

**Statement of Basis for
Boeing Commercial Airplane Group
North Boeing Field/Plant 2 Facility
Operating Permit 21147
Issuance Date May 20, 2002
Administrative Amendment: December 23, 2020**

TABLE OF CONTENTS

| | |
|---|-----------|
| 1. PURPOSE OF THE STATEMENT OF BASIS | 4 |
| 2. SOURCE DESCRIPTION | 4 |
| 2.1 Combining NBF and Plant 2 facilities under one Operating Air Operating Permit | 4 |
| 2.2 Why NBF/Plant 2 is an Air Operating Permit Source | 4 |
| 2.3 Emission Inventory | 4 |
| 2.4 Process Description | 5 |
| 2.5 Compliance Assurance Monitoring | 5 |
| 3. REVIEW OF PERMIT APPLICATION | 7 |
| 3.1 Initial Application | 7 |
| 3.2 Air Operating Permit Issuance and Subsequent Appeal | 7 |
| 11. 2. 1.Section I | 8 |
| 11. 2. 1.Section II | 11 |
| 11. 2. 1.Section V | 13 |
| 4. COMPLIANCE HISTORY | 14 |
| 4.1 Aerospace NESHAP Compliance History | 14 |
| 4.2 Solvent Cleaning (other than Aerospace NESHAP) Compliance History | 16 |
| 4.3 Spray Coating Prior to the Aerospace NESHAP | 16 |
| 4.4 Asbestos Removal Compliance History | 16 |
| 4.5 Dust Collection Compliance History | 17 |
| 4.6 Gasoline Dispensing | 18 |
| 4.7 Boilers | 18 |
| 4.8 Other | 18 |
| 5. EXPLANATION OF APPLICABLE REQUIREMENTS | 19 |
| 5.1 Applicable Requirements | 19 |
| 5.2 Section I.A. (Facility-Wide) | 20 |
| 5.2.1 Requirement I.A.1 | 20 |

| | | |
|-----------|---|-----------|
| 5. 2.2 | Requirement I.A.2 | 22 |
| 5. 2.3 | Requirement I.A.3 | 23 |
| 5. 2.4 | Requirement I.A.4 | 23 |
| 5. 2.5 | Requirement I.A.5 | 24 |
| 5. 2.6 | Requirements I.A.6 through I.A.8 | 25 |
| 5. 2.7 | Requirement I.A.9 | 26 |
| 5. 2.8 | Requirement I.A.10 | 27 |
| 5. 2.9 | Requirement I.A.11 | 28 |
| 5. 2.10 | Requirement I.A.12 | 28 |
| 5. 2.11 | Requirement I.A.13 | 28 |
| 5. 2.12 | Requirement I.A.14 | 29 |
| 5. 2.13 | Section I.B. | 29 |
| 5. 2.14 | EU-1 Chemical Process Tankline Operations | 29 |
| 5. 2.15 | EU-2 Coating, Cleaning, and Depainting Operations | 29 |
| 5. 2.16 | EU-3 Non-Halogenated Solvent Spray Wand Parts Cleaning Operations | 33 |
| 5. 2.17 | EU-4 Fuel Burning Equipment (Not Subject to New Source Performance Standards) ³⁴ | |
| 5. 2.18 | EU-5 Waste Water Treatment Operations | 36 |
| 5. 2.19 | EU-6 Cyclones, Baghouses, and Other Particulate Control Operations | 37 |
| 5. 2.20 | EU-7 Abrasive Blasting Operations | 38 |
| 5. 2.21 | EU-8 Motor Vehicle Fueling Operations | 38 |
| 5. 2.22 | EU-9 Storage Tanks | 40 |
| 5. 2.23 | EU 10 Wood Furniture Manufacture | 41 |
| 5. 2.24 | Operations Without Specific Applicable Requirements | 42 |
| 6. | MONITORING, MAINTENANCE AND RECORDKEEPING PROCEDURES | 43 |
| 6. 1 | Opacity Monitoring | 43 |
| 6. 2 | Following Monitoring, Maintenance and Recordkeeping Procedures | 43 |
| 6. 3 | Standard Approval Conditions | 44 |
| 6. 4 | Operation and Maintenance (O&M) Plan Requirements | 44 |
| 7. | PROHIBITED ACTIVITIES | 45 |
| 8. | ACTIVITIES REQUIRING ADDITIONAL APPROVAL | 45 |
| 8. 1 | Requirement IV.A. New Source Review | 45 |
| 8. 2 | Requirement IV.D Spray Coating | 46 |
| 8. 3 | Notice of Construction No. 8335 | 46 |
| 9. | STANDARD TERMS AND CONDITIONS | 46 |
| 9. 1 | V. O Recordkeeping | 46 |
| 9. 2 | V. P Data recovery | 47 |
| 9. 3 | V. Q Reporting | 47 |

| | |
|---|-----------|
| 10. PERMIT SHIELD | 48 |
| 11. PUBLIC COMMENTS AND RESPONSES | 48 |
| 11.1 Draft Air Operating Permit Comments | 48 |
| 11.2 June 2003 Comments from Boeing | 56 |
| 11.2.1.Reserved | 57 |
| 11.3 Additional changes from discussion with Boeing | 72 |
| 11.4 Additional comments by Boeing | 73 |
| 12. ADMINISTRATIVE PERMIT AMENDMENTS (WAC 173-401-720) | 75 |
| 12.1 October 13, 2004 change | 75 |
| 12.2 May 10, 2005 | 76 |
| 12.3 August 17, 2005 | 76 |
| 12.4 February 16, 2006 | 76 |
| 12.5 March 16, 2010 | 76 |
| 12.6 April 9, 2015 | 76 |

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 - North Boeing Field/Plant 2 (NBF/Plant 2) 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 NBF/Plant 2's air emissions and provides a description of the activities taking place at NBF/Plant 2, including a compliance history.

2. Source Description

2.1 Combining NBF and Plant 2 facilities under one Operating Air Operating Permit

In an October 12, 2001 letter to the Puget Sound Clean Air Agency (Letter Reference No. E-1370-2001-GRM-233), Boeing requested that the Puget Sound Clean Air Agency combine the operating air operating permit requirements for Plant 2 with the North Boeing Field (NBF) requirements under one operating permit. For reasons discussed below, the Puget Sound Clean Air Agency intends to grant this request. After the operating permit for the combined NBF/Plant 2 facility is issued, the Puget Sound Clean Air Agency will revoke the operating permit (No. 13124) currently enforced for Plant 2.

The Boeing Company has historically identified the NBF and Plant 2 manufacturing operations as separate for its managerial purposes. While Boeing has separated the facilities for managerial purposes, the facilities are in fact adjacent and both facilities conduct similar activities under the same primary SIC code (3721). The Puget Sound Clean Air Agency therefore agrees to interpret NBF and Plant 2 as being one facility for operating permit purposes. The combined facility will be named NBF/Plant 2 throughout the operating permit.

2.2 Why NBF/Plant 2 is an Air Operating Permit Source

NBF/Plant 2 qualifies as a major source and is required to obtain an operating permit because it emits more than 100 tons per year (tpy) of volatile organic compounds (VOCs), more than 25 tpy of total hazardous air pollutants (HAPs), and more than 10 tpy of certain specific HAPs. The major sources of emissions are from the use of solvents and coatings used to support cleaning and coating operations associated with aircraft assembly, manufacturing, flight testing, and preparation of aircraft for delivery to customers.

2.3 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. In 2000, NBF/Plant 2 emitted more than ten tons per year of Methyl

Ethyl Ketone (MEK), a HAP. In the last 10 years (1991-2000), the emissions of VOC from the combined NBF/Plant 2 facility have decreased by more than 80 percent, and the emissions of HAP have decreased by more than 95 percent.

The following table summarizes the total HAP and VOC emissions from NBF/Plant 2 over the last ten years. The information is presented in tons per year.

TABLE 1 NBF/PLANT 2 REPORTED EMISSIONS

| Pollutant | 1991 Tons | 1992 Tons | 1993 Tons | 1994 Tons | 1995 Tons | 1996 Tons | 1997 Tons | 1998 Tons | 1999 Tons | 2000 Tons |
|------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| VOC | 498 | 174 | 87 | 49 | 38 | 35 | 80 | 107 | 107 | 81 |
| HAP | 453 | 136 | 63 | 30 | 20 | 18 | 29 | 29 | 30 | 22 |

2.4 Process Description

The NBF/Plant 2 facility conducts a variety of aerospace parts assembly processes, repair, flight testing and delivery for Boeing commercial and military aircraft. The facility is located on East Marginal Way South in a heavily industrialized area of Seattle along the Duwamish River. The primary activities occurring at NBF/Plant 2 are painting of completed aircraft, flight test and delivery of aircraft to customers, research and development, components testing, and fuel testing. The facility also has a wind tunnel complex, laboratories, and offices. Other support operations include metalworking, woodworking, automotive shop, and wastewater treatment. The NBF/Plant 2 facility occupies a 257-acre site and includes several airplane painting and storage buildings, research and development laboratories, support buildings, roads, and employee parking areas.

2.5 Compliance Assurance Monitoring

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

The information outlined in the table below presents the findings of NBF/Plant 2's CAM applicability analysis. In order for a unit to be subject to CAM, the unit needs to be outside of the exemption criteria outlined in 40 CFR 64.2. As shown in the table, the units at the NBF/Plant 2 facility are all eligible for one or more of the exemptions in 40 CFR 64.2.

PLANT 2 / NBF EMISSION UNIT CAM APPLICABILITY

| MSS# | BLDG | Equipment | Is the unit subject to an emission limitation or standard for the applicable regulated air pollutant? 40 CFR 64.2 (a)(1) | Does the unit use a control device to achieve compliance with any such emission limitation or standard? 40 CFR 64.2(a)(2) | Does the unit have the “potential to emit” w/o the control device \geq 100% of the tpy amount to be classified as a major source? 40 CFR 64.2(a)(3) |
|--|-------------|-----------------------|---|--|---|
| DUC022 | 2-44 | Tankline Scrubber | Yes | Yes | No |
| DUC052 | 2-44 | Tankline Scrubber | Yes | Yes | No |
| DUC063 | 2-63 | Dust Collector | Yes (0.05grain/dscf) | Yes | No |
| DUC066 | 2-65 | Dust Collector | Yes (0.05grain/dscf) | Yes | No |
| DUC7460 | 2-88 | Dust Collector | Yes (0.05grain/dscf) | Yes | No |
| PB0002 | 2-44 | Paint Booth | Yes (ANESHAP) | Yes | No |
| PB0004 | 2-62 | Paint Booth | No | No | No |
| PB0006 | 2-62 | Paint Booth | No | No | No |
| PB0007 | 2-62 | Paint Booth | No | No | No |
| PB0008 | 2-65 | Paint Booth | No | No | No |
| PB0016 | 2-62 | Paint Booth | No | No | No |
| PB0018 | 2-122 | Paint/Grind Booth | Yes (0.05grain/dscf) | Yes | No |
| PB0020 | 2-122 | Solvent Spray Cleaner | No | No | No |
| PB9006 | 2-88 | Paint Booth | No | No | No |
| APL001 APL002 | 2-13 | Fuel Tanks | No | No | No |
| RE0021 BOIL09 BOIL10 BOIL11 BOIL12 | 2-15 | Boilers | Yes (NOC, 0.05gr/dscf 7% O ₂ , SO _x \leq 1000ppm, < 0.1gr/dscf) | No | Yes* |
| VE0014 | 2-15 | Gas Station | Yes | Yes | No |
| SND511 | 3-818 | Media Blast Booth | Yes (0.05grain/dscf) | Yes | No |
| VE5001 | 3-470 | Gas Station | Yes (PSCAA 2.07 SIP) | Yes | No |
| BOIL53 | 3-374 | Boiler #1 | Yes (0.05gr/dscf 7% O ₂ , 20% opacity) | No | Yes* |
| BOIL54 | 3-374 | Boiler #2 | Yes (NOC, 0.05gr/dscf 7% O ₂ , 20% opacity) | No | Yes* |
| RT5011 | NBF | ABF Tanks | Not sure | No | No |
| PB5004 | 3-365 | Paint Booth | No | No | No |
| RV5004, RV5503 | 3-369 | Pit Filters P3, P4 | Yes (ANESHAP) | Yes | Yes* |
| PB5001 | 3-370 | Paint Booth | Yes (ANESHAP) | Yes | No |
| PB5008 | 3-380 | Paint Booth | Yes (ANESHAP) | Yes | No |
| F50020, F50021 | 3-380 | Pit Filters P5, P6 | Yes (ANESHAP and PSD condition) | Yes (ANESHAP only) | Yes** |

| MSS# | BLDG | Equipment | Is the unit subject to an emission limitation or standard for the applicable regulated air pollutant? 40 CFR 64.2 (a)(1) | Does the unit use a control device to achieve compliance with any such emission limitation or standard? 40 CFR 64.2(a)(2) | Does the unit have the “potential to emit” w/o the control device \geq 100% of the tpy amount to be classified as a major source? 40 CFR 64.2(a)(3) |
|--------|-------|-----------------------|---|--|--|
| PB5002 | 3-818 | Paint Booth | Yes (ANESHAP) | Yes | No |
| WE5003 | 3-369 | Waste Water Treatment | No | No | No |
| DUC369 | 3-369 | Dust Collector | Yes (0.05grain/dscf) | Yes | No |

*Assumed, actual potential to emit was not calculated

**Assumed based on PSD permit

Paint Hangers are exempt under 40 CFR 64.2(b)(1)(i)

(b) *Exemptions*— (1) *Exempt emission limitations or standards*. The requirements of this part shall not apply to any of the following emission limitations or standards: (i) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.

3. Review of Permit Application

3.1 Initial Application

Two separate operating permit applications were received by the Puget Sound Clean Air Agency from NBF and Plant 2 on June 7, 1995. The Puget Sound Clean Air Agency acknowledged that the NBF application was complete in a letter to NBF dated August 1, 1995. On August 2, 1995, October 17, 1995 and November 28, 1995, the Puget Sound Clean Air Agency issued written notifications to Plant 2 that the application was incomplete because it did not describe many of the monitoring, recordkeeping, and reference test methods as required under WAC 173-401-510(2)(d)(ii). This information for Plant 2 was received by the Puget Sound Clean Air Agency on December 4, 1995, and the Puget Sound Clean Air Agency acknowledged that the Plant 2 application was complete in a December 5, 1995 letter. Revised tables of applicable requirements for Plant 2 were received by the Puget Sound Clean Air Agency on January 10, 1997.

3.2 Air Operating Permit Issuance and Subsequent Appeal

The Puget Sound Clean Air Agency issued the air operating permit for Boeing Commercial Airplane Group’s - North Boeing Field/Plant 2 (No. 21147) on May 20, 2002, after the 30 day public 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 North Boeing Field/Plant 2, PCHB No. 02-084. Of specific concern to Boeing was language in the opacity monitoring method Section II.A.1(a) of the permit, and other sections had similar wording.

The Boeing and Puget Sound Clean Air Agency entered into settlement discussions to resolve the concerns Boeing raised in its appeal. 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 (WAC 173-401-730), and propose agreed upon changes to address Boeing's concerns. The Agency is seeking public comment and EPA review for these proposed changes to the Boeing North Boeing Field Air Operating Permit. Below is a description of the proposed changes listed by section of the permit. There are several administrative changes to the numbering system and the related cross-references that do not change the requirements and are not subject to public comments.

At Boeing's request, the Agency also added NOC No. 8850, issued May 21, 2003, to the AOP as part of this reopening. NOC 8850, issued May 21, 2003, supersedes and cancels NOC No. 7564 dated February 24, 1999. The requirements of NOC No. 7564 have also been removed from the AOP.

11.2.1. Section I

Requirement I.A.1 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to Monitoring, Recordkeeping, and Reporting (MM&R).

Requirement I.A.2 – Added WAC 173-400-060 as an applicable requirement and II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to MM&R.

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

Requirement I.A.10 – Corrected a date from 1999 to 1998.

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 this 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 and added and II.A.1(c) Facility Inspections to MM&R.

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

Requirement EU 1.4 – 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.

Requirement EU 1.5 – 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.

Requirement EU 2.104 – 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 2.105 – Added II.A.1(c) Facility Inspections to MM&R and clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20 requirement listed in I.A.9.

Requirement EU 2.131 – Added II.A.1(c) Facility Inspections to MM&R and clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20 requirement listed in I.A.9.

Requirement EU 3.2 – 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 – 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 MM&R.

Requirement EU 4.1 – Added II.A.1(b) Complaint Response to the MM&R. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.03 requirement listed in I.A.1.

Requirement EU 4.2 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to MM&R. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.09(a) requirement listed in I.A.3.

Requirement EU 4.3 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to MM&R. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.09(a) requirement listed in I.A.3.

Requirement EU 4.5 – 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 4.6 – Added II.A.1(c) Facility Inspections to MM&R and clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20 requirement listed in I.A.9.

Requirement EU 5.1 – 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 5.2 – Clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

Requirement EU 6.1 – 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.

Requirement EU 6.2 – 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.

Requirement EU 6.3 – 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 6.4 – Added II.A.1(c) Facility Inspections to MM&R and clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

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.

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.

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.

Requirement EU 7.4 – Added II.A.1(c) Facility Inspections to MM&R and clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

Requirement EU 7.5 – Added II.A.1(c) Facility Inspections to MM&R.

Requirement EU 8.1 to 8.6 – Changed the reference to location of the MM&R.

Requirement EU 8.7 – 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 8.8 – Clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20 requirement listed in I.A.9.

Requirement EU 9.3 – 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 9.4 – Added II.A.1(c) Facility Inspections to MM&R and clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

11. 2. 1. Section II

II.A – Added *“Except for the testing required under Section II.A.2(m) of this permit (Periodic Performance Source Test), 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, 11/4/93]”*

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 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.”

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 NBF/Plant 2 observes potential compliance problems for which there are no monitoring requirements under an applicable requirement and corrects that problem within 24 hours, NBF/Plant 2 does not need to report the deviation under Section V.M.

Compliance certifications or V.O Reporting and does not need to record such action under Section V.O.1.4 of this permit.”

II.A.1(d) – Clarified that if Boeing cannot correct possible compliance problems within 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.

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 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.

II.A.2(d)(i) – 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.

II.A.2(d)(ii) – Removed provisions for data recovery.

II.A.2(d)(iii) – 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.

II.A.2(d)(v) – Added natural gas is not available or is not being used due to economic reasons, NBF/Plant 2 shall check for visible emissions within 24 hours each time that it burns fuel oil or Jet A during daylight hours and at least once per week if it burns fuel oil or Jet A fuel for more than seven consecutive days

Added that for purposes of complying with the visible emission monitoring required by Section II.A.2(d)(v), 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.”

II.A.2(d)(vi) – Clarified that for purposes of complying with the visible emissions monitoring required by Section II.A.2(d)(vi), 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 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.

II.A.2(d)(viii) – 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 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.

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.”

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

11.2.1. Section V

V.P.2 – Removed Gun Cleaning Systems.

V.Q.1.(b) – Changed the reporting requirement from 90 to 30 days after the end of the month that the deviation was discovered.

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 those required by the permit. The section also specifies reports that must be certified upon submittal, as apposed 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 all problems not corrected within 24 hours.

V.Q.6 – Updated the required applications, reports, and certifications.

V.Q.7 – Updated the list of notifications.

4. Compliance History

The Puget Sound Clean Air Agency has inspected both North Boeing Field and Plant 2 at least annually since 1986.

The compliance history for NBF/Plant 2 from August, 1996 to 2001 is summarized below. Compliance documents are listed by emissions unit or other appropriate category groups in chronological order.

The Agency considers all the matters listed below 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 NBF/Plant 2.

4.1 Aerospace NESHAP Compliance History

Below is a listing of the enforcement actions taken by the Puget Sound Clean Air Agency concerning the Aerospace National Emissions Standard for Hazardous Air Pollutants and related requirements for NBF for the last five years.

- Compliance Status Report (CSR) dated April 24, 2000, for self-reported violations (for period September 1, 1999 through February 29, 2000), of 40CFR 63.745(g)(3) and 40 CFR 63.751(c)(1) on September 1, 1999 and October 28, 1999-failure to shutdown regulated painting operation when pressure drop falls outside specified limits. CSR noted that based on the corrective actions reported, no further enforcement action to be taken.
- Notice of Violation (NOV) No. 36351 dated December 9, 1999, for the self-reported (159 days from March, 1999 through August 31, 1999) violations of Regulation III, Section 2.02, failure to comply with 40 CFR 63.745(g), failure to use Method 319 certified filter system when applying primers and topcoats containing inorganic HAPs. A corrective action letter dated December 22, 1999 was received from Boeing. This NOV was settled by a Settlement Agreement, which included a required revision of Boeing's maintenance inspection

frequency, \$15,000 civil penalty and SEP \$20,000 (to facilitate replacement of wood burning devices) dated July 3, 2000. A letter was sent on August 18, 2000 acknowledging the payment of the penalty portion of the agreement (received July 31, 2000). A letter was sent on February 13, 2001 acknowledging the previous payment, acknowledging the completion of the SEP, and closing this NOV without further enforcement action.

- NOV No. 36363 dated June 12, 2000, for the self-reported violations (September 1, 1999 to April 9, 2000), Regulation III, Section 2.02 -operation of source in violation of 40 CFR 63.745(g)(i)(A) - Failure to spray apply coatings with inorganic HAP using a dry particulate filter system certified per Method 319, and 40 CFR 63.745(g)(3)- failure to follow monthly maintenance inspection procedures in hanger bays P3 & P4 PMI.

While NOV No. 36351 was being resolved through an AOD, Boeing incurred further NESHAP filter violations per NOV No. 36363. Since the AOD for NOV No. 36351 had not yet been finalized and would solve this recurring problem, no penalty was issued for NOV No. 36363 and that NOV was closed since the same issues were already addressed in the AOD.

- CSR dated Nov. 28, 2000, for the self-reported violations of Regulation III, Section 2.02, failure to comply with 40 CFR 63.752(d)(1)-failure to record pressure drop across (aerospace NESHAP) spray coating operation system PB5001 in Bldg. 3-370 for 1 shift. Follow-up information received December 26, 2000 was deemed adequate as requested. No further enforcement action to be taken.
- Written Warning No. 2-00275 dated June 12, 2001 for the period August 8 through September 22, 2000, for Regulation III, Section 2.02 -operation of source in violation of 40 CFR 63.745(g)(2)(i)(A)-failure to control the exhaust from the HAP primer and topcoat application operation by passing “the air stream though a dry particulate filter system certified using the methods described in 63.750(o) to meet or exceed the efficiency data points in Table 1 and 2 of this section...” in paint booths P5 and P6 of Building 3-380. A corrective action letter dated June 29, 2000 was received from Boeing. A closure letter was sent on September 15, 2001.

Below is a listing of the enforcement actions taken by Puget Sound Clean Air Agency concerning the Aerospace National Emissions Standard for Hazardous Air Pollutants and related requirements at Plant 2 during the last five years.

- CSR dated February 25, 1999 addressed need to update equipment list (Bldg. 2-62 water wash booths) and reconcile with the equipment list in the AOP. January 19, 1998 corrective action letter received, and no further enforcement action to be taken.
- CSR issued May 1, 1999 for self-reported violations (per Compliance Status Report, May 1, 1999 and submitted per 40 CFR 63.9(h) and 63.753(a)). From September 1, 1998 to February 28, 1999 the facility deviated from housekeeping requirements for solvent rag management and closed containers <1% of inspections per 40 CFR 63.744(a)(1) and (2). CSR noted that based on the corrective actions reported in Compliance Status Report, no further enforcement action to be taken. The Puget Sound Clean Air Agency sent an

“Evaluation of the Notification of Compliance Status Report” (deficiencies reported) with statement that the Agency will work with Boeing and EPA to develop compliance certification reports for NESHAP, and other reporting requirements, that will be included in the operating permit. No further action was taken.

- CSR dated July 6, 2000 for self-reported violations (per Monthly AOP Deviation Report, May 2000 received June 30, 2000) for incorrectly established low end of range of pressure drop on tankline scrubber per AOD Section II A.2.d.viii for 5 days of operation. Corrective action taken and reported, no further enforcement action to be taken.
- CSR dated November 15, 2000, for self-reported violations (per Operating AOP Semi-Annually Report dated November 16, 2000 for the period March 1, 2000 through August 31, 2000) for operation of source in violation of 40 CFR 63.753(b)(b)-(e): improper labeling of second stage spray booth (PB0002) filters. Corrective action (information request) was reported. No further enforcement action to be taken.
- CSR dated November 28, 2000, for self-reported violations (per Operating AOP Semi-Annually Report dated October 16, 2000) for operation of source in violation of 40 CFR 63.745(g)(i)-failure to spray apply coatings with inorganic HAP using a dry particulate filter system certified using Method 319 located in PB0002 in Bldg. 2-44 for 12 shifts between June 13, 2000 to October 5, 2000. Corrective action taken and reported. No further enforcement action to be taken.

4.2 Solvent Cleaning (other than Aerospace NESHAP) Compliance History

The following enforcement action was taken concerning non Aerospace NESHAP solvent cleaning at the Plant 2 facility.

- CSR issued February 25, 1999, addressed Regulation III, Section 3.05(a)(1), solvent waste tank for the metal solvent cleaner in Bldg. 2-122 (cover requirement). Determination made that Regulation Section 3.05 (a)(1) and (2), (b)(1) and (2) and (4) apply, and that this will be clarified in Operating permit. March 31, 1999 corrective action letter received. No further enforcement action to be taken.

4.3 Spray Coating Prior to the Aerospace NESHAP

The following enforcement action was taken concerning spray coating at Plant 2 prior to the effective date of the Aerospace NESHAP.

- CSR dated December 12, 1997 with request to check for full water curtain coverage for Booth #4, Bldg. 2-62 as gap was observed in the spray at corners. Corrective action taken and reported. No further enforcement action to be taken.

4.4 Asbestos Removal Compliance History

Below is a listing of the enforcement actions taken concerning asbestos removal and related requirements for Plant 2 for the last five years. There have been no enforcement actions taken concerning asbestos at NBF for the last five years.

- CSR dated December 11, 1997 for request to submit asbestos survey for renovation area in Bldg. 2-41 (tank line area) with disposition of asbestos-containing materials, and explanation of how asbestos survey was communicated per Regulation III, Article 4. Corrective action taken and reported, and no further enforcement action to be taken.
- CSR dated February 25, 1999, recommending that asbestos coordinators receive training to contribute to the Operating compliance certifications. Corrective action taken and reported, and no further enforcement action to be taken.
- NOV No. 36364 dated for April, 2000 violation of Regulation III, Section 4.02-failure to obtain asbestos survey and post results on boiler insulation prior to April 6, 2000 removal. This NOV has two parts, the second part of which is for opacity and is discussed under Section 4. 8 Other. A corrective action letter was received July 6, 2000. No further enforcement action to be taken.
- CSR dated November 15, 2000, for self-reported violations (per Monthly APO Deviation Report, September, 2000 dated October 16, 2000) for failure to conduct asbestos survey prior to renovation work per Section 4.02 of Regulation III. CSR noted that based on the corrective actions reported, no further enforcement action to be taken.
- Written Warning No. 2-000461 dated June 4, 2001 for Regulation III, Section 4.03 (a)(8)(c) –Temporary Asbestos Waste Storage Site not locked, and Regulation Section 4.03(a)-quarterly written reports not received within 15 days after the end of each calendar quarter. Corrective action letter was received June 29, 2001 (and e-mails on August 20, 2001) from Boeing. A closure letter was sent on September 18, 2001.

4.5 Dust Collection Compliance History

Below are the enforcement actions taken concerning dust collection and related requirements for NBF for the last five years.

- CSR dated May 2, 2000, for failure
 1. To mark the acceptable pressure drop range on the Waste Water Treatment Plant Dust Collector gauge per Order of Approval No. 7165, Condition No. 3- and
 2. To log that a specific unit or units will use only compliant exterior commercial primers thus avoiding the requirement of condition 2(a)&(d) of Order of Approval No. 8072- Proposed Scheme for Primers-Log for VOC Averaging for Exterior Commercial Primers. Order of Approval 8072, Conditions 2(c)&(d) requires monthly log.

A corrective action letter dated June 8, 2000 was received from Boeing. No further enforcement action to be taken.

Below are the enforcement actions taken concerning dust collection and related requirements for Plant 2 for the last five years.

- CSR dated December 12, 1997 with request to clearly mark acceptable range for pressure drop on or nearby grinding booth gauge (Order of Approval 6120, Condition 4) and check for full water curtain coverage for Booth #4, Bldg. 2-62 as gap was observed in spray booth corners. Corrective action taken and reported, and no further enforcement action to be taken.
- CSR dated February 25, 1999 addressed need to update equipment list and reconcile with the equipment list in the AOP. Corrective action letter explained Bldg. 2-43 dry filter removed on January 31, 1998 and Bldg. 2-62 abrasive blasting unit and cyclone removed Sept. 1997. No further enforcement action to be taken.

4.6 Gasoline Dispensing

The following are the enforcement actions taken concerning gasoline dispensing and related requirements at the Plant 2 facility in the last five years. No enforcement actions concerning gasoline dispensing have been taken at NBF in the last five years.

- CSR dated December 11, 1997 for request to check integrity on Stage 1 coaxial gasket per Regulation I, Section 7.09 Operations & Maintenance requirements. Corrective action letter was received December 24, 1997 from Boeing. No further enforcement action to be taken.
- CSR dated February 25, 1999 addressed Regulation I, Section 9.20 deficiency, Gasoline tank outside of Bldg. 2-15, specifically for a loose adaptor. March 31, 1999 corrective action letter received and no further enforcement action to be taken.

4.7 Boilers

The following are the enforcement actions taken concerning the boilers at the Plant 2 facility in the last five years. No enforcement actions concerning the boilers have been taken at NBF in the last five years.

- CSR dated December 12-23, 1997 for failure to provide source test results to Agency within 60 days after the test per Regulation I Section 3.07(c). Order of Approval No. 5208, Condition 6 required compliance tests be performed, according to Regulation I, Section 3.07, by August 31, 1997. July 15, 1997 test report results received on Oct. 6, 1997. Corrective action letter received January 14, 1998. No further enforcement action to be taken.
- CSR dated February 25, 1999 addressed Order of Approval No. 5208, Condition 4- Boiler record-keeping requirement for day tank turnover. Corrective action taken and reported. No further enforcement action to be taken.

4.8 Other

The following is an enforcement action taken concerning opacity at the NBF/Plant 2 facility in the last five years.

- NOV No. 36364 dated for April, 2000 violation of Regulation I, Section 3.07(c)-failure to submit compliance test report (pursuant to NOC Order of Approval 5208, Condition 8) no

later than 60 days after the test. This NOV had two parts, the second part of which was for asbestos and is discussed in Section 4.4. 4 Asbestos Removal Compliance History. A corrective action letter was received on July 6, 2000. No further enforcement action to be taken.

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. NBF/Plant 2 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

NBF/Plant 2 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. 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 statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern. For more information regarding any of the requirements cited in the second 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 the 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 SIP¹.

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, NBF/Plant 2 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 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, NBF/Plant 2 shall as soon as practicable but within 24 hours of the initial

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.

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 included 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
- 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, NBF/Plant 2 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 NBF/Plant 2 did not elect to continue the visible emission inspection as described above, NBF/Plant 2 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 9A 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.

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 properly and either shut it down within 3 hours or observe visible emissions using WDOE Method 9A within 30 days. Three hours was chosen because these units are usually tested once a month for less than three hours. If they have visible emissions and operate for more than three hours, the permit requires Boeing to either determine the opacity during that test or some other test within 30 days. It is not the agency's intention that Boeing would have to startup a generator, solely for the purpose of determining opacity. 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 relates 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.

- 1) Compliance. None of the emission units at NBF/Plant 2 normally have visible emissions. The emission units are also unlikely to generate visible emissions except under the most unusual circumstances, except for the boilers when burning back-up fuel oil or jet fuel or some emergency generators during testing. These boilers have specific opacity monitoring requirements elsewhere in the permit (Section I.B.4). 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 NBF/Plant 2. 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 NBF/Plant 2 will take corrective action before a violation occurs, further enhancing the compliance margin.
- 2) Variability of process and emissions. None of the processes at NBF/Plant 2 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. Except for testing, emergency generators and fire suppression pumps that do not normally operate and testing is normally less than three hours.
- 3) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter or finely divided liquid droplets. The manufacturing activities at NBF/Plant 2 typically do not generate significant quantities of particulate matter, typically less than two tons 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. The emission units that are likely to generate visible emissions are addressed elsewhere in the permit.

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 NBF/Plant 2 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 NBF/Plant 2 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 by the O&M Plan, 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 NBF/Plant 2 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 5.5. 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). WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O₂ from all combustion units (i.e., units using combustion for steam production or other process requirements, excluding open burning). NBF/Plant 2 burns only pipeline grade natural gas and backup fuel oil and jet fuel that are certified to comply with the fuel oil standards of Regulation I, Section 9.08. It can be shown, as in Section 5.5. 2.4 for SO₂, that if fuels are properly burned, NBF/Plant 2 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

Both Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements (SO₂ 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 SO₂ concentrations to 1000 ppm. Since the Puget Sound Clean Air Agency's rules are more stringent, this exception is not available to NBF/Plant 2 and the second paragraph does not apply to NBF/Plant 2.

NBF/Plant 2 burns primarily pipeline grade natural gas in its combustion emission units, and uses jet fuel and PS-300 fuel oil as a back-up.

All the natural gas burned at NBF/Plant 2 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:

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

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:

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

This is equivalent to 0.31 ppmdv SO₂. Note that this estimated value is less than one-tenth of one percent of the 1,000 ppm SO₂ standard. Therefore, it is reasonable to assume that combustion units that are fired on natural gas cannot exceed the 1,000 ppm SO₂ limits in Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6). The other emission units are not capable of generating SO₂ emissions as permitted. Therefore, the permit does not contain additional monitoring requirements for the natural gas usage.

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, NBF/Plant 2 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-wide 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.

- 1) Initial compliance. The Puget Sound Clean Air Agency has not received any complaints concerning NBF/Plant 2 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 NBF/Plant 2; therefore, we conclude 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. NBF/Plant 2 does not have emission units that are likely to generate emissions that would cause a nuisance. In addition, NBF/Plant 2 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 NBF/Plant 2. Boilers at NBF/Plant 2 are fueled mainly on natural gas with back-up fuel limited to curtailment and testing, 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 by NBF/Plant 2, thereby minimizing the chance of generating emissions that may cause a nuisance. The permit requires NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 is in violation of this requirement, but NBF/Plant 2 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 NBF/Plant 2 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. We have 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 NBF/Plant 2; therefore, we conclude that it is generally in compliance with this requirement.
- 2) Margin of compliance. For known sources of potential fugitive dust, the buildings at NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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). Those emission units subject to Section 9.20(a) are specifically listed in Section I.B of the permit. 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-wide criteria and specific criteria for the emission units and activities. In addition, the facility-wide inspections provide monitoring of the general effectiveness of NBF/Plant 2'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 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), NBF/Plant 2 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 NBF/Plant 2 to promptly correct any defective equipment². However, the underlying requirement in most instances does not define "promptly"; hence for significant emission units and applicable requirements that NBF/Plant 2 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 NBF/Plant 2 is following good industrial practice.

² *Puget Sound Clean Air Agency Regulation I, Section 1.07(s) states, "EQUIPMENT means any stationary or portable device or any part thereof that emits or may emit any air contaminant into the atmosphere."*

As described in Section V.Q, NBF/Plant 2 must report to the Puget Sound Clean Air Agency any instances where it failed to promptly repair any defective equipment—both Agency-approved equipment, as well as equipment that has not been approved by this Agency.. In addition, NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 to investigate and prevent a violation. Since the Puget Sound Clean Air Agency and NBF/Plant 2 have not received odor complaints concerning NBF/Plant 2, 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 NBF/Plant 2 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% O₂ for combustion sources. Since NBF/Plant 2 burns only pipeline grade natural gas, distillate fuel oil, and Jet A and the other processes do not use chlorine in a form likely to emit HCl, it is incapable of violating this standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements.

5. 2.12 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. 2.13 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 NBF/Plant 2 and its complexity, the information is provided as an aid in understanding the permit and as an aid to locating 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. 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. 2.14 EU-1 Chemical Process Tankline Operations

Boeing no longer performs this operation at the facility and has removed all associated equipment. The emission unit and monitoring has been "Reserved" in order to preserve the numbering system in the AOP.

5. 2.15 EU-2 Coating, Cleaning, and Depainting Operations

This section includes all activities and equipment associated with surface coating, cleaning, and depainting operations for both aerospace activities and non-aerospace activities. These operations include coating mixing, application, drying, and curing; spray gun cleaning; solvent wipe and solvent flush cleaning; depainting; and material and waste handling. The activities included in this section are conducted throughout the NBF/Plant 2 facility. For the purpose of defining an "emission unit" in the 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. However, from time-to-time NBF/Plant 2 may change the type of coatings applied or the parts coated. The permit requires NBF/Plant 2 to keep a log of booths where coating operations that are regulated under the Aerospace NESHAP occur. That log must be available for inspection at any time.

| <i>Bldg.</i> | <i>Col/Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Date Installed</i> | <i>Source Description</i> | <i>Aerospace NESHAP Coatings with Inorganic HAP Used in Unit?</i> |
|--------------|---------------|----------------|----------------------------|-----------------------|---------------------------|---|
| 3-818 | E1 | PB5002 | Reg. | 1986 | Spray Booth | Yes |
| 3-370 | D2 | PB5001 | 5572 | 1994 | Spray Booth | Yes |
| 3-380 | C13 | PB5008 | 3560 | 1992 | Spray Booth | Yes |
| 3-369 | P3 | RV5004 | Reg. | 1986 | Paint Hangar | Yes |
| 3-369 | P4 | RV5003 | Reg. | 1986 | Paint Hangar | Yes |
| 3-380 | P5 | F50020 | 3560 | 1992 | Paint Hangar | Yes |
| 3-380 | P6 | F50021 | 3560 | 1992 | Paint Hangar | Yes |
| 3-365 | A1 | PB5004 | 2634 | 1985 | Spray Booth* | No |
| 2-44 | S1 | PB0002 | 4358 | 1992 | Dry filter Spray booth | Yes |
| 2-62 | D8 | PB004 | 5693 | 1994 | Wet Spray Booth* | No |
| 2-62 | C18 | ROB0021 | Reg. | 1973 | Wet Spray Booth #6* | No |
| 2-62 | C16 | PB0016 | Reg. | 1973 | Wet Spray Booth #5* | No |
| 2-62 | C14-15 | PB0006/07 | Reg. | 1973 | Wet Spray Booth #3, #4* | No |
| 2-31 | WJ10 | PB0008 | 4371 | 1968 | Dry filter Spray Booth* | No |
| 2-122 | Q5 | PB0018 | 4371 | 1992 | Dry Filter Spray Booth* | No |
| 2-88 | | PB9006 | 8051 | 2001 | Dry Filter Spray Booth* | No |

Many of the spray coating units listed above are used in aerospace component coating operations. The units with an asterisk (*) next to their description are not normally used in aerospace component coating operations, but may be in the future.

(a) Aerospace NESHAP

40 CFR 63 Subpart A (40 CFR 60.6) requires Startup, Shutdown, and Malfunction Plans (SSMPs) for all equipment that controls regulated HAPs. In this case, dry filters and waterwash systems control HAPs. However, 40 CFR 63.743(b) specifically exempts dry filters from the requirement to have a Startup, Shutdown, and Malfunction Plan as long as the manufacturer’s recommendations, specification, or instructions are being followed. NBF/Plant 2, however, must report any deviation of those recommendations, specification, or instructions as permit deviations. NBF/Plant 2 also has the responsibility to maintain the dry filters according to Puget Sound Clean Air Agency O&M Plan requirements. Elsewhere, the permit requires NBF/Plant 2 to report all instances where the filters were not operated and maintained properly. However, if NBF/Plant 2 finds that it must deviate from the manufacturer’s instructions, NBF/Plant 2 must develop a SSMP. The permit contains operation and maintenance procedures for establishing filter pressure drop outside the manufacturer’s instruction. 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 NBF/Plant 2 chooses to normally operate a filter in a manner inconsistent with the manufacturer’s instructions, specifications, or recommendations, NBF/Plant 2 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 different (greater) than in other Puget Sound Clean Air Agency operating permits. This is due to the fact that, as discussed in the Compliance History above, the NBF/Plant 2 facility has observed problems with installing the wrong filters, gaps around filters, and not reading the pressure drop at all times when such reading is required. A settlement agreement was signed between Boeing and Puget Sound Clean Air Agency regarding this issue, and the specific monitoring requirements of this agreement are discussed below in Section 5.5. 2.15(b), July 3, 2000 Settlement Agreement.

If NBF/Plant 2 observes problems for which there are no monitoring requirements under an applicable NESHAP, and corrects such problems within 24 hours, NBF/Plant 2 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.

40 CFR 63.745(g)(2)(iii) allows for alternate control technology options for control emissions from aerospace spraying sources for which construction commenced after June 6, 1994, but before October 29, 1996, if they are approved by the permitting agency. NBF/Plant 2 has no source that this could apply to.

NBF/Plant 2 does not have enclosed gun cleaners or atomized gun cleaning. However, NBF/Plant 2 has chosen to keep the language discussing enclosed gun cleaning in the permit in case enclosed gun cleaners are used in the future.

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

Currently, the NBF/Plant 2 facility depaints six or less completed aircraft each calendar year. However, under the Alternate Operating Scenario, the NBF/Plant 2 facility could depaint more than six completed aircraft in a calendar year and thus be subject to the depainting requirements.

Chemical maskant application operations subject to the Aerospace NESHAP are not conducted at the NBF/Plant 2 facility and therefore are not included in this section.

The Puget Sound Clean Air Agency issued General Regulatory Order No. 7451 on August 9, 1998 for an extension of the compliance date for 40 CFR 63.749(a) until September 1, 1999. The beginning and end dates for this extension have already been passed. Therefore, the requirements of General Regulatory Order No. 7451 are obsolete.

(b) July 3, 2000 Settlement Agreement

For bays P3, P4, P5, and P6: In a July 3, 2000 Settlement Agreement signed by Boeing and the Puget Sound Clean Air Agency resolving Notice of Violation No. 36351, Boeing agreed to perform monthly inspections of the first stage paint filters in bays P3 and P4 of the 3-369 building and bays P5 and P6 of the 3-380 building. Boeing has also agreed to perform monthly visual inspections of the second stage exhaust filter in bays P3 and P4 of the 3-369 building. The Settlement of Agreement specified that if filter conditions are satisfactory for six consecutive months, the inspection frequency may be reduced to quarterly. If filter conditions are found to be unsatisfactory, inspections shall resume on a monthly schedule until six satisfactory inspections are recorded, at which time the schedule may be decreased to quarterly. This language from the settlement agreement is incorporated into the Air Operating Permit.

(c) Local Requirements

The Puget Sound Clean Air Agency did not require a Notice of Construction (NOC) for six of the booths installed prior to 1987. These booths are not subject to the standard Order of Approval conditions or the state-only requirement in RCW 70.94.152(7). However, they are subject to all applicable Puget Sound Clean Air Agency regulations. The other spray booths are subject to the Order of Approval conditions and RCW 70.94.152(7).

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 the SIP change, this section will no longer apply when NBF/Plant 2 conducts activities that must comply with the aerospace NESHAP.

For several of the spray booths installed before 1987, the Puget Sound Clean Air Agency approved the booths by registration instead of by an NOC Order of Approval. The booths installed after 1987 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, NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 for this type of housekeeping requirement, the Puget Sound Clean Air Agency has

determined that periodic, quarterly, work practice inspections by NBF/Plant 2 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.

Boeing requested that aerosol temporary coatings Ardox 327N and Aztec AZ643 GC Aerosol be exempt from Puget Sound Clean Air Agency Regulation II, Section 3.09 and cited a May 25, 1995 letter from the Washington State Department of Ecology as justification. The letter says that WAC 173-490-208, a similar requirement, does not apply. The letter, however, says that NBF/Plant 2 must comply with Puget Sound Clean Air Agency regulations and specifically cites Section 3.09. Therefore, the Puget Sound Clean Air Agency has not granted an exemption from the requirements of Puget Sound Clean Air Agency Regulation II, Section 3.09 for aerosol temporary coatings Ardox 327N and Aztec AZ643 GC Aerosol.

Boeing requested the Puget Sound Clean Air Agency clarify that hand-wipe cleaning operations include wiping, scrubbing, mopping, or other hand actions and these operations are specifically not included in the definition of “flush cleaning.” The Puget Sound Clean Air Agency did so in an August 1, 1996 letter.

On several occasions NBF/Plant 2 has reported the use of filters that were not the required filters or were not correctly certified at the time of installation, see Compliance History Section 4, Compliance History. NBF/Plant 2 later certified some of these filter systems. However, because NBF/Plant 2's use of incorrect filters does not appear to be an isolated event, the Puget Sound Clean Air Agency has determined that NBF/Plant 2 should annually check each filter system to insure that the required filter is place.

Besides coating aerospace parts in spray booths, NBF/Plant 2 sometimes coats parts for motor vehicles and mobile equipment. When NBF/Plant 2 conducts such activity, Regulation II, Section 3.04, which sets limits on the VOC content of the coatings, would apply. The monitoring method requires NBF/Plant 2 to keep records of the VOC content of each motor vehicle coating and verify that the coatings being applied meet the requirements.

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).

5. 2.16 EU-3 Non-Halogenated Solvent Spray Wand Parts Cleaning Operations

This section includes all activities associated with solvent cleaning operations using non-halogenated solvents, including solvent spray cleaning of parts used in hydraulic systems (i.e., hydraulic tubing) for testing purposes. The Puget Sound Clean Air Agency approved the spray-cleaning booth in 1992 (Order of Approval No. 4371) and includes a remote reservoir.

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|----------------|----------------|----------------------------|-----------------------|-------------------------------|
| 2-122 | P7 | PB0020 | 4371 | 1992 | Spray Cleaning Booth;4320 cfm |

While the spray wand cleaning operation does not generate a significant amount of VOC emissions, the Puget Sound Clean Air Agency has determined that to maintain the equipment properly, NBF/Plant 2 should conduct monthly inspections for leaks.

Boeing requested the Puget Sound Clean Air Agency to determine that the solvent metal cleaner rules (Puget Sound Clean Air Agency Regulation III, Section 3.05 and WAC 173-460-060(5)) are inapplicable to this process. The Puget Sound Clean Air Agency has determined that the emission unit is a solvent cleaner but not a cold solvent cleaner or a vapor degreaser. As a solvent cleaner, it must meet some of the requirements of Regulation III, Section 3.05. The Puget Sound Clean Air Agency also has determined that this remote reservoir system complies with Section 3.05(a)(1). In addition, the Puget Sound Clean Air Agency has determined that the cleaner uses reasonable means to control emissions. This includes keeping the solvent and spent solvent in covered containers, providing for solvent from the cleaned parts to drain into an enclosed container and keeping the solvent from leaking from the cleaning equipment.

One of the requirements for this cleaning operation is to have a facility for draining cleaned parts such that the solvent is returned to the tank, another requires construction such that the liquid solvent from the cleaned parts drains into a trough or equivalent device and is returned to the solvent tank. NBF/Plant 2 has certified that the equipment complies with these requirements in the Notice of Construction Notice of Completion. The Puget Sound Clean Air Agency has also inspected and verified NBF/Plant 2's claims. NBF/Plant 2 understands that any modification to this cleaning operation would require approval by the Puget Sound Clean Air Agency; therefore, no further monitoring is necessary.

5.2.17 EU-4 Fuel Burning Equipment (Not Subject to New Source Performance Standards)

This section includes the steam generating boilers listed below. The six boilers listed below are in the size range of 10 MMBtu/hr to 100 MMBtu/hr, were installed prior to June 9, 1989 and have not been modified or reconstructed (as defined in 40 CFR Part 60 Subpart A) since. Because of their date of installation, these boilers are not subject to the Standards of Performance for New Stationary Sources in 40 CFR Part 60. The other three boilers are below 10 MMBtu/hr and are not subject to the Standards of Performance for New Stationary Sources in 40 CFR Part 60 because of their size. All the boilers listed below use natural gas as their primary fuel. Fuel oil or Jet A are used as a back-up fuel for the six larger boilers.

For purposes of defining an “emission unit” in this permit, each boiler listed below is considered a separate emission unit.

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|----------------|----------------|----------------------------|-----------------------|--|
| 2-15 | S. End | RE0021 | 5208 | 1986 | Boilers #1 and 2; 42MMBtu/hr |
| 2-15 | S. End | RE0021 | 5208 | 1989 | Boilers #3 and 4; 80 MMBtu/hr |
| 3-374 | | BOIL53 | Reg. | 1986 | Keeler 52.5 MMBTU/hr natural gas fired, PS-300 backup fuel |

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|----------------|----------------|----------------------------|-----------------------|---|
| 3-374 | | BOIL54 | Reg. | 1986 | B&W 76.6 MMBTU/hr natural gas fired, PS-300 |
| 3-801 | | | 4861 | 1991 | Bryan CL-150 1.5 MMBtu/hr natural gas fired |
| 3-800 | | | 3825 | 1991 | 2 Bryan Steam Corp. 3.75 MMBtu/hr natural gas fired |

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

(a) EU 4.1 and EU 4.10 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 NBF/Plant 2. Order of Approval No. 5208, Condition EU 4.10, also requires that the emissions from the No. 1, No.2, No.3, and No. 4 boilers be limited to 10% opacity.

The fuel burning equipment at NBF/Plant 2 can only burn natural gas as the primary fuel and low (or very low) sulfur fuel oil or Jet A as back up fuel. The monitoring method requires checking for visible emissions quarterly while burning gas. The monitoring method also requires checking for visible emissions within 24 hours of shifting to oil and weekly while burning oil for more than seven consecutive days, because oil burning is more likely to cause visible and particulate emissions.

The natural gas, fuel oil, and Jet A fuel approved for this application are inherently low in sulfur, ash and other impurities. Therefore, other than certifying that these are the only fuels burned, the Puget Sound Clean Air Agency has determined that no additional monitoring is necessary to certify compliance with the fuel oil standards in Regulation I, Section 9.08(a) and RCW 70.94.152(7). The same certification is adequate to assure compliance with the SO₂ emission standards in Regulation I, Section 9.07 and WAC 173-400-040(6). Puget Sound Clean Air Agency Regulation I, Section 9.08(a) limits the content of all fuel oil, including Jet A, to less than 2% sulfur. The engineering calculation (Attachment 3) shows that combustion of fuel with a sulfur content not greater than 2% generates emissions less than 1000 ppm SO₂ @ 7% O₂.

- 1) Compliance. None of the fuel burning equipment at NBF/Plant 2 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 NBF/Plant 2. Therefore, the Agency concludes that NBF/Plant 2 is generally in compliance with the opacity requirement and the margin of compliance is large. In addition, the monitoring method is designed so that NBF/Plant 2 will take corrective action before a violation occurs, further enhancing the compliance margin.
- 2) Variability of process and emissions. The equipment normally burns natural gas, with oil as a backup and for testing, training, and calibration. The steam and heat demand at NBF/Plant

2 fluctuates throughout the day and from season-to-season, causing variations in load on the equipment and the need to startup and shutdown equipment. 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 NBF/Plant 2 typically do not generate significant quantities of particulate matter, typically less than two tons 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 10%, the monitoring method requires corrective action, or Reference Method testing, upon detection of visible emissions. Boeing must also take corrective action if visible emissions are noted during the quarterly monitoring, facility wide inspections, or during a complaint investigation. This will provide an added margin of compliance. Monitoring for visible emissions is not required while burning oil during periods when natural gas is a reasonable option or is not being used due to economic reasons, such as when testing, training, and calibration. However, Boeing must still comply with the opacity requirements.

(b) EU 4.2 and 4.3 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% O₂ from all combustion units (i.e., units using combustion for steam production or other process requirements, excluding open burning). NBF/Plant 2 burns only pipeline grade natural gas and backup fuels that are certified to comply with the fuel oil standards of Regulation I, Section 9.08. It can be shown, as in Section 5.5. 2.4 for SO₂, that if fuels are properly burned, NBF/Plant 2 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. 2.18 EU-5 Waste Water Treatment Operations

This section includes all activities and equipment associated with the industrial waste water treatment operations at Building 3-369, including any tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material; chemical and physical treatment methods; waste water storage tanks; sludge drying, material and waste handling; and air emission control equipment. Treatment includes oxidation of organics, heavy metals removal, stripping operations and filtration from aircraft painting, metal finishing, parts washers, and general plant maintenance. The plant does not receive off-site waste and is not subject to the Off-Site Waste and Recovery Operations NESHAP (40 CFR Part 63 Subpart DD)

This emission unit does include an air stripper that is not considered control equipment under 40 CFR 63 Subpart DD. The air stripper received Order of Approval No. 2929 for its operation. The Order of Approval does not list any specific conditions (i.e., flow rate or removal efficiency) with which the air stripper must comply. However, NBF/Plant 2 must maintain and follow an Operations and Maintenance Plan for the stripper and must ensure that the air stripper is operated in accordance with good engineering practices.

5.2.19 EU-6 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 and housecleaning. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

Order of Approval No. 8051 (February 29, 2000) was written for a dust collector. The Order of Approval requires weekly inspections. Inspections shall include a check of the exhaust for visible emissions and fallout, and check of the pressure drop across the filters. If no visible emissions or fallout are observed for 12 consecutive months the inspection frequency maybe reduced to monthly.

The Puget Sound Clean Air Agency has determined that the monitoring frequency for the particulate control equipment other than the dust collector approved in Order of Approval No. 8051 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 they generally comply 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 are small dust collectors that combined normally emit less than a ton of particulate per 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*. Boeing must also take corrective action if problems are noted during facility wide inspections or during a complaint investigation.

Monthly monitoring for visible emissions and fugitive dust is proposed for systems that are rated at greater than 2000 cfm. The following systems at the NBF/Plant 2 facility meet these criteria:

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|----------------|----------------|----------------------------|-----------------------|---------------------------|
| 2-88 | | DUC7460 | 8051 | 2000 | Dust collector |
| 3-369 | Inside Door S6 | DUC369 | 7165 | 1998 | Dust collector |
| 2-49 | | DUC078 | 7391 | 1998 | Dust collector |
| 2-49 | VC18 | GRO128 | 6120 | 1995 | Grind Booth, Dry Filter |

Quarterly monitoring is proposed for vacuum systems that are not expected to be significant sources of particulate emissions because the system is rated at 2000 cfm or less. Among these vacuum systems are:

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|----------------|----------------|----------------------------|-----------------------|---------------------------|
| 3-818 | DUC 515 | | 4677 | 1993 | Dust collector |

5.2.20 EU-7 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 a Notice of Construction Order of Approval. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

| <i>Bldg.</i> | <i>Location</i> | <i>MSS/ID#</i> | <i>Order of Approval #</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|-----------------|----------------|----------------------------|-----------------------|---------------------------|
| 3-818 | E1 | SND511 | 7880 | 1999 | Blast booth/baghouse |

NBF/Plant 2 uses abrasive blasting to clean parts before final finishing and assembly and conducts the operation inside booths with particulate control equipment. Monitoring of the particulate control equipment is consistent with Section 5.5. 2.19 EU-6 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 monitor requirement 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 since 1986 and has not identified violations.

5.2.21 EU-8 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 stations at the facility consist of gasoline pumps, a diesel pump, and above ground and underground storage tanks. Gasoline throughput at the stations is less than 600,000 gallons annually.

NBF/Plant 2 has two gasoline stations that dispense fuel to NBF/Plant 2 motor vehicles. The Puget Sound Clean Air Agency approved the new equipment in 1986 and 1990. Regulation II, Section 2.07(a)(1) requires the use of Stage 1 vapor recovery for all gasoline storage tanks with a capacity greater than 1000 gallons installed after January 1, 1979. This regulation applies at NBF/Plant 2. Regulation II Section 2.07(a)(2) requires Stage 2 vapor recovery systems at tanks installed after August 2, 1991, or at facilities with a throughput greater than 600,000 gallons per calendar year. Because of the gasoline throughput rate and equipment installation date, the Stage 2 vapor recovery requirements don't apply to the NBF/Plant 2 facility.

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. NBF/Plant 2 does not have to report finding defective equipment as a permit deviation as long as NBF/Plant 2 takes the appropriate corrective action. However, failure to take corrective action as described in the permit must be reported under Section V.M Compliance certifications or V.Q Reporting of the permit. NBF/Plant 2 must also, under Regulation I, Section 7.09(b), keep a record of all inspections and actions required by its O&M Plan.

There are two versions of Regulation II, Section 2.07(b): the "SIP," or federally enforceable, version which was promulgated on February 10, 1994, and the December 9, 1999 "state/local only" version, which has not yet been approved in the SIP. There are minor differences between the "SIP" and "state/local only" versions, but the monitoring methods are the same. Both versions of the regulation require NBF/Plant 2 to have a Stage 1 vapor recovery system.

- The "SIP" version requires that the "transport tank" or tank truck also be equipped to balance vapors, and that the vapor return lines actually be connected when fuel transfer takes place.
- The "state/local only" version does not have the vapor recovery line connection requirement, but it does require the owner/operator to visually inspect the vapor recovery system each time after fuel delivery and to make any necessary repairs.

The monitoring, maintenance, and recordkeeping procedures required under the "state/local only" version of Regulation II, Section 2.07(b) reasonably assure compliance with both the new "state/local only" version of Regulation II, Section 2.07 as well as with all applicable requirements in the "SIP" version of Regulation II, Sections 2.07 and 2.08. This is because:

- The required California Air Resources Board (CARB)-approved system, combined with visual inspection and mandatory repair of any defective equipment at the storage tank *with each fill-up*, prevents leaks of vapor or liquid gasoline from the storage tank; and
- The "state/local only" Regulation II, Section 2.08 requirements from tank trucks, while not applicable to or monitored by NBF/Plant 2, prevent gasoline liquid or vapor leaks from the tank truck, during filling, delivery, and transport.

5. 2.22 EU-9 Storage Tanks

This section consists of the storage tanks listed below that have been permitted under a Notice of Construction. For the purpose of defining an emission unit in this permit, each tank listed below is considered a separate emission unit.

| <i>Bldg.</i> | <i>Col./Dr</i> | <i>MSS/ID#</i> | <i>Order of Approval#</i> | <i>Installed Date</i> | <i>Source Description</i> |
|--------------|--------------------------|----------------|---------------------------|-----------------------|----------------------------------|
| 2-13 | N. Yard | APL001 | 1231 | 1974 | 500,000 gal jet fuel tank |
| 2-13 | N.Yard | APL002 | 2153 | 1980 | 600,000 gal jet fuel tank |
| 2-15 | E20 | UPL007 | 7203 | 1997 | 25,000 gal jet fuel |
| 2-15 | E20 | UPL008 | 7203 | 1997 | 25,000 gal jet fuel |
| 3-822 | Fuel farm | ABF108 | 3486 | 1987 | 30,000 gal jet fuel tank |
| 3-822 | Fuel farm | ABF109 | 3486 | 1987 | 30,000 gal jet fuel tank |
| 3-822 | Fuel farm | ABF110 | 3486 | 1987 | 6,000 gal recycled jet fuel tank |
| 3-822 | Fuel farm | ABF154 | 5336 | 1994 | 30,000 gal jet fuel tank |
| 3-822 | Fuel farm | ABF155 | 5336 | 1994 | 30,000 gal jet fuel tank |
| 3-368 | Outside SE side of bldg. | ABF145 | 5279 | 1993 | 12,000 gal jet fuel tank |
| 3-304 | Outside N side of bldg | ABF148 | 5365 | 1994 | 15,000 gal jet fuel tank |
| 3-304 | Outside N side of bldg | ABF149 | 5365 | 1994 | 15,000 gal jet fuel tank |
| 3-304 | Outside N side of bldg | ABF150 | 5365 | 1994 | 15,000 gal jet fuel tank |
| 3-374 | Outside N | ABF156 | 5468 | 1994 | 20,000 gal PS-300 tank |

(a) 40 CFR 60 Subpart K and Ka

The requirements of 40 CFR 60 Subpart K and Ka apply to large storage tanks used to store petroleum liquids. All of the tanks in Section 5. 2.22 of this Statement of Basis, except tanks APL001 and APL002, have less than 40,000 gallons storage capacity. 40 CFR 60 Subpart K and Subpart Ka do not apply to these tanks with a capacity less than 40,000 gallons.

40 CFR 60 Subpart K has been found to apply to tank APL001 (a 500,000 gallon tank constructed in 1974 and storing jet fuel, which is a petroleum liquid blend like kerosene). A review of the fuel characteristics of kerosene shows that the vapor pressure of kerosene is well below 6.9 kPa. 40 CFR 60.113(d)(1) provides an exemption from the monitoring requirements of 40 CFR 60.113 for tanks used to store petroleum liquids with a vapor pressure less than 6.9 kPa. This exemption in 40 CFR 60.113(d)(1) applies to tank APL001. In addition, a review of the other requirements in 40 CFR 60 Subpart K reveals that the requirements apply only to tanks storing liquids with higher vapor pressures than that of kerosene (jet fuel). Therefore, even

though 40 CFR 60 Subpart K generally applies in general to tank APL001, the tank has no applicable requirements per 40 CFR 60 Subpart K.

40 CFR 60 Subpart Ka has been found to apply to tank APL002 (a 600,000 gallon tank constructed in 1980 and storing jet fuel, which is a petroleum liquid like kerosene). As stated above, the vapor pressure of kerosene is well below 6.9 kPa. 40 CFR 60.115a(d)(1) provides an exemption from the monitoring requirements of 40 CFR 60.115a for tanks used to store petroleum liquids with a vapor pressure less than 6.9 kPa. This exemption in 40 CFR 60.115a(d)(1) applies to tank APL002. In addition, a review of the other requirements in 40 CFR 60 Subpart Ka shows that they apply only to tanks storing liquids with higher vapor pressures than that of kerosene (jet fuel). Therefore, even though 40 CFR 60 Subpart Ka applies in general to tank APL002, the tank has no applicable requirements per 40 CFR 60 Subpart Ka.

(b) 40 CFR 60 Subpart Kb

Except as discussed below, 40 CFR 60 Subpart Kb applies to each storage vessel with a capacity greater than or equal to 40 cubic meters that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984.

- Vessels holding volatile organic liquids but having a capacity less than 75 cubic meters (19,800 gal) are exempt from all but the recordkeeping requirements in 40 CFR 60.116b(a) and (b).
- Vessels holding volatile organic liquids that have a capacity greater than or equal to 75 cubic meters (19,800 gal) but less than 151 cubic meters (39,890 gal) and storing a liquid with a maximum vapor pressure less than 15.0 kPa are exempt from all but the recordkeeping requirements in 40 CFR 60.116b(a) and (b).
- Vessels meeting the above criteria that have a capacity greater than or equal to 151 cubic meters and storing a liquid with a vapor pressure less than 3.5 kPa are exempt from all but the recordkeeping requirements in 40 CFR 60.116b(a) and (b).

40 CFR 60 Subpart Kb applies to all the tanks discussed in Section 5. 2.22 of this Statement of Basis except for tanks APL001, APL002, and ABF110. Tanks UPL007, UPL008, ABF108, ABF109, ABF154, ABF155, ABF145, ABF148, ABF149, ABF150, ABF156 are all larger than 10,567 gallons, but smaller than 39,890 gallons. All of the above tanks except for ABF 156 hold jet fuel (vapor pressure less than 3.5 kPa). Tank ABF156 holds PS300 oil (vapor pressure less than 3.5 kPa). Because of the tank size and vapor pressure of the liquids stored, the tanks have no applicable requirements other than recordkeeping per 40 CFR 60.115b(a) and (b).

5. 2.23 EU 10 Wood Furniture Manufacture

This section consists of equipment used in wood furniture manufacture. Wood furniture manufacture is an incidental activity at NBF/Plant 2, and the equipment used for wood furniture manufacture is also used for other manufacturing activities discussed in EU 1 through EU 9 above. Therefore, the specific NOC Order of Approval numbers of this equipment are not called out in this section. Instead, the NOC Order of Approval numbers are listed in the appropriate section under EU 1 through EU 9.

The manufacture of wood furniture takes place at the following locations at the NBF/Plant 2 facility:

- Facilities Carpentry Shop (building 2-31)
- Model Shop (building 2-88)
- Mechanical Systems Lab (building 2-10)
- Carpentry Shop (building 3-365)

Wood furniture manufacturing activities are subject to regulation under 40 CFR 63 Subpart JJ. 40 CFR 63, Subpart JJ regulates wood manufacturing activities even if they are done on a small scale, so long as the activities take place at a facility that is a major source as defined by 40 CFR 63.2. NBF/Plant 2 is a major source under this definition.

40 CFR 63.800(a) offers an exemption from all but the recordkeeping requirement of 40 CFR 63.801 for facilities that are considered to be incidental wood furniture manufacturers. Incidental wood furniture manufacturers are facilities that use 100 gallons/month or less of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. NBF/Plant 2 meets these criteria. An incidental wood furniture manufacturer meets the provisions of 40 CFR Subpart JJ by keeping purchase or usage records demonstrating that the facility uses 100 gallon/month of finishing materials or adhesives.

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

5.2.24 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.

NBF/Plant 2 may conduct operations at NBF/Plant 2 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. NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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.

6. Monitoring, Maintenance and Recordkeeping Procedures

Except for the testing required under Section II.A.2(m) of the permit (Periodic Performance Source Test), 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 9A 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 NBF/Plant 2 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 Opacity Monitoring

Section II.A.1(a) requires that Boeing conduct quarterly inspections of the facility for visible emissions. If during one of these inspections, Boeing observes visible emissions, Boeing can eliminate the visible emissions, determine if the emissions last more than three minutes, or determine the opacity using the reference method. If Boeing determined opacity using the reference method, Boeing must report to Puget Sound Clean Air Agency. It would not be a deviation of the emission standard if Boeing eliminated the visible emissions within 24 hours, the visible emissions did not last more than 3 minutes, or if opacity was determined to be less than the standard using the reference method. However, noting visible emissions during a quarterly inspection and taking no action would be a deviation of the monitoring method.

6.2 Following Monitoring, Maintenance and Recordkeeping Procedures

NBF/Plant 2 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 NBF/Plant 2 must report such deviations, as well as deviations from any other permit condition, as a deviation under Section V.Q.1 of the permit. In addition, all information collected as a result of implementing Section II can be used as credible evidence under Section V.N of the permit. Reporting a permit deviation and taking corrective action does not relieve NBF/Plant 2 from its obligation to comply with the underlying applicable requirement.

6.3 Standard Approval Conditions

A standard Puget Sound Clean Air Agency Notice of Construction 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 Approval Order. While the Notice of Completion is a one-time requirement that NBF/Plant 2 has complied with, NBF/Plant 2 cannot change the approved equipment in such a manner that requires an Order of Approval without first obtaining an Order of Approval which is addressed in Section IV.A of the permit.

The permit requires NBF/Plant 2 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, NBF/Plant 2 in-house training practices and similar factors. If problems are identified during work practice inspections or any other time, NBF/Plant 2 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.

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

- NBF/Plant 2'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 NBF/Plant 2 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.

6.4 Operation and Maintenance (O&M) Plan Requirements

NBF/Plant 2's O&M Plan shall include equipment operation and maintenance procedures specifying how NBF/Plant 2 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 a

April 17, 2001 letter (Attachment 14) 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 May 1, 2001 letter (Attachment 12) to Barbara Thompson, Rick Hess confirmed that understanding.

7. Prohibited Activities

Some of the requirements NBF/Plant 2 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.

- Requirement III.D & E. 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 NBF/Plant 2 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 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 Regulation I, Article 6 and not the statewide version administered 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),

NBF/Plant 2 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 16, E-mail, dated September 14, 2001, S. Van Slyke to B. Thompson, New NOC Rule Interpretation).

Determinations Granted by the Puget Sound Clean Air Agency

10/10/02 letter from Steven M. Van Slyke, Puget Sound Clean Air Agency, to Jade Hudson, Boeing, discussing when a Notice of Construction is required for scrubbers and baghouses. See Attachment 11.

7/09/96 Letter from John K. Anderson, Puget Sound Air Pollution Control Agency, to Irina Polyakovsky, Boeing, Exemption from Registration and Notice of Construction Application. See Attachment 19

8.2 Requirement IV.D Spray Coating

Both the 1993 federally enforceable version and the version of Regulation I, Section 9.16 are included in the permit. However, the two versions differ enough that NBF/Plant 2 could only comply with one. Therefore, Puget Sound Clean Air Agency will only enforce the current version.

8.3 Notice of Construction No. 8335

NBF/Plant 2 applied for Notice of Construction No. 8335 for an environmental chamber used to test hydraulic hoses and seals under various temperature and pressure conditions. A review of the information supplied led to the conclusion that no Order of Approval was needed for this equipment. A January 23, 2001 letter from Jay Willenberg, Puget Sound Clean Air Agency, to Jon Turvey, Boeing, exempted this equipment from Notice of Construction requirements, as per Puget Sound Clean Air Agency Regulation 1 Section 6.03b(5).

9. Standard Terms and Conditions

Some of the requirements NBF/Plant 2 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 NBF/Plant 2 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 NBF/Plant 2 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 consider 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 of the Operating Air Operating Permit lists the reports that NBF/Plant 2 must submit, and the responsible official must certify the report. In many cases, the Puget Sound Clean Air Agency used its authority under 40 CFR 63.10 to adjust the reporting dates and reporting frequencies to be consistent with other reporting requirements. 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 NBF/Plant2 submitting two or three different reports with the same information at different times, the Agency determined that more frequent reporting under 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 NBF/Plant 2 to report certain startup, shutdown and malfunctions. After reviewing the requirement 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.

Section V.Q contains tables summarizing the reporting and notification requirements that are presented in detail in the permit. In the event of a conflict between the reporting or notification requirements listed those tables and the reporting requirements listed in other sections of the permit, the reporting and notification requirements listed in other sections of the permit shall govern.

WAC 173-401-520 (Section V.Q.1(c)) requires that any application form, report, or compliance certification that is required to be certified by any applicable requirement or is submitted pursuant to the permit contain certification by a responsible official of truth, accuracy, and completeness. WAC 173-401-615(3)(a) requires submittal of any required monitoring report at least once every six month and those reports must be certified consistent with WAC 173-401-520. However, there are reports that are required more frequently than once every six month. Unless an underlying applicable requirement requires a report to be certified at the time of submittal, the Agency has determined that responsible official, could list all the required forms, reports, and certifications submitted in the pervious six months and certify their truth, accuracy, and completeness. Section V.Q.1(c) lists those reports that must be certified at the time of submittal. The other form, reports, or certifications can be certified at the time of submittal or once every six months. The required applications, reports, and compliance certifications are listed in Section V.Q.6. Section V.Q.7 lists required notifications, these notifications do not need to be certified consistent with WAC 173-401-520 (Section V.Q.1(c)).

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 following comments were received from Boeing during the public comment period:

11.1 Draft Air Operating Permit Comments

Section I.B Emission Unit Specific Applicable Requirements

Page 16: In section IB the second paragraph, change Notice of Construction (NOC) number to Order of Approval number.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 17: The column heading “*Using NOC#*” should be changed to “*Order of Approval #*”:

Answer: Puget Sound Clean Air Agency modified as requested.

Page 20: The fourth paint booth from the bottom has moved, change 2-65 to 2-31, Col./Dr. from A11 to WJ10 and PB0018 to PB0008.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 21: Change the EU range to “EU 2.1 through EU 2.16”. The requirements of 40 CFR 63.10(b)(2) and 40 CFR 63.10(b)(3) with No Monitoring Required should be listed in section I.B.2(a) NESHAP General Provisions as they are applicable requirements listed in the Plant 2 permit.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 23: Change the EU range to “EU 2.17 through EU 2.29”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 25: Change the EU range to “EU 2.30 through EU 2.47”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 30: Change the EU range to “EU 2.48 through EU 2.55”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 31: Change the EU range to “EU 2.56 through EU 2.58”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 42: Change the EU range under (k) O&M to “EU 2.102 through EU 2.103” and under (l) Outside spray coating to “EU 2.104 through EU 2.105”. The Monitoring, Maintenance and Recordkeeping Method column for EU 2.102 should contain II.B Operation and Maintenance (O&M) Plan Requirements.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 44: Change the EU range to “EU 2.106 through EU 2.114”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 48: For clarity add Bldg. 2-62 after PB0004 so that the first sentence under (r) Order of Approval No. 5693 reads “Requirement EU 2.123 is the Order of Approval permit condition that applies to PB0004 located in Bldg. 2-62.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 48: Change the EU range under (s) Order of Approval No. 8051 to “EU 2.124 through EU 2.127”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 49: Change the EU under (u) to “EU 2.129”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 53: The column heading *NOC#* should be changed to *Order of Approval #*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 55: Add BOIL51 to the second to last boiler and BOIL55 & BOIL56 to the last boiler in the MSS/ID# column. For consistency the source description of the last boiler should be changed from 3,750 Mbtu/hr to 3.75 MMBtu/hr.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 61: Change the EU range to “EU 4.7 through EU 4.10”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 65: Remove the first two cyclones from the emission unit list (*DUC063* and *DUC066*), these units have been removed from the site. In the Col./Dr. column change *A-3755* to *Outside W. wall*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 66: Add the reference to the following letter at the end of the Cyclones, Baghouses, and Other Particulate Control Operations section:

Steven M Van Slyke letter dated October 10, 2001 to Jade Hudson re Notice of Construction (NOC) Requirements for Scrubbers and Baghouses

Answer: Puget Sound Clean Air Agency added this reference to the Statement of Basis, in the section discussing Notice of Construction New Source Review. This location is more appropriate than the location in the permit, because the letter is of a general nature, and does not specifically cite the cyclones, baghouses, and particulate operations discussed in the Air Operating Permit.

Page 68: Change the EU range to “EU 7.8 through EU 7.9”.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 69: In the *MSS/ID#* column add VE0014 to the first emission unit, so that it reads *VE0014/UPL063*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 71: Delete EU 8.6 it is a duplicate of EU 8.4.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 72: The column heading *NOC#* should be changed to *Order of Approval #*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 73: A note should be placed in the Monitoring, Maintenance & Recordkeeping Method column of EU 9.4 that states that this monitoring does not apply to Underground Storage Tanks (USTs) [UPL007 and UPL008 Order of Approval # 7203]

Answer: Puget Sound Clean Air Agency modified as requested.

Page 77: Change 2 (g) from Yes to No

Answer: Puget Sound Clean Air Agency modified as requested.

Section II: Monitoring, Maintenance and Recordkeeping

Page 81: The last paragraph of II.A.1(a) addresses visible emission inspections for emergency generators and fire suppression pumps. The language requires that emergency generators with visible emissions be checked per Method 9 at least once every two years. Since NBF/Plant 2 has

not had an opacity issue with these generators in the past and typically these units are not run for more than 3 hours at any one time, we propose to change the language to:
Except for the first 10 minutes during startup, 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 shut it down within 3 hours or observe visible emissions using WDOE Method 9A within 30 days at least once every two years.

Answer: As requested, Puget Sound Clean Air Agency has reviewed the monitoring, maintenance and recordkeeping language for this requirement. The language has been changed to:

If NBF/Plant 2 observes visible emissions from an emergency generator or generator for fire suppression pumps, NBF/Plant 2 shall check to make sure that the generator is operated and maintained properly and either shut it down within 3 hours or observe visible emissions using WDOE Method 9A within 30 days.

This language is consistent with the requirements of other large aerospace facilities.

Page 81: The first sentence in the first paragraph of II.A.1 (b) Complaint Response should be changed to clarify that an investigation shall commence no later than three working days. This is consistent with the statement of basis page 21, section 5.2.9 Requirement I.A.11 last sentence.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 82: The second sentence of II.A.1 (d) Work Practice Inspections should be changed to clarify that the second sentence is referring to the same work practice inspection as the first sentence, i.e. that there is not a “randomly sampled” work practice inspection “in addition” to the work practice inspection referred to in the first sentence. The third sentence should be changed to require that only potential compliance problems be corrected, instead of requiring that all problems be corrected.

Answer: Puget Sound Clean Air Agency modified as requested.

The first sentence of II.A.1 (e) Maintenance and Repair of Insignificant Emission Units should be changed to allow the option of shutting down defective equipment until the problem can be repaired.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 83: In section II.A.1 (e) Fugitive Dust, Track-Out, and Odor Bearing Contaminants add “within 24 hours” to the last sentence after shut down.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 87: In section II.A.2 (c) (vi) fifth paragraph second sentence should be changed to: If the fugitive dust or fallout from the equipment or the exhaust stack is observed, NBF/Plant 2 shall as soon as practicable but within 24 hours of determination either take corrective action or shutdown the operation until it is repaired or corrected.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 88 and 89: In section II.A.2 (c)(viii) Scrubbers for Metal Finishing Tankline the first paragraph requires monthly inspections of the pump including checking the nozzles for pluggage. The fifth paragraph requires quarterly inspection of the nozzles for pluggage. These requirements are redundant, we feel quarterly inspection of nozzle pluggage and pump operations are adequate.

Answer: Changed to monthly for consistency.

Page 91 and 92: In section II.A.2 (d) Purchase Specification add [WAC 173-401-615(1)(b), 11/4/93].

Answer: Puget Sound Clean Air Agency modified as requested.

In section II.A.2 (e) Fuel Sulfur Content Monitoring Procedure add [WAC 173-401-615(1)(b), 11/4/93]

Answer: Puget Sound Clean Air Agency modified as requested.

In section II.A.2 (f) add date to regulatory references.

Answer: Puget Sound Clean Air Agency modified as requested.

In section II.A.2 (g) add regulatory references.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 92: The first sentence of the fourth paragraph of II.A.2 (f) Aerospace NESHAP Solvent Cleaner Monitoring and Recordkeeping Procedure should be changed from Boeing Fredrickson to Boeing NBF/Plant 2.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 93: In section II.A.2 (h) add regulatory references.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 94: II.A.2 (h)(ii)(a) Aerospace NESHAP Pressure Drop/Water Flow Rate Monitoring and Recordkeeping Procedure change ore to or.

Answer: Puget Sound Clean Air Agency modified as requested.

II.A.2 (h)(iii) Aerospace NESHAP Pressure Drop/Water Flow Rate Monitoring and Recordkeeping Procedure should be changed to indicate that all equipment malfunctions shall be immediately reported to a supervisory personnel is only required when not using manufacturers instructions.

Answer: Puget Sound Clean Air Agency modified as requested.

Section III Prohibited Activities

Page 100: In section III.D.2 add “not” to the first sentence.

Answer: Puget Sound Clean Air Agency modified as requested.

Section IV Activities Requiring Additional Approval

Page 101: In section IV.A add “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.” This is consistent with the Statement of Basis Page 41 second paragraph.

Answer: Puget Sound Clean Air Agency modified as requested.

Section V Standard Terms and Conditions

Page 106: The last paragraph of V.M Compliance Certifications should be changed to clarify that the compliance certifications that must be submitted to the EPA are the annual compliance certifications and the number of days in which the compliance certification report must be submitted should be changed to be consistent with the table in V.Q.4 (February 28 for the previous calendar year)

Answer: Puget Sound Clean Air Agency modified as requested.

Page 109: In V.P.1 General Data Recovery the sentence does not make sense as written. We propose the language be changed to clarify that no data is required to be collected during any period that the monitored process does not operate.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 111: V.Q.1 (b) Deviation Reports should be changed to clarify that the six-month report of no deviations is for the semiannual period (January – June, July – December) and not for any six-month period of no deviations. The number of days in which the six-month certification of deviations reports must be submitted should be changed to be consistent with the table in V.Q.4 (August 30 for the period January 1 to June 30 and February 28 for the period July 1 to December 31.)

Answer: Puget Sound Clean Air Agency modified as requested.

Page 115: In V.Q.3 (d) Change in Information clarifying that the information provided is under 40 CFR 63.9. This change was previously discussed and agreed to by PSCAA at our meeting on December 21 2001.

Answer: Puget Sound Clean Air Agency modified as requested.

Section VII Appendixes

Page 132 through 135: Change the section header from VII Permit Shield to VII Appendixes

Answer: Puget Sound Clean Air Agency modified as requested.

Draft Statement of Basis Comments

Page 14: In Section 5.2.1 Requirement I.A.1, the language in this section should be changed to be consistent with the language in the Air Operating Permit

Answer: The Puget Sound Clean Air Agency will change the language in the Statement of Basis to be the same as the language in Section II.A.1.(a) of the Air Operating Permit.

Page 24: In the table of Section 5.3.2 EU-2 Coating, Cleaning, and Depainting Operations, change the column heading *NOC#* to *Order of Approval #*, change the 8th Order of Approval # from 2635 to 2634. The 14th unit has been moved please change the following: 2-65 to 2-31, A11 to WJ10, PB0018 to PB0008. Remove the 16th unit it is a duplicate of the 8th unit. Remove the 18th unit, order of approval #4245 is a modification of existing spray booths and not a separate emission unit.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 24: For consistency in Section 5.3.2 Coating, Cleaning, and Depainting Operations, subsection (a) Aerospace NESHAP, the first paragraph third and fourth sentence manufacturer's recommendations should be changed to manufacturer's instructions.

Answer: Puget Sound Clean Air Agency has changed manufacturer's recommendations to manufacturer's: recommendations, specifications, or instructions. This wording is consistent with agreement reached between Jay Willenberg, Agency, and John Fosberg, Boeing.

Page 28: In Section 5.3.2 Coating, Cleaning, and Depainting Operations, subsection (c) Local Requirements, the last paragraph is unnecessary and should be removed, Boeing NBF/Plant 2 is in agreement that the requirements of cold solvent cleaners should be placed in a separate emission unit.

In the table of Section 5.3.3 EU-3 Non-Halogenated Solvent Spray Wand Parts Cleaning Operations, change the column heading *NOC#* to *Order of Approval #*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 29: In the table of Section 5.3.4 EU-4 Fuel Burning Equipment (Not Subject to New Source Performance Standards), change the column heading *NOC#* to *Order of Approval #*. Under Source description change the last unit from 3,750 *Mbtu/hr* to 3.75 *MMBtu/hr*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 30: In Section 5.3.4 EU-4 Fuel Burning Equipment (Not Subject to New Source Performance Standards) subsection (a) EU 6.1 Fuel Burning Opacity the second paragraph states that visible emission inspections will occur once per month when burning gas. However, the draft permit requires that such visible emission inspections occur once each calendar quarter.

Answer: Puget Sound Clean Air Agency reviewed the existing Plant 2 Air Operating Permit, and modified both the NBF/Plant 2 Air Operating Permit and Statement of Basis to be consistent with the Plant 2 Air Operating Permit.

Page 32: In the first table of Section 5.3.6 EU-6 Cyclones, Baghouses, and Other Particulate Control Operations, change the column heading from *NOC#* to *Order of Approval #*. The first two emission units (DUC063 & DUC066) have been removed from the site please delete them. On the fourth unit (DUC369) move Door S6 to the Col./Dr. column. On the 5th unit (DUC078) delete the A-3755 under the Col./Dr. Column. On the 6th unit under the Col./Dr. column change VCR18 to VC18 and under the MSS/ID# column change A-3775 to GRO128.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 33: In the second table of Section 5.3.6 EU-6 Cyclones, Baghouses, and Other Particulate Control Operations, change the column heading from *NOC#* to *Order of Approval #*. In the MSS/ID# column insert DUC515 and move 1993 from the Source Description to the Installed Date column.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 36: In the table of Section 5.3.9 EU-9 Storage Tanks change *NOC#* to *Order of Approval #*.

Answer: Puget Sound Clean Air Agency modified as requested.

Page 38: In Section 6.1 Following Monitoring, Maintenance and Recordkeeping Procedures, the third sentence violations should be changed to deviations. Boeing does not have the authority to determine violations only to determine deviations.

Answer: Puget Sound Clean Air Agency modified as requested.

The following additional comment was received from Boeing (originally received in 1/29/02 email and then modified by 2/4/02 email):

In the Statement of Basis

Page 19: In Section 5.2.7 Requirement I.A.9, the last sentence should be deleted and replaced with the following statement:

"Where maintenance specifically required in Section II.A for a particular emissions unit is performed and the facility has developed and implemented an O&M Plan applicable to that emission unit in a manner reflecting good industrial practice, as required by Section II.B, the facility shall be deemed to be in compliance with the general good working order provision of Reg. I Section 9.20. by virtue of the permit shield."

If the Agency does not agree, the last sentence should be deleted anyway and the Statement of Basis should be silent on this issue. It is Boeing's understanding that the Statement of Basis is not the forum to express views on disputed issues."

Answer:

The sentence referred to in the above statement is: *“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.”*

It is the Agency’s position that the Statement of Basis has been created to provide background information for decisions made in the Air Operating Permit. As such, this document is uniquely suited to expressing views and interpretations. In certain cases, these views and interpretations may not coincide with those of a facility.

The Agency has reviewed Boeing’s request to change the language of Section 5.2.7 Requirement I.A.9 as proposed by Boeing. The Agency continues to reserve its right to make case-by-case determinations of whether equipment is being maintained in good working order. Therefore, the language of Section 5.2.7 Requirement I.A.9 will not be changed.

11.2 June 2003 Comments from Boeing

July 16, 2003
E-1370-GRM-2003-072

Agata McIntyre
Puget Sound Clean Air Agency
110 Union St., Suite 500
Seattle, WA 98101

Subject: Comments to the re-opened for cause Boeing NBF/ Plant 2 Draft Air Operating Permit and Statement of Basis

The purpose of this letter is to provide comments to the NBF/Plant 2 Draft Operating Permit and Statement of Basis.

Comments to NBF/Plant 2 Draft Air Operating Permit

1) Please add the appropriate headers to sections: I.A, I.B.1-10, I.C, II, III, IV, V, VI, VII, and VIII

Response: Headers added 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. Please make the following changes to I.A.3 as shown below.

| | | | | | | |
|-------|---|--|---|---|------------------------------|---|
| I.A.3 | <p>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 WAC 173-400-050</p> <p>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</p> <p>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.</p> <p>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)</p> | <p>02/10/1994</p> <p>03/22/1991</p> <p>04/09/1998</p> <p>03/22/1991</p> <p>09/15/01</p> | <p>Shall not emit particulate matter in excess of 0.05 gr/dscf (0.10 gr/dscf per <u>WAC 173-400-050</u>) 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. Examples include indirect-fired drying ovens and space heaters and water heaters)</p> | <p>II.A.1(a) Opacity Monitoring</p> <p>II.A.1(b) Complaint Response</p> <p>II.A.1(c) Facility Inspections</p> | <p>At least 1-hr per run</p> | <p>Puget Sound Clean Air Agency Method 5 (See Section VIII)</p> |
|-------|---|--|---|---|------------------------------|---|

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 16-19: Boeing NBF/Plant 2 has ceased all Process Tankline Operations and removed the associated equipment from the facility. In order to remove the Chemical Process Tankline Operations Section applicable requirements and the associated monitoring while maintaining the AOP numbering system please change EU 1 as shown below.

11.2.1. Reserved

Response: Change made as requested.

4) Page 21: Please remove the following from the equipment list. This unit is covered under EU 3

| Bldg. | Col/Dr | MSS/ID# | Order of Approval # | Date Installed | Source Description | Aerospace NESHAP Coatings with Inorganic HAP Used in Unit? |
|------------------|---------------|-------------------|---------------------|-----------------|----------------------------------|--|
| 2-122 | P7 | PB0020 | 4371 | 1992 | Spray-cleaning-booth* | |

Response: Change made as requested.

5) Page 22: Please correct the typo as shown below

| |
|--|
| <p>(a) NESHAP General Provisions</p> <p>Requirement Nos. EU 2.1 through EU 2.16⁷ are the NESHAP General Provisions, 40 CFR 63 Subpart A, that apply to sources subject to the Aerospace NESHAP. Applicability of 40 CFR 63 Subpart A is defined in Table 1 to Subpart GG of Part 63. Table 1 supersedes this permit if an apparent conflict exists.</p> |
|--|

Response: Change made as requested.

6) Page 24: 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, <u>but</u> 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 32: Please modify the requirement paraphrase of EU 2.56 as shown below to reflect the regulatory language:

| | | | | |
|---------|-------------------------------|---|-----|--|
| EU 2.56 | 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, <u>and the use of an extension on the spray gun to properly reach limited access spaces.</u> | NMR | |
|---------|-------------------------------|---|-----|--|

Response: Change made as requested.

8) Page 33: Please correct the typos as shown below

(b) ANESHAP Primer & Topcoat

Requirement Nos. EU 2.62~~62~~ through EU 2.78~~8~~ are the Aerospace NESHAP requirements related to aerospace primer and topcoat application operations (as defined in 40 CFR 63.741 and 742) where the primer or topcoat contains an inorganic HAP. These requirements only apply when an aerospace primer and topcoat containing an inorganic HAP is sprayed onto an aerospace part. Coatings that do not contain inorganic HAPs or coatings that are not primers or topcoats as defined in the Aerospace NESHAP are also be sprayed in these booths. NBF/Plant 2 may add other booths as being subject to the inorganic HAP requirements provided that NBF/Plant 2 shall, contemporaneously with making the change, record in a log at NBF / Plant 2 a record of the additional booths that are required to comply with the following requirements and the scenario under which they are operating.

Response: Changes made as requested.

9) Page 34: 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)(B) (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 a waterwash system that remains in operation during all coating application operations. Alternatively, may choose to comply with 40 CFR 63.745(g)(2)(i)(A), discussed in EU 2.66, <u>or 63.745(g)(2)(i)(C), discussed in EU 2.68.</u> | II.A.2(i) Aerospace NESHAP Pressure Drop/Water Flow Rate Monitoring and Recordkeeping Procedure |
|---------|-------------------------------------|--|---|

Response: Changes made as requested.

10) Page 45: Please correct the date on Order of Approval No. 8850 (NBF) Condition No. 3 as follows. (~~3/3/99~~ 5/21/03)

Response: Change made as requested. In addition, the paraphrase for NOC 8850 Condition No. 3 was updated to include the changes made during the 5/21/03 NOC modification.

11) Page 46: Please correct the typo as shown below.

(c) PSD 90-04 and NOC Order of Approval 3560

Requirement Nos. EU 2.108 through 2.11~~67~~ are the PSD 90-04 and Order of Approval No. 3560 permit conditions that apply to the Bldg. 3-380 paint hangar.

Response: Change made as requested.

12) Page 47: Please remove or reserve EU 2.114. PSD 90-04 amendment 1 Approval condition No. 7 was satisfied through WA Department of Ecology with Boeing banked emission credits.

Response: A copy of the letter regarding the fulfillment of this condition was sent by Gary May on September 12, 2003. According to this April 19, 1996 letter written by Joseph Williams, Ecology, to Kirk Thompson, Boeing, “Ecology has determined that reallocation of emission credits as indicated in the table column under “PSD 90-04” will adequately fulfill the requirements of PSD No. 90-04, condition 7.” EU 2.114 has been removed from the AOP as requested.

13) Page 51-52: Please change EU 2.133, EU 2.134, and EU 2.135 as shown below. This is consistent with how the “State Only” requirements that are pending SIP approval have been handled elsewhere in this permit.

| | | | | |
|-------------|--|---|--------------------------------------|--|
| EU 2.133 | Puget Sound Clean Air Agency Reg I: 9.16(b) (7/12/01) (State Only) <u><i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg I: 9.16.</i></u> | 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 ounce 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 100F. | NMR | |
| EU 2.134 | Puget Sound Clean Air Agency Reg I: 9.16(c) (7/12/01) (State Only) <u><i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg. I: 9.16.</i></u> | Unlawful to allow spray-coating inside a structure, or spray-coating of any motor vehicles or components, unless the spray-coating is conducted inside an enclosed spray area employing paint arresters or water-wash curtains to control overspray. All emissions shall be vented through an unobstructed vertical exhaust vent. | II.A.1(c) Facility Inspections | |

| | | | | |
|---------------------|---|--|---|--|
| <p>EU 2.135</p> | <p>Puget Sound Clean Air Agency Reg I: 9.16(d) (7/12/01) (State Only) <u><i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg. I: 9.16.</i></u></p> | <p>Unlawful to allow spray coating outside an enclosed structure unless approved in an Order of Approval. Reasonable methods must be used to confine overspray to the property where the spray coating is being conducted. High transfer efficiency spray equipment must be used. 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:</p> <p>(1) <u>Enclosures and curtailment during high winds; and</u></p> <p>(2) <u>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. Airless spray equipment may be used where low viscosity or high solid coatings preclude the use of higher transfer efficiency spray equipment.</u></p> | <p>II.A.1(c) Facility Inspections, II.A.1(d) Work Practice Inspection</p> | |
|---------------------|---|--|---|--|

Response: Change made as requested.

14) Page 52: Please change the item shown below and add the following attachment

Exception: 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 63.745(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)]

11) Puget Sound Clean Air Agency “New Source” Requirements for Spray Gun Cleaning Operations Letter dated January 8, 2002, Jay M. Willenberg to Robin Bennett, The Boeing Company See Attachment 16

Response: Change made as requested.

15) Page 57: Please remove BOIL51, BOIL55 and BOIL56 from the equipment list of EU 4 “NON NSPS – Fuel Burning Equipment.” These boilers belong under section C of the NBF/Plant 2 AOP (Operations without Specific Applicable Requirements) as each is “Fuel burning equipment that has a maximum input rate of: ... (B) less than 10 million Btu per hour (3

million joules per second) burning natural gas, propane, or butane.” BOIL51 is natural gas fired with a heat input rate of 1.5 million Btu per hour and, BOIL55 and BOIL56 are natural gas fired with heat input rates of 3.75 million Btu per hour.

Response: BOIL51, BOIL55, and BOIL56 were all approved under a Notice of Construction Order of Approval. They therefore do not fit under the category of Operations without Specific Applicable Requirements. N change made to the AOP.

16) Page 58: Please correct date in EU 4.3 as shown below.

| | | | | |
|--------|--|---|---|--|
| EU 4.1 | <p>WAC 173-400-050 (3/22/91) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-050 into the SIP.</i></p> <p>WAC 173-400-050 (9/15/01)(<i>State Only</i>). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 3/22/9391 version of WAC 173-400-050)</i></p> | <p>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.)</p> | <p>II.A.2(d)(v) Fuel Burning Equipment</p> <p>II.A.1(b) Complaint Response</p> <p>II.A.1(c) Facility Inspections</p> <p>These monitoring methods supersede the monitoring method for this requirement listed in I.A.3</p> | <p>EPA Method 5 (See 40 CFR Part 60, Appendix A, July 1, 2001)</p> |
|--------|--|---|---|--|

Response: Change made as requested.

17) Page 68: Please add the following guidance document to the end of section I.B.6

EXEMPTIONS, EXTENSIONS AND DETERMINATIONS GRANTED BY AGENCIES:

| <u>Source</u> | <u>Description</u> |
|---------------------------------|---|
| 1. Puget Sound Clean Air Agency | Notice of Construction Requirements for Scrubbers and Baghouses. Letter dated October 10, 2001, Steve M. Van Slyke to Jade Hudson, The Boeing Company. See Attachment 15. |

Response: Change made as requested.

18) Page 82: Please revise wood furniture table as shown below to include one other area where new wood furniture manufacturing activities might take place:

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

Response: Change made as requested.

19) Page 87: Please add the following guidance document at the end of Section I.C.

EXEMPTIONS, EXTENSIONS AND DETERMINATIONS GRANTED BY AGENCIES:

| <u>Source</u> | <u>Description</u> |
|---------------------------------|---|
| 1. Puget Sound Clean Air Agency | Solvent Metal Cleaner. Letter dated January 16, 2002, Steve M. Van Slyke to Neva Welch, The Boeing Company. See Attachment 18. |
| 2. Puget Sound Clean Air Agency | A. Lee letter February 26, 1993 to J. Johnston re Confirmation of Exemption from PSAPCA O&M Plan Requirements for Fume Hoods and Ovens. See Attachment 17 |

Response: *The attachments were added as requested. However, the paraphrased description of Attachment 17 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.”*

20) Page 90: 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 requirement 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.

21) Page 90: Please revise the wording as shown below. This change is consistent with Everett's permit.

(d) Work Practice Inspection

... 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, 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: 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.

22) Page 92: 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.

(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 19 for clarification of weekly and monthly monitoring frequencies.

Response: Change made as requested.

23) Page 95 – 98: Please change the following paragraph as it appears in II.A.2(d)(v), II.A.2(d)(vi), 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 section 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, NBF/Plant 2 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 NBF/Plant 2 did not elect to continue the visible emission inspection as described above, NBF/Plant 2 shall, as soon as practicable but within 24 hours of the initial observation either...

Response: Change made as requested.

24) Page 98-101: Boeing NBF/Plant 2 has ceased all Process Tankline Operations and removed the associated equipment from the facility. In order to remove section II.A.2(d)(viii)'s "Scrubber for Metal Finishing Tankline" monitoring obligations while maintaining the AOP numbering system, please change the language in Section II.A.2(d)(viii) to "RESERVED."

Response: Change made as requested.

25) Page 126: In Section V.Q.3(e), please change the citation V.Q.(2) to V.Q.1. V.Q.2 refers to the Annual Emission Inventory and is the incorrect reference in this context.

Response: Change made as requested.

26) Page 128: Please change the Paraphrased Frequency in Section V.Q. 6 for the periodic startup, shutdown, malfunction reports (40 CFR 63.10(d)(5)(i)) as shown below. This is consistent with the underlying rule as well as Section V.Q.3(e) of the permit.

Semiannually, by August 30th for the reporting period of January through June and by February 28th for the reporting period of July through December. ~~Consistent with V.Q.1(b) Deviation Reports.~~

Response: Change made as requested.

27) Page 133: Please add the following to section V.7 Notification Requirements.

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

Response: Change made as requested.

28) Page 147: Please add the following to the list of Attachments.

16 Jay M. Willenberg letter dated January 18, 2002 to Robin Bennett re “New Source” Requirements for Spray Gun Cleaning Operations.

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

18 Steve Van Slyke letter dated January 16, 2002 to Neva Welch re Solvent Metal Cleaner rule Interpretation.

19 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.

Comments to the NBF/Plant 2 Draft Statement of Basis

1) Page 8: Please make the following changes (shown in redlined text) to Requirement EU 2.131. –

Added II.A.1(c) Facility Inspections to MM&R and clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20 requirement listed in I.A.9.

Response: Change made as requested.

2) Page 10: Please make the following changes (shown in redlined text) to 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 to correct visible emissions if observed during the a quarterly inspection 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.

3) Page 10: Please make the following changes (shown in redlined text) to II.A.1(b). –

Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports~~ed~~ 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.

4) Page 10: Please make the following changes (shown in redlined text) to II.A.1(c). –

Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports~~ed~~ 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 NBF/Plant 2 observes potential compliance problems for which there are no monitoring requirements under an applicable requirement and corrects that problem within 24 hours, NBF/Plant 2 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.*”

Response: Change made as requested.

5) Page 11: Please make the following changes (shown in redlined text) to II.A.1(f). –

Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports~~ed~~ 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.

6) Page 11: Please make the following changes (shown in redlined text) to II.A.2(d)(i). –

Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports~~ed~~ 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.

- 7) Page 11: Please make the following changes (shown in redlined text) to II.A.2(d)(iii). –

Clarified that if Boeing cannot correct possible compliance problems within 24 hours and report~~see~~ 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.

- 8) Page 11: Please make the following changes (shown in redlined text) to II.A.2(d)(v). –

Added when natural gas is not available or is not being used due to economic reasons, NBF/Plant 2 shall check for visible emissions within 24 hours each time that it burns fuel oil or Jet A during daylight hours and at least once per week if it burns fuel oil or Jet A fuel for more than seven consecutive days. 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 emission monitoring required by Section II.A.2(d)(v), under this monitoring method, 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: Change made as requested.

- 9) Page 11-12: Please make the following changes (shown in redlined text) to II.A.2(d)(vi). –

Clarified that for purposes of complying with the visible emission monitoring required by Section II.A.2(d)(vi), under this monitoring method, 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.”* Clarified that if Boeing cannot correct possible compliance problems within 24 hours and report~~see~~ 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.

- 10) Page 12: Please make the following changes (shown in redlined text) to II.A.2(d)(viii). –

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 report~~sed~~ 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.

11) Page 13: Please make the following changes (shown in redlined text) to 4. Compliance History.

The Puget Sound Clean Air Agency has inspected both North Boeing Field and Plant 2 at least annually since 1986. The compliance history for NBF/Plant 2 since from August 1996 to 2001 is summarized below. Compliance documents are listed by emissions unit or other appropriate category groups in chronological order. The Agency considers all the matters listed below 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 NBF/Plant 2.

Response: Change made as requested.

12) Page 20: Please make the following changes (shown in redlined text) to the fourth paragraph on page 20. –

Boeing argued that the original wording would require Boeing to make daily Method 9~~A~~ 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 ~~o~~until the next required monitoring.

Response: Changed reference for sampling method from Method 9 to Method 9A. The word “ontil” was already changed to “until”, so further changes didn’t need to be made to this word.

13) Page 21: Please make the following changes (shown in redlined text) to the second paragraph of 5.2.2 Requirement I.A.2. –

The monitoring method is based on quarterly visual inspections of the facility for visible emissions, complaint response, and facility wide inspections. Opacity monitoring ~~asis~~ a surrogate to performing a Method 5 test with NBF/Plant 2 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 NBF/Plant 2 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 by the O&M Plan, 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 NBF/Plant 2 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

Response: Change made as requested.

14) Page 28-29: Please make the following changes (shown in redlined text) to 5.3.1 EU-1 Chemical Process Tankline Operations –

Boeing no longer performs this operation at the facility and has removed all associated equipment. The emission unit and monitoring has been “Reserved” in order to preserve the numbering system in the AOP. Or remove this section if it is removed from the AOP.

Response: Change made as requested. In addition, the requirements written in the section have been removed.

15) Page 30: Please remove the following from the equipment list. This unit is covered under EU 3

| Bldg. | Col/Dr | MSS/ID # | Order of Approval # | Date Installed | Source Description | Aerospace NESHAP Coatings with Inorganic HAP Used in Unit? |
|------------------|---------------|-------------------|---------------------|-----------------|----------------------------------|--|
| 2-122 | P7 | PB0020 | 4371 | 1992 | Spray-cleaning booth* | |

Response: Change made as requested.

16) Page 35: Please remove BOIL51, BOIL55 and BOIL56 from the equipment list of EU 4 “NON NSPS – Fuel Burning Equipment.” These boilers belong under section C of the NBF/Plant 2 AOP (Operations without Specific Applicable Requirements) as each is “Fuel burning equipment that has a maximum input rate of: ... (B) less than 10 million Btu per hour (3 million joules per second) burning natural gas, propane, or butane.” BOIL51 is natural gas fired with a heat input rate of 1.5 million Btu per hour and, BOIL55 and BOIL56 are natural gas fired with heat input rates of 3.75 million Btu per hour.

Response: BOIL51, BOIL55, and BOIL56 were all approved under a Notice of Construction Order of Approval. They therefore do not fit under the category of Operations without Specific Applicable Requirements. This change was not made.

17) Page 42: Please update the locations where wood furniture manufacturing takes place.

The manufacture of wood furniture takes place at the following locations at the NBF/Plant 2 facility:

- Facilities Carpentry Shop ([building 2-31](#))
- Model Shop (building 2-88)
- [Mechanical Systems Lab \(building 2-10\)](#)
- Carpentry Shop (building 3-365)

Response: Change made as requested.

18) Page 43: Please make the following changes (shown in redlined text) to 6. Monitoring, Maintenance, and Recordkeeping Procedures. –

Except for the testing required under Section II.A.2(m) of the permit (Periodic Performance Source Test), 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 9A 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(ed) 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.

Response: Change made as requested.

19) Page 43: Please make the following changes (shown in redlined text) to 6.1 Opacity Monitoring. –

Section II.A.1(a) requires that Boeing conduct quarterly inspections of the facility for visible emissions. If during one of these inspections, Boeing observes visible emissions, Boeing can eliminate the visible emissions, determine if the emissions last more than three minutes, or determine the opacity using the reference method. If Boeing determined opacity using the reference method, Boeing must report to Puget Sound Clean Air Agency. It would not be a deviation of the emission standard if Boeing eliminated the visible emissions within 24 hours, the visible emissions did not last more than 3 minutes, or if opacity was determined to be less than the standard using the reference method. However, noting visible emissions during a quarterly inspection and taking no action would be a deviation of the monitoring method.

Response: Change made as requested.

If you have any questions, please contact Gary May at 206-544-2363, or me as shown below.

Sincerely,

Michael Verhaar
Environmental Affairs Manager
737/757 Airplane Programs
E-1370, M/C 63-41
(425) 237-9228

11.3 Additional changes from discussion with Boeing

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

RE: Boeing NSR AOP section - Message (HTML)

From: Steve Van Slyke
To: 'Verhaar, Michael L'
Cc: Hudson, Jade J; Agata McIntyre
Subject: RE: Boeing NSR AOP section

Sent: Tue 10/28/2003 11:42 AM

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 173-400-040, 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.

October 31, 2003: Additional changes were made after discussion with Gary May, Boeing, about a paint curing oven and laser operations that received Notice of Construction Orders of Approval but haven't yet been added to the Air Operating Permit. This equipment was permitted under Orders of Approval No. 4371 and No. 4357 respectively. Paint curing and laser operations were added to the Air Operating Permit. The additions of the curing oven and laser operations to the Air Operating Permit are administrative in nature.

11.4 Additional comments by Boeing

Following Email was received by Agata McIntyre from Gary May, Boeing, on November 17, 2003.

Agata,
Comments to the Proposed NBF/Plant 2 AOP

Page 43: Please correct the EU numbers as shown below

(a) PSD 90-04 and NOC Order of Approval 3560 Requirement Nos. EU 2.108 through 2.116 are the PSD 90-04 and Order of Approval No. 3560 permit conditions that apply to the Bldg. 3-380 paint hangar.

Response: As requested, the heading for this group of requirements was modified from "Requirement Nos. EU 2.108 through 2.117 are the PSD 90-04 and Order of Approval No. 3560 permit conditions that apply to the Bldg. 3-390 paint hanger" to Requirement Nos. EU 2.108 through 2.116 are the PSD 90-04 and Order of Approval No. 3560 permit conditions that apply to the Bldg. 3-390 paint hanger"

Page 55: Please remove BOIL51, BOIL55 and BOIL56 from the equipment list of EU 4 "NON NSPS - Fuel Burning Equipment." These boilers belong under section C of the NBF/Plant 2 AOP (Operations without Specific Applicable Requirements) as each is "Fuel burning equipment that has a maximum input rate of: ... (B) less than 10 million Btu per hour (3 million joules per second) burning natural gas, propane, or butane." BOIL51 is natural gas fired with a heat input rate of 1.5 million Btu per hour, and BOIL55 and BOIL56 are natural gas fired with heat input rates of 3.75 million Btu per hour.

| Description | Bldg. | Col./Dr. | Order of MSS/ID# | Installed Approval # | Date | Source |
|---------------------------------------|-------|----------|---------------------|-------------------------|------|----------------------|
| 42MMBtu/hr | 2-15 | S. End | RE0021 | 5208 | 1986 | Boilers #1 and 2: |
| MMBtu/hr | 2-15 | S. End | RE0021 | 5208 | 1989 | Boilers #3 and 4; 80 |
| natural gas fired, PS-300 backup fuel | 3-374 | ---- | BOIL53 | Reg. | 1986 | Keeler 52.5 MMBTU/hr |
| natural gas fired, PS-300 backup fuel | 3-374 | ---- | BOIL54 | Reg. | 1986 | B&W 76.6 MMBTU/hr |
| | 3-801 | | BOIL51 | 4861 | 1991 | Bryan CL-150 1.5 |

MMBtu/hr natural gas fired
3-800 BOIL55 & BOIL56 3825 1991 2 Bryan Steam
Corp. 3.75 MMBtu/hr natural gas fired

If not removed please explain in the SOB why the Agency believes BOIL51, BOIL55, and BOIL56 need to be listed in NON NSPS - Fuel Burning Equipment when the units clearly meet the definition in Section C "Fuel burning equipment that has a maximum input rate of: ... (B) less than 10 million Btu per hour (3 million joules per second) burning natural gas, propane, or butane."

Response: This same comment was made previously by Mr. Verhaar, Boeing, in a letter dated July 16, 2003. This letter was submitted as a public comment to the NBF/Plant 2 AOP during the 30 day AOP public comment period. As discussed earlier in this Statement of Basis, the Agency responded to this comment by saying: "BOIL51, BOIL55, and BOIL56 were all approved under a Notice of Construction Order of Approval. They therefore do not fit under the category of Operations without Specific Applicable Requirements. No change made to the AOP." The Agency response remains the same as that made to Mr. Verhaar's identical comment during the 30-day public comment period.

Page 124: Please insert "conducted as a requirement of this permit" as shown in red below

1. Method 9A Reports

NBF/Plant 2 shall report to the Puget Sound Clean Air Agency results of all opacity monitoring using Ecology Method 9A conducted as a requirement of this permit within 30 days after the end of the month that the measurement occurred. These reports will be certified in accordance with V.Q.1.(c) at least semi-annually. [WAC 173-401-615(3)(a), 11/4/1993]

Response: Boeing asked that the term "conducted as a requirement of this permit" be added. The Agency feels that this addition is redundant. Method 9A reports need to be treated as described in Section V.Q.4 only in those cases when Section V.Q.4 is called out as being an applicable requirement. No change made to the AOP.

Gary May
Environmental Engineer
Airplane Programs SHEA
206-544-2363 phone
206-797-6530 pager

12. ADMINISTRATIVE PERMIT AMENDMENTS (WAC 173-401-720)

On July 2, 2004, the Puget Sound Clean Air Agency received a letter from Mr. Michael Verhaar, Boeing, requesting an administrative permit amendment to update the telephone number and title of the NBF/Plant 2 facility responsible official. (Note that the specific person listed as the responsible official did not change, just the telephone number and title of the person.) Ms. Carolyn Corvi, the responsible official for the NBF/Plant 2 air operating permit, signed this request.

The Agency reviewed the request and agreed that the requested changes meet the criteria for administrative permit amendments in WAC 173-401-720(1)(b).

As requested by Boeing, changes were made to the cover page of the air operating permit to update the telephone number and title of the responsible official. The telephone number was changed from (425) 237-7674 to (425) 965-9000. The title of the responsible official was changed from VP 737/757 Program to Vice President.

12.1 October 13, 2004 change

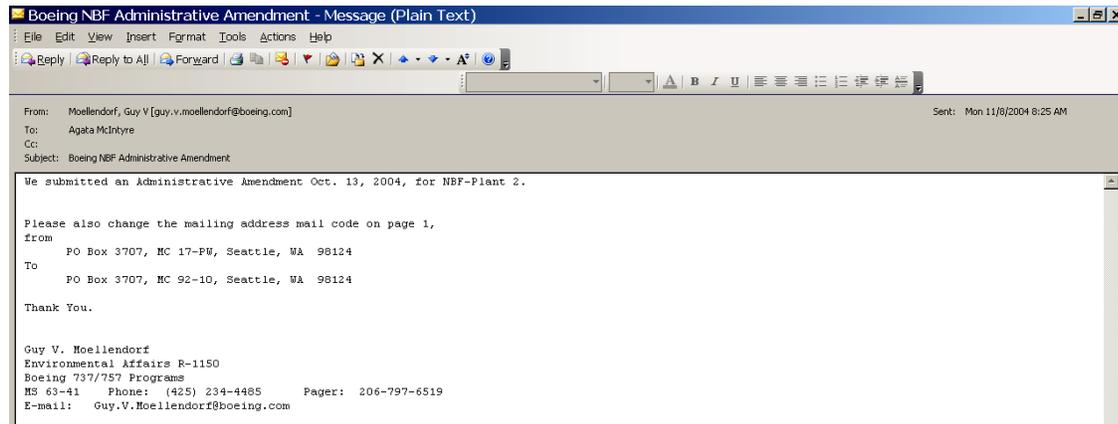
On October 13, 2004, the Puget Sound Clean Air Agency received a letter from Mr. Michael Verhaar at Boeing requesting an Administrative Permit Amendment to the title page of the Air Operating Permit. The changes to the title page include:

- Change the site contact from Mr. Gary May to Mr. Michael Verhaar
- Change the site contact phone number from (206) 544-2363 to (425) 237-9923, and
- Change the site contact fax number from (206) 544-1561 to (425) 237-4464

Ms. Carolyn Corvi, the responsible official for the Boeing Renton air operating permit, signed this request. The Agency reviewed the request and agreed that the changes meet the criteria for administrative permit amendments in WAC 173-401-720(1)(b).

As requested by Boeing, changes were made to the cover page of the air operating permit to update the site contact, telephone number, and fax number.

On Nov. 8, 2004 the Puget Sound Clean Air Agency received the following email from Guy Moellendorf of Boeing, asking that the mail code for the facility also be changed. This change was made to the cover page of the Air Operating permit as requested by Boeing.



12.2 May 10, 2005

On May 9, 2005 the Agency received a complete (including fee) administrative permit amendment request to change the name of the responsible official for this plant from Carolyn Corvi - General Manager, 737/757 Airplane Program, to Mark Jenkins, Vice President- General Manager, 737 Airplane Production. Per our review, Mr. Jenkins meets the requirements for a responsible official. Boeing also requested that the mailing code for the facility be updated to 61-94 to reflect recent reorganization at Boeing. These two changes are administrative in nature and will be made as requested by Boeing.

12.3 August 17, 2005

On July 20, 2005 the Agency received an administrative permit amendment request to change the mail stop for Michael Verhaar from 61-94 to 63-13. We received the processing fee on August 5th, and as requested we have made this change.

12.4 February 16, 2006

On December 19, 2005 the Agency received an administrative permit amendment request to change the mail stop for Michael Verhaar from 63-13 to 67-74 and his phone number from 425) 237-9928 to 425) 965-1567. We received the processing fee on January 11, 2006, and as requested we have made this change.

12.5 March 16, 2010

On February 18, 2010, the Agency received an administrative permit amendment request to change the responsible official from Mark Jenkins to Beverly Wyse, with a new fax number. We have made these changes.

12.6 April 9, 2015

On January 13, 2015, the Agency received an email informing the Agency that the responsible official had changed from Beverly Wyse to Scott Campbell. The change was made.

12. 7 May 14, 2019

On January 29, 2019, the Agency received an email informing the Agency that the responsible official had changed to Eric Lindblad and the site contact had changed to Johnathan Sherman. These changes were made. The Agency also updated the mailing address.

12. 1 October 29, 2019

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

12. 1 December 23, 2020

On May 27, 2020, the Agency received a letter informing the Agency that the responsible official had changed to Walt Odisho. The change was made.