AO-04/07/06

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:	)	
	)	
The Boeing Company and AMB Property Corporation	)	First Amended
	)	AGREED ORDER
		No. 01HWTRNR-3345

TO: The Potentially Liable Person (PLP(s)):

The Boeing Company
C/o Mr. Kirk Thomson
Director of Environmental Affairs
P.O. Box 3707, MS 7A-XE
Seattle, WA 98124-2207

The AMB Property Corporation
C/o Mr. Steven Campbell
Senior Vice President
Pier 1, Bay 1
San Francisco, CA 94501

TABLE OF CONTENTS

I. JURISDICTION 2
II. DEFINITIONS 2
III. OBJECTIVES 7
IV. FINDINGS OF FACT 8
V. ECOLOGY DETERMINATIONS 13
VI. WORK TO BE PERFORMED 14
VII. TERMS AND CONDITIONS OF ORDER 21
VIII. STIPULATED PENALTIES 33
IX. SATISFACTION OF THIS ORDER 34
X. AMENDMENTS 34
XI. ENFORCEMENT 34

ATTACHMENTS

[Attachment 1: Diagram]
[Attachment 2: Table of SWMUs and AOCs]
[Attachment 3: Scope of Work for a Remedial Investigation/Feasibility Study Work plan]
[Attachment 4: Public Participation Plan]
[Attachment 5: Reference to: Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, February 2001]
[Attachment 6: Reference Data and Reports for Independent Remedial Actions]
[Attachment 7: List of Sumps, SWMU-15]
[Attachment 8: Stipulated Amendment No. 1 to Agreed Order No. 01HWTRNR-3345]
[Attachment 9: Interim Remedial Action Work Plan]
[Attachment 10: Supplemental to Interim Remedial Action Work Plan]
[Attachment 11: Area 1 Interim Action]
[Attachment 12: Property Transfer Form]

I. JURISDICTION

This First Amended Agreed Order is issued pursuant to the authority of RCW 70.105D.050 (I).

II. DEFINITIONS

Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

Additional definitions are as follows:

1. Area 1 Property means the property at the north end of the BCA- Auburn Plant, south of the YMCA/Junior Achievement property, and north of Building 17-06, as shown in the diagram in Attachment 1.

2. Agreed Order or Order means this Order issued under RCW 70.105D.050(1) and WAC 173-340-530. The term includes the text of this Order, all Attachments to this Order, and Ecology-approved submittals required pursuant to this Order. Order Attachments and Ecology-approved submittals are incorporated into this Order by this reference and are enforceable parts of this Order as if fully set forth herein.

3. Area of Concern (AOC) means any area of the Site where a release or threatened release of dangerous constituents (including dangerous waste and hazardous substances) has occurred, is occurring, is suspected to have occurred, or threatens to occur.

4. Boeing Auburn facility (BA facility) means the Boeing Commercial Airplanes, Fabrication Division- Auburn Plant property at 700 15th Street SW and all contiguous land, and structures, other appurtenances, and improvements on the land that Boeing used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste since 1966. This includes the property

1 described in Attachment A to the original permit which was jointly issued by Ecology and EPA in
2 August, 1987.
3 5. Boeing Commercial Airplanes, Fabrication Division- Auburn Plant (BCA- Auburn Plant)
4 means the property at 700 15th Street SW and all contiguous land, and structures, other appurtenances,
5 and improvements on the land that Boeing used for recycling, reusing, reclaiming, transferring, storing,
6 treating, or disposing of dangerous waste since 1966. However, the BCA-Auburn Plant no longer
7 includes the Safeway, YMCA/Junior Achievement, or Puget Sound Energy (PSE) properties in light of
8 modifications previously made to Part A of Boeing's RCRA Permit No. 87-1. Ecology approved the
9 modifications to Part A of the permit on September 6, 2002 for the Safeway Property, on February 27,
10 2003 for the YMCA Property, and on June 30, 2004 for the PSE Property (See Diagram, Attachment 1,
11 for the locations of the Safeway, YMCA, and PSE properties).
12 6. Cleanup Action Plan (CAP) means the document issued by Ecology under WAC 173-340-
13 360 which selects Site specific corrective measures and specifies cleanup standards.
14 7. Cleanup Standards means the standards promulgated under RCW 70.105D.030 (2)(e) and
15 developed for the Site under WAC 173-340-700(3). These include (1) hazardous substance
16 concentrations (cleanup levels) that protect human health and the environment, (2) the location at the Site
17 where those cleanup levels must be attained (points of compliance), and (3) additional regulatory
18 requirements that apply to a cleanup because of the type of action and/or the location of the Site
19 (applicable state and federal laws).
20 8. Corrective Action means any activities including investigations, studies, characterizations
21 and corrective measures, including actions taken pursuant to Chapter 70.105D RCW and Chapter 173-
22 340 WAC, undertaken in whole or in part to fulfill the requirements of WAC 173-303-64610 through
23 173-303-646920.
24 9. Corrective Measure means any measure or action to control, prevent, or mitigate releases
25 and/or potential releases of dangerous constituents (including dangerous waste and hazardous

substances) at or from the Site, which action has been reviewed and approved by Ecology for the Site and set forth in a Site specific Cleanup Action Plan (CAP) prepared in compliance with the requirements of Chapter 173-340 WAC. Corrective measures may include interim actions as defined by Chapter 173-340 WAC. Interim actions will not necessarily be set forth in a Site-specific CAP.

10. Dangerous Constituent means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 Appendix IX, any constituent that caused a waste to be listed or designated as dangerous under the provisions of Chapter 173-303 WAC, and any constituent defined as a hazardous substance by RCW 70.105D.020(7).

11. Dangerous Waste means any solid waste designated in WAC 173-303-070 through 173-303-100 as dangerous or extremely hazardous or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70.105D.020 (7).

12. Dangerous Waste Constituent means any constituent listed in WAC 173-303-9905 and any other constituent that has caused a waste to be a dangerous waste pursuant to Chapter 173-303 WAC.

13. Dangerous Waste Management Unit (DWMU) is a contiguous area on or in which dangerous waste is placed or has otherwise come to be located, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area, as defined in WAC 173-303-040.

14. Day shall always mean a calendar day unless otherwise specified. In computing any period of time under this Order, if the last day falls on a Saturday, Sunday, or a state or federal holiday, the period shall run until the end of the next day which is not a Saturday, Sunday, or a state or federal holiday. Any time period scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event.

15. Ecology or Ecology- NWRO means the State of Washington Department of Ecology or the State of Washington Department of Ecology Northwest Regional Office.

16. Facility or Site means the BCA - Auburn Plant, as defined above. For the purposes of implementing corrective action under WAC 173-303-64620 or 173-303-64630, Facility or Site also means all contiguous property under the control of Boeing Auburn and AMB Corporation and includes the definition of Facility at RCW 70.105D.020(4).

17. Feasibility Study (FS) means the investigation and evaluation of potential corrective measures performed in accordance with the Feasibility Study (FS) requirements of WAC 173-340-350 [and the RI/FS Scope of Work attached to this Order], which includes the substantive requirements for a RCRA Corrective Measures Study, and undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64610 through 173-303-646920.

18. Hazardous Substances means the definition of hazardous substance at RCW 70.105D.020(7).

19. Independent Remedial Actions means remedial actions conducted without department oversight or approval and not under an order, agreed order, or consent decree as defined in WAC 173-340-200 and WAC 173-340-515.

20. Permit or Permitting Requirement, unless otherwise specified, means the requirements of Chapter 173-303 WAC for applying for, obtaining, maintaining, modifying, and terminating dangerous waste management permits.

21. Potentially Liable Person (PLP) means any person whom the Department of Ecology finds, based on credible evidence, to be liable under RCW 70.105D.040. The term PLP or PLPs in this Order refers jointly to the AMB Property Corporation and The Boeing Company. AMB Property Corporation initially became a PLP as a result of its purchase of the Area 1 Property on December 16, 2005.

22. RCRA Facility Assessment (RFA) means the investigation conducted under the direction of the U.S. Environmental Protection Agency – Region Ten (U.S. EPA Region X) for releases and potential releases at or from the BA facility and the information contained in the report entitled *"The Boeing Company, Auburn Fabrication Division, Resource Conservation and Recovery Act Facility*

Assessment, Final Report, June 19, 1998, Prepared by Tetra Tech EM Inc" ("RFA Report"). The RFA Report is incorporated into this Order by this reference as if fully set forth herein.

23. Release means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous waste or dangerous constituents into the environment. It also includes the abandonment of or the discarding of barrels, containers, and other receptacles containing dangerous waste or dangerous constituents and includes the definition of release in RCW 70.105D.020 (20).

24. Remedial Investigation (RI) means a Site wide investigation and characterization performed in accordance with the requirements of Chapter 173-340 WAC and the remedial investigation/feasibility study ("RI/FS") Scope of Work described in Section VI of this Order. The Ecology approved RI will be deemed to be equivalent to a RCRA Facility Investigation, fulfilling the corrective action requirements of WAC 173-303-64610 through 173-303-646920.

25. Solid Waste Management Unit (SWMU) means the definition of Solid Waste Management Unit at WAC 173-303-040, including any discernible location at the Site, where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. These SWMUs include any area at the Site at which solid wastes, including spills, have been routinely and systematically released and include regulated units as defined by Chapter 173-303 WAC. Pursuant to the RFA Report and information provided by The Boeing Company, Ecology has identified (in attachment 2) the SWMUs and Areas of Concern (AOCs) at the Site.

26. Submittal shall include any work plan, report, status report, or any other written document required to be submitted to Ecology pursuant to this Order.

III. OBJECTIVES

The remedial action objectives for this Site are:

1. The PLPs shall complete a remedial investigation and feasibility study (RI/FS) at the Site, to be approved by Ecology and conducted in accordance with the requirements of Chapter 70.105D RCW and Chapter 173-340 WAC. The purpose of the RI/FS is, in part, to satisfy the corrective action requirements of WAC 173-303-64610 through 173-303-646920.

2. After completion and Ecology approval of the RI/FS, the PLPs shall prepare a draft Cleanup Action Plan (CAP) according to the requirements of WAC 173-340-380.

3. After Ecology review of the draft CAP, Ecology and the PLPs intend to negotiate a draft Consent Decree or new Agreed Order. The Consent Decree or Agreed Order will provide for the implementation of a CAP to satisfy the requirements of WAC 173-340-400 and to concurrently satisfy the corrective action requirements of WAC 173-303-64610 through 173-303-64690.

4. Finalization of the CAP and the Consent Decree or Agreed Order after public review and comment. Pursuant to the Consent Decree or Agreed Order, the PLPs will design, construct, operate, and monitor the selected cleanup or corrective actions. The cleanup will be designed to address releases into the environment of dangerous constituents at or from the SWMUs and AOCs at the Site.

5. Performance by the PLPs of interim actions as needed, which are required, reviewed and approved by Ecology in accordance with WAC 173-340-430. The purpose of the identified interim actions is to eliminate or reduce the migration of contamination in the surficial and subsurface soils, and groundwater. If interim actions are needed to address releases at SWMUs or AOCs listed in Attachment 2 at a future date, then this paragraph will apply.

6. If Ecology finds that further remedial investigation and/or cleanup action is required, Ecology will identify any necessary changes to the RI work plan and/or amendments or attachments to the Agreed Order to address such Additional Work. Accordingly, this Agreed Order will integrate prior independent remedial action activities with the remedial action requirements hereunder.

IV. FINDINGS OF FACT

Ecology makes the following Findings of Fact.

1. The Boeing Company is and has been the owner and operator of the BA facility since 1966. In 1974, the Boeing Company purchased GSA warehouses, adding to the overall facility's size. The BCA-Auburn Plant no longer includes the Safeway, YMCA/Junior Achievement, or PSE properties as described in Section II.5.

2. The Boeing Company owned and operated the BA facility as a dangerous waste management facility on or after November 19, 1980, the date which subjects facilities to the permitting requirements of the Resource Conservation and Recovery Act, 42 U.S.C. § 6921 *et. seq.* (RCRA), including interim status requirements pursuant to Section 3005 of RCRA and implementing regulations thereunder, and including authorized state regulations promulgated in Chapter 173-303 WAC.

3. On August 11, 1980, the Boeing Company notified the U.S.E.P.A. Region 10 of its dangerous waste management activities. In the notification, the Boeing Company identified itself as managing the following dangerous wastes under WAC 173-303-082 and WAC 173-303-9904 at the BA facility: F001, F002, F003, F005, F006, F007, F008, F009, F010, F011, F017, and F018.

4. Pursuant to the August 11, 1980 notification, the Boeing Company was issued identification number WAD041337130 by U.S. EPA Region X.

5. On November 17, 1980, the Boeing Company submitted Part A of the RCRA permit application to the U.S.E.P.A. Region X. In the Part A Application, the Boeing Company identified itself as managing the following dangerous wastes under WAC 173-303-082 and WAC 173-303-9904 at the BA facility: F001, F002, F003, F005, F006, F007, F008, F009, F010, F011, F017, F018, D001, D002, D003, D006, D007, and K054.

6. On July 13, 1987, Ecology issued a final status RCRA Permit to the Boeing Company for the BA facility.

7. On September 24th and 25th, 1997, Tetra Tech EM Inc., contractor to the U.S.E.P.A Region X performed a RCRA Facility Assessment (RFA) for releases and potential releases at or from the BA facility. The purpose of an RFA is to identify those areas where releases of hazardous substances, as defined in RCW 70.105D.020 (7), may have occurred or may be occurring.

8. Pursuant to the RFA Report and information provided by the Boeing Company, Ecology has identified (in Attachment 2) the Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at the Site. SWMUs and AOCs at the Site have been documented in the RCRA Facility Assessment Final Report, prepared for the EPA by Tetra Tech EM Inc., June 19, 1998, and filed at the Department of Ecology, Northwest Regional Office (Ecology –NWRO). Hazardous constituents which have been detected from releases/or potential releases of hazardous substances found in either soil or groundwater include, but are not limited to: methyl ethyl ketone, 4-methyl 2-pentanone, xylenes, ethyl benzene, toluene, styrene, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, acetone, arsenic, cadmium, barium, mercury, selenium, silver, lead, nickel, zinc, benzene, chromates, cadmium, copper, alodine, 1,1,1-trichloroethane, 1,2- Dichoroethylene, trichloroethylene, perchloroethylene, ethylene glycol ether, lubricant oils, diesel, gasoline, hydraulic fluids, gear oils, sulfuric acid, hydrochloric acid, hydroflouric acid, chromic acid, nitric acid, sodium hydroxide, sodium cyanide, potassium cyanide, polychlorobiphenyls, and polycyclic aromatic hydrocarbons. Some of the releases of these hazardous constituents are recorded in the following documents:

(A) Hart Crowser, Inc., May 15, 1986, *Auburn Hazardous Waste Storage Facility Potential Contamination Assessment.* (156)

(B) Hart Crowser, Inc., July 11, 1986, *Sump and Contaminated Soil Removal, Hazardous Waste Storage Facility, Boeing Auburn.* (155)

(C) Boeing Corporate SHEA, Quadrant, Kennedy-Jenks, 1994, *Volatile Organics in Groundwater at Auburn Facility.* (1467)

(D) Kennedy-Jenks, November 1991, *Technical Report-Preliminary Subsurface Investigation Rinsewater Treatment Plant, Boeing Auburn.* ((2121)

(E) Kennedy-Jenks, January 1994, *Technical Report-Hydrogeologic Investigation, Rinsewater Treatment Plant Area, Boeing Auburn.* (123)

(F) PSAPCA and Auburn Fabrication Division, March 1990, *NOC (#3191) and Application for Approval.* (762)

(G) SECOR International Incorporated (SECOR), July 1996, Preliminary Subsurface Assessment Investigation, 17-10 Building, G&L Post Mill, Boeing Commercial Airplane, Auburn, Washington. (1542)

(H) SECOR International Incorporated (SECOR), September 1996, *Preliminary Subsurface Assessment Investigation, 17-06 Building, Briquetting Machine Boeing Commercial Airplane Group.* (1324)

(I) Geoengineers, May 1991, *Report of Geoenvironmental Services, Subsurface Assessment, Two Underground Storage Tanks Near Building 17-06, Boeing Fabrication Division, Auburn, Washington.* (72)

(J) Geoengineers, April 1992, *Report of Geoenvironmental Services, Drilling Additional Borings, Building 17-06, Boeing Fabrication Division, Auburn, Washington.* (147)

(K) Kennedy-Jenks, May 1996, *Technical Report-1995-Hydrogeologic Investigation and Summary Report, Boeing Auburn.* (96)

(L) Dames and Moore, 1987-1992, *UST Groundwater Monitoring Report.* (91)

(M) Boeing Auburn, July 1997, *Letter Regarding Report of Release Pursuant to WAC 173-340-300(2), 17-05 Building, Boeing –Auburn Plant.*

(N) Kennedy-Jenks, February 1995, *Technical Report-Hydrogeologic Investigation, Building 17-05, Boeing Auburn.* (2119)

(O) Kennedy-Jenks, May 1996, *Technical Report, 1995-Hydrogeologic Investigation and Summary Report, Boeing Auburn.* (96)

(P) Kennedy-Jenks, April 1997, *Final Report-Building 17-05 Vapor Degreaser Removal, Boeing Auburn.* (2169)

(Q) Geoengineers, June 1997, *Site Characterization Report, 17-29 Titanium Bailing Area, Auburn, Washington.* <<ne>>

(R) Geoengineers, May 1991, *Report-Sump Tank Removal and Replacement, Building 17-29, The Boeing Company, Auburn, Washington.* (82)

(S) Kennedy-Jenks, May 1994, *Environmental Services Decontamination and Demolition Projects, 17-02 and 17-05 Building.* (133)

(T) Kennedy-Jenks, May 1997, *Technical Report-Building 17-05 Area Hydrogeologic Characterization.* <<ne>>

(U) AGI Technologies, November 1996, *Final Closure Report, Resource Conservation and Recovery Act (RCRA) Acid and Cyanide Tank Closures, 17-07 Building, Boeing Commercial Airplane Group-Fabrication Division, Auburn, Washington.* (2046)

(V) Kennedy/Jenks; October, 1993, *Independent Remedial Action, 17-66 Building East Construction Site, Boeing Auburn.* (154)

(W) Kennedy/Jenks; February 22, 1994, *Building 17-08, Environmental Response Action.* (157)

9. Hazardous substances have been and may continue to be released at the Site into the environment including: surface water drainage areas; groundwater; air; human work areas; and floral and faunal habitats.

10. The Boeing Company submitted a Part B renewal application dated September 30, 1998 for storage of 220 gallons of dangerous waste within the 17-66 building.

11. The Department of Ecology did not issue a RCRA Permit to cover storage of the 220 gallons of dangerous waste within the 17-66 building. Boeing withdrew its application.

12. The BA facility has been operating under conditions of its Dangerous Waste Permit signed by Ecology and the U.S.E.P.A. Region X in August 1987. However, the BCA-Auburn Plant no longer includes the Safeway, YMCA/Junior Achievement, or PSE properties as described in Section II.5. Other than dangerous wastes treated by its wastewater treatment unit under permit-by-rule, the BCA-Auburn Plant will not store, treat, or land-dispose of dangerous wastes under the State of Washington Dangerous Waste Management Permit No. WAD041337130.

13. On August 14, 2002, the Boeing Company and Ecology entered into Agreed Order No. 01HWTRNR-3345, wherein the Boeing Company agreed to complete a remedial investigation, a feasibility study, draft a CAP, and perform interim actions as necessary to remediate the Site. This First Amended Agreed Order No. 01HWTRNR-3345 fully supersedes the 2002 Agreed Order.

14. On December 16, 2005, the AMB Property Corporation purchased the Area 1 Property [parcels 8, 9 and 12, Attachment 1] from the Boeing Company. The Diagram in Attachment 1 represents the current BCA-Auburn Plant boundaries, including the Area 1 Property.

15. On July 14, 2004, the Boeing Company began implementation of an interim remedial action in accordance with Section III (5) of Agreed Order No. 01HWTRNR-3345. A public comment period was held from May 24, 2004 through June 23, 2004 prior to Ecology approval of the Interim Action Work Plan. Ecology approved the Interim Action Work Plan by letter dated July 13, 2004. See Attachment 9, [the work plan]. This interim remedial action is intended to slow the migration and to remediate trichloroethene in groundwater underneath Solid Waste Management Unit, S-12b, and Area of Concern, A-08 [see Attachment 2]. Three injections of a non-toxic media have been completed in accordance with the approved interim remedial action work plan: Final Interim Remedial Action Work Plan, Boeing Auburn Area 1 (Landau Associates, May 7, 2004). By creating conditions favorable to reductive dechlorination these injections have, at this time, reduced the levels of hazardous constituents

in groundwater. Currently, the PLPs are completing compliance monitoring for the interim remedial action as required by WAC 173-340-410.

16. The continuation of the interim action and completion of compliance monitoring for the interim remedial action is set forth in Attachment 11 of this Agreed Order.

V. ECOLOGY DETERMINATIONS

1. The Boeing Company and AMB Property Corporation are persons within the meaning of RCW 70.105D.020 (14).

2. The Boeing Company and AMB Property Corporation are the owners and operators of a dangerous waste management Facility that has operated, and is operating, under final status subject to Section 3005(e) of RCRA and regulations promulgated thereunder, including authorized state regulations in Chapter 173-303 WAC.

3. Certain waste and constituents found at the Site are dangerous wastes and/or dangerous constituents as defined in WAC 173-303-040, and shown in Section II of this Order.

4. These dangerous wastes and dangerous constituents are considered hazardous substances within the meaning of RCW 70.105D.020 (7).

5. Based on the Findings of Fact and the administrative record, Ecology has determined that releases and potential releases of hazardous substances at and/or from the Site that originated at the BA facility present a threat to human health and the environment. Ecology has further determined that this Agreed Order should be issued in order to achieve the objectives stated in Section III hereof.

6. First Amended Agreed Order No. 01HWTRNR-3345 fully supersedes Agreed Order No. 01HWTRNR-3345.

7. By a letter dated April 7, 1999, the Boeing Company voluntarily waived its rights to notice and comment and accepted Ecology's determination that the Boeing Company is a "potentially liable person" under RCW 70.105D.040.

8. By a letter dated December 20, 2005, the AMB Property Corporation voluntarily waived its rights to notice and comment and accepted Ecology's determination that the AMB Property Corporation is a "potentially liable person" under RCW 70.105D.040.

9. Pursuant to RCW 70.105D.030 (l) and RCW 70.105D.050, Ecology may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances, whenever it believes such action to be in the public interest.

10. Ecology has determined that the actions, including investigations, required by this Order are in the public interest.

11. By Entering into this Order, The Boeing Company and AMB Property Corporation make no admissions of fact or liability. However, The Boeing Company and AMB Property Corporation agree not to contest the above facts or status as PLPs in any proceeding or administrative action brought by Ecology to enforce this Order.

VI. WORK TO BE PERFORMED

Based on the foregoing Facts and Determinations, it is hereby ordered that the PLPs take the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC and applicable provisions of Chapter 173-303 WAC, unless otherwise specifically provided for herein.

1. Pursuant to Agreed Order No. 01HWTRNR-3345, Section VI.1., the Boeing Company submitted a draft remedial investigation ("RI") work plan which was approved by Ecology on February 17, 2004. The draft RI work plan follows the requirements specified in WAC 173-340-350 and the Scope of Work, Attachment 3. On December 5, 2003, Ecology approved an RI work plan for the Area 1 Property. The PLPs shall continue to implement the RI work plans as approved by Ecology. Other documents related to the RI, Feasibility Study (FS) or Draft Cleanup Action Plan (DCAP) may be viewed at a local public repository. See Attachment 4, Public Participation Plan, Section III [repository].

2. Pursuant to Agreed Order No. 01HWTRNR-3345 Section VI. 2, the Boeing Company submitted to Ecology-NWRO reports and data generated with respect to the independent remedial investigation and remediation activities at SWMUs and AOCs listed in Attachment 2, column III: Independent Remediation Work Conducted and/or Additional Work Not Needed to Meet Standards at the Site. These reports and data are listed in Attachment 6.

3. The PLPs shall provide for the continued implementation, including monitoring, of the Area 1 Property interim action as set forth in Attachment 11.

4. If Ecology identifies any additional remedial investigation beyond those activities conducted independently as being necessary to meet the objectives of this Agreed Order, Ecology will notify the PLPs of its requirements for Additional Work as provided in Section VII.7.

5. Upon completion of the remedial investigation work described in the final Ecology-approved RI work plan, the PLPs shall submit to Ecology-NWRO a draft RI report as provided in the approved RI work plan schedule. Within 60 days of receipt of Ecology comments on the RI Report, the PLPs shall submit a revised RI report incorporating Ecology's comments.

6. Within sixty (60) calendar days after receiving written Ecology approval of the final RI report, the PLPs shall submit to Ecology-NWRO a draft FS work plan. The draft FS work plan shall be written in accordance with WAC 173-340-350 and shall contain, at minimum, methods for evaluating the technical, environmental health, human health, and financial costs associated with each cleanup action alternative. The FS work plan shall contain a time schedule for completing the FS activities and, at a minimum, the methods for evaluating the following:

(A) Current Conditions: the PLPs shall update Ecology on the current nature and extent of dangerous constituents released into the environment at or from the SWMUs and AOCs addressed in the RI, if different from the results of the RI report.

(B) Technical: the PLPs shall develop a set of cleanup action alternatives to address those SWMUs and AOCs to be evaluated in the FS. The initial set of cleanup action alternatives shall

include options that meet the requirements of WAC 173-340-360 and the expectations of WAC 173-340-370. The FS work plan may incorporate prescreening of cleanup action alternatives in order to streamline the FS process, and may propose a focused analysis to support the use of presumptive remedies recognized in U.S. Environmental Protection Agency cleanup guidelines. The PLPs shall, at a minimum, evaluate the following for each pre-screened cleanup action alternative:

(i) the permanence and practicability of the option, based upon factors of overall protectiveness of human health and the environment, long-term effectiveness, manageability of short-term risks, permanent reduction of toxicity, mobility and volume of dangerous constituents, cost, implementability, and community concerns as specified in WAC 173-340-360(3)(f);

(ii) chemical and physical characteristics and estimated quantity of remediation wastes generated;

(iii) compliance with all applicable Federal and State applicable, relevant, and appropriate regulations ("ARARs"), including but not limited to standards in RCRA, the Clean Water Act, 33 U.S.C. § 1251 *et. seq.,* the Clean Air Act, 42 U.S.C. § 7401 *et. seq.,* the Model Toxics Control Act ("MTCA"), RCW 70.105D, the Toxic Substances Control Act, 15 U.S.C. § 2601 *et. seq.* ("TSCA"), and the Safe Drinking Water Act, 42 U.S.C. § 1401 *et. seq.* ("SDWA");

(iv) limitations of Site use as a result of implementing each cleanup action alternative, including but not limited to deed restrictions, access control mechanisms to prevent unauthorized entry, surface covers, and prohibition on use of groundwater for drinking, agricultural, or industrial purposes;

(v) if required by Ecology, examples of Sites using the same cleanup action alternatives for similar dangerous constituents, and a discussion of the results achieved; and

(vi) discussion of laboratory or bench-scale tests necessary to evaluate the effectiveness of any cleanup action alternative.

(C) Environmental: Evaluate the future long and short term adverse effects on the environment of each remedial option, and measures necessary to mitigate any adverse effects. Evaluate both the positive and negative environmental consequences of implementing each remedial option.

(D) Human Health and the Environment: Evaluate the future long and short term potential exposure to human and environmental receptors of residual contamination during and after remedy implementation, based on potential exposure routes and toxicity of dangerous constituents.

(E) Cost Estimate: Evaluate the capital costs (mobilization, design, construction, permits, licenses, and taxes) for each cleanup action alternative. Include, at a minimum, quantities, unit costs, and total costs, annual operating costs (labor, expendable goods, utilities, and laboratory analysis), and present worth analysis of each remedial option. Further, the cost of removing new structures can not be a factor in favor of a less permanent clean up action under WAC 173-340-360(3). "New structures" mean structures not in existence as of the effective date of this Agreed Order.

(F) Restoration Timeframe: Submit an estimate of the time required to meet the remediation goals for each cleanup action alternative in the draft FS work plan.

(G) Recommendation: Provide a recommendation for one or more cleanup action alternatives based on the factors described above.

7. Upon completion of the feasibility study work described in the final Ecology approved FS work plan, the PLPs shall submit to Ecology-NWRO a draft FS report as provided in the approved FS work plan schedule. Within 60 days of receipt of Ecology comments on the FS, the PLPs shall submit a revised FS incorporating Ecology's comments.

8. After Ecology concurrence and approval of the final FS report, and if required by Ecology, the PLPs shall submit a draft cleanup action plan ("DCAP") to Ecology - NWRO within forty five (45) calendar days of receipt of formal notification of such requirement by letter. The notification shall identify the required scope of the DCAP. The DCAP shall meet the requirements of WAC 173-340-360, -400(1) through (9), -410 as well as WAC 173-303-64610 through 173-303-646920. The PLPs acknowledge that monitoring wells or other remediation technology may need to be placed within the new building structures or offices as part of a final cleanup action plan ("CAP").

9. The scope of any DCAP required by Ecology shall be subject to the Additional Work provisions in Section VII. 7.

10. After the parties agree upon the terms of a DCAP, the PLPs shall enter into negotiations with Ecology regarding a consent decree or agreed order to design, construct, operate, and monitor the chosen remedial option(s) described in the DCAP. Existence of new structures, as defined in paragraph VI. 6 (E), on the Site can not frustrate remedial actions Ecology determines to be necessary as part of final clean up. After public review and comment on the DCAP document and agreed order or consent decree, Ecology may modify the DCAP and agreed order or consent decree. Then Ecology shall approve a final CAP.

11.. Notwithstanding the foregoing, if the Remedial Investigation identifies releases of dangerous constituents at the Site from both the PLPs and non-PLP third party sources which, due to source(s), nature and/or location, render it impracticable for the PLPs to remediate the releases from the PLPs sources without involving third parties (the "Commingled Releases"), Ecology may allow the PLPs to conduct an additional Remedial Investigation and/or a Feasibility Study, and prepare a Cleanup Action

Plan addressing Commingled Releases pursuant to a separate agreed order or consent decree, as appropriate. In such event, the PLPs and Ecology may proceed as follows under this Agreed Order:

(A) Prepare a DCAP and issue an Interim CAP under this Agreed Order addressing non-Commingled Releases and, as appropriate, any sources of Commingled Releases at the Site, pending issuance of a CAP addressing Commingled Releases under separate order or decree;

(B) Proceed with negotiation of a consent decree or agreed order to implement the Interim CAP; and

(C) Issue a final CAP under this Agreed Order incorporating the CAP for the Commingled Releases once it is finalized under separate order or decree.

In lieu of or in addition to the foregoing, the PLPs and Ecology may agree to take such other actions as may be appropriate to provide for remediation of non-Commingled Releases and Commingled Releases under separate orders or decrees.

12. The PLPs shall follow the reporting guidelines in WAC 173-340-840 for all parts of this order unless otherwise agreed to by both Ecology and the PLPs. All data generated pursuant to this order shall be submitted to Ecology-NWRO, including all outlier and duplicate data. In addition, all groundwater, sediment, surface water, and soil data generated shall be submitted to Ecology-NWRO as copies of the original reported laboratory data sheets, in tabulated data format, and in electronic format using the most recent compatible software to which Ecology and the PLPs agree, for the constituent concentrations detected above method detection limits in the above referenced environmental media. Pursuant to WAC 173-340-840(5), the PLPs shall submit all soil and groundwater sampling data to Ecology according to the requirements of Ecology Policy 840 Data Submittal Requirements. Laboratory detection limits and practical quantitation limits shall be reported for each chemical constituent concentration detected.

13. The PLPs shall submit quarterly status reports to Ecology-NWRO, starting from the effective date of this Agreed Order until all of the requirements of this Agreed Order are completed to

Ecology's satisfaction. The submittal shall be due on the 15th day of the month following the three-month activity period. The PLPs shall describe the following in each status report:

(A) all work conducted pursuant to this Agreed Order during the last quarter, including interim action work;

(B) occurrence of any problems, how problems were rectified, deviations from the work plans and an explanation for all deviations;

(C) projected work to occur in the upcoming quarter;

(D) summaries of significant findings, changes in personnel, summaries of contacts with all federal, state, local community, and public interest groups; and

(E) all laboratory analyses (as copies of the original laboratory reporting data sheets, in tabulated data format) for which quality assurance procedures were completed during the quarter.

If both Ecology and the PLPs agree that such a change is necessary, the frequency of progress report submittals shall be revised. This would be an example of a minor modification that may be agreed to by Ecology and the PLPs without public comment.

14. The PLPs shall notify Ecology's Project Coordinator in writing of any newly-identified SWMU(s) or AOCs, newly-discovered releases from known SWMU(s) or AOCs, and newly-discovered significant releases of dangerous waste or dangerous constituents, as defined in WAC 173-303-806(4)(a)(xxiv)(A), at or from the Site no later than fifteen (15) calendar days after discovery. Additional activities to address new discoveries are subject to the Additional Work provisions of Section VII.7.

VII. TERMS AND CONDITIONS OF ORDER

1. Public Notices: Ecology shall be responsible for providing public notice. Ecology reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations to Ecology that the Order is inadequate or improper in any respect.

2. Remedial and Investigative Costs: The PLPs agree to pay costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or Ecology's contractors for investigations, remedial actions, and Order preparation, negotiations, oversight and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). The PLPs agree to pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. Itemized statements will be prepared quarterly. Failure to pay Ecology's costs within thirty (30) days of receipt of the itemized statement of costs will result in interest charges. Interest charges shall accrue at the rate designated in WAC 173-340-550(4). The current rate is 12% (annual percentage rate, compounded monthly) on all remedial action costs not paid within ninety days of the billing date.

In order to assure payment to the proper authority, the address for mailing via the post office is:

Cashiering Section
P.O. Box 5128
Lacey, WA 98509-5128

If you choose to send a check by a messenger/overnight delivery service, the address to use is:

Cashiering Section
300 Desmond Drive
Lacey, WA 98503

1 Please indicate on the check that it is for cost recovery at the BCA – Auburn Plant so it is properly
2 credited. Enclosing the bottom portion of our invoice will accomplish this.
3 3. Financial Assurance: The PLPs shall establish and maintain financial assurance for
4 corrective action in the amount necessary to implement the Cleanup Action Plan (CAP) and the
5 Compliance Monitoring Plan (CMP), as provided in WAC 173-340-380 and WAC 173-340-410,
6 respectively, and required by WAC 173-303-64620. Except as modified below and in the absence of
7 detailed regulations, Federal Register/Vol. 51, No. 206/Friday, October 24, 1986/Proposed rules and
8 Federal Register/Vol. 61, No. 85/Wednesday, May1, 1996/Proposed Rules, shall be used as guidance for
9 providing financial assurance for corrective action. In a manner consistent with this guidance, the
10 Permittees shall make satisfactory demonstration to the Department that all financial assurance
11 documents include appropriate provision for the Department to gain access to the funds to implement
12 corrective action in the event the Department determines that corrective action is not being conducted in
13 accordance with the provisions of this permit. Upon evidence of the failure of the Permittees to
14 demonstrate continuous financial assurance for corrective action, the Department may direct the payment
15 or use of funds to assure that the approved corrective action plan is carried out. Acceptable mechanisms
16 include letters of credit, surety bonds guaranteeing performance, liability insurance, trust funds, or
17 equivalent mechanisms as approved by the Department. The PLPs shall provide Ecology's project
18 manager with documentation of this financial assurance within sixty (60) days of Ecology's first issuance
19 of the final CAP/CMP. The PLPs shall adjust the financial assurance coverage and provide Ecology's
20 project manager with documentation of the updated financial assurance for:
21 (A) Inflation, annually, within 30 days of the anniversary date of the first issuance of the final
22 CAP/CMP; or if applicable, the modified anniversary date, that has been set in (2), below,
23 and
24 (B) Changes in cost estimates, within 30 days of Ecology's issuance of the modified CAP/CMP,
25 which modifies the anniversary date.

Each PLP shall notify Ecology's project manager by certified mail of the commencement of a voluntary or involuntary bankruptcy proceeding under Title 11, United States Code, naming that PLP, within ten (10) days after commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he is named as debtor as required under the terms of the corporate guarantee. A PLP who has established financial assurance for corrective action with an acceptable mechanism, mentioned above, will be deemed to be without the required financial assurance or liability coverage:

(A) in the event of bankruptcy of the trustee or issuing institution; or

(B) the authority of the trustee institution to act as trustee has been suspended or revoked; or

(C) the authority of the institution issuing the surety bond, letter of credit or insurance policy has been suspended or revoked.

The PLP in bankruptcy must establish other financial assurance within sixty (60) days of bankruptcy, or suspension/revocation of authority.

4. Designated Project Coordinators:

The Project Coordinator for Ecology is:

Name: Ms. Robin Harrover
Address: Department of Ecology - Northwest Regional Office
3190 160th Avenue S.E.
Bellevue, WA 98008-5452
Telephone: (425)-649-7232
FAX: (425)-649-7098
E-mail: rhar461@ecy.wa.gov

The Project Coordinator for the Site is:

Name: Mr. James Bet
Address: Boeing Environmental Affairs
P.O. Box 3707, MC 1W-12
Seattle, WA 98124-2207
Telephone: (206) 679-0433
FAX: (206) 766-5343

The Project Coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and the PLPs, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the Project Coordinator(s). Notification

requirements in this Order may be satisfied by electronic mail with agreement between the Project Coordinators. Should Ecology or the PLPs change Project Coordinator(s), written notification shall be provided to Ecology or the PLPs at least ten (10) calendar days prior to the change.

5. Ecology Approvals and Short-form Dispute Resolution Process: The PLPs shall submit draft Submittals pursuant to the schedules required by this Agreed Order or as otherwise approved hereunder. With the exception of periodic status reports, Ecology will review all Submittals required by this Order, and will provide written approval, or disapproval with comments and/or modifications to be made by the PLPs. A Submittal shall become final when it is approved by Ecology in writing. Once approved in writing by Ecology, all submittals to Ecology are incorporated by reference and become enforceable parts of this Agreed Order, as if fully set forth herein. Following approval of any Submittal, the PLPs shall commence all Work required thereby within fifteen (15) days after receipt of Ecology approval, unless a longer time is specified by Ecology.

During the performance of work under an approved submittal, the Project Coordinators may verbally agree to minor field modifications to the submittal. In such case, the PLPs shall submit a description of the modification to Ecology's Project Coordinator in writing within seven (7) days of the verbal agreement, and Ecology's Project Coordinator shall provide written confirmation of the agreed modification.

When Ecology provides comments or proposed modifications to the PLPs on any Submittal, and if the PLPs agree with Ecology's comments and/or proposed modifications, the PLPs shall submit a revised Submittal incorporating all of Ecology's comments and/or proposed modifications within thirty (30) days of the PLPs' receipt of Ecology's comments and/or proposed modifications, unless a longer time is approved by Ecology. If following submission of a draft Submittal, the PLPs disagree or have questions concerning Ecology's comments and/or required modifications, the PLPs, within seven (7) days after receipt of Ecology's comments or required modifications, may request a meeting or telephone conference, with the Ecology Project Coordinator. Such request shall be in writing and will establish a twenty (20) day informal resolution period, unless a longer period is approved by Ecology, beginning

with the date of the written request. The written request shall include a statement of the issues the PLPs wish to address.

The informal resolution period shall extend the due date for resubmittal. If agreement is reached within the informal resolution period, the PLPs shall incorporate into a revised Submittal the agreed-upon comments and/or modifications within thirty (30) days after reaching agreement, unless a longer time is specified by Ecology. If agreement is not reached within the informal resolution period, Ecology shall send a written letter of disapproval to the PLPs. The PLPs shall then either submit a revised, final draft Submittal which incorporates all Ecology comments or required modifications within 30 days of receipt of such written letter of disapproval, unless a longer time is approved by Ecology, or the PLPs may invoke the dispute resolution procedures in Section VII.11 (B) of this Agreed Order for all comments or required modifications the PLPs wish to challenge.

6. Performance: The PLPs shall notify Ecology as to the company(s) or firm name(s) of any consulting engineer(s), geologist(s), hydrogeologist(s), or similar expert(s), and of any contractors and/or subcontractors to be used in carrying out the terms of this Order, at least seven (7) calendar days in advance of their involvement at the Site, if possible. The PLPs shall provide a copy of this Order to all consultants and contractors retained to perform work required by this Order and shall ensure that all work undertaken by such consultants, contractors and subcontractors will be in compliance with this Order. Upon request, the PLPs shall provide the names of such engineers, hydrogeologists, toxicologists, or similar experts, and of any contractors or subcontractors used in carrying out the terms of this Order.

WAC 173-340-400(6)(b)(i) requires that "construction" performed on the Site must be under the supervision of a professional engineer registered in Washington. In addition, all work performed by the PLPs pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in hazardous waste Site investigation and cleanup.

Unless manufacturing schedule needs interfere, the PLPs shall provide seven (7) working days notice to Ecology's Project Coordinator prior to commencing any major work activities pursuant to this Agreed Order. Major work activities that require a seven (7) day notice will be described in the Ecology

approved RI/FS and interim action work plans. If manufacturing schedules require that major work activities be taken pursuant to this Agreed Order in less than seven days, the PLPs will give twenty-four (24) hours notice to Ecology's Project Coordinator prior to commencing this major work. Except as allowed by WAC 173-340-515(2) or where necessary to abate an emergency situation, the PLPs shall not perform any remedial actions at the Site, outside that required by this Order, unless Ecology approves the independent remedial action in writing prior to the additional remedial action.

7. Additional Work: Ecology may determine or the PLPs may propose that additional work is or may be necessary to implement this Agreed Order (henceforward "Additional Work"). If the PLPs propose the Additional Work, Ecology will respond to the proposal in writing within an appropriate time period, not to exceed 30 days. If the Additional Work is required by Ecology, then Ecology will specify in writing the basis for its determination that the Additional Work is necessary. Within fifteen (15) days after the receipt of such written determination, the PLPs shall notify Ecology-NWRO of its willingness to perform the Additional Work or may request a meeting with the Ecology Project Coordinator to discuss the Additional Work as specified in the informal dispute resolution procedures set forth in Section VII.5. If, after such meeting, the PLPs disagree with Ecology's request for Additional Work, the PLPs may invoke dispute resolution procedures set forth in Section VII.11B below. If dispute resolution is not invoked on Ecology's written request for Additional Work, the PLPs shall submit a work plan for Ecology review incorporating the Additional Work within thirty (30) days (or more, if approved by Ecology) after either submitting notice of its willingness to perform or the date of the meeting with Ecology, as applicable. Ecology's review and approval of such work plan shall be subject to the procedures set forth in Section VII.5. Upon written approval of the work plan, the PLPs shall implement the work plan in accordance with the schedule contained therein.

8. Access: Except as provided below regarding safety and security precautions, Ecology or any Ecology authorized representative shall have the authority to enter and freely move about the Site that the PLPs own, control, or have access rights to (to the extent that the PLPs have such rights) at all reasonable times for the purposes of, among other things, inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the progress in carrying

1 out the terms of this Order; conducting such tests or collecting samples as Ecology or the Project
2 Coordinator may deem necessary; using a camera; sound recording; or using other documentary type
3 equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by
4 the PLPs. By signing this Agreed Order, the PLPs agree that this Order constitutes reasonable notice of
5 access, and the PLPs agree to allow Ecology and all Ecology agents access to the Site that the PLPs
6 either own, control, or have access rights to (to the extent that the PLPs have such rights) at all
7 reasonable times, with reasonable notice from Ecology, for purposes of overseeing work performed under
8 this Order. Ecology shall allow split or replicate samples to be taken by PLPs during an inspection unless
9 doing so interferes with Ecology's sampling. The PLPs shall allow split or replicate samples to be taken
10 by Ecology and shall provide seven (7) days notice before any sampling activity.
11 If photographs are to be taken in a U.S. Department of Defense (DOD) area that contains items
12 important to national security, then the PLPs shall provide a competent photographer to take photographs
13 under the instruction of Ecology staff on Site subject to limitations required for protection of DOD
14 secrets, including any required DOD security clearance. All such photographs will be developed and
15 previewed by the PLPs, to enable the PLPs to assure compliance with security requirements for
16 protection of DOD secrets. The PLPs shall provide two copies to Ecology-NWRO of all photographs
17 taken within seven (7) days excepting any photographs for which additional precautions must be
18 followed to protect DOD secrets. The PLPs shall provide Ecology with a log of the photographs taken,
19 and shall identify photographs withheld for protection of DOD secrets.
20 The PLPs' Project Coordinator or other representative may accompany Ecology's
21 representative(s) at all times for purposes of plant security, and compliance with plant and work area
22 health and safety precautions. If Ecology or its representatives seek to perform their duties at the Site in
23 a manner which is not in compliance with any written plant or work area health and safety requirement or
24 rule, or any applicable federal or state law or promulgated regulation, the PLPs' Project Coordinator or
25 other representative may verbally notify such Ecology representative(s) of the non-compliance. Ecology
26 shall ensure that its employees, contractors, and other representatives comply with all applicable health

and safety laws, and with all plant and work area health and safety plans of which Ecology or its representatives have notice.

If Ecology desires to obtain access to any manufacturing or process areas at which PLPs conduct activities utilizing information which is proprietary, the PLPs may request in writing, pursuant to RCW 43.21A.160, that documentation of such areas be designated as confidential business information to protect against Ecology disclosure of information collected. If Ecology desires to obtain access to any manufacturing or process areas at which the PLPs conduct activities utilizing secrets associated with U.S. Department of Defense (DOD) projects, the PLPs may request a reasonable delay to providing such access so that PLPs' and Ecology's representatives may further confer regarding the purpose of the inspection in the area and appropriate precautions for protecting DOD secrets. Ecology shall be responsible for obtaining any DOD required security clearance prior to entering secured areas.

If access to areas not owned by the PLPs is necessary for performance of work under this Order, the PLPs shall use reasonable best efforts to obtain such access and shall include Ecology representatives among those persons authorized to enter and inspect property under any access agreements obtained for performance of work under the Order. The PLPs shall promptly notify Ecology in writing if it is unable to obtain necessary access agreement(s) from owners of properties not owned by the PLPs and shall provide a written description of how the PLPs have used reasonable best efforts to obtain access.

9. Public Participation: The PLPs shall update the Public Participation Plan for the Site, Attachment 4, as needed. Ecology will review and approve updates to the plan and will maintain the responsibility for public participation at the Site. The PLPs shall help coordinate and implement public participation for the Site as specified in the Ecology-approved Public Participation Plan.

10. Retention of Records: The PLPs shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of issuance by Ecology of written notification that all requirements of this Order have been satisfactorily completed, all submittals to Ecology, QA/QC memoranda and audits, final work plans, final reports, field notes and laboratory analytical and testing reports in its possession relevant to this Order. Should any portion of the work performed thereunder be undertaken through contractors or agents, the PLPs agree to include in their

contract(s) with all such contractors or agents a record retention requirement meeting the terms of this paragraph.

11. Dispute Resolution: In the event a dispute arises as to a decision by Ecology's Project Coordinator, the parties shall utilize the dispute resolution procedure set forth below.

(A) The PLPs shall utilize the informal dispute resolution processes provided in Section VII.5 prior to proceeding with the formal dispute resolution processes described in Section VII.11.(B).

(B) The PLPs may then request Ecology management review of the Ecology Project Coordinator's letter of disapproval issued at the completion of the informal dispute resolution process set forth in Section VII.5. This request shall be submitted in writing to the Program Manager within seven (7) days of receipt of the Ecology Project Coordinator's letter of disapproval. In such case, the PLPs shall provide the Program Manager with a written statement of their position. The PLPs may also request an extension of the due date for any Submittal, or other activity required hereunder, affected by the dispute. Ecology's Program Manager shall conduct a review of the dispute, and shall issue a written decision regarding the dispute within thirty (30) days of the PLPs' request for review. The Program Manager's decision shall be Ecology's final decision on the disputed matter. If a Submittal is affected by the dispute, then within thirty (30) days after receipt of the Program Manager's final decision, unless a longer time is approved by Ecology, the PLPs shall submit a revised Submittal which conforms to the Program Manager's final decision.

The parties agree to utilize the dispute resolution process only in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used. Implementation of the formal dispute resolution procedures in Section VII.11 (B) shall not provide a basis for delay of any activities required in the Order, unless Ecology agrees in writing to a schedule extension.

12. Reservation of Rights/No Settlement: This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or

a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against the PLPs to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against the PLPs to require those remedial actions required by this Agreed Order, provided the PLPs comply with this Agreed Order.

Ecology reserves the right to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of dangerous constituents from the Site.

In the event Ecology determines that conditions at the Site are creating or have the potential to create a threat to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order the PLPs to stop further implementation of this Order for such period of time or take other action as needed to abate the threat.

13. Transference of Property: The PLPs shall notify Ecology-NWRO of the intent to transfer ownership by submitting the form in Attachment 12 to this Order with any changes proposed for the BCA-Auburn Plant noted on the form. Prior to any voluntary conveyance or relinquishment of title, easement, leasehold, or other interest by the PLPs in any portion of the Site, the PLPs shall provide for continued implementation of all applicable requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order. Nothing in the preceding sentence shall alter or restrict the PLPs obligations under this Order for implementation of the actions described therein.

Prior to any involuntary conveyance or relinquishment of an interest in any portion of the Site, the PLPs shall use reasonable best efforts to provide for continued implementation of this Order and of necessary remedial actions, and shall notify Ecology if such efforts are unsuccessful. If Ecology utilizes its authority to provide for continued implementation of the Order or the remedy on the portion of the Site involuntarily conveyed or relinquished (e.g., if Ecology obtains access for the PLPs) the PLPs shall be responsible for such continued implementation as directed by Ecology in writing.

Prior to transfer of any legal or equitable interest by the PLPs in the Site or any portions thereof, the PLPs shall serve a copy of this Order upon any prospective purchaser, lessee, transferee, assignee, or

other successor in such interest. At least ninety (90) days prior to finalization of any transfer, the PLPs shall notify Ecology of the contemplated transfer and of the available information, for the portion of the Site to be transferred, concerning SWMUs and AOCs, the likelihood of releases of hazardous constituents at or from that portion of the Site, the likelihood of releases of hazardous constituents from other portions of the Site onto the portion to be transferred, and the remedial actions completed or underway. Ecology shall use best reasonable efforts to review the information submitted by the PLPs on the portion of the Site to be transferred, and issue a written determination within 30 days after receiving same that either (a) Ecology will not require additional remedial investigation work or remedial action at this time on the property to be transferred, or (b) the property to be transferred continues to require additional remedial actions due to known or suspected releases of hazardous constituents on that portion of the Site.

14. Compliance with Other Applicable Laws:

(A) All actions carried out by the PLPs pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits.

(B) The PLPs have a continuing obligation to determine whether permits or approvals exempted under RCW 70.105D.090(1) would otherwise be required for actions under this Order. In the event the PLPs determine that permits or approvals applicable to the action under this Order are exempted under RCW 70.105D.090(1), they shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or the PLPs shall be responsible to contact the appropriate state and/or local agencies regarding such permits or approvals. If Ecology so requires, the PLPs shall promptly consult with the appropriate state and/or local agencies, and provide Ecology with written documentation from those agencies regarding the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the PLPs and on how the PLPs must meet those requirements. Ecology shall inform the PLPs in writing of these requirements. Once established by Ecology, these substantive requirements shall

be made enforceable requirements of this Order. The PLPs shall not begin or continue the action subject to the substantive requirements until Ecology makes its final determination that the appropriate substantive requirements of those agencies have been identified. Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies prior to establishing the substantive requirements under this section.

(C) Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from the procedural requirements pursuant to RCW 70.105D.090(1) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply and the PLPs shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

15. Extension of Schedule: The PLPs may request an extension of any deadline or schedule set forth in this Order or an approved Submittal. Any such request shall be submitted in writing to Ecology's Project Coordinator at least twenty (20) days in advance of the pending deadline, if possible. The request shall specify the reason(s) the extension is needed.

An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. A requested extension shall not be effective until approved by Ecology. Ecology shall act upon any written request for extension in a timely fashion. It shall not be necessary to formally amend this Order when a schedule extension is granted.

The burden shall be on the PLPs to demonstrate that the extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause includes, but is not limited to, the following:

(A) Unforeseeable circumstances beyond the reasonable control of the PLPs or any person or entity controlled by the PLPs that delay or prevent the timely performance of any obligation under this Order despite the PLPs' best efforts to fulfill the obligation; or

(B) Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable event or casualty.

Neither increased costs of performance nor changed economic circumstances shall be considered circumstances beyond the reasonable control of the PLPs.

Ecology shall give the PLPs written notification in a timely fashion of any extensions granted pursuant to this section. The period of delay approved by an extension under this section shall be an "excused delay" which is not subject to Stipulated Penalties under Section VIII.

VIII. STIPULATED PENALTIES

Except for excused delays described in Subsections 5, 11 & 15 of Section VII, for each day the PLPs fail to comply with any time schedules contained in this Agreed Order, or any other time schedules approved or modified in writing by Ecology, the PLPs stipulate and agree that Ecology may, at its discretion, assess a civil penalty. The penalties to be assessed are as follows:

1. For failure to commence or complete field work by the time required by this Order; and for failure to submit any work plans or reports by the time required by this Order: $500.00 per day for each of the first seven (7) days of delay; $1,000.00 per day for the eighth (8th) through fourteenth (14th) days of delay; $5,000.00 per day for the fifteenth (15th) through thirtieth (30th) days of delay; and $10,000 for the thirty-first (31st) through ninetieth (90th) days of delay.

2. For failure to submit other required written Submittals not described above by the time required pursuant to this Order: $250.00 per day for each of the first seven (7) days of delay; $500.00 per day for the eighth (8th) through fourteenth (14th) days of delay; $2,500.00 per day for the fifteenth (15th) through thirtieth (30th) days of delay; and $5,000.00 for the thirty-first (31st) through ninetieth (90th) days of delay. Ecology retains its entire rights to issue penalties or orders for damages or for any other actions that are not covered by this section. Issuance of penalties under this section shall preclude Ecology from issuing any other penalties for that violation.

Should a penalty be assessed under this section, the penalty shall begin to accrue from the date on which the work was to have been performed, or the submittal was to have been made, and shall cease

to accrue on the date the PLPs perform the required work or deliver the required submittal to Ecology. The assessment of penalties shall be subject to the Dispute Resolution procedures specified in Section VII.11, except that the amount of a stipulated penalty is not subject to challenge. Penalties shall accrue but not become payable until after dispute resolution procedures are completed. All penalties will be payable within forty-five (45) days of assessment or the completion of Dispute resolution procedures if applicable, to the Department of Ecology, Cashiering Section, PO Box 5128, Lacey, WA 98503-0210.

3. The PLPs shall not be liable for payment of penalties if the PLPs have submitted to Ecology a timely request for an extension of schedule, and if Ecology has received the written request and has not denied the request in writing.

IX. SATISFACTION OF THIS ORDER

The provisions of this Order shall be deemed satisfied upon the PLPs' receipt of written notification from Ecology that the PLPs have completed the corrective actions required by this Order, as amended by any modifications, and that the PLPs have complied with all other provisions of this Agreed Order.

X. AMENDMENTS

Ecology and the PLPs may modify this Agreed Order by mutual written agreement. Substantial modification may require additional public notice and opportunity to comment. Ecology will determine if the Agreed Order modifications are substantial, thus requiring additional public notice and opportunity to comment.

XI. ENFORCEMENT

1. Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

(A) The Attorney General may bring an action to enforce this Order in a state or federal court.

(B) The Attorney General may seek to recover, by filing an action if necessary, the amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

(C) In the event the PLPs refuse, without sufficient cause, to comply with any term of this Order, pursuant to RCW 70.105D.050, the PLPs will be liable for:

(i) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and

(ii) civil penalties of up to $25,000 per day for each day it refuses to comply.

(D) This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order:_____

THE BOEING COMPANY
by, through and for its COMPANY SAFETY, HEALTH, and ENVIRONMENTAL AFFAIRS
By: Mr. Kirk Thomson
Director of Environmental Affairs

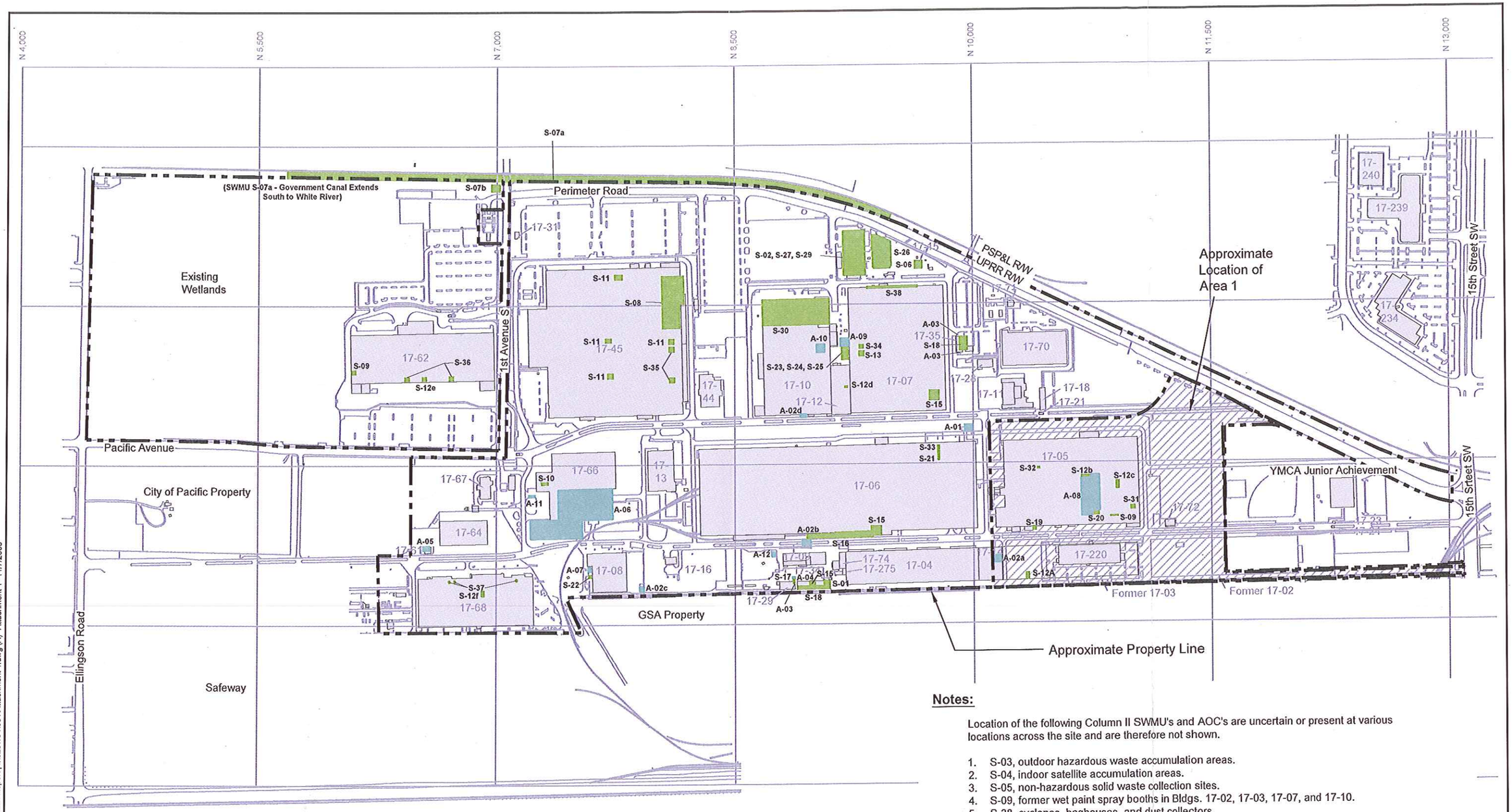
Date 3-30-06

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
By: Julie Sellick, Section Manager
Hazardous Waste and Toxics Reduction
Northwest Regional Office

Date 4-7-06

THE AMB PROPERTY CORPORATION
By: Steven Campbell
Senior Vice President

Date 3-31-06



Notes:

Location of the following Column II SWMU's and AOC's are uncertain or present at various locations across the site and are therefore not shown.

1. S-03, outdoor hazardous waste accumulation areas.
2. S-04, indoor satellite accumulation areas.
3. S-05, non-hazardous solid waste collection sites.
4. S-09, former wet paint spray booths in Bldgs. 17-02, 17-03, 17-07, and 17-10.
5. S-38, cyclones, baghouses, and dust collectors.
6. S-39, x-ray and photographic laboratories.

Legend

- Solid Waste Management Unit (SWMU)
- Area of Concern (AOC)
- 17-68 Boeing Building and Number
- Property Boundary

N

0 600 1200

Scale in Feet

Base map source: Geomatrix 2003

Boeing\Remedial Investigation Report | I:\025\1641031\Attachment 1.dwg (A) "Attachment 1" 11/7/2005

LANDAU ASSOCIATES

Boeing Auburn Facility Agreed Order No. 01HWTRNR-3345	**RCRA Corrective Action Solid Waste Management Units and Areas of Concern Location Map**	Attachment 1

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

IA. Existing SWMUs & AOCs **Further Action & Incorporation into RI Needed for both soil and groundwater analysis**	**IB. Existing SWMUs & AOCs** **Further Action & Incorporation into RI Needed for groundwater analysis only**	**II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards.** **Incorporation into RI not needed.**
S-06 17-15 Rinsewater Treatment Plant	S-11 17-45 Active Aqueous Degreasers – Formerly Vapor Degreasers	S-01 17-34 Permitted Container Storage Area
S-12d 17-12 Former Vapor Degreaser; Former Metal Fabrication and Finishing	S-12a 17-03 Former Vapor Degreaser; Former Metal Fabrication and Finishing	S-02 17-32 and 17-33, regulated Waste Material Staging Area
S-15 Machine Sumps (Please see Attachment 7 for a list of sumps)	S-12b 17-05 Former Vapor Degreaser (VD-01); Process Assembly, Metal Bonds and Composite Parts	S-03 Outdoor Hazardous Waste Accumulation Areas
S-16 17-06 Active Aluminum Chip Briquetter (Sump and tank)	S-12c 17-05 Former Vapor Degreaser (VD-02); Process Assembly, Metal Bonds and Composite Parts	S-04 Indoor Satellite Accumulation Areas
S-17 17-29 Titanium Chip Bailer (shed, sump and tank);	S-12f 17-68 Former Vapor Degreaser	S-05 Nonhazardous Solid Waste Collection Sites

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's **Further Action & Incorporation into RI Needed for both soil and groundwater analysis**	**IB. Existing SWMUs & AOCs** **Further Action & Incorporation into RI Needed for groundwater analysis only**	**II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards.** **Incorporation into the RI not needed.**
S-18 17-34 (SAU34-002) and 17-35 Miscellaneous Sumps at Chip Sheds	S-13 17-07 Active Vapor Degreaser; Machine Fabrication	S-07a Government Canal
A-01 17-06; Former Underground Storage Tanks AU-01 and AU-02	S-19 17-05 Former Waste Oil Tank (Au-22); Process Assembly, Metal Bonds, and Composite Parts.	S-07b Storm Water Treatment Facility
A-02c 17-08 Former UST (AU-16) Diesel Product Storage	S-30 Former Debris Pile and burn pit.	S-08 17-45 Active Wet Paint Spray Booths; Sheet Metal Center
A-02d 17-10 Former UST (AU-6) Diesel Product Storage Tank	A-02a Building 17-03 (Now Demolished). Former USTs (Au-7 and Au-8) Diesel oil product storage	S-09 17-62 Former Wet Paint Spray Booths
A-03 17-29 & 17-35 Former unregistered Waste Oil Tanks	A-02b 17-06 Former UST (AU-23) Jet Fuel product storage	S-10 17-66 Paint Storage Room, Mixing Area, and Testing Booth

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's **Further Action & Incorporation into RI Needed for both soil and groundwater analysis**	**IB. Existing SWMUs & AOCs** **Further Action & Incorporation into RI Needed for groundwater analysis only**	**II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards.** **Incorporation into the RI not needed.**
A-09 17-07 Acid Scrubber Drain line Leak; Machine Fabrication	A-04 17-29 Former Underground Bailer Sump; PS300, cutting oil and solvents	S-12e 17-62 Former Vapor Degreasers (2); Welded Duct Facility
A-12 Fuel Oil Spill; Location unknown	A-05 17-64 Unleaded Gasoline UST (AU-32); Transportation Bldg. Fuel Island.	S-14 17-52 Battery Wash Area
	A-06 Excavations for the expansion of 17-66. Three independent investigations	S-20 17-05 Former Waste Holding Tank (WHT-02)
	A-07 17-08 Former Methyl Ethyl Ketone UST (AU-18)	S-21 17-06 Former Waste Holding Tank (WHT-01)
	A-08 17-05 Former Metalbond Tank Line; Process Assembly, Metal Bonds and Composite Parts	S-22 17-08 Former Acid Waste Holding Tank AU-21

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's Further Action & Incorporation into RI Needed for both soil and groundwater analysis	IB. Existing SWMUs & AOCs Further Action & Incorporation into RI Needed for groundwater analysis only	II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards. Incorporation into the RI not needed.
	A-10 17-10 G&L Post Mill; Tooling/Tool Fabrication	S-23 17-07 Former Alkaline Waste Holding Tank
		S-24 17-07 Former Cyanide Waste Holding Tank
		S-25 17-07 Former Acid Waste Holding Tank
		S-26 Former North Lagoon
		S-27 Former South Lagoon

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's Further Action & Incorporation into RI Needed for both soil and groundwater analysis	IB. Existing SWMUs & AOCs Further Action & Incorporation into RI Needed for groundwater analysis only	II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards. Incorporation into the RI not needed.
		S-28 Former Waste Pile Sludge Delisting
		S-29 Former Landfill
		S-31 17-05 Alodine Waste Holding Tank WHT-01
		S-32 17-05 Waste Holding Tank WHT-03
		S-33 17-06 Waste Holding Tanks WHT-02, 03, 04, 05; Skin and Spar Fabrication
		S-34 17-07 Tank Line Waste Holding Tanks WHT-01, 02, -03, -04

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's Further Action & Incorporation into RI Needed for both soil and groundwater analysis	IB. Existing SWMUs & AOCs Further Action & Incorporation into RI Needed for groundwater analysis only	II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards. Incorporation into the RI not needed.
		S-35 17-45 Tank Line Waste Holding Tanks (WHT-01, -02, -03); Sheet Metal Center
		S-36 17-62 Tank Line Waste Holding Tanks (WHT-01, -02, -03, -04) Welded Duct Facility
		S-37 17-68 Tank Line Waste Holding Tanks (WHT-01, -02, -03, -04, -05) Emergent Manufacturing Facility
		S-38 Cyclones, Baghouses, and Dust Collectors
		S-39 X-ray and Photographic Laboratories
		A-02e 17-57 Former USTs (AU-12 & AU-13) Heating Oil Tanks

ATTACHMENT 2
SWMU'S AND AOCS, BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION – AUBURN PLANT
Revised: May 30, 2002

I. Existing SWMU's & AOC's Further Action & Incorporation into RI Needed for both soil and groundwater analysis	IB. Existing SWMUs & AOCs Further Action & Incorporation into RI Needed for groundwater analysis only	II. SWMUs & AOCs - Independent Remediation Work Conducted, and/or Additional Work Not Needed to Meet Standards. Incorporation into the RI not needed.
		A-02f 17-58 Former UST (AU-10) PS300 Product Storage Tank
		A-11 17-66 Methyl Phenyl Ketone UST

ATTACHMENT 3

Scope of Work for a Remedial Investigation/Feasibility Study Workplan at the Boeing Commercial Airplanes, Fabrication Division – Auburn Plant

Revised as of May 30, 2002

For the portion(s) of the facility containing SWMUs and AOCs identified in Attachment 2, column I., the RI workplan shall describe procedures for evaluating:

(A) the vertical and horizontal hydraulic conductivity, particle size distribution, porosity and organic carbon content of lithologic units down to and including the first laterally continuous aquitard beneath the Boeing Auburn Plant, based on existing subsurface conditions and data gathered during remedial investigation (RI) activities.

(B) the seasonal groundwater flow direction and gradient of all potentially impacted groundwater units;

(C) a qualitative description of potential human and environmental receptors and potential pathways to each receptor from each SWMU and AOC or group of SWMUs and AOCs, as appropriate. Based on this information, Ecology may, at a later time, request further quantitative evaluation of the migration of contaminants to potential receptors. Any further quantitative evaluation may include evaluation of contaminant migration rates, groundwater monitoring systems, and directions and impacts on potential receptors.

(D) the lithologic description of stratigraphic units. All soil borings logged shall be classified using the Unified Soil Classification (USC) system. Soil measurements shall include as appropriate: bulk density, porosity, total organic matter content, particle size distribution, and moisture content;

(E) the lateral continuity of all stratigraphic units encountered in the areas investigated;

(F) the potential hydraulic connection between hydrogeologic units with surface water bodies, downgradient wells, and human or environmental receptors;

(G) the current distribution of dangerous constituents released at or from SWMUs and AOCs in the subsurface soils, groundwater, surface water, and sediments; and the estimated rate and direction of future migration of such dangerous constituents. To facilitate this assessment for groundwater, Boeing will conduct an assessment of the horizontal and vertical coverage provided by existing wells at or near the Boeing Company's property boundaries and provide for the installation of wells in areas and at depths that are determined to be inadequately covered. For the purposes of evaluation, Ecology may require that current and/or historical sampling results be depicted as contaminant isopleth drawings for dangerous constituents detected in groundwater.

(H) the chemical and physical properties of the soil, sediment, groundwater, surface water and released dangerous constituents which may assist in determining mobility and degradation of the dangerous constituents.

Additionally, for the portion(s) of the Facility containing the SWMUs and AOCs identified in Attachment 2, the RI workplan shall describe procedures for obtaining the following for Ecology:

(I) hydrogeologic cross sections;

(J) seasonal water level contour maps obtained from groundwater wells, where the location, number, and construction of groundwater monitoring wells shall be sufficient to characterize the extent and nature of any groundwater contamination;

(K) documentation of well construction materials, design, installation, and development methods. Groundwater monitoring well systems shall be designed, sampled, constructed, maintained, and abandoned in general accordance with Chapter 173-160 WAC and the *RCRA Groundwater Monitoring: Draft Technical Guidance Document*, Office of Solid Waste, U.S. EPA, November, 1992;

(L) consistent site-wide groundwater flow maps based on an accurately closed survey of all wells included in the groundwater monitoring plan and any additional wells as necessary to have complete coverage of the Boeing Auburn Plant. This survey must be corrected or re-surveyed to account for changes in elevations resulting from the Nisqually Earthquake. Construct groundwater flow maps using measurements taken from a consistent measuring point on each well casing.

(M) a list and map of the location, including water extraction rates, depths and length of well screens for all active local wells withdrawing water within a 1.0 mile radius of the BCAG - Auburn Plant, and their potential effect, if any, on hydraulic gradients;

(N) data from the chemical analysis of potentially impacted media (e.g., soil, groundwater, sediment, and surface water) samples for dangerous constituents and their major breakdown products likely to be present based on The Boeing Company's knowledge of past and present chemical usage associated with a SWMU and AOC or group of SWMUs and AOCs. Groundwater samples for chemical analysis shall be collected on at least a quarterly basis, unless otherwise approved by Ecology. Soil samples for chemical analysis will be obtained at appropriate intervals as designated in the RI Workplan, utilizing criteria approved by Ecology;

(O) a time schedule for the completion of RI milestones;

(P) a list of analytical methods, detection limits, practical quantitation limits, and chemical parameters to be analyzed. Prepare quality assurance/quality control procedures (QA/QC) and submit them to Ecology-NWRO for review and approval in a QA Project Plan. Prepare the QA Project Plan in accordance with *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies* by Stewart

Lombard and Cliff Kirchmer, Environmental Assessment Program, February 2001, Publication No. 01-03-003 (see reference in Attachment 5);

(Q) a sampling and analysis plan in accordance with WAC 173-340-820 and 830 and The Guidance on Sampling and Data Analysis Methods, January 1995, Department of Ecology; and

(R) an engineering drawing of the storm water collection system for the BCAG – Auburn Plant which includes at a minimum the location of all oil water separators, storm drains, drain piping, and outfall locations.

(S) groundwater level elevation contour maps to cover the southern extent of the Boeing Auburn Plant.

(T) provisions in the Health and Safety Plan to protect the water supply of the City of Pacific municipal supply wells.

ATTACHMENT 4

BOEING COMMERCIAL AIRPLANES, FABRICATION DIVISION
AUBURN PLANT
PUBLIC PARTICIPATION PLAN
February, 2006

I. INTRODUCTION

The public participation plan is intended to promote public understanding of the Washington State Department of Ecology's (Ecology) responsibilities, planning activities and remedial activities at sites where Ecology is overseeing the investigation and cleanup of hazardous substances released to the environment. It also provides an opportunity for Ecology to learn information, from the public, that will enable the department to develop a comprehensive cleanup plan that is protective of both human health and environment. Ecology is committed to providing public participation opportunities during the investigation and cleanup of facilities undergoing the corrective action process.

This public participation plan addresses public involvement activities that will take place during the remedial investigation and feasibility study (RI/FS) through the Cleanup Action Plan (CAP) phase of the corrective action process at the Site, as described in the First Amended Agreed Order No. 01HWTRNR-3345.[1] All public involvement activities will be carried out jointly by Ecology and the Potentially Liable Persons (PLPs), The Boeing Company, and AMB Property Corporation. . The plan will be reviewed at each phase of the corrective action process and amended or rewritten as appropriate.

II. SITE BACKGROUND

The Boeing Company is and has been the owner and operator of the BA facility, since 1966. On November 17, 1980, the Company filed its original RCRA Part A permit application for the storage of dangerous wastes. At that time, the US EPA required submission of Part A of a RCRA Permit Application for treatment, storage or disposal of dangerous waste at existing facilities. On July 13, 1987, Ecology issued a final status RCRA Permit to the Boeing Company for the BA facility.

The BA facility has been operating under Subtitle C of the Resource Conservation and Recovery Act (RCRA), the RCRA regulations including the authorized Washington State Dangerous Waste Regulations promulgated in

[1] The terms Site, BA facility, and BCA-Auburn Plant are defined in the First Amended Agreed Order No. 01HWTRNR-3345.

Chapter 173-303 WAC, and the conditions of the RCRA Permit..However, based on modifications to Part A of the RCRA Permit, the BCA-Auburn Plant no longer includes the Safeway, YMCA/Junior Achievement, or PSE properties. Other than dangerous wastes treated by its wastewater treatment unit under permit-by-rule, the BCA-Auburn Plant will not store, treat, or land-dispose of dangerous wastes under the State of Washington Dangerous Waste Management Permit No. WAD041337130.

Releases and/or potential releases of hazardous constituents at the Site originating from the BA facility to soils, groundwater, surface water and/or sediments are documented in Site investigation reports and independent cleanup reports prepared for or by the Boeing Company and/or AMB Property Corporation. These substances include, but are not limited to: methyl ethyl ketone, 4-methyl 2-pentanone, xylenes, ethylbenzene, toluene, styrene, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, acetone, arsenic, cadmium, barium, mercury, selenium, silver, lead, nickel, zinc, benzene, chromates, cadmium, copper, alodine, 1,1,1-trichloroethane, 1,2- Dichloroethylene, trichloroethylene, perchloroethylene, ethylene glycol ether, lubricant oils, diesel, gasoline, hydraulic fluids, gear oils, sulfuric acid, hydrochloric acid, hydroflouric acid, chromic acid, nitric acid, sodium hydroxide, sodium cyanide, potassium cyanide, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons.

III. COMMUNITY CONCERNS

The Public Participation Plan is developed mainly for residents and businesses located within the potentially affected vicinity of the proposed corrective action at the Site.This public participation plan is effective for the work described in First Amended Agreed Order No. 01HWTRNR-3345.

Ecology, The Boeing Company , and AMB Property Corporation will address these community concerns by keeping Site investigation/ remediation reports and work plans accessible to interested community members. Nearby residents and businesses can review these documents and provide written or verbal comments to Ecology by visiting either the local repository located at: Algona Pacific Library, 255 Ellingson Road, Pacific, Washington, (253) 833-3554, or the Department of Ecology, Northwest Regional Office, 3190 160th Avenue SE, Bellevue, Washington. The contact person at Ecology's Northwest Regional office is Sally Perkins and she may be contacted at (425) 649-7190.. Public comments will be considered in the decisions made by Ecology. Those on the Site Mailing list will be notified by mail of any proposed remediation decisions.

IV. PUBLIC INVOLVEMENT ACTIVITIES

Ecology proposes the following public involvement activities for the Site. Public involvement for the Site shall consist of the following activities:

A. A 45 day public comment period will be provided for proposed State of Washington Dangerous Waste Management Permit for Corrective Action No. WAD 041337130, including proposed First Amended Agreed Order No. 01HWTRNR-3345.

B. Future comment periods for modifications of proposed State of Washington Dangerous Waste Management Permit for Corrective Action No. WAD 041337130, including modifications to proposed First Amended Agreed Order No. 01HWTRNR-3345, will be provided in accordance with WAC 173-303 and WAC 173-340 *See generally* WAC 173-303-830, 173-303-840, 173-340-600.

C. Residences and businesses in the vicinity of the Site will be notified of public comment periods by a mailed public notice.

   Ecology will mail notices to individuals, environmental groups, public officials, public agencies and private firms that have expressed an interest in the Site.

D. The public comment period will be advertised in the Seattle Post-Intelligencer and a local Auburn newspaper.

E. Public meetings will be held when required by WAC 173-303 and/or WAC 173-340. *See generally* WAC 173-303-830, 173-303-840, and 173-340-600.

   If a public meeting is required, Ecology will organize and hold the public meeting. The public meeting will be announced in a public notice sent to those on the Site mailing list, and in advertisements in the Seattle Post-Intelligencer and a local Auburn newspaper.

F. The public will have the opportunity to review the proposed State of Washington Dangerous Waste Management Permit for Corrective Action No. WAD 041337130, including First Amended Agreed Order No. 01HWTRNR-3345, at the following locations:

Department of Ecology
Northwest Regional Office
Attn: Sally Perkins
3190 160th Avenue SE
Bellevue, WA 98008-5452
(425) 649-7190

Algona Pacific Library
Information Services
Attn: Linda Skoggin
255 Ellingson Dr.
Pacific, WA 98047
(253) 833-3554

G. All comments received during the public comment period will be maintained for the administrative record. A formal **Responsiveness Summary** will be prepared addressing all written comments received during the public comment period. The summary will be placed with the other Site documents in the information repositories listed above. A copy of the Responsiveness Summary will also be sent to all who commented.

H. Persons requesting to be placed on the mailing list of the Site will receive updates on Site activities as new information becomes available. Those on the mailing list will receive all future mailing regarding this Site.

I. When additional public involvement activities are needed, the public will be notified through additional, notification in Ecology's Site Register, advertisements in the Seattle Post-Intelligencer and a local Auburn newspaper. The Public Participation Plan will be updated and placed in the information repositories listed above.

J. If Ecology, The Boeing Company, and AMB Property Corporation agree to substantial changes to the proposed State of Washington Dangerous Waste Management Permit for Corrective Action No. WAD 041337130, which includes the First Amended Agreed Order No. 01HWTRNR-3345, Ecology shall provide additional public notice and opportunity to comment.

PUBLIC PARTICIPATION PLAN - APPENDIX A

The Boeing Company and AMB Property Corporation will provide the Department of Ecology a list of property owners who are adjacent to the BCA- Auburn Plant boundary and any other neighbors within 500' of the BCA-Auburn Plant boundary. This will become part of the Site mailing list and will appear as Appendix A to the Public Participation Plan.

SITE MAP – APPENDIX B

Please refer to the site map provided in ATTACHMENT 1 to First Amended Agreed Order No. 01HWTRNR-3345.

ATTACHMENT 5

Boeing Commercial Airplanes, Fabrication Division – Auburn Plant
&
AMB Property Corporation

Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies; By Stewart Lombard and Cliff Kirchmer, Environmental Assessment Program, July 2004, Publication No. 04-03-030; Revision of Publication No. 91-16.

This publication may be downloaded from the internet at the following web site:

http://www.ecy.wa.gov/biblio/0403030.html

17-07: Alkaline Waste Hold Tank; Kennedy -Jenks; October, 1994; (57)

17-05: Closure Report; Kennedy-Jenks; June, 1994; (63)

17-05: Waste Hold Tank Analysis; Kennedy-Jenks & ARI; 1994; (64)

17-07: Results of Site Characterization; Kennedy-Jenks; May 23, 1994; (67)

17-07: Final Closure Report; Kennedy-Jenks; September 14, 1994; (68)

17-07: Closure Report, Waste Hold Tank; Kennedy-Jenks; December, 1993; (69)

17-07: Supplemental Closure Report; Kennedy-Jenks; July 20, 1994; (70)

17-06: Subsurface Assessment of 2 USTs; GeoEngineers; May,23, 1991; (72)

Removal of Methyl Ethyl Ketone UST; GeoEngineers; April 7, 1992; (76)

17-29: Sump Tank Removal & Replacement; GeoEngineers; May 23, 1991; (82)

UST Groundwater Monitoring; Dames & Moore; 1987-1992; (91)

Soil Sampling for USTs; Norton Corrosion Ltd., Inc.; November 30, 1985; (92)

17-07: Subsurface Investigation; Kennedy-Jenks; May, 1996; (94)

Hydrogeologic Investigation & Summary; Kennedy-Jenks; May, 1996; (96)

Government Canal – Independent Remedial Action; Charlton & Leach; January 20, 1995; (110)

Government Canal – Phase II Investigation; GeoEngineers; October 7, 1992; (111)

Government Canal – Drainage Assessment; Tetra Tech, Inc.; November 25, 1991; (113)

Government Canal – Drainage System, Preliminary Assessment; Tetra Tech, Inc.; February 10, 1992; (114)

17-66 Hydrogeologic Investigation; Kennedy-Jenks; January, 1994; (117)

Hydrogeologic Investigation Rinsewater Treatment Plant Area; Kennedy-Jenks; January, 1994; (123)

Environmental & Compliance Monitoring Report - Rinsewater Treatment Plant; Kennedy-Jenks; January, 1993; (124)

17-03: Environmental Monitoring Report; Kennedy-Jenks; January, 1993; (128)

17-02, 17-05; Demolition Projects; Kennedy-Jenks; May, 1994; (133)

17-10: Soil Excavation Monitoring; Landau Associates; July 18, 1990; (142)

17-52: Battery Wash Pad Assessment; Hart Crowser, Inc.; November, 1987; (145)

17-06 Drilling Additional Soil Borings; GeoEngineers; April 6, 1992; (147)

17-34: Sump & Contaminated Soil Removal; Hart Crowser, Inc.; July 11, 1986; (155)

17-34: Hazardous Waste Storage Facility Assessment; Hart Crowser, Inc.; May 15, 1986; (156)

17-08: Environmental Response Action; Kennedy-Jenks; February 22, 1994; (157)

Underground Storage Tank #31 & #32; Auburn Environmental Engineering; March, 1996; (181)

Exposure Information Report; Boeing Commercial Airplane Group; August 30, 1985; (1006)

Groundwater Data Statistical Review, Volume 1; Dames & Moore; June 15, 1988; (1007)

Groundwater Assessment Plan; Boeing Commercial Airplane Group; January 31, 1985; (1012)

Sludge Pile Delisting Petition; Boeing Commercial Airplane Group; November, 1985; (1240)

Sludge Pile Monitoring Wells; U.S. EPA; June 17, 1985; (1244)

Proposed Detection Monitoring System; Dames & Moore; August 30, 1985; (1247)

South Lagoon Closure Report & Certification; Dames & Moore; November 16, 1988; (1251)

COR, Former North Lagoon; BCAG, WDOE, Dames & Moore; 1987 – 1988; (1252)

17-15: Rinse Water Treatment Plant – North Lagoon; Boeing Commercial Airplane Group; November 14, 1986; (1253)

17-15: Rinse Water Treatment Plant – Phase II Closure; Boeing Commercial Airplane Group; July 2, 1987; (1254)

Old North Lagoon Wells; Dames & Moore, BCAG; September 15, 1988; (1255)

Groundwater Monitoring Wells; Dames & Moore, BCAG; 1983; (1258)

Groundwater Monitoring Wells; Dames & Moore, BCAG: 1984; (1259)

4th Quarter Groundwater Monitoring Report; Dames & Moore; August 30, 1988; (1260)

Evaluation of Groundwater Monitoring Data; Geraghty & Miller, Inc.; November, 1985; (1261)

Burn Pit/Tank Area Soil Sampling & Analysis; Dames & Moore; July 17, 1987; (1262)

17-64: Independent Action Cleanup Report; BCAG; May, 1993; (1323)

17-06: Briquetting Machine – Subsurface Assessment; SECOR; September 9, 1996; (1324)

South Lagoon Closure Report; BCAG; December 1, 1988; (1460)

17-15: Volatile Organics in Groundwater at Auburn Facility; Corporate SHEA, Quadrant, Kennedy-Jenks; 1994; (1467)

17-07: RCRA Acid and Cyanide Tank Closures – Final Closure Report; AGI; November 1, 1996; (2046)

17-45: Spray Paint Booths; AMTEST: July 17, 1996; (2056)

17-06: Closure Certification – 66,000 Gallon Waste Hold Tank; January, 1997; (2100)

Underground Storage Tank History; Kennedy-Jenks; April, 1989; (2116)

17-05: Hydrogeologic Investigation; February, 1995; (2119)

17-15: Technical Report – Preliminary Subsurface Investigation Rinsewater Treatment Plant; Kennedy-Jenks; November, 1991; (2121)

Risk Assessment for Boeing Government Canal; McLaren/Hart; August, 1992; (2145)

17-05: Vapor Degreaser Removal; Kennedy-Jenks; April, 1997; (2169)

Building 17-05 Area Hydrogeolgic Characterization; Kennedy-Jenks; May, 1997

17-29: Titanium Bailing Area; GeoEngineers; June, 1997

ATTACHMENT 7

List of Sumps that need to be included in a Remedial Investigation/Feasibility Study Workplan at the Boeing Commercial Airplane Group – Auburn Fabrication Division

Revised as of December 19, 2005

With the exception of the following sumps, all sumps listed in the table attached to the Agreed Order No. 01HWTRNR-3345 ***(Table 1: SWMU S-15 Sump Information, Boeing/Auburn RCRA SWMU S-15 Sump Inspection Program)*** will not be required to be included in the Remedial Investigation Work Plan for additional investigative sampling and analysis. Ecology will not pursue additional information at these sumps unless a problem is discovered in the future related to prior use of one or more of these sumps.

Four of the following sumps need to be included in the Remedial Investigation Work Plan for additional sampling and analysis of the sub-surface soils. An additional six sumps may require further investigation if soil samples from certain of these sumps are contaminated above the MTCA standards set for cleanup. These sumps are outlined below:

BUILDING NO.	SUMP NO.	DETERMINATION	COMMENTS
17-06	SAU06-12	Investigate	Uncoated for 30 years, up to 4'8" below ground, coating appears cracked in one photo, potential leaks from piping.
17-07	SAU07-024	Investigate	Uncoated for 30 years, pitted, floor of sump is 6" thick. Sump Report recommends investigation.
17-07	SAU07-025	Possible Investigation	Same as for SAU07-024. If soils beneath SAU07-024 are contaminated above MTCA Standards, then investigate beneath this sump.
17-07	SAU07-028	"	"

ATTACHMENT 7

List of Sumps that need to be included in a Remedial Investigation/Feasibility Study Workplan at the Boeing Commercial Airplane Group – Auburn Fabrication Division

Revised as of December 19, 2005

17-07	SAU07-029	"	"
BUILDING NO.	**SUMP NO.**	**DETERMINATION**	**COMMENTS CONT.**
17-34	SAU34-001 (S-18)	Possible Investigation	Same as below. If soils beneath SAU34-002 are contaminated above MTCA Standards, then investigate beneath this sump.
17-34	SAU34-002 (S-18)	Investigate	Not coated for 22 years. Floor is 6" thick.
17-34	SAU34-003 (S-18)	Possible Investigation	Same as above. If soils beneath SAU34-002 are contaminated above MTCA Standards, then investigate beneath this sump.
17-34	SAU34-004 (S-18)	Possible Investigation	Same as above. If soils under SAU34-002 are contaminated above MTCA Standards, then sample under this sump.
17-52	SAU52-001 (S-14)	Investigate	Floor is 4" thick. In photo, coating appears to be peeling around edges of sump. Holds waste battery rinse water.

ATTACHMENT 8

STIPULATED AMENDMENT No. 1 to Agreed Order No. 01HWTRNR-3345

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:	)
	) STIPULATED AMENDMENT No. 1
The Boeing Company	) TO AGREED ORDER
Boeing Commercial Airplanes	) No. 01HWTRNR-3345
Fabrication Division – Auburn Plant	)
700 15th Street SW	)
Auburn, Washington 98002	)
	)

WHEREAS, the Washington State Department of Ecology ("Ecology") and The Boeing Company – Boeing Commercial Airplanes, Fabrication Division – Auburn Plant ("BCA - Auburn Plant") have entered into an Agreed Order No. DE 01HWTRNR-3345 ("Auburn Agreed Order"); and

WHEREAS pursuant to Section VII.5. of the Auburn Agreed Order, the Boeing Auburn Facility and Ecology now agree to modify Section VI,1., Paragraph 1; and

WHEREAS Ecology has determined that this modification is not substantial;

THE PARTIES HEREBY STIPULATE:

1. Section VI.1., Paragraph 1 is amended to include the following:

   (A) Within 30 days of the effective date of these Stipulated Amendments to Agreed Order No. DE 01HWTRNR-3345, the BCA – Auburn Plant shall submit a proposal for monitoring groundwater at wells AGW-092, AGW-093, and AGW-094. This groundwater monitoring plan shall cover four monitoring events and shall propose a monitoring interval agreeable to both Boeing and Ecology. The BCA – Auburn Plant shall present the results of the four monitoring events in a final report and shall propose remedial action in the final report if the levels of diesel and motor oil in the groundwater are:

   (i.) increasing in one or more wells and the levels do not meet either MTCA Method A, WAC173-303-720(3), or MTCA Method B standards as determined under WAC173-340-720(4)(b)(iii)(C); or

   (ii.) decreasing in one or more wells and the levels do not meet either MTCA Method A, WAC173-303-720(3), or MTCA Method B standards as determined under WAC173-340-720(4)(b)(iii)(C).

   If the levels of diesel or motor oil meet MCTA standards, but there are increasing trends in one or more wells that indicate there could be future elevated levels above the MTCA Standards in groundwater from these two wells, then Boeing shall propose continued monitoring of the wells until the levels remain below the MTCA Standards and show no such trends.

Boeing may elect to take independent remedial action at any time to clean up the site so that levels of diesel or motor oil in the groundwater drop consistently below MTCA Standards.

Boeing may request Ecology to review a petition for the discontinuation of groundwater monitoring based on the groundwater monitoring results presented in the final report or based on documented results of the independent remedial action activities. Ecology may approve Boeing's request or may include a requirement for additional remediation activities to be proposed in Boeing's Feasibility Study, required by Section VI.5. in the Agreed Order for the BCA – Auburn plant site.

(B.) Upon the effective date of the Stipulated Amendments to Agreed Order No. DE 01HWTRNR - 3345, the BCA - Auburn Plant shall incorporate groundwater monitoring of the sentry wells, Nos. AGW-87, AGW-88, AGW-89, AGW-90, AGW-91, AGW-74, and of the up-gradient well, No. AGW-36, into the site-wide groundwater monitoring plan. These wells shall be included in proposed future groundwater monitoring as part of the BCA - Auburn Plant's groundwater compliance monitoring system conducted at the point of compliance in accordance with the requirements of WAC 173-303-646(2)(d)(vii) and WAC 173-340-720(8).

(C.) Within 30 days of the effective date of the Stipulated Amendments to Agreed Order No DE 01 HWTRNR - 3345, the BCA - Auburn Plant shall follow the procedures outlined in Attachment A to the Stipulated Amendments. The BCA-Auburn Plant will record a restrictive covenant to run with the deed of the BCA - Auburn Plant property (SE Property) that is to be transferred to a new owner.

2. Effective date of this Stipulated Agreement: *(September 3, 2002)*

THE BOEING COMPANY
By, through, and for its COMPANY SAFETY, HEALTH and ENVIRONMENTAL AFFAIRS
By: Mr. Kirk Thompson
Director of Environmental Affairs

(Kirk Thomson)

Date: *(8/25/02)*

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
By: Julie Sellick, Section Manager
Hazardous Waste and Toxics Reduction
Northwest Regional Office

(Julie Sellick)

Date: *(9/3/02)*

****

ATTACHMENT 9

Refer to:

Ecology Review Draft, Interim Remedial Action Work Plan, Boeing Auburn Area 1, 700 15th Street SW, Auburn, Washington; Landau Associates; April 2, 2004.

ATTACHMENT 10

Refer to:

Ecology Review Draft Report, Supplemental to the Final Interim Remedial Action Work Plan, Boeing Auburn; Landau Associates; October 11, 2005

ATTACHMENT 11

Area 1 Interim Action

Section 1.

1. The AMB Property Corporation is redeveloping the Area 1 Property where remediation activities and compliance monitoring have been taking place as part of an interim action for SWMU S-12b and AOC 08. The redevelopment of the Area 1 Property will interrupt interim action activities when demolition of Building 17-05 and earthwork to prepare the new building foundation necessitate the abandonment of the groundwater monitoring wells being used to track the effectiveness of the interim action. To insure the continuation of the interim action, the PLPs shall follow the modified interim action work plan: Supplement to the Final Interim Remedial Action Work Plan, Boeing Auburn (Landau Associates, October 11, 2005), which is hereby incorporated into this Agreed Order. See Attachments 9 and 10.

2. The PLPs shall develop a soil management work plan at least two months prior to the beginning of sub-grade construction activities on the Area 1 Property. The soil management plan will describe how the requirements of WAC 173-303 will be met as soil and construction debris that are potentially contaminated with Dangerous Waste or Dangerous Waste Constituents are generated or removed from the Area 1 Property. This includes the management of any wastewater generated as a result of dewatering activities at the Area 1 Property. This soil management work plan will be shared with all contractors and subcontractors working on the Area 1 Property. Section VI.(16) shall be followed by the PLPs if new discoveries of contaminated media are made during construction activities at the Area 1 Property.

3. The PLPs will evaluate the analytical results from nine wells selected from the groundwater monitoring system for the potential of vapor intrusion into the new building being

constructed on the Area 1 Property by the AMB Property Corporation. The groundwater monitoring results of each sampling event for the nine wells constituting the data set to be used for consideration of potential impacts to indoor air will be used to estimate an upper bounds estimate of the mean concentration (i.e., the upper 95 percent confidence limit on the mean [UCL95]) of trichloroethene (TCE) and vinyl chloride (VC) at a given point in time, specifically, the date of the groundwater monitoring event. The data set used to calculate the UCL95 will consist of monitoring wells: AGW002, AGW053, AGW058, AGW066, AGW067, AGW106, AGW110, AGW112, and a proposed new shallow well that will be located north of the new building (between wells AGW066 and AGW067). If the UCL95 exceeds the action levels set for TCE = 30 ug/l and VC = 99 ug/l, the PLP's will consider whether an individual sample contributing to the UCL95 might be considered an outlier; in this case, indoor air sampling may be deferred until a confirmation sample is collected in the following quarter. If the UCL95 exceeding the action level is found not to be a result of an individual outlier, or if the outlier is confirmed by subsequent sampling, the PLP's will conduct indoor air sampling to determine whether the observed groundwater concentrations do contribute to indoor air concentrations exceeding MTCA Method C cleanup levels for indoor air. For an explanation of how the action levels were derived, refer to Section 2 of this attachment.

Within 30 days of lab reports indicating an exceedence of the action levels for groundwater, the PLP's will submit an Indoor Air Sampling Plan to Ecology that proposes indoor air sampling locations, locations for other media samples (such as ambient air or soil gas, e.g.) to be collected concurrently, sample collection and analysis methodologies, analyte lists, and analyte reporting limit lists, standard operating procedures, data quality assurance/quality control procedures, reporting format, and schedules. The Indoor Air Sampling Plan will be implemented within 20 days of Ecology approval of the plan. If sampling results indicate that vapor intrusion is causing an exceedence of MTCA Method C cleanup levels for indoor air, the PLP's will take actions to reduce vapor intrusion impacts to acceptable levels. Indoor air samples will then be taken again to confirm that the mitigation action was effective.

Section 2.

The groundwater action levels of TCE = 30 ug/l and VC = 99 ug/l were derived by use of the EPA Johnson-Ettinger model spreadsheet (GW-ADV-Feb04.xls, Version 3.1, 02/04). These specific levels correspond to indoor air predictions equal to the MTCA Method C indoor air cleanup levels for TCE and VC when the air exchange rate, Q_{soil}, building dimension, soil type, and other values (indicated below) are utilized as model inputs.

Input to the Johnson-Ettinger Model (JEM)

- Average vapor flow rate into bldg: Q_{soil} is set by the model
- 1 stratum: sand
- Bulk ρ, total porosity, and soil water-filled porosity are JEM defaults for sand.

The following input parameters are modified from GeoEngineers Memorandum, October 5, 2005, using a building height of approximately 10 ft, to accommodate a flexible building design that is anticipated to generally have ceiling heights of 19 ft, or greater, with some lesser areas designated for office space with ceiling heights of approximately 10 ft:

- Average soil/groundwater Temperature: $T_S = 11$
- Depth below grade to bottom of enclosed space floor: $L_F = 15$ centimeters
- Depth below grade to water table: $L_{WT} = 579$cm (or 19'). This assumes 15' from water table to grade and then 4' of fill above grade.
- Soil-building pressure differential: $\Delta P = 40$
- Floor length: $L_B = 118$m (384')
- Floor width: $W_B = 118$ m (384')
- Footprint: = 750,000 ft2
- Space height: $H_B = 305$ cm (10')
- Indoor air exchange rate: ER = 1/hr

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ATTACHMENT 12
Washington State Dangerous Waste Permit For Corrective Action: Property Transfer Form

Form Submittal

Contact the Ecology office that will process the modification request to find out how many copies to submit. To learn where to send the form, contact the office serving the county in which your facility is located. Ask for the Hazardous Waste Section. One copy of the application must have original signatures for the certification statements. Regional offices and the counties they serve are:

Central Regional Office
15 West Yakima Avenue
Yakima, WA 98902-3387
(509) 575-2490
Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima

Eastern Regional Office
North 4601 Monroe Street
Spokane, WA 99205-1295
(509) 456-2926
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman

Northwest Regional Office
3190 160th Avenue S.E.
Bellevue, WA 98008-5452
(425) 649-7000
Island, King, Kitsap, San Juan, Snohomish, Skagit, Whatcom

Southwest Regional Office
300 Desmond Drive P.O. Box 47775
Olympia, WA 98504-7775
(360) 407-6300
Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

For TTY calls, contact Ecology via the Washington State Relay Service at 711 or 1-800-833-6388.

Completing the Property Transfer Form

Please type or print in the unshaded areas using dark ink. For some information, the form provides cells or boxes for each character in the response. When typing, space between characters, so that each character is in a box. You may need to use additional sheets to provide the required information (e.g., photos, drawings). On each sheet, clearly indicate the number of the item for which you are providing information.

Unless otherwise specified in these instructions, each item must be answered. If a particular item does not fit the circumstances or characteristics of your facility or activity, enter "NA" for "not applicable." If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

If a Property Transfer Form is incomplete, Ecology's decision on the facility's modification request will be delayed while the department requests and receives a revised form for review.

Line-by-Line Instructions for Completing Property Transfer Form

Section I: Purpose of Submittal

Enter an "X" in the appropriate box.

Section II: EPA/State Identification Number

Section III: Name of Facility

Enter the facility's official or legal name. Avoid using an informal name.

Section IV: Facility Location

A. Address. Enter the address or location of the facility identified in Section III of this form. *Please note that the address must be a physical address, not a post office box or route number.* If the facility lacks a street name, give the most accurate alternative geographic information (e.g., provide the section number or quarter section number from county records or a brief description such as "at intersection of Rts. 425 and 22"). Provide the county's name and, if known, the county's code.

B. Land type. Using the following codes, indicate the code that *best describes* the current legal status of the land on which the facility is located.

F = Federal	C = County
S = State	M = Municipal*
I = Indian	D = District
P = Private	O = Other

*If the Land Type is *best described* as both Municipal and as Indian, County, or District, please do not mark Municipal. Instead, please use the other appropriate code.

C. Geographic Location: Enter the latitude and longitude of the facility in degrees, minutes, and seconds. For larger facilities, enter the latitude and longitude at the approximate mid-point of the facility. You may use the map provided for Item XII to determine latitude and longitude.

D. Facility Existence Date. Enter the appropriate date that applies to your facility. This will be the earliest of the following:

1. The date the facility was first regulated as a hazardous waste (or dangerous waste) management facility because new state or federal regulations caused a waste to be newly regulated as hazardous waste (or dangerous waste).
2. The date a "final status" – or Part B – permit was issued and in effect.

Section V: Facility Mailing Address

Enter the complete mailing address of the office where correspondence should be sent. This may differ from the address used to designate the location of the facility or activity. If the Mailing Address and the Facility Location are the same, you can print "same" in this space.

Section VI: Facility Contact

Enter the name, title, address, and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this Property Transfer Form and who can be contacted if necessary.

Section VII: Facility Operator

A. Name/address. Enter the name and address, as it is legally referred to, of the person, firm, public organization, or any other entity that operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity that controls the facility's operation rather than the plant or site manager. Do not use an informal, or colloquial, name. Also, provide a telephone number and address at which the operator can be contacted.

B. Operator type. Using the following codes, indicate the code which *best describes* the legal status of the current operator of the facility.

F = Federal	C = County
S = State	M = Municipal*
I = Indian	D = District
P = Private	O = Other

*If the Land Type is *best described* as both Municipal and as Indian, County, or District, please do not mark Municipal. Instead, please use the other appropriate code.

C. Change of operator. If a change in the operator of this facility is being proposed, place an "X" to the left of the box marked "Yes" and enter the date the operator is scheduled to change (this date must be at least 90 days after the request to change operators, refer to WAC 173-303-830(2) or 805(7)(a)(iv)). If no change is scheduled, mark "no."

D. Operator and owner the same? If the name listed in this section is also the owner, mark "yes."

Section VIII: Owner Information

A. Name/address. Enter the name, address and telephone number of the legal owner(s) of the facility described in this application, including the property owner. This may or may not be the same name as the facility. Use the comment section or additional sheets if necessary to list more than one owner.

B. Owner type. Using the codes listed on the form, indicate the code that *best describes* the legal status of the owner of the facility.

F = Federal	C = County
S = State	M = Municipal*
I = Indian	D = District
P = Private	O = Other

*If the Land Type is *best described* as both Municipal and as Indian, County, or District, please do not mark Municipal. Instead, please use the other appropriate code.

C. Change of owner. If a change in the owner of this facility is being proposed, place an "X" in the box marked "Yes" and enter the date the owner is scheduled to change. This date must be at least 90 days after the request to change owner, refer to WAC 173-303-830(2) or 805(7)(a)(iv). If no change is scheduled, mark "no."

Section IX: NAICS Codes

List, in descending order of significance, the North American Industry Classification Systems (NAICS) codes that best describe your facility in terms of the principal products or services you produce or provide. Enter each 5- or 6- digit NAICS code starting in the left-most box. If you use a 5-digit code, leave the sixth box blank. Also, specify each classification in words. These classifications may differ from the NAICS codes describing the operations generating and/or managing the dangerous wastes.

Note: the North American Industry Classification System (NAICS) replaces the U.S. Standard Industrial Classification (SIC) system.

Section X: Other Environmental Permits

A. Permit type. Using the codes listed below, enter a letter on the form for all other environmental permits received or applied for under any of the following programs:

U = Underground Injection Control Code (UIC) program under the Solid Waste Disposal Act (SWDA)

N = National Pollutant Discharge Elimination System (NPDES) program under the Clean Water Act (CWA)

P = Prevention of Significant Deterioration (PSD) program under the Clean Air Act (CAA)

F = EPA 404 Dredge or Fill permits under Section 404 of the Clean Water Act (CWA)

E = Other relevant environmental permits. List any other relevant federal (e.g., permits under the Ocean Dumping Act, permits under the Marine Protection Research and Sanctuaries Act); state (e.g., state permits for new air emission sources in non-attainment areas under Part D of the Clean Air Act (CAA), or state permits under Section 404 of the Clean Water Act (CWA)); or local environmental permits or applications such as substantial development permits under the Shoreline Management Act, building or grading permits, or a sanitary landfill permit, or construction approvals received under any of these programs.

B. Permit Number. Enter the number of each presently effective permit issued to the facility for each program. If you filed an application, but have not yet received a permit, give the number of the application. If there are more than seven permits for your facility, you may list additional permit numbers on a separate sheet of paper.

C. Description. Use the space provided for information identifying or describing the permits; e.g., City industrial wastewater discharge permit.

Section XI: Nature of Business

Briefly describe the nature of your business; e.g., products produced or services provided. Also, briefly describe what the facility does that requires a permit and other dangerous waste management activities, such as recycling (these may or may not be your main business activities). Include a brief statement providing the status of corrective action(s) taken under the Dangerous Waste Rules, the Model Toxics Control Act, or federal regulations; for example, *remedial investigation is underway*. Attach additional sheets if necessary.

Section XII: Map

Provide a topographic map or maps of the area extending at least to one (1) mile beyond the property boundaries of the facility that clearly show the following:

1. Legal boundaries of the facility;
2. Location and serial number of each of the existing and proposed intake and discharge structures;
3. All dangerous waste management units. Identify the location of each tank;
4. Location of all dangerous waste management processes (those listed in Sections XII and XIII);
5. Each well where you inject fluids underground; and
6. All springs and surface water bodies in the area, plus all drinking water wells within ¼ mile of the facility that are identified in the public record or otherwise known to you.

If an intake or discharge structure, dangerous waste disposal site, or injection well associated with the facility is located more than one (1) mile from the facility, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps with rivers, show the direction of the currents; and in tidal waters, show the directions of the ebb and flow tides. Use a 7½-minute series map published by the U.S. Geological Survey, which may be obtained through the U.S. Geological Survey Office listed below. If a 7½-minute series map has not been published for your facility site, then you may use a 15-minute series map from the U.S. Geological Survey. If neither a 7½- nor a 15-minute series map has been published for the facility site, use a plat map or other appropriate map, and include all the requested information; in this case, briefly describe land uses in the map area (e.g., residential, commercial).

You may trace your map from a geological survey chart or another map meeting the above specifications. If you do, the map should bear a note referencing the number or title of the source map or chart. Include the names of nearby towns, water bodies, and other prominent points.

You may obtain maps from the following Earth Sciences Information Center (ESIC):

Menlo Park – ESIC
Room 3128, Building 3, MS 532 U.S.G.S.
345 Middlefield Road
Menlo Park, CA 94025

Tel: (415) 329-4390

Section XIII: Facility Drawing

All existing facilities must include a drawing showing the general layout of the facility. This drawing should be approximately to scale and fit on an 8½ x11 <u>or</u> an 11x17 sheet(s) of paper. This drawing should show the following:

1. Property boundaries of the facility;
2. Areas occupied by all storage, treatment, or disposal operations that are in use. For corrective action, all current and historic SWMUS, ADCs, areas undergoing remediation and/or areas where interim actions are taking place;
3. Name of each operation (example: multiple hearth incinerators drum storage area, etc.);
4. Areas of past storage, treatment, recycling, or disposal operations not already included in #2 above;
5. Areas of future storage, treatment, recycling, or disposal operations; and
6. Approximate dimensions of the property boundaries and all areas as requested in #2 above.

Include other major structures/operations even if not used for dangerous waste management.

Note: New facilities will not have existing storage, treatment, or disposal operations.

Section XIV: Photographs

All existing facilities must include photographs that clearly delineate all existing structures; all existing areas for storing, treating, recycling, or disposing of dangerous waste; and all known sites of future storage, treatment, recycling, or disposal operations. Photographs may be color or back and white, ground-level or aerial. Indicate on each photograph the date it was taken. The date can be placed on the front or back of the photograph as long as it is visible.

Section XV: Legal Description

Provide a written legal description of the BCA-Auburn Plant, including all property boundaries

Section XVI: Certifications

All facility owners and operators must sign Section XVIII. State regulations require the certification to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

If the facility owner and the operator are different entities, then both must sign for the form to be accepted.

Note: WAC 173-303-950 and WAC 173-303-960, in accordance with RCW 70.105.080, provide severe penalties for submitting false information on this Property Transfer Form.

Section XVI: Comments

Use this section to provide any comments, such as additional information on new or changed owners or operators beyond that presented in sections VII.C and VIII.C.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ATTACHMENT 12
Property Transfer Form

Date Received	Reviewed by:	Date:
Month Day Year	Approved by:	Date:

Please refer to instructions for completing this form.

I. This form is submitted to: (place an "X" in the appropriate box)

- [X] Request modification to a final status permit
- [ ] Request a change under interim status

(Date)

II. EPA/State ID Number

W A

III. Name of Facility

IV. Facility Location (Physical address not P.O. Box or Route Number)

A. Street

City or Town	State	ZIP Code

County Code (if known)	County Name

B. Land Type	C. Geographic Location Latitude (degrees, mins, secs)	Longitude (degrees, mins, secs)	D. Facility Existence Date Month Day Year

V. Facility Mailing Address

Street or P.O. Box

City or Town	State	ZIP Code

Modified from and unrelated to:
ECY 030-31 (12/2005)

Ecology is an equal opportunity employer.

VI. Facility contact (Person to be contacted regarding waste activities at facility)	
Name (last)	(first)
Job Title	Phone Number (area code and number)

Contact Address		
Street or P.O. Box		
City or Town	State	ZIP Code

VII. Facility Operator Information	
A. Name	Phone Number (area code and number)
Street or P.O. Box	
City or Town	State / ZIP Code
B. Operator Type	
C. Does the name in VII.A reflect a proposed change in operator?	☐ Yes ☐ No
If yes, provide the scheduled date for the change:	Month / Day / Year
D. Is the name listed in VII.A. also the owner?	☐ Yes ☐ No

VIII. Facility Owner Information (List all owners with an interest and/or liability in all or a part of the Facility – attach sheets at needed.)	
A. Name	Phone Number (area code and number)
Street or P.O. Box	
City or Town	State / ZIP Code
B. Operator Type	
C. Does the name in VII.A reflect a proposed change in operator?	☐ Yes ☐ No
If yes, provide the scheduled date for the change:	Month / Day / Year

IX. NAICS Codes (5/6 digit codes)	
A. First	B. Second
C. Third	D. Fourth

X. Other Environmental Permits (see instructions)

A. Permit Type	B. Permit Number	C. Description

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities. Provide this description for each portion of the BCA-Auburn Plant under separate ownership.)

XII. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary. The instructions provide additional information on meeting these requirements. .

XIII. Facility Drawing

All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

XIV. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

XV. Legal Description

XVI. Certifications

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator Name and Official Title (type or print)	Signature	Date Signed
Facility/Property Owner Name and Official Title (type or print)	Signature	Date Signed

XVII. Comments