STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action	on by:	
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ENFORCEMENT ORDER

The Boeing Company
Boeing Commercial Airplane Group
– Everett Plant
3003 West Casino Road
Everett, Washington

TO: The Potentially Liable Person (PLP)
The Boeing Company
c/o Mr. Steven Shestag
Environment, Health & Safety
PO Box 3707, M/C 9U4-08
Seattle, WA 98124-2207

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I. INTRODUCTION

The objective of the State of Washington, Department of Ecology (Ecology) under this Enforcement Order (Order) is to require remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires the Boeing Company (Boeing) to implement a cleanup action plan at a portion of a Facility where there has been a release or threatened release of hazardous substances. Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Enforcement Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70A.305.050(1). This Order also satisfies the requirements of WAC 173-303-646 through -64630.

III. PLP BOUND

This Enforcement Order shall apply to and be binding upon Boeing. To the extent allowed by law, changes in ownership or corporate status shall not alter Boeing's responsibility under this Order. Boeing shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order, and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

IV. DEFINITIONS

Unless otherwise specified herein, the definitions set forth in RCW 70A.305, WAC 173-340, and WAC 173-303 shall control the meanings of the terms in this Order.

- A. <u>Enforcement Order or Order</u>: Refers to this Order and each of the exhibits to the Order. All exhibits are an integral and enforceable part of this Order.
- B. <u>Area of Concern (AOC)</u>: Refers to any area of the Facility where a release of dangerous constituents (including dangerous waste and hazardous substances) has occurred, is occurring, is suspected to have occurred, or threatens to occur.

- C. <u>Cleanup Action Plan (CAP)</u>: Refers to the document issued by Ecology under WAC 173-340-380 which selects Facility-specific corrective measures and specifies cleanup standards (cleanup levels, points of compliance, and other requirements for the corrective measures).
- D. <u>Corrective Action</u>: Refers to any activities including investigations, studies, characterizations, and corrective measures, including actions taken pursuant to RCW 70A.305 and WAC 173-340, undertaken in whole or in part to fulfill the requirements of WAC 173-303-64620.
- E. <u>Dangerous Constituent or Dangerous Waste Constituent</u>: Refers to any constituent identified in WAC 173-303-9905 or 40 C.F.R. part 264, appendix IX; any constituent that caused a waste to be listed or designated as dangerous under the provisions of WAC 173-303; and any constituent defined as a hazardous substance under RCW 70A.305.020(13).
- F. <u>Dangerous Waste</u>: Refers to any solid waste designated in WAC 173-303-070 through -100 as dangerous or extremely hazardous or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70A.305.020(13).
- G. <u>Dangerous Waste Management Facility</u>: Used interchangeably in this document with the term "Facility."
- H. <u>Dangerous Waste Management Unit (DWMU)</u>: Refers to a contiguous area of land on or in which dangerous waste is placed, 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.
- I. <u>Facility or Site</u>: Refers to the Boeing Commercial Airplane Group Everett Plant (BCAG Everett Plant) DWMU controlled by Boeing, located at 3003 West Casino Road Everett, Washington; all property contiguous to the DWMU also controlled by Boeing; and all property, regardless of control, affected by release(s) or threatened release(s) of hazardous substances, including dangerous wastes and dangerous constituents, at and from these areas. "Facility" also includes the definition found in RCW 70A.305.020(8). Based upon factors currently known to

Ecology, the Remedial Action Location Diagram (Exhibit A) shows where Boeing will implement the remedial action. The Facility description and remedial action are more fully described in the Cleanup Action Plan (Exhibit B).

- J. <u>Feasibility Study (FS)</u>: Refers to the investigation and evaluation of potential corrective action performed in accordance with the FS requirements of WAC 173-340-350, which includes the substantive requirements for a Resource Conservation and Recovery Act Corrective Measures Study, and which is undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64620.
 - K. Parties: Refers to the State of Washington, Department of Ecology and Boeing.
 - L. <u>Potentially Liable Person (PLP)</u>: Refers to Boeing.
- M. <u>RCRA</u>: Refers to the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992k.
- N. <u>RCRA Facility Assessment (RFA)</u>: Refers to the EPA conducted investigation of release(s) and potential release(s) at the Dangerous Waste Management Facility and the information contained in the report entitled *RCRA Facility Assessment, Final RCRA Facility Assessment Report for Boeing Everett, Everett, Washington, December 2, 1993.* (RFA Report). The RFA Report is incorporated into this Order by this reference as if fully set forth herein.
- O. <u>Remedial Investigation (RI)</u>: Refers to a facility-wide investigation and characterization performed in accordance with the requirements of WAC 173-340, which includes the substantive requirements for a RCRA facility investigation, undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64620.
- P. <u>Solid Waste Management Unit (SWMU)</u>: Refers to any discernible location at the Dangerous Waste Management Facility where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at the Dangerous Waste Management Facility at which solid

wastes, including spills, have been routinely and systematically released, and include regulated units as defined by WAC 173-303.

V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by Boeing:

- 1. Boeing is, and has been, the owner and operator of the BCAG Everett Plant since at least November 17, 1980, when Boeing filed its original RCRA Part A permit application for the storage of dangerous wastes in a container storage area and in dangerous waste tanks (RCRA 3005).
- 2. Boeing owned and operated its BCAG Everett Plant, and has stored dangerous waste onsite under WAD041585464, since at least November 19, 1980. After November 19, 1980, facilities became subject to RCRA permitting requirements, including interim status requirements pursuant to Section 3005 of RCRA and RCW 70.105.145, and implementing regulations thereunder, and including authorized state regulations promulgated in Chapter 173-303 WAC.
- 3. On August 6, 1980, Boeing notified the U.S.E.P.A. Region X of its dangerous waste management activities at the BCAG Everett Plant.
- 4. Pursuant to the August 6, 1980, notification, Boeing was issued identification number WAD041585464 from the U.S.E.P.A. Region X for the BCAG-Everett Plant.
- 5. On November 17, 1980, Boeing submitted to the U.S.E.P.A. Region X, Part A of its RCRA dangerous waste storage permit application for the BCAG Everett Plant. Since that time, Boeing has submitted various revisions to its Part A application. At the time of submission of its first Part A permit application, the BCAG Everett Plant stored dangerous waste in containers in the 40-07 building, which had a capacity of 6,600 gallons. In 1987, storage of dangerous waste in containers was moved to the 40-15 building in coordination with Ecology. In 1988, Boeing filed a Part A requesting authorization to store up to 75,000 gallons of

dangerous waste in containers at the 40-15 building. In addition to container storage, Boeing requested authorization in 1983 to store hydraulic fluid waste in two 500 gallon above-ground tanks in the 40-24 building. These tanks held state only WT02 dangerous wastes. In October 2003, Ecology accepted RCRA clean closure certification of the building 40-15 container storage unit. The WT02 dangerous waste tanks are no longer in use, however, clean closure was not completed because residual contamination above clean closure thresholds was not removed at the time of tank decommissioning.

- 6. Boeing submitted to Ecology a RCRA Part B application dated November 7, 1988 for the storage of dangerous wastes at the Boeing Everett Plant. Boeing updated its Part B application several times during the course of Ecology's review of those permit applications.
- 7. On February 11, 2002, Boeing submitted written notification to Ecology that it was withdrawing its Part B Permit Application and reverted to Large Quantity Generator (LQG) status only.
- 8. Although the BCAG Everett Plant is no longer storing dangerous waste onsite and is instead operating as a large quantity generator (LQG) of dangerous wastes, the facility maintains its RCRA interim status pursuant to Section 3005 of RCRA and implementing regulations including the authorized Washington State Dangerous Waste Regulations promulgated in Chapter 173-303 WAC. In subsequent Annual Dangerous Waste Reports submitted to Ecology, Boeing identified itself as managing the following dangerous wastes at the BCAG Everett Plant: halogenated and non-halogenated solvents, paints, lacquers, primers, paint strippers, inks, adhesives, sealants, resins, curing agents, lubricants, oils, greases, petroleum hydrocarbons, synthetic hydraulic fluids, jet fuel, mineral acids in plating and coating solutions, strong caustics, cyanide plating and stripping solutions, wastewater and sludges from painting operations, rinse water from plating and coating operations, rinse water treatment

plant filter cake, contaminated rags and absorbents, and dangerous wastes containing heavy metals.

- 9. Similar to Federal RCRA and its amendments, state regulations (WAC 173-303-646) require that all dangerous waste treatment, storage, and disposal ("TSD") facilities that operated under RCRA interim status, are seeking or are required to have a RCRA permit to manage dangerous wastes must conduct corrective action, as necessary to protect human health and the environment, for all releases of dangerous wastes and dangerous constituents at and from a TSD facility. Since the BCAG Everett Plant obtained RCRA interim status and sought a RCRA TSD permit, it is subject to the corrective action requirements under WAC 173-303-646.
- 10. On July 29 through August 1, 1991, Ecology & Environment, Inc., a subcontractor for the U.S. E.P.A. Region X, performed a RCRA Facility Assessment (RFA) inspection at the BCAG Everett Plant. On August 17 and 18, 1993, PRC Environmental Management, Inc., also a subcontractor for the U.S.E.P.A. Region X, performed an additional RFA inspection at the BCAG Everett Plant and relied in part on information previously generated by Ecology & Environment. The purpose of an RFA is to identify those areas at the Dangerous Waste Management Facility where release(s) of hazardous substances, as defined in RCW 70.105D.020(13), may have occurred or may be occurring. The final RFA report, dated December 2, 1993, recommended additional subsurface soil and groundwater investigations for specific SWMUs and AOCs.
- 11. Dangerous constituents which have been released or have the potential to be released to soils, groundwater, surface water and/or sediments at the Facility, include, but are not limited to, toluene, benzene, ethylbenzene, xylene, cyclohexanone, trimethylbenzene, isopropylbenzene, 1,1,1 trichloroethane, trichloroethene, perchloroethene, 1,1 dichloroethane, 2-butanone, 4-methyl 2-pentanone, tributyl phosphate, dibutyl phenyl phosphate, butyl diphenyl phosphate, triphenyl phosphate, polychlorinated biphenyls, acetone, cyanides, lead, arsenic,

chromium, polycyclic aromatic hydrocarbons ("PAHs"), PCBs and total petroleum hydrocarbons including gasoline, diesel and heavy oil fractions ("TPH").

- 12. Agreed Order, DE 96HS-N274 required Boeing to complete a remedial investigation of the uplands portion of the Facility. Boeing submitted a revised remedial investigation (RI) report, dated December 17, 2010. Ecology contingently approved the revised RI report as a public review draft final by its letters dated, November 21, 2011 and November 4, 2011.
- 13. Agreed Order, DE96HS-N274 required Boeing to complete an upland feasibility study (FS) for the uplands portion of the Facility. Boeing submitted its upland FS report, dated November 16, 2015.
- 14. Ecology also required that Boeing submit a supplemental feasibility study (SFS) report to further examine remedial action options for the Powder Mill Gulch TCE groundwater final remedy, by its letter dated August 6, 2018. Boeing submitted the SFS report dated November 29, 2018.
- 15. Ecology selected the final upland site cleanup actions, based on its letters dated August 18, 2016 and July 20, 2017, as modified by Ecology letters dated September 5, 2019, May 2, 2019.
- 16. The First Amendment to the Agreed Order DE-96HS-N274 was finalized on October 22, 1998. The first amendment updated the definition of the BCAG Everett Plant under Section II and amended the terms for transfer of property under Section VII, Paragraph 12.
- 17. The Second Amendment to the Agreed Order DE-96HS-N274 was finalized on July 26, 2004. The second amendment required Boeing to conduct additional PCB source control interim actions to install a stormwater detention basin outlet riser to reduce the release of PCBs and other dangerous constituents from the detention basin to Powder Mill Creek. The amendment also required (a) routine sampling of wetlands; stormwater peat filters; and stormwater conveyance system components; (b) submittal and implementation of SOPs for the

maintenance and operation of the peat filter system and removal of PCB contaminated solids from the stormwater detention and sedimentation basins; and (c) decontamination of the stormwater system conveyance system. The construction of the detention basin was completed in 2004. Decontamination of the stormwater piping was completed in 2007. The other requirements of the amendment are routinely ongoing, as required.

- 18. The Third Amendment to the Agreed Order DE-96HS-N274 was finalized on July 27, 2006. The third amendment required Boeing to remove PCB contaminated sediments at the headwaters of Powder Mill Creek and to implement a groundwater interim action in the TCE groundwater source area on Boeing Everett property. The PCB contaminated sediment removal was completed in 2006. The first phase of the groundwater source area interim action (electrical resistance heating) was completed in 2008. The second phase of the groundwater source area interim action (enhanced bioremediation) was completed in 2020.
- 19. The Fourth Amendment to the Agreed Order DE-96HS-N274 was finalized on January 24, 2008. The fourth amendment required Boeing to remove contaminated soils at the BOMARC property located within the boundary of the Facility and remove contaminated soils at the Former Gun Club Area (SWMU100) prior to construction activities to expand the Boeing Everett flightline. The field work for this interim action was completed in November 2008.
- 20. The Fifth Amendment to the Agreed Order DE-96HS-N274 was finalized on April 26, 2011. The fifth amendment required Boeing to implement a phase one interim action on the downgradient portion of the PMG TCE groundwater plume on both Boeing Property and a phase two interim action on the downgradient portion of the PMG TCE groundwater plume on City of Everett Property (Lot#9). Together both interim actions required the installation and operation of twelve groundwater extraction wells to prevent further migration to the maximum extent practicable of chlorinated solvent contaminated groundwater beyond Seaway Blvd; and reduce to the maximum extent practical, migration of chlorination solvent contaminated groundwater to the surface waters of Powder Mill Creek. Phase one of the interim action was constructed and

operational in November 2012 and is currently still running. Phase two of the interim action was constructed and operational in September 2015 and is still operating. Optimization of the phase 1 groundwater extraction system was completed in February 2016.

- 21. The Sixth Amendment to the Agreed Order DE-96HS-N274 was finalized on August 6, 2012. The amendment was a minor modification to the Agreed Order to require the submittal of a feasibility study report for specific SMWUs on the Bomarc Property, leased by Snohomish County, under Section VI.8, without submitting an FS work plan.
- 22. The Seventh Amendment to the Agreed Order DE-96HS-N274 was finalized on April 30, 2014. The amendment required Boeing to remove lead, PAH and arsenic contaminated soils in eastern portion of the Former Gun Club Area C, other portions of Area C, and the portion of Area A known as Pond D. The interim action field work was completed in late 2014.
- 23. In October 2020, Boeing indicated to Ecology that it would not sign an Agreed Order for implementing a cleanup action plan at the upland portion of the Facility seen in the Remedial Action Location Diagram (Exhibit A).
- 24. Ecology and Boeing anticipate entering into an Agreed Order in Spring 2021 for a cleanup action plan at the BOMARC Property, located at 2600 94th Street Southwest in Everett, Washington that is located within the Facility.

VI. ECOLOGY DETERMINATIONS

Ecology makes the following determinations, without any express or implied admissions of such determinations (and underlying facts) by Boeing.

A. Boeing is the owner and operator of a Dangerous Waste Management Facility that has operated, is operating, or should have been operating under interim status or a final facility permit, subject to RCRA, 42 U.S.C. §§ 6924 and 6925, and regulations promulgated thereunder, including authorized state regulations in WAC 173-303. Boeing is also an "owner or operator" as defined by RCW 70A.305.020(22) of a "facility" as defined by RCW 70A.305.020(8).

- B. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70A.305.020(32) and (13), respectively, has occurred at the Facility.
- C. By letter dated October 11, 1995, Ecology notified Boeing of its status as a "potentially liable person" (PLP) under RCW 70A.305.040. By letter dated November 10, 1995, Boeing made no objection to being named a 'potentially liable person'. Ecology issued a determination that Boeing is a PLP under RCW 70A.305.040 and notified Boeing of this determination by letter dated November 27, 1995.
- D. Pursuant to RCW 70A.305.030(1) and .050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

VII. WORK TO BE PERFORMED

Based upon the above Findings of Fact and Ecology Determinations, Ecology hereby orders Boeing to comply with all provisions of this Order and any modifications to this Order, including all exhibits to this Order and all documents incorporated by reference into this Order. Ecology hereby orders that Boeing take the following remedial actions at the Facility. The area within the Facility where remedial action is necessary under RCW 70A.305 is described in the Remedial Action Location Diagram (Exhibit A).

In addition to the work under this Enforcement Order, Boeing and Ecology have entered into an Agreed Order to conduct cleanup actions at the BOMARC Property, the property located at 2600 94th Street Southwest in Everett, Washington that is located within the Facility. Boeing agreed to perform a final cleanup action for the BOMARC Property by implementing the remedial actions set forth in the upland cleanup action plan (Exhibit B), Sections 5.11.1, 5.11.5, and 5.11.6 describe the cleanup actions, compliance monitoring, and institutional controls for the BOMARC

Property. Additional sections of the cleanup action plan, Sections 5.11.2 through 5.11.4 describe the cleanup standards, points of compliance, restoration timeframes, and applicable, relevant and appropriate state and federal requirements that apply to the BOMARC Property. Compliance monitoring frequency for indoor air for the BOMARC Property is outlined in the cleanup action plan Section 4.4 subsection Indoor Air Monitoring.

Boeing must conduct remedial actions for this Order in accordance with WAC 173-340 and 173-303:

- A. Boeing shall perform a final cleanup action for the upland portion of the Facility by implementing the remedial actions set forth in the upland cleanup action plan (CAP), Exhibit B.
- B. If Boeing learns of a significant change in conditions at the Facility, including but not limited to a statistically significant increase in contaminant and/or chemical concentrations in soil, groundwater, surface water, air, or sediments, Boeing, within seven (7) days of learning of the change in condition, shall notify Ecology in writing of said change and provide Ecology with any reports or records (including laboratory analyses, sampling results) relating to the change in conditions. In the event that Ecology determines that this unanticipated or changed circumstances warrant changes in the cleanup action plan, Ecology shall modify the associated plan in writing accordingly or direct Boeing to modify and submit the modified plan to Ecology for approval. Boeing shall perform the cleanup action plan as modified.
- C. Boeing shall notify Ecology's project coordinator in writing of any newly-identified SWMU(s), newly-discovered release(s) from known SWMU(s), and newly-discovered AOCs at the Facility no later than 15 calendar days after discovery, and shall investigate and report on these areas as directed by Ecology's project coordinator.
- D. Boeing shall submit to Ecology written Progress Reports every two months that describe the actions taken during the previous two months to implement the requirements of this Order. Boeing must submit all Progress Reports by the tenth (10th) day of the month in which they are due after the effective date of this Order. Unless otherwise specified by Ecology, Progress

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Reports and any other documents submitted pursuant to this Order shall be sent by electronic mail and by certified mail, return receipt requested, to Ecology's project coordinator. The Progress Reports shall include the following:

- 1. A list of on-site activities that have taken place during the two months.
- 2. Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests.
- 3. Description of all deviations from the Cleanup Action Plan (Exhibit B) during the current two months and any planned deviations in the upcoming two months.
- 4. For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule.
- 5. All raw data (including laboratory analyses) received during the previous two months (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected.
- 6. A list of deliverables for the upcoming two months.
- E. Financial assurance for corrective action is required by WAC 173-303-64620. Ecology's Financial Assurance Officer shall determine when Boeing's actions and submissions meet the requirements of WAC 173-303-64620.

Ecology's Financial Assurance Officer is:

Joanna Richards Washington State Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600 Phone: (360) 407-6754

Fax: (360) 407-6715 Email: joar461@ecy.wa.gov

F. As detailed in the cleanup action plan, institutional controls are required at the Facility. Environmental (Restrictive) Covenants will be used to implement the institutional controls.

- In consultation with Boeing, Ecology will prepare the Environmental (Restrictive)
 Covenants consistent with WAC 173-340-440, RCW 64.70, and any policies or
 procedures specified by Ecology. The Environmental (Restrictive) Covenants shall
 restrict future activities and uses of the Facility as agreed to by Ecology and Boeing.
- 2. After approval by Ecology, Boeing shall record the Environmental (Restrictive) Covenant for affected properties it owns with the office of the Snohomish County Auditor as detailed in the cleanup action plan (Exhibit B). Boeing shall provide Ecology with the original recorded Environmental (Restrictive) Covenants within thirty (30) days of the recording date.
- 3. As detailed in the cleanup action plan, as part of the remedial action for the Facility, institutional controls are required on properties not owned by Boeing. Boeing will ensure that the owner of each affected property records an Ecology-approved Environmental (Restrictive) Covenant as detailed in the cleanup action plan (Exhibit B). Upon a showing that Boeing has made a good faith effort to secure an Environmental (Restrictive) Covenant for an affected property and failed to do so, Ecology may provide assistance to Boeing. Unless Ecology determines otherwise, affected properties include Seaway Center, Powder Mill Business Center (PMBC), and City of Everett (City) Lot 9. Boeing shall provide Ecology with the original recorded Environmental (Restrictive) Covenants within thirty (30) days of the recording date.
- G. All plans or other deliverables submitted by Boeing for Ecology's review and approval under the cleanup action plan (Exhibit B) shall, upon Ecology's approval, become integral and enforceable parts of this Order. Boeing shall take any action required by such deliverable.
- H. If Ecology determines that Boeing has failed to make sufficient progress or failed to implement the remedial action, in whole or in part, Ecology may, after notice to Boeing, perform

any or all portions of the remedial action or at Ecology's discretion allow Boeing the opportunity to correct. In an emergency, Ecology is not required to provide notice to Boeing. Boeing shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.B (Remedial Action Costs). Ecology reserves the right to enforce requirements of this Order under Section X (Enforcement).

- I. Except where necessary to abate an emergency situation or where required by law, Boeing shall not perform any remedial actions at the Facility outside those remedial actions required by this Order to address the contamination that is the subject of this Order, unless Ecology concurs, in writing, with such additional remedial actions pursuant to Section VIII.J. (Amendment of Order). In the event of an emergency, or where actions are taken as required by law, Boeing must notify Ecology in writing of the event and remedial action(s) planned or taken as soon as practical but no later than within twenty-four (24) hours of the discovery of the event.
- J. Ecology may determine that, in addition to tasks described in the cleanup action plan, other additional work may be necessary to accomplish the objectives of MTCA. Boeing must perform these response actions in addition to those required by the cleanup action plan, if Ecology determines that such actions are necessary to meet the requirements of MTCA. Boeing must complete the additional work according to the standards, specifications, and schedule set forth or approved by Ecology in a written modification to any Work Plan. Ecology reserves the right to conduct the work itself, to seek reimbursement from Boeing for the costs incurred in performing the work, and/or to seek any other appropriate relief. Nothing in this Paragraph shall be construed to limit Ecology's authority to require performance of further response actions at the Facility.

VIII. TERMS AND CONDITIONS

A. Remedial Action Costs

Boeing shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for or on the Facility under RCW 70A.305, including remedial actions and Order

preparation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). For all Ecology costs incurred, Boeing shall 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 statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70A.305.060, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

B. Designated Project Coordinators

The project coordinator for Ecology is:

Mr. Paul Bianco Washington State Department of Ecology-Northwest Regional Office 3190 160th Avenue S.E. Bellevue, WA 98008-5452 (425)649-7264

The project coordinator for Boeing is:

Ms. Debbie Taege Boeing EHS Remediation Group PO Box 3707 Mail Code 9U4-26 Seattle, WA 98124-2207 (818) 720-5575

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Facility. To the maximum extent possible, communications between Ecology and Boeing, 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 coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

C. Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist or hydrogeologist licensed by the State of Washington or under the direct supervision of an engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43 and 18.220.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic, or engineering work shall be under the seal of an appropriately licensed professional as required by RCW 18.43 and 18.220.

Boeing shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s), subcontractor(s), and other key personnel to be used in carrying out the terms of this Order, in advance of their involvement at the Facility.

D. Access

RCW 70A.305.030(1)(a) authorizes Ecology or any Ecology authorized representative to enter all property at the Facility that Boeing either owns, controls, or has access rights to, after reasonable notice unless an emergency prevents such notice.

Boeing shall notify Ecology of any manufacturing or process areas at the Facility at which Boeing conducts activities utilizing secrets associated with U.S. Department of Defense (DOD) or any International Traffic in Arms Regulation, 22 CFR §§ 120 et. seq. (ITAR)- or Export Administrative Regulations, 15 CFR §§ 730 et. seq. (EAR)-related projects. Boeing may request a reasonable delay to providing access to these areas of the Facility so that Boeing and Ecology's representatives may further confer regarding the purpose of the inspection in the area and appropriate precautions for protecting DOD secrets or complying with ITAR and EAR requirements. Boeing shall notify Ecology in advance of any required security clearance required for such an area.

If photographs are to be taken in a DOD area that contains items important to national security, then Boeing shall provide a competent photographer to take photographs under the instruction of Ecology staff on site subject to limitations required for protection of DOD secrets, including any required DOD security clearance. All such photographs will be developed and previewed by Boeing, to enable Boeing to assure compliance with security requirements for protection of DOD secrets. Boeing shall provide electronic copies to Ecology-NWRO of all photographs taken within seven (7) days excepting any photographs for which additional precautions must be followed to protect DOD secrets. Boeing shall provide Ecology with a log of the photographs taken, and shall identify photographs withheld for protection of DOD secrets.

Boeing shall use their best efforts to secure access rights for those properties within the Facility not owned or controlled by Boeing where remedial activities or investigations will be performed pursuant to this Order.

As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Boeing would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If, within 30 days after the effective date of this Order, Boeing is unable to accomplish what is required through "best efforts," they shall notify Ecology, and include a description of the steps taken to comply with the requirements. If Ecology deems it appropriate, it may assist Boeing, or take independent action, in obtaining such access and/or use restrictions. Ecology reserves the right to seek payment from Boeing for all costs, including cost of attorneys' time, incurred by Ecology in obtaining such access or agreements to restrict land, water, or other resource use.

E. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, Boeing shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

Upon Ecology's request, Boeing shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Boeing pursuant to the implementation of this Order. Boeing shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Facility.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under WAC 173-50 for the specific analyses to be conducted, unless otherwise approved by Ecology.

F. Access to Information

Boeing shall provide to Ecology, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Boeings' possession or control or that of their contractors or agents relating to activities at the Facility or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the work. Boeing shall also make available to Ecology, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the work.

Nothing in this Order is intended to waive any right Boeing may have under applicable law to limit disclosure of Records protected by the attorney work-product privilege and/or the attorney-client privilege. If Boeing withholds any requested Records based on an assertion of privilege, Boeing shall provide Ecology with a privilege log specifying the Records withheld and the applicable privilege. No Facility-related data collected pursuant to this Order shall be considered privileged, including: (1) any data regarding the Facility, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, biological, or engineering data, or the portion of any other record that evidences conditions at or around the Facility; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Order.

Notwithstanding any provision of this Order, Ecology retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under any other applicable statutes or regulations.

G. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of the work performed pursuant to this Order, Boeing shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors.

H. Delay in Performance

- 1. Boeing shall notify Ecology of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone and email to the Ecology Project Coordinator within 48 hours after Boeing first knew or should have known that a delay might occur. Boeing shall adopt all reasonable measures to avoid or minimize any such delay. Within 7 days after notifying Ecology by telephone and email, Boeing shall provide to Ecology written notification fully describing the nature of the delay, the anticipated duration of the delay, any justification for the delay, all actions taken or to be taken to prevent or minimize the delay or the effect of the delay, a schedule for implementation of any measures to be taken to mitigate the effect of the delay, and any reason why Boeing should not be held strictly accountable for failing to comply with any relevant requirements of this Order. Increased costs or expenses associated with implementation of the activities called for in this Order is not a justification for any delay in performance.
- 2. Ecology shall consider any delay in performance of this Order that, in Ecology's judgment, is not properly justified by Boeing a violation of this Order. Any delay in performance of this Order shall not affect Boeings' obligations to fully perform all obligations under the terms and conditions of this Order.

I. Amendment of Order

The Ecology Project Coordinator may make minor changes to any plan or schedule or the work to be performed under this Order without formally amending this Order. The Ecology Project Coordinator may direct such changes in writing or verbally. Ecology will memorialize any verbal change in writing, but the effective date of the change is the date Ecology's Project Coordinator verbally directed the change.

To make substantial changes to any plan or schedule or the work to be performed, Ecology will formally amend this Order. Such amendments will be in writing and signed by the Regional Section Manager of the Hazardous Waste and Toxics Reduction Program. Such amendments are subject to public notice and comment.

No informal advice, guidance, suggestion, or comment by Ecology's Project Coordinator or other Ecology representatives regarding any deliverables submitted by Boeing shall relieve Boeing of their obligation to obtain any formal approval required by this Order, or to comply with all requirements of this Order, unless it is formally modified.

J. Endangerment

In the event Ecology determines that any activity being performed at the Facility under this Order is creating or has the potential to create a danger to human health or the environment on or surrounding the Facility, Ecology may direct Boeing to cease such activities for such period of time as it deems necessary to abate the danger. Boeing shall immediately comply with such direction.

In the event Boeing determines that any activity being performed at the Facility under this Order is creating or has the potential to create a danger to human health or the environment, Boeing may cease such activities. Boeing shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction, Boeing shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Boeing's cessation of activities, it may direct Boeing to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this section, Boeing's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.I

(Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

K. Reservation of Rights

Ecology reserves its rights under RCW 70A.305, including the right to require additional or different remedial actions at the Facility should it deem such actions necessary to protect human health or the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Facility.

Nothing in this Order shall limit the power and authority of Ecology to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Facility. Further, nothing in this Order shall prevent Ecology from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Boeing in the future to perform additional activities pursuant to MTCA, CERCLA or any other applicable law.

L. Other Claims

By issuance of this Order, Ecology assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Boeing. Ecology shall not be deemed a party to any contract entered into by Boeing or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

Nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against Boeing or any person not a party to this Order, for any liability such person may have under MTCA, CERCLA, other statutes, or common law.

No action or decision by Ecology pursuant to this Order shall give rise to any right to judicial review, except as set forth in RCW 70A.305A.070.

M. Transfer of Interest in Property

Before any voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Facility (with the exception of the BOMARC Property) shall be consummated by Boeing, Boeing shall provide for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Further, prior to Boeing's transfer of any interest in all or any portion of the Facility (with the exception of the BOMARC Property), Boeing shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and at least thirty (30) days prior to any transfer, Boeing shall notify Ecology of said transfer. Upon transfer of any interest, Boeing shall notify all transferees of the restrictions on the activities and uses of the property under this Order and incorporate any such use restrictions into the transfer documents.

N. Compliance with Applicable Laws

1. Applicable Laws. All actions carried out by Boeing pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits or approvals, except as provided in RCW 70A.305.090. The permits or specific federal, state, or local requirements that the agency has determined are applicable and that are known at the time of the execution of this Order have been identified in the cleanup action plan (Exhibit B). Boeing has a continuing obligation to identify additional applicable federal, state, and local requirements which apply to actions carried out pursuant to this Order, and to comply with those requirements. As additional federal, state, and local requirements are identified by Ecology or Boeing, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order and the PLP must implement those requirements.

- 2. Relevant and Appropriate Requirements. All actions carried out by Boeing pursuant to this Order shall be done in accordance with relevant and appropriate requirements identified by Ecology. At this time, no relevant and appropriate requirements have been identified as being applicable to the actions required by this Order. If additional relevant and appropriate requirements are identified by Ecology or Boeing, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order and Boeing must implement those requirements.
- 3. Pursuant to RCW 70A.305.090(1), Boeing may be exempt from the procedural requirements of RCW 70A.15, 70A.205, 70A.300, 77.55, 90.48, and 90.58 and of any laws requiring or authorizing local government permits or approvals. However, Boeing shall comply with the substantive requirements of such permits or approvals. For permits and approvals covered under RCW 70A.305.090(1) that have been issued by local government, Ecology has the non-exclusive ability under this Order to enforce those local government permits and/or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this section.
- 4. Boeing has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70A.305.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or Boeing determines that additional permits or approvals addressed in RCW 70A.305.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or Boeing shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Boeing shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of 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 Boeing and on how Boeing must meet those requirements. Ecology shall inform Boeing in writing

of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Boeing shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

5. Pursuant to RCW 70A.305.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70A.305.090(1) would result in the loss of approval from a federal agency that is necessary for the state to administer any federal law, the exemption shall not apply and Boeing shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70A.305.090(1), including any requirements to obtain permits.

O. Periodic Review

So long as remedial action continues at the Facility, the Ecology will review the progress of remedial action at the Facility, and review the data accumulated as a result of monitoring the Facility as often as Ecology determines is necessary and appropriate under the circumstances. Unless otherwise decided by Ecology, every five (5) years after the initiation of cleanup action at the Facility the Parties will confer regarding the status of the Facility and the need, if any, for further remedial action at the Facility. At least ninety (90) days prior to each periodic review, Boeing shall submit a report to Ecology that documents whether human health and the environment are being protected based on the factors set forth in WAC 173-340-420(4). Ecology reserves the right to require further remedial action at the Facility under appropriate circumstances. This provision shall remain in effect for the duration of this Order.

IX. SATISFACTION OF ORDER

The provisions of this Order shall be deemed satisfied upon Boeing's receipt of written notification from Ecology that Boeing has completed the remedial activity required by this Order, and that Boeing has complied with all other provisions of this Enforcement Order.

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X. SEVERABILITY

If a court issues an order that invalidates any provision of this Order or finds that Boeing has sufficient cause not to comply with one or more provisions of this Order, Boeing shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XI. ENFORCEMENT

Pursuant to RCW 70A.305.050, 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, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Facility.
- C. A liable party, who refuses without sufficient cause, to comply with any term of this Order will be liable for:
 - 1. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply.
 - 2. Civil penalties of up to twenty-five thousand dollars (\$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 70A.305.070.

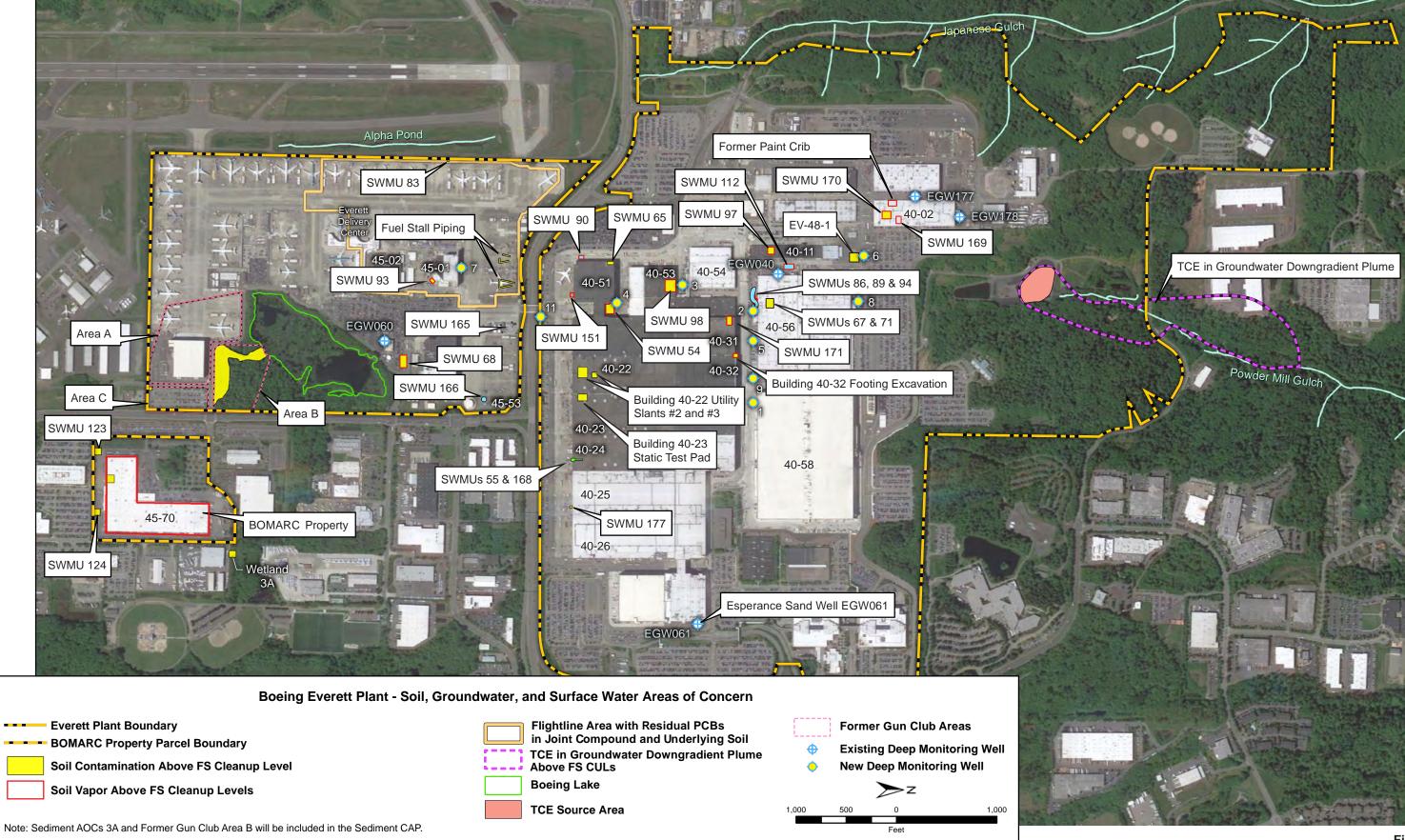
Effective date of this Order:	
STATE OF WASHINGTON DEPARTMENT OF ECOLOGY	
Raman Iyer, Section Manager	

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Hazardous Waste and Toxics Reduction Program Northwest Regional Office 425-649-7053

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EXHIBIT A: Remedial Action Location Diagram



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Figure 1-2
Site Plan – Boeing Everett Plant

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EXHIBIT B: Ecology Cleanup Action Plan (CAP)