

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action by:

The Boeing Company

AGREED ORDER

No. DE 7088

TO: Ms. Kathryn L. Lewis
The Boeing Company
Environmental Remediation
Boeing Environment, Health and Safety
M/C 9U4-26
Seattle, WA 98124-2207

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I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology), and The Boeing Company under this Agreed Order (Order) is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires The Boeing Company to complete a remedial investigation (RI), feasibility study (FS), and prepare a draft cleanup action plan (DCAP) for the Site. Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Agreed Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

III. PARTIES BOUND

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such party to comply with this Order. The Boeing Company agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter The Boeing Company's responsibility under this Order. The Boeing Company 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 Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms in this Order.

A. Site: The Site is referred to as Boeing Isaacson Thompson and is generally located at 8625-8811 E. Marginal Way S., Tukwila, Washington. The Boeing Isaacson and Boeing Thompson properties are adjacent tax parcels owned by The Boeing Company and are part of the Site. The Site is defined by the extent of contamination caused by the release of

hazardous substances at the Site. Based upon factors currently known to Ecology, the Site is more particularly described in the Site Diagram (Exhibit A). The Site constitutes a facility under RCW 70.105D.020(4).

B. Parties: Refers to the State of Washington, Department of Ecology and The Boeing Company.

C. Potentially Liable Person (PLP): Refers to The Boeing Company.

D. Agreed Order or Order: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order. The terms “Agreed Order” or “Order” shall include all exhibits to this Order.

V. FINDINGS OF FACT

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

A. The Site collectively includes the Boeing Isaacson and Boeing Thompson properties (Exhibit A).

1. The Boeing Isaacson property is located adjacent to the east side of the Lower Duwamish Waterway (LDW), at approximately river miles (RM) 3.7 to 3.8, as measured from the southern tip of Harbor Island. The property is rectangular and about 9.8 acres. The western Boeing Isaacson property boundary does not extend all the way to the water; a strip of land consisting of the shoreline bulkhead and approximately 20 to 30 feet inshore of the bulkhead is identified in King County parcel ownership records as part of the LDW and therefore is under Port of Seattle ownership and control. The Boeing Isaacson property is bordered by East Marginal Way S. on the east, on the south by the Boeing Thompson property and on the north by the Jorgensen Forge property.

2. The Boeing Thompson property is located along the east side of the LDW, at approximately RM 3.8 to 3.9, as measured from the southern tip of Harbor Island. The property is rectangular and approximately 19.35 acres in size. It is situated between the LDW on the west and East Marginal Way S. on the east; bordered on the south by the

former Kenworth Motor Corporation property (also known as the former PACCAR site or 8801 E. Marginal Way S. Site; currently owned by Merrill Creek Holdings, LLC and leased by Insurance Auto Auctions, Inc.); and bordered on the north by the Boeing Isaacson property.

B. The former Duwamish River channel was converted in the early 1900's into a berth (Slip 5) that existed on the Site between the Boeing Isaacson and Boeing Thompson properties. Slip 5 existed until the mid-1960s.

C. The Boeing Isaacson property had the following known property history:

1. The Boeing Isaacson property was occupied by residences and sawmills/lumber companies from the early-1900s through circa 1949. The mills were generally located along the banks of the LDW and Slip 5, with the remaining property being largely undeveloped for commercial use until circa 1942. However, there was extensive use for log storage occurring throughout the property from 1942 to 1945.

2. In 1945, the Mineralized Cell Wood Preserving Company was operating on the Boeing Isaacson property, using copper-, zinc-, and arsenic-containing chemicals as a wood preserving agent.

3. In the mid-1940s, the U.S. Navy built a galvanizing plant on the northeastern portion of the property, as it expanded the facilities of its Isaacson Iron Works Plant No. 2, which were otherwise located on the parcel just north of the Boeing Isaacson property. The Boeing Isaacson property was used to store scrap metal prior to being melted down. The galvanizing plant was dismantled in 1967.

4. In the 1950s, the Isaacson Steel Company purchased the Isaacson Iron Works plant and the Boeing Isaacson property, and expanded facilities on the Boeing Isaacson property while continuing to operate the manufacturing facilities on the property to the north. Some filling of Slip 5 occurred to accommodate this expansion. Isaacson Steel sold the facilities on the northern property to the Earle M. Jorgensen Company in 1965.

5. The Isaacson Steel Company combined new buildings with the previously existing structures into a single large building by 1961. Filling of Slip 5 continued and a bulkhead was constructed along the LDW. The bulkhead construction was complete by the mid-1970s.

6. The Boeing Company purchased the property in 1984 and used the large steel fabrication building (referred to as Building 14-05) for storage until it was razed in 1989.

7. During 1989 and 1990, The Boeing Company realigned a stormwater conveyance line at the Boeing Isaacson property, adjusted the south property line approximately 75 feet to the north, and installed fencing along the south and west sides. The property has remained vacant since, except for occasional open storage.

8. Between August and November 1991, The Boeing Company completed a large-scale soil stabilization project on the subject property. Approximately 35,000 tons of soil were excavated and treated using a chemical and physical stabilization process. Compliance monitoring was conducted during the excavation. Soil with arsenic concentrations greater than 200 mg/kg was treated. The stabilized soil was replaced in the ground and paved over to prevent stormwater infiltration.

9. In 2008, The Boeing Company removed approximately 20,000 cubic yards of material composed of metals-contaminated soil and a cement-based stabilizing additive. The surface grade was leveled and new stormwater controls were installed.

D. The Boeing Thompson property had the following known property history:

1. The Boeing Thompson property was occupied by the Bissell Lumber Company from the 1920s until 1952. The sawmill operations largely existed on the western portion of the property, adjacent to Slip 5. Numerous capital improvements were made to Slip 5 to accommodate the sawmill operations, such as piling installation, constructing log chutes, and dredging. The eastern portion of the property was largely undeveloped agricultural land.

2. Charles W. Thompson built a 3-tier bulkhead along the south bank of Slip 5 in 1955, and removed all the existing buildings in 1956.

3. The Boeing Company purchased the property from Parr Seattle Company in 1956, for testing and assembly of aircraft parts. The Boeing Company continued filling Slip 5, which was complete by the mid-1960s. Building 14-01 construction was completed in 1967.

4. In 1966, The Boeing Company installed a stormwater conveyance line along the north property line and extended an outfall into the LDW. A bulkhead and pier were also constructed along the LDW in the 1960s.

5. The property is largely developed with multiple buildings and pavement.

E. A 48-inch stormwater line that drains portions of King County International Airport runs through the Site and discharges into the LDW along the Boeing Thompson property.

F. The U.S. Environmental Protection Agency (EPA) added the LDW, which is adjacent to the Boeing Isaacson Thompson property, to the federal Superfund list on September 13, 2001. Ecology listed the LDW on the Confirmed and Suspected Contaminated Sites List (CSCSL) on February 26, 2002. The LDW federal Superfund/MTCA site is undergoing a RI/FS under a Joint Administrative Order on Consent. Polychlorinated Biphenyls (PCBs), dichlorodiphenyltrichloroethane (DDT), mercury, bis(2-ethylhexyl)phthalate (BEHP), dieldrin, lead, and zinc have been preliminarily identified as contaminants of concern in sediments in the LDW.

G. Early Action Area 6 (EAA-6) of the LDW, an identified early removal area that is part of the overall cleanup process for the LDW Superfund site, lies adjacent to the Boeing Isaacson Thompson property at RM 3.7-3.9. The potential sources of contaminants to sediments in EEA-6 are described in the following report: *Lower Duwamish Waterway, RM 3.7-3.9 East, Early Action Area 6, Source Control Action Plan, Draft 2 report by Science Applications International Corp. (SAIC), October 2008.*

H. The Site has been the subject of several environmental inspections and investigations beginning in 1981. These investigations and cleanups are summarized in the following reports: *Lower Duwamish Waterway, RM 3.7-3.9 East, Early Action Area 6, Summary of Existing Information and Identification of Data Gaps report by Science Applications International Corp. (SAIC), May 2008.*

I. Environmental investigations and cleanups revealed some of the soil, groundwater, stormwater outfall, and sediment samples on the Site and in the adjacent LDW are contaminated with metals, polychlorinated biphenyls (PCBs), volatile organic compounds, semi-volatile organic compounds, pesticides, and/or petroleum hydrocarbons. Sources of this contamination to the LDW may include outfalls at the Site and stormwater contributions to those outfalls, as well as property owners and operators near the Site.

VI. ECOLOGY DETERMINATIONS

A. The Boeing Company is an “owner or operator” as defined in RCW 70.105D.020(17) of a “facility” as defined in RCW 70.105D.020(5) because The Boeing Company owns and operates the Isaacson and Thompson properties at 8625-8811 E. Marginal Way S., Tukwila, Washington.

B. Based upon all factors known to Ecology, a “release” or “threatened release” of “hazardous substance(s)” as defined in RCW 70.105D.020(25) and RCW 70.105D.020(10), respectively, has occurred at the Site.

C. Based upon credible evidence, Ecology issued a PLP status letter to The Boeing Company dated October 30, 2008, pursuant to RCW 70.105D.040, -.020(17), and WAC 173-340-500. After providing for notice and opportunity for comment, reviewing any comments submitted, and concluding that credible evidence supported a finding of potential liability, Ecology issued a determination that The Boeing Company is a PLP under RCW 70.105D.040 and notified The Boeing Company of this determination by letter dated December 8, 2008.

D. Pursuant to RCW 70.105D.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.

E. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, RI/FS, or design of a cleanup action. Investigation of the Site may reveal upland sources of contamination to the LDW or to other upland areas that, if addressed promptly, will allow LDW remediation to proceed. Investigation of the Site may reveal sources of contamination in the LDW that might also warrant an interim action consistent with WAC 173-340-430. Ecology, with input from The Boeing Company, will determine if interim actions are warranted, including those that reduce or eliminate sources of contamination into the LDW, and will give direction to The Boeing Company regarding the scope and schedule for such interim actions.

VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that The Boeing Company take the following remedial actions at the Site and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein:

A. The Boeing Company shall prepare a Work Plan for and conduct a RI/FS and prepare a draft cleanup action plan (DCAP) of the Site that meets the requirements of Chapter 173-340 WAC and Chapter 173-204 WAC. A scope of work for the RI/FS and DCAP is more particularly described in Exhibit B, "Scope of Work" and is incorporated by reference as an

enforceable part of this Order. To plan and manage the RI/FS and DCAP, the project tasks and management strategies shall be summarized in the RI/FS Work Plan that will be developed and submitted to Ecology for review and approval in accordance with the Scope of Work.

B. The schedule of performance and list of deliverables is described in Exhibit C, "Schedule of Deliverables" and is incorporated by reference as an enforceable part of this Order.

C. Should an interim action be determined necessary under Section VI.E, the PLPs will prepare and implement a Work Plan and implement as specified in Task 3 of Exhibit B, Scope of Work. The public notice and comment period will be in accordance with the Public Participation Plan.

D. The Boeing Company shall submit monthly progress reports for work conducted under this Order, unless Ecology notifies the PLP, in writing, that less frequent reporting is required for these reports. Progress reports shall be submitted in electronic format to Ecology until satisfaction of the Order in accordance with Section IX of this Order. Progress Reports shall be submitted to the Ecology project coordinator by day 15 of the month following the reporting month. If this day is a weekend or holiday, deliverables will be submitted to Ecology on the next business day. At a minimum, progress reports shall contain the following information, pursuant to this Order, regarding the preceding reporting period:

- A description of the actions which have been taken to comply with the Order.
- Summaries of sampling and testing reports and other data reports received by The Boeing Company.
- Summaries of deviations from approved work plans.
- Summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal governments.
- Summaries of problems or anticipated problems in meeting the schedule or objectives set forth in the Scope of Work and RI/FS Work Plan.
- Summaries of solutions developed and implemented or planned to address any actual or anticipated problems or delays.
- Changes in key personnel.
- A description of work planned for the next reporting period.

E. If, at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required by this Section, Ecology may complete and issue the final deliverable.

If at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any deliverable required by this Section, Ecology may provide written notice to The Boeing Company that The Boeing Company has thirty (30) days to demonstrate sufficient progress in preparation of the required deliverable. If such notice is given and sufficient progress is not demonstrated within such thirty (30) day period, then at that time Ecology may complete and issue the deliverable. Ecology need provide this written notice and thirty (30) day opportunity to cure only once per deliverable.

VIII. TERMS AND CONDITIONS OF ORDER

A. Public Notice

RCW 70.105D.030(2)(a) requires that, at a minimum, this Order be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that this Order is inadequate or improper in any respect.

B. Remedial Action Costs

The Boeing Company 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 Site under Chapter 70.105D RCW, including remedial actions and Order preparation, negotiation, 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). Ecology has accumulated \$38,807.26 in remedial action costs related to this Site as of September 30, 2009. Payment for this amount shall be submitted within thirty (30) days of the effective date of this Order. For all costs incurred subsequent to September 30, 2009,

The Boeing Company shall pay the required amount, except for those costs that The Boeing Company disputes, 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, a description of the work performed, 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, other than disputed 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. The Boeing Company shall pay any disputed costs that remain after the completion of the dispute resolution process set forth below within thirty (30) days of a final decision by Ecology.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

C. Implementation of Remedial Action

If Ecology determines that The Boeing Company has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after providing written notice to The Boeing Company, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of The Boeing Company's failure to comply with its obligations under this Order, The Boeing Company shall reimburse Ecology for the costs of doing such work in accordance with Section VIII of this Order (Remedial Action Costs), provided that The Boeing Company is not obligated under this Section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order.

Except where necessary to abate an emergency situation, The Boeing Company shall not perform any remedial actions at the Site outside those remedial actions required by this Order, unless Ecology concurs, in writing, with such additional remedial actions.

D. Designated Project Coordinators

The project coordinator for Ecology is:

Ronald W. Timm, P.Hg., M.S.
Washington Department of Ecology
Northwest Regional Office
Toxics Cleanup Program
3190 160th Avenue SE
Bellevue, Washington 98008
Telephone: (425) 649-7185
FAX: (425) 649-7161
Email: rtim461@ecy.wa.gov

The project coordinator for The Boeing Company is:

Ms. Kathryn L. Lewis
The Boeing Company
Environmental Remediation
Boeing Environment, Health and Safety
M/C 9U4-26
Seattle, Washington 98124-2207
Telephone: (425) 237-1905; (206) 579-2110
Email: kathryn.l.lewis2@boeing.com

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 Site. To the maximum extent possible, communications between Ecology and The Boeing Company, 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 Decree.

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.

E. Performance

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

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered in 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 in 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 Chapter 18.220 RCW or RCW 18.43.130. The Boeing Company shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

F. Access

Ecology or any Ecology authorized representative shall have the full authority access to enter and freely move about all property at the Site that The Boeing Company either owns, controls, or has access rights to at all reasonable times for the purposes of, *inter alia*: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing The Boeing Company's progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by The Boeing Company.

The Boeing Company shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by The Boeing Company where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by The Boeing Company unless an emergency prevents such notice. All persons who access the Site pursuant to this Section shall comply with any applicable Health and Safety

Plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access. Ecology employees or an Ecology authorized representative shall, however, follow any appropriate safety and security precautions related to Site conditions that the Project Coordinators work out in advance.

G. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, The Boeing Company 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 such sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII of this Order (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.

If requested by Ecology, The Boeing Company shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by The Boeing Company pursuant to implementation of this Order. The Boeing Company shall notify Ecology fourteen (14) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow The Boeing Company and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VIII of this Order (Access), Ecology shall notify The Boeing Company prior to any sample collection activity unless an emergency prevents such notice.

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

H. Public Participation

A Public Participation Plan is required for this Site. Ecology shall review any existing Public Participation Plan to determine its continued appropriateness and whether it requires

amendment, or if no plan exists, Ecology shall develop a Public Participation Plan alone or in conjunction with The Boeing Company.

Ecology shall maintain the responsibility for public participation at the Site. However, The Boeing Company shall cooperate with Ecology, and shall, with respect to this Order:

1. If agreed to by Ecology, develop appropriate mailing list, prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, RI/FS reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

2. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify The Boeing Company prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by The Boeing Company that do not receive prior Ecology approval, The Boeing Company shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

3. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter.

4. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

- a. South Park Library
8604 Eighth Avenue South at Cloverdale Street
Seattle, Washington 98108
Tel: 206-615-1688
- b. Ecology's Northwest Regional Office
3190 160th Avenue SE
Bellevue, Washington 98008
Tel: 425-649-7190

At a minimum, copies of all public notices, fact sheets, and press releases; all quality assured monitoring data; and remedial action plans and reports, supplemental remedial planning documents, and all other similar documents relating to performance of the remedial action required by this Order shall be promptly placed in these repositories.

I. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, The Boeing Company 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. Upon request of Ecology, The Boeing Company shall make all records available to Ecology and allow access for review within a reasonable time, except to the extent such records are protected from disclosure by attorney client privilege or any other applicable law for which the PLP will prepare a Privilege Log describing all withheld or redacted documents or information. No actual data collected on Site pursuant to this Order shall be considered privileged.

J. Resolution of Disputes

1. In the event a dispute arises as to an approval, disapproval, proposed change, or other decision or action by Ecology's project coordinator, or an itemized billing statement under Section VIII of this Order (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

a. Upon receipt of Ecology's project coordinator's written decision or the itemized billing statement, The Boeing Company has fourteen (14) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.

i. The Boeing Company shall include in the written objection sufficient detail to allow Ecology to evaluate the merits of the dispute.

ii. Such detail shall include the specific Ecology determination or direction or itemized statement in dispute and shall include specific argument(s) documenting the basis for invoking the dispute resolution procedure.

iii. Clarification of Ecology directions or determinations shall not be handled through the dispute resolution procedure. The Ecology project coordinator will make such clarifications in a manner and time they deem appropriate to expedite to the maximum extent practicable the work performed under this order.

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute. If the project coordinators cannot resolve the dispute within fourteen (14) days, Ecology's project coordinator shall issue a written decision.

c. The Boeing Company may then request regional management review of the decision. This request shall be submitted in writing to the Northwest Region Toxics Cleanup Section Manager within seven (7) days of receipt of Ecology's project coordinator's written decision.

d. The Section Manager shall conduct a review of the dispute and shall endeavor to issue a written decision regarding the dispute within thirty (30) days of The Boeing Company's request for review. The Section Manager's decision shall be Ecology's final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

K. Extension of Schedule

1. An extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the

deadline for which the extension is requested, and good cause exists for granting the extension.

All extensions shall be requested in writing. The request shall specify:

- a. The deadline that is sought to be extended;
- b. The length of the extension sought;
- c. The reason(s) for the extension; and
- d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on The Boeing Company to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

- a. Circumstances beyond the reasonable control and despite the due diligence of The Boeing Company including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by The Boeing Company;
- b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or
- c. Endangerment as described in Section VIII of this Order (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of The Boeing Company.

3. Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give The Boeing Company written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII of this Order (Amendment of Order) when a schedule extension is granted.

4. An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:

- a. Delays in the issuance of a necessary permit which was applied for in a timely manner;
- b. Other circumstances deemed exceptional or extraordinary by Ecology; or
- c. Endangerment as described in Section VIII of this Order (Endangerment).

L. Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII of this Order (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and The Boeing Company. The Boeing Company shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing in a timely manner after the written request for amendment is received. If the amendment to this Order represents a substantial change, Ecology will provide public notice and opportunity to comment. Reasons for the disapproval of a proposed amendment to this Order shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section VIII of this Order (Resolution of Disputes).

M. Endangerment

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

at the Site is creating or has the potential to create a danger to human health or the environment, The Boeing Company may cease such activities. The Boeing Company 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 The Boeing Company shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with The Boeing Company's cessation of activities, it may direct The Boeing Company to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to Section VIII of this Order (Endangerment), The Boeing Company'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 of this Order (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.

N. Reservation of Rights

This 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 of Ecology's rights or authority. Ecology will not, however, bring an action against The Boeing Company to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against The Boeing Company regarding remedial actions required by this Order, provided The Boeing Company complies with this Order.

Ecology nevertheless reserves its rights under Chapter 70.105D RCW, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and 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 Site.

O. Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by The Boeing Company without provision 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.

Prior to The Boeing Company's transfer of any interest in all or any portion of the Site, and during the effective period of this Order, The Boeing Company 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, The Boeing Company shall notify Ecology of said transfer. Upon transfer of any interest, The Boeing Company shall restrict uses and activities to those consistent with this Order and notify all transferees of the restrictions on the use of the property.

P. Compliance with Applicable Laws

1. All actions carried out by The Boeing Company pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. At this time, no federal, state, or local requirements have been identified as being applicable to the actions required by this Order.

2. Pursuant to RCW 70.105D.090(1), The Boeing Company is exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, The Boeing Company shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section.

The Boeing Company has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or The Boeing Company determines that additional permits or approvals addressed in RCW 70.105D.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 The Boeing Company shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, The Boeing Company 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 The Boeing Company and on how The Boeing Company must meet those requirements. Ecology shall inform The Boeing Company in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The Boeing Company shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

3. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.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 The Boeing Company 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.

Q. Financial Assurances

Pursuant to WAC 173-340-440(11), The Boeing Company shall maintain sufficient and adequate financial assurance mechanisms to cover all costs associated with the operation and maintenance of the remedial action under this Order at the Site, including institutional controls, compliance monitoring, and corrective measures.

Within sixty (60) days of the effective date of this Order, The Boeing Company shall submit to Ecology for review and approval an estimate of the costs that it will incur in carrying out the terms of this Order, including operation and maintenance, and compliance monitoring. Within sixty (60) days after Ecology approves the aforementioned cost estimate, The Boeing Company shall provide proof of financial assurances sufficient to cover all such costs in a form acceptable to Ecology.

The Boeing Company shall adjust the financial assurance coverage and provide Ecology's project coordinator with documentation of the updated financial assurance for:

1. Inflation, annually, within thirty (30) days of the anniversary date of the entry of this Order; or if applicable, the modified anniversary date established in accordance with this Section, or if applicable, one hundred twenty (120) days after the close of The Boeing Company's fiscal year if the financial test or corporate guarantee is used, or if applicable, within thirty (30) days of the anniversary date of the entry of this Order if a letter of credit is used, and

2. Changes in cost estimates, within thirty (30) days of issuance of Ecology's approval of a modification or revision to the cleanup action plan (CAP) that result in increases to the cost or expected duration of remedial actions. Any adjustments for inflation since the most recent preceding anniversary date shall be made concurrent with adjustments for changes in cost estimates. The issuance of Ecology's approval of a revised or modified CAP will revise the anniversary date established under this Section to become the date of issuance of such revised or modified CAP.

R. Periodic Review

As remedial action, including groundwater monitoring, continues at the Site, the Parties agree to review the progress of remedial action at the Site, and to review the data accumulated as a result of monitoring the Site as often as is necessary and appropriate under the circumstances. At least every five (5) years after the initiation of cleanup action at the Site the Parties shall meet to discuss the status of the Site and the need, if any, for further remedial action at the Site. At least ninety (90) days prior to each periodic review, The Boeing Company 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 Site under appropriate circumstances. This provision shall remain in effect for the duration of this Order.

S. Indemnification

The Boeing Company agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless, from any and all claims or causes of action for death or injuries to persons or for loss or damage to property to the extent arising from or on account of acts or omissions of The Boeing Company, its officers, employees, agents, or contractors in entering into and implementing this Order. However, The Boeing Company shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

IX. SATISFACTION OF ORDER

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

X. ENFORCEMENT

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, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

C. In the event The Boeing Company refuses, without sufficient cause, to comply with any term of this Order, The Boeing Company 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; and

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 70.105D.060.


Effective date of this Order: April 23 2010

THE BOEING COMPANY



Steve Shestag 1/20/2010
Director, Enterprise Remediation
Environment, Health & Safety
Telephone: 818-466-8822

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY



Robert W. Warren, P.Hg., MBA
Section Manager
Toxics Cleanup Program
Northwest Regional Office
Telephone: 425-649-7054



Exhibit A
Boeing and adjacent properties

EXHIBIT B SCOPE OF WORK

PURPOSE

The work under this Agreed Order (Order) involves conducting a Remedial Investigation and Feasibility Study (RI/FS), conducting interim actions if required or agreed to by Ecology, and preparing a Draft Cleanup Action Plan (DCAP) to select a cleanup alternative. The purpose of this RI/FS and DCAP for the Boeing Isaacson Thompson site (Site) is to provide sufficient data, analysis, and evaluations to enable Ecology to select a cleanup alternative for the Site.

The Scope of Work is divided into six major tasks as follows:

- Task 1. RI/FS Work Plan
- Task 2. Remedial Investigation
- Task 3. Interim Action (if required)
- Task 4. Feasibility Study and State Environmental Policy Act (SEPA) Compliance
- Task 5. DCAP
- Task 6. Progress Reports

TASK 1: PREPARE RI/FS WORK PLAN

The Boeing Company shall prepare a draft Remedial Investigation/Feasibility Study Work Plan (Work Plan). The Work Plan shall include an overall description and schedule of all RI/FS activities. The Work Plan shall clearly describe the project management strategy for implementing and reporting on RI/FS activities. The responsibility and authority of all organizations and key personnel involved in conducting the RI/FS will be outlined.

The Work Plan shall describe general facility information; site history and conditions, including previous operations and ownership; past field investigations, including any data collection and analysis of soils, air, groundwater, surface water, and sediments; a conceptual site model showing contaminants, migration pathways in all environmental media, and potential receptors; geology and groundwater system characteristics; past, current, and future land use; identification of natural resources and ecological receptors; hazardous substances and their sources, etc., in compliance with WAC 173-340-350 and WAC 173-204-560.

As part of the project background, existing environmental data on site soil, groundwater, surface water, and sediments will be compiled and evaluated for data gaps. The data gaps will be used as the basis for conducting additional site investigations. The Draft Work Plan will also identify specific data collection procedures in a Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) as part of the Work Plan in compliance with WAC 173-340-820 and WAC 173-204-600 for defining the nature and extent of contamination. The Draft Work Plan will also contain a Health and Safety Plan (HSP) to be followed during conductance of the RI/FS.

The SAP identifies the proposed number and location of all environmental samples and methods, including soil borings, groundwater monitoring wells, soil, groundwater, stormwater, seep, catch basin and sediment samples, approximate depths, and includes a quality assurance project plan. The SAP will describe the sampling objectives, the rationale for the sampling approach (based upon the identified data gaps), and plans for data use, and shall provide a detailed description of sampling tasks. The SAP shall describe specifications for sample identifiers; sampling equipment; the type, number, and location of samples to be collected; the analyses to be performed; descriptions of sampling equipment and methods to be used; sample documentation; sample containers, collection and handling; data and records management; and schedule.

The QAPP will be prepared in accordance with the Guidance for Preparation of Quality Assurance Project Plans, EPA Region 10, Quality Data Management Program, QA/R-5 and requirements of the EPA Contract Laboratory Program. The QAPP will also follow Ecology's Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (July 2004) and Sediment Sampling and Analysis Plan Appendix (February 2008). These documents can be found at <http://www.ecy.wa.gov/pubs/wac173204.pdf> and <http://www.ecy.wa.gov/biblio/0309043.html> respectively. Examples of completed QAPPs can be found at <http://www.ecy.wa.gov/biblio/qapp.html>. Laboratories must meet the accreditation standards established in Chapter 173-50 WAC. Data quality objectives will reflect the criteria or threshold values used for the source control evaluation.

The SAP, including the QAPP, and HSP will be submitted to Ecology for review and approval. Environmental work pursuant to this Order at the site may not begin without written approval from Ecology. Except where necessary to abate an emergency situation, The Boeing Company shall not perform any remedial actions at the site outside those remedial actions required by the Order, unless Ecology concurs, in writing, with such additional remedial actions. The plan shall provide seven (7) days notice to Ecology prior to beginning sampling. Ecology may obtain split samples.

The Boeing Company or their contractors shall submit all new sampling data generated under this SAP and any other recently collected data to Ecology for entry into the Environmental Information Management System (EIM) in accordance with WAC 173-340-840(5) and Ecology's Toxics Cleanup Program Policy 840: Data Submittal Requirements. Only validated data will be entered into the EIM database.

RI/FS tasks and subtasks will include the following:

- Sampling and analysis of soil, groundwater, and seeps.
- Sampling and analysis of surface and subsurface sediments in the Lower Duwamish Waterway (LDW).
- Sampling and analysis of stormwater and catch basin solids; if stormwater and catch basin contaminants are present, determine the source of the contaminants by sampling necessary media.
- Evaluate the potential to contaminate or recontaminate sediments, including analysis of the following pathways:

- Direct discharges
- Stormwater discharges
- Overland flow
- Groundwater discharges and seeps
- Soil erosion
- Air deposition
- Site operations
- Spills, dumping, leaks, housekeeping, and management practices
- Evaluate whether fill within a former slip is contaminated or provides a contaminate source to the LDW or sediments.

The FS portion of the Work Plan will provide a detailed analysis of each remedial alternative according to the applicable requirements of WAC 173-340-350, MTCA Remedial Investigation and Feasibility Study, and WAC 173-204-560, Sediment Management Standards Cleanup Study. The remedial alternatives will be evaluated for compliance with the applicable requirements of WAC 173-340-360, Selection of Cleanup Actions, and WAC 173-204-560(4).

The Work Plan shall not be implemented until approved by Ecology. Once approved by Ecology, The Boeing Company will implement the work plan according to the schedule contained in Exhibit C.

The Boeing Company shall coordinate with Ecology throughout the development of the RI/FS and DCAP and shall keep Ecology informed of changes to the Work Plan and other project plans and of issues and problems as they develop.

The Boeing Company shall prepare two (2) copies of the Draft RI/FS Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. After addressing Ecology's comments on the Draft Work Plan and after Ecology approval, The Boeing Company shall prepare five (5) copies of the Final Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

TASK 2: REMEDIAL INVESTIGATION

The Boeing Company shall conduct a Remedial Investigation (RI) that meets the requirements of WAC 173-340-350(7) and WAC 173-204-560 according to the Work Plan as approved by Ecology. The RI will determine the nature and extent of contamination exceeding Model Toxics Control Act (MTCA) cleanup levels, Sediment Management Standards (SMS) cleanup standards, and other regulatory requirements. The RI must provide sufficient data and information to define the nature and extent of contamination.

Field sampling and analysis will be completed in general accordance with the SAP, QAPP, and HSP. Deviation(s) from the approved SAP, QAPP, and HSP must be communicated to Ecology immediately and documented as required by Ecology.

The Boeing Company shall provide interim data reports and updates to Ecology as new site data and information become available. Laboratory analysis data shall also be provided in electronic format when it has been validated. Raw laboratory data will be provided to Ecology upon request.

During Site investigations, remedial actions might be identified that if taken will reduce or eliminate sources of contamination to the LDW. Ecology will determine if the remedial actions identified should be implemented prior to completion of the RI/FS. Remedial actions implemented prior to completion of the RI/FS will be considered interim actions and will be implemented in accordance with WAC 173-340-430. Remedial actions for contaminated sediments will be designated partial cleanup actions and will be implemented pursuant to WAC 173-204-550(3)(d). Should an interim action be required, Ecology will require that The Boeing Company submit an Interim Action Work Plan for approval and implementation.

The Boeing Company shall compile the results of the Site investigation into a Draft RI report. The Boeing Company shall prepare two (2) copies of the Draft RI report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. Figures, diagrams or maps shall be submitted in the Geographic Information System shape file (.shp) format or AutoCAD file (.dwg) format.

After addressing Ecology's comments on the Draft RI report, The Boeing Company shall prepare five (5) copies of a Final RI report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. Electronic survey data for sampling and monitoring locations, electronic lab data, and GIS maps of contaminant distribution shall also be provided for both the Draft and Final RI reports.

If the data collected during this investigation is insufficient to define the full nature and extent of contamination, an additional phase of investigation shall be conducted to define the extent of contamination.

TASK 3: INTERIM ACTION (if required)

Remedial actions implemented prior to completion of the RI/FS:

- that are technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance;
- that correct a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or
- that are needed to provide for completion of the remedial investigation/feasibility study or design of the cleanup action

will be considered interim actions, will be implemented in accordance with WAC 173-340-430 and the AO, and will be designed in a manner that will not foreclose reasonable alternatives for any final cleanup action that may be required.

If required by Ecology, with input from The Boeing Company, or if proposed by The Boeing Company and approved by Ecology, The Boeing Company will implement an interim action. Based upon information in the Draft RI report, interim action(s) may be needed to expedite control of releases to sediments or other environmental media pursuant to WAC 173-340-430.

The scope of the interim actions may include, but not be limited to, typical source control or containment elements such as:

- Soil or sediment removal.
- Groundwater remediation.
- Repair, slip lining, replacement, or closure of stormwater conveyances or other structures such as conduit, vaults, catch basins, etc.
- Removal of underground storage tanks and pipes.
- Removal of old drain fields or former surface impoundments.
- Proper abandonment of old wells.
- Removal of contaminated building or other structural material.
- Construction of a treatment facility.
- Shoreline stabilization such as bulkhead repair, erosion or seepage control, and grading or clearing.

If an interim action is to be performed, The Boeing Company will prepare and submit for Ecology review a Draft Interim Action Work Plan (DIAWP) with detail commensurate with the work to be performed. The DIAWP shall include, as appropriate:

- Description of the interim action including its purpose, general requirements, and relationship to the (final) cleanup action (to the extent known).
- Summary of relevant RI/FS information, including at a minimum existing site conditions and alternative interim actions considered.
- Information regarding design and construction requirements, including a proposed schedule and personnel roles and responsibilities.
- Compliance Monitoring Plan.
- HSP.
- SAP/QAPP.

Once approved by Ecology, The Boeing Company will implement the interim action according to the schedule contained in the Final IAWP (FIAWP).

The Boeing Company shall prepare two (2) copies of the DIAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. After addressing Ecology's comments on the draft work plan and after Ecology approval, The Boeing Company shall prepare five (5) copies of the FIAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

Upon successful completion of the work, an Interim Action Report will be prepared as a separate deliverable. The Boeing Company shall prepare two (2) copies of the Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf)

formats, to Ecology for review and comment. After addressing Ecology's comments on the Interim Action Report and after Ecology approval, The Boeing Company shall prepare five (5) copies of the Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

TASK 4: FEASIBILITY STUDY AND SEPA COMPLIANCE

FEASIBILITY STUDY

The Boeing Company shall use the information obtained in the RI to prepare a Feasibility Study (FS) that meets the applicable requirements of WAC 173-340-350(8) according to the approved Work Plan and schedule (Exhibit C).

The draft FS will evaluate remedial alternatives for site cleanup, consistent with MTCA and SMS requirements to ensure protection of human health and the environment by eliminating, reducing, or otherwise controlling risk posed through each exposure pathway and migration route.

The FS will provide a detailed analysis of each remedial alternative according to the applicable requirements of WAC 173-340-350, MTCA Remedial Investigation and Feasibility Study, and WAC 173-204-560, SMS Cleanup Study. The remedial alternatives will be evaluated for compliance with the applicable requirements of WAC 173-340-360, Selection of Cleanup Actions, and WAC 173-204-560(4), including a detailed evaluation of remedial alternatives relative to the following criteria:

- Compliance with Cleanup Standards and Applicable Laws.
- Protection of Human Health.
- Protection of the Environment.
- Provision for a Reasonable Restoration Time Frame.
- Use of Permanent Solutions to the Maximum Extent Practicable.
- The Degree to which Recycling, Reuse, and Waste Minimization are Employed.
- Short-term Effectiveness.
- Long-Term Effectiveness.
- Net Environmental Benefit.
- Implementability.
- Provision for Compliance Monitoring.
- Cost-Effectiveness.
- Prospective Community Acceptance.

The remedial alternative that is judged to best satisfy the evaluation criteria will be identified. Justification for the selection will be provided, and the recommended remedial alternative further developed, in the FS report.

The Boeing Company shall prepare two (2) copies of the Draft FS report and submit them, including one electronic copy in Word (.doc) and Adobe (.pdf) formats, to Ecology for review

and comment. Figures, diagrams or maps shall be submitted in the Geographic Information System shape file (.shp) format or AutoCAD file (.dwg) format.

After addressing Ecology's comments on the Draft FS report and after Ecology approval, The Boeing Company shall prepare two (2) copies of the Draft Final FS report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. Figures, diagrams or maps shall be submitted in the Geographic Information System shape file (.shp) format or AutoCAD file (.dwg) format.

SEPA

The Boeing Company shall be responsible for complying with the SEPA Rules including preparing and submitting an environmental checklist. If the result of the threshold determination is a determination of significance (DS), The Boeing Company shall be responsible for the preparation of draft and final environmental impact statements. The Boeing Company shall assist Ecology with coordinating SEPA public involvement requirements with MTCA public involvement requirements whenever possible, such that public comment periods and meetings or hearings can be held concurrently.

The Boeing Company shall support Ecology in presenting the Final RI and Draft Final FS reports and SEPA evaluations at one public meeting or hearing. The Boeing Company will assist Ecology with presentations at any additional meetings or hearings that might be necessary for SEPA compliance or as part of the Public Participation Plan.

After the public comment periods are completed, The Boeing Company shall prepare a Draft Responsiveness Summary that addresses public comments and prepare a second Draft Final FS report that addresses public comments. The Boeing Company shall prepare two (2) copies of the Draft Responsiveness Summary and second Draft Final FS report and submit them to Ecology for review and comment, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. After addressing Ecology's comments, The Boeing Company shall prepare five (5) copies of the Final Responsiveness Summary and Final FS report and submit them to Ecology for distribution, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

TASK 5: PREPARE A DRAFT CLEANUP ACTION PLAN

Upon Ecology approval of the Final RI report and Draft FS report, The Boeing Company shall prepare a DCAP in accordance with WAC 173-340-380 that provides a proposed remedial action to address the contamination present on the Site. Where contaminated sediments are included in the remedial action, the cleanup plan will comply with WAC 173-204-580, in addition to the MTCA requirements cited above. The DCAP shall include a general description of the proposed remedial actions, cleanup standards developed from the RI/FS and rationale regarding their selection, a schedule for implementation, description of any institutional controls proposed, and a summary of applicable local, state, and federal laws pertinent to the proposed cleanup actions.

The Boeing Company will submit a DCAP for Ecology's review and approval. The DCAP will include, but not be limited to, the information listed under WAC 173-340-380. The Boeing Company shall prepare five (5) copies of the DCAP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. Figures, diagrams or maps shall be submitted in the Geographic Information System shape file (.shp) format or AutoCAD file (.dwg) format.

After receiving Ecology's comments on the DCAP, if any, The Boeing Company shall revise the report to address Ecology's comments and submit five (5) copies of the report including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

TASK 6: **PROGRESS REPORTS**

The Boeing Company shall submit Progress Reports monthly in electronic format. Progress Reports shall be submitted to Ecology until satisfaction of the Order in accordance with Section IX of this Order. Progress Reports shall be submitted to the Ecology project coordinator by the 15th of the month following the reporting month. If this day is a weekend or holiday, deliverables will be submitted to Ecology on the next business day. At a minimum, Progress Reports shall contain the following information regarding the preceding reporting period:

- A description of the actions which have been taken to comply with the Order;
- Summaries of sampling and testing reports and other data reports received by The Boeing Company;
- Summaries of deviations from approved work plans.
- Summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal governments.
- Summaries of problems or anticipated problems in meeting the schedule or objectives set forth in the Schedule of Work and Work Plan.
- Summaries of solutions developed and implemented or planned to address any actual or anticipated problems or delays.
- Changes in key personnel.
- A description of work planned for the next reporting period.

EXHIBIT C – SCHEDULE OF DELIVERABLES

The schedule for deliverables described in Exhibit B of this Agreed Order (Order) is presented below. If at any time during the Remedial Investigation (RI), Feasibility Study (FS), or Draft Cleanup Action Plan (DCAP) process unanticipated conditions or changed circumstances are discovered which might result in a schedule delay, The Boeing Company shall bring such information to the attention of Ecology. Ecology will determine whether a schedule extension is warranted under the Order.

Any completion times that fall on a holiday or weekend will be extended to the next working day.

RI/FS Deliverables	Completion Times
Data Summary Report	Effective date of Agreed Order
Draft RI/FS Work Plan, Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP), Health & Safety Plan (HSP)	60 calendar days following effective date of the Agreed Order
Final RI/FS Work Plan, SAP, QAPP, and HSP	30 calendar days following receipt of Ecology's review comments on the draft plans
Completion of RI Work	180 calendar days following Ecology's approval of the final RI/FS Work Plan
Draft RI Report	90 days following completion of RI work
Final RI Report	30 calendar days following receipt of Ecology's review comments on the draft report
Draft FS Report	90 days following Ecology's approval of the Final RI Report
Draft Final FS Report	30 calendar days following receipt of Ecology's review comments
2 nd Draft Final FS Report	60 calendar days following completion of the public comment period
Final FS Report	30 calendar days following receipt of Ecology's review comments
Draft Cleanup Action Plan (DCAP)	60 calendar days following Ecology's approval of the Final FS Report
Progress Reports	15 th of the month following the completion of the first full month after the effective date of the AO