STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:

Burlington Environmental, LLC

AGREED ORDER for CORRECTIVE AND **REMEDIAL ACTION**

No. DE 7347

Burlington Environmental, LLC 18000 – 72nd Avenue South, Suite 217 TO: Kent, Washington 98032

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I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology) and Burlington Environmental, LLC 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. Burlington Environmental, LLC ("Burlington") is a wholly owned subsidiary of PSC Environmental Services, LLC, and hereafter under this order referred to as "PSC." This Order requires PSC to implement a Cleanup Action Plan to address contamination caused by facility releases in the eastern portion of the Site. This action is consistent with actions as defined in WAC 173-340-430. In addition, this order requires monitoring and financial assurance for the entire site. Further remedial action to address the portion of the site west of Fourth Avenue South will be governed by a future order or orders, anticipated to include multiple responsible parties. Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1). This order also satisfies the requirements of WAC 173-303-646 through -64630.

III. PARTIES BOUND

This Agreed Order shall apply to and be binding upon the Parties to this Order and 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. PSC agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter PSC's responsibility under this Order. PSC 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. <u>Agreed Order</u> or <u>Order</u> means this Order. The term includes the text of this Order, all
 Attachments to this Order, and all Ecology-approved submittals required pursuant to this Order.
 Order Attachments and Ecology-approved submittals are incorporated into this Order by this
 reference and are enforceable parts of this Order as if fully set forth herein.

B. <u>Cleanup action plan</u>, or <u>CAP</u>, means the document prepared by the department under
 WAC 173-340-380 that selects the cleanup action and specifies cleanup standards and other
 requirements for the cleanup action.

C. <u>Cleanup standards</u> refers to the standards promulgated under RCW 70.105D.030(2)(e) and include (1) hazardous substance concentrations (cleanup levels) that protect human health and the environment, (2) the location at the Facility where those cleanup levels must be attained (points of compliance), and (3) additional regulatory requirements that apply to a cleanup because of the type of action and/or the location of the Facility.

D. <u>Corrective action</u> refers to requirements in WAC 173-303-646 through 173-303-646920 for corrective action for releases of dangerous waste and dangerous constituents including releases from solid waste management units at a facility, and may include any activities including investigations, studies, characterizations, and corrective measures, including actions taken pursuant to Chapter 70.105D RCW and Chapter 173-340 WAC, when they fulfill the requirements of WAC 173-303-646 through 173-303-646920.

E. <u>**Corrective Measure**</u> refers to any measure or action to control, prevent, or mitigate release(s) and/or potential release(s) of dangerous constituents (including dangerous waste and hazardous substances) reviewed and approved by Ecology for the Facility and set forth in a Facility-specific CAP prepared in compliance with the requirements of Chapter 173-340 WAC, including WAC 173-340-360.

F. **Dangerous constituent** or **Dangerous waste constituent** means any constituent

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

G. <u>Dangerous waste</u> means any solid waste designated under the procedures of WAC 173-303-070 through 173-303-100 as dangerous, extremely hazardous, or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70.105D.020(10).

H. **<u>Department</u>** means the Washington Department of Ecology or "Ecology."

I. <u>Eastern portion of the Site</u>, or E-4 Area, means contamination due to releases of hazardous substances from the PSC-Georgetown Facility that are present in the area east of Fourth Avenue South.

J. <u>Facility</u> means the dangerous waste/hazardous waste management facility owned and operated by PSC located at 734 South Lucile Street, Seattle Washington, and all contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste or dangerous constituents also controlled by PSC. "Facility" also includes the definition found in RCW 70.105D.020(5).

K. <u>**HWMA**</u> means the Washington Hazardous Waste Management Act, Chapter 70.105 RCW, and its implementing Dangerous Waste Regulations, Chapter 173-303 WAC, which implement an authorized state program under RCRA.

L. <u>MTCA</u> refers to the Model Toxics Control Act, Chapter 70.105D RCW.

M. <u>**Parties**</u> refer to the State of Washington, Department of Ecology and Burlington Environmental, LLC.

N. <u>**Permit**</u> means the Respondent's HWMA Permit No. WAD 000812909 for the Georgetown Facility.

O. **Potentially Liable Person (PLP)** means Burlington Environmental, LLC, referred to both historically and in the present as "PSC."

P. <u>**RCRA**</u> means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as further amended by, *inter alia*, the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6901 *et seq*.

Q. <u>Release</u> refers to any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous waste or dangerous constituents into the environment. It also includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous waste or dangerous constituents and includes the definition of "release" in RCW 70.105D.020(25).

R. <u>**Remedial Action**</u> means any action or expenditure consistent with the purposes of Chapter 70.105D RCW to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

S. <u>Site</u> means the PSC-Georgetown Facility generally located at 734 S. Lucile St. in Seattle and areas to the immediate east and north, and west and southwest of this location. The Site is defined by the extent of contamination caused by the release of hazardous substances at the Site. The Site is more particularly described in the Site Diagram (Exhibit C). The Site constitutes a Facility under RCW 70.105D.020(5).

T. <u>Western portion of the site</u>, or W-4 Area depicted in the Site Diagram (Exhibit C), means contamination present west of Fourth Avenue South. Contamination in this area has been affected by the release of hazardous substances from the PSC Georgetown Facility. Releases of hazardous substances from non-PSC properties (i.e., owned and operated by other PLPs) located west of 4th Ave. S. have also contributed to soil and groundwater contamination within this portion of the site.

V. FINDINGS OF FACT

Ecology makes the following Findings of Fact, without any express or implied admissions of any such facts by PSC:

 PSC is and has been the owner and operator of the dangerous waste management facility located at 734 South Lucile Street, Seattle, Washington (the "Facility" or "Georgetown Facility"). The facility no longer operates. PSC was formerly known as Chemical Processors, Inc. or "Chempro".

2. PSC owned and operated the Facility as a dangerous waste management facility on or after November 19, 1980, the date that subjected facilities to Resource Conservation and Recovery Act ("RCRA") permitting requirements, including interim status requirements pursuant to Section 3005 of RCRA, 42 U.S.C. § 6925, and implementing regulations thereunder, and including authorized state dangerous waste regulations promulgated in Chapter 173-303 WAC.

3. Chemical Processors, Inc. was incorporated in August 1970 and began solvent distillation and recycling operations on the Facility property initially on behalf of the Preservative Paint Company. In December 1986, the Sabey Corporation purchased a 100% interest in Chempro and became the sole owner. In March 1988, Burlington Northern Inc. ("BNI"), through its subsidiary Glacier Park Company ("GPC"), acquired a majority interest in Chempro from the Sabey Corporation. Subsequent to the corporate spin-off of the BNI resources companies into a separate company, Burlington Resources Inc. ("BR"), Chempro became majority owned by BR. Under BR, Chempro filed its Part B permit application, and in 1988 negotiated a Section 3008(h) agreed order with the United States Environmental Protection Agency ("EPA") to perform a RCRA facility investigation and corrective measures study at the Georgetown Facility. In August 1991, EPA and Ecology jointly issued Permit No. WAD 000812909 to Chempro to treat and store hazardous and dangerous wastes. In January 1992, Chempro formally changed its corporate name to "Burlington Environmental Inc." Following several corporate mergers and acquisitions at the parent company level, in March 2003, Burlington Environmental Inc. became a wholly owned subsidiary of PSC Environmental Services, Inc. In April 2008, Burlington Environmental merged with Burlington-PSC, LLC to form a new entity called "Burlington Environmental, LLC."

4. The Georgetown Facility Permit expired in August 2001. In February 2001, PSC submitted a dangerous waste permit renewal application to Ecology to continue operations until closure and the completion of corrective action.

5. The PSC Georgetown Facility consists of two adjacent and contiguous parcels of property, the original permitted parcel consisting of approximately two (2) acres located at 734 Lucile Street, Seattle, Washington and an unpermitted parcel of approximately four (4) acres (the former Amalgamated Sugar Company or "TASCO" property) located at 5400 Denver Avenue, Seattle, Washington. PSC purchased the Amalgamated Sugar parcel on December 2, 2002. The PSC Georgetown Facility is depicted in Exhibit A.

6. On December 1, 2002, PSC notified Ecology of its intent to close all permitted dangerous waste operations at the Facility. In August 2003 Ecology conditionally accepted certification for final clean closure of permitted dangerous waste management units at the Facility after reviewing the certification report and supporting documentation in the "Facility Clean Closure Certification" (submitted by PSC on July 2003). PSC closed the operating portion of the Facility effective December 2003.

7. Hazardous substances, including volatile organic compounds ("VOCs"), semi-volatile compounds, metals, and PCBs have been detected in soils and groundwater beneath the PSC Georgetown Facility and the adjacent property located at TASCO property. Releases of hazardous substances from the Facility have also been detected in downgradient groundwater and in soils and groundwater immediately upgradient of the Facility. The presence of hazardous substances released from the Facility has been documented in a number of environmental investigation reports. These reports are listed in Exhibit B.

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8. The Site is depicted in the Site Diagram (Exhibit C). Groundwater contamination due to releases from the Facility has been detected in concentrations that exceed applicable clean up levels over an area west and southwest of the Facility boundaries approaching the Duwamish Waterway. Concentrations exceeding applicable clean up levels, due to Facility releases, have also been detected to the north and east. This entire area, including the Georgetown Facility, impacted by releases of contaminants from the Facility to soils and groundwater is designated hereinafter for all purposes as the "Site". For purposes of administering corrective action under the Permit, the Site has been divided into two areas designated as the "East of 4th Avenue South Area" (E-4 Area) of the Site and the "West of 4th Avenue South Area" (W-4 Area) of the Site as shown on Exhibit C.

9. PSC has implemented interim actions, which have included construction of a subsurface barrier wall (also known as the hydraulic containment interim measure and referred to herein as the "HCIM") that surrounds most of the 734 Lucile Street and 5400 Denver Avenue South properties (the "HCIM Area"). The HCIM was constructed to minimize or eliminate the downgradient migration of hazardous substances in groundwater. PSC also implemented vapor intrusion mitigation measures throughout the Site at 30 buildings downgradient of the Facility and continues to conduct groundwater monitoring beyond the Facility boundaries. The properties and/or areas adjacent to the Facility and lying outside the HCIM Area, that are or will be subject to corrective action under the CA Permit and the Cleanup Action Plan ("CAP"), are sometimes referred to as the E-4 "Outside Area."

10. Since August 2001, PSC has conducted corrective action under the terms and conditions of its expired Permit.

VI. ECOLOGY DETERMINATIONS

A. PSC is a person within the meaning of RCW 70.105D.020(19).

B. PSC is the owner and former operator of a Dangerous Waste Management
 Facility that operated under a final Facility permit, subject to Sections 3004 and 3005 of RCRA,

42 U.S.C. §§ 6924 and 6925, and regulations promulgated there under, including authorized State regulations in Chapter 173-303 WAC. PSC is also an "owner or operator" as defined by RCW 70.105D.020(17) of a "facility" as defined by RCW 70.105D.020(5).

C. Certain waste and constituents found at the Facility are dangerous wastes and/or dangerous constituents as defined by Chapter 173-303 WAC, and in Section IV of this Order.

D. These dangerous wastes and dangerous constituents are considered hazardous substances within the meaning of RCW 70.105D.020(10).

E. Based on the Findings of Fact and the administrative record, Ecology has determined that releases and potential releases of hazardous substances at and/or from the Facility present a threat to human health and the environment.

F. Based upon credible evidence, Ecology issued a potentially liable person ("PLP") status letter to PSC on October 9, 2003, pursuant to RCW 70.105D.040, -.020(21) and WAC 173-340-500. By letter dated November 9, 2003, PSC voluntarily waived its rights to notice and comment, and accepted Ecology's determination that PSC is a potentially liable person under RCW 70.105D.040.

G. Pursuant to RCW 70.105D.030(1) and RCW 70.105D.050, 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.

H. The Site includes the PSC Georgetown Facility located at 734 S. Lucile Street, Seattle, Washington, the E-4 Area (which includes the PSC Georgetown Facility), and the W-4 Area, an area of downgradient groundwater affected by the release of hazardous substances from the Georgetown Facility, as well as releases of hazardous substances from the properties of other parties in the W-4 Area.

I. 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, remedial investigation/feasibility study or design of a cleanup action. The actions required by this order will primarily address the E-4 area and are intended to be the final cleanup action for this portion of the site. However, these actions constitute interim action with regard to the entire site.

VII. WORK TO BE PERFORMED

Based on the foregoing Findings of Fact and Ecology Determinations, it is hereby agreed that PSC shall perform the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC and applicable provisions of Chapter 173-303 WAC, unless otherwise specifically provided for herein. All work undertaken pursuant to this Order shall be developed and performed, as appropriate and approved by the Department, in accordance with the approved Work Plans and all other applicable federal and state regulations. More specifically:

1. <u>Cleanup Action Plan</u>. Exhibit D to this Order contains the CAP for the E-4 Area of the Site. Exhibit D is incorporated by reference and is an integral and enforceable part of this Order. PSC shall implement the cleanup action in this CAP in accordance with requirements established in 2 through 16 below in this Section (VII).

2. **Draft Engineering Design Report**. Per the schedule in Exhibit E, PSC shall submit a draft Engineering Design Report ("EDR") to Ecology in accordance with the requirements of WAC 173-340-400(4) and the CAP. The EDR shall document engineering concepts and design criteria used for design of the cleanup action and shall include sufficient information for the development and review of construction plans and specifications. The EDR will include all components of the selected remedy, including contingent remedies specified in the CAP. The EDR will include a detailed implementation plan, design concepts and objectives, and an

implementation schedule. The implementation schedule will include a critical-path Gantt chart timeline showing anticipated dates and timeframes for all post-EDR deliverables and cleanup action elements.

The EDR may be a document containing plans for all elements of the cleanup action or PSC may choose to establish multiple Plans (and/or Reports) specific to particular elements or groups of elements of the cleanup action. The EDR itself shall contain the information indicated below with an asterisk (*). For other required deliverables/activities below, if the EDR does not contain the deliverable, it shall propose a schedule and due date for submitting, or carrying out, the respective document or action:

(a) Construction Plans and Specifications (CPS) consistent with WAC 173-340-400(4)(b). The CPS document will include design drawings and specifications sufficient to proceed with construction, and a detailed cost estimate. All permits necessary to complete the cleanup will be identified and included in the CPS.*

(b) A Construction Health and Safety Plan and a Construction Quality Assurance Plan.*

(c) Documentation of the establishment of exposure and other controls. Consistent with the CAP, a combination of administrative controls, institutional controls, and public communications must be implemented to: (i) restrict groundwater recovery within areas where contaminant concentrations exceed drinking water standards, (ii) limit the potential for exposure to contaminated soils, (iii) notify the public of potential risks and hazards associated with subsurface work in contaminated areas, (iv) restrict land and groundwater use within the HCIM Area and in portions of Union Pacific Railroad ("UPRR") Argo Yard, which lies east and north, directly adjacent to the Facility, (v) restrict and regulate subsurface work conducted within the HCIM Area and in portions of UPRR Argo Yard, (vi) require vapor intrusion mitigation (or an investigation demonstrating no mitigation is required) as part of any building construction within the HCIM Area or in and in portions of UPRR Argo Yard, (vii) require continued operation of

the HCIM system, and (viii) require the long-term maintenance/repair of all components of the cleanup action that must be operated/maintained into the future.*

(d) An implementation schedule for all components of the cleanup action, including due dates for all future CAP-implementation documents.*

(e) A Work Plan for excavating approximately 200 cubic yards of soil on the TASCO property that contain concentrations of polychlorinated biphenyls (PCBs) above 10 mg/kg, the Method A industrial soil cleanup level (see Appendix E of the Cleanup Action Plan, Section E.2). The Work Plan shall contain procedures for managing the soil once excavated, and proposals for proper off-site disposal of the excavated soil.

(f) A Work Plan for temporarily lowering the water table (partial dewatering) within the HCIM Area, preliminary to extracting and treating contaminated soil vapors.

(g) A Remedial Design and Remedial Action ("RD/RA") Work Plan for performing soil vapor extraction within the HCIM Area.

(h) A RD/RA Work Plan for performing in situ bioremediation via electron donor injection into contaminated groundwater behind the barrier wall.

 (i) A Work Plan for placing cover in the HCIM Area (this covering is mostly in place now). The cover will be designed to prevent exposures to soil contamination and reduce the amount of precipitation entering groundwater into the HCIM Area.

(j) A Groundwater Monitoring Plan to measure the performance of the actions taken behind the barrier wall.

(k) An Operation and Maintenance Plan ("O&M Plan") for long-term care of the HCIM system, HCIM Area capping, and other components of the HCIM Area remedy that require on-going future activities to ensure that the remedy remains protective of human health and the environment. The O&M Plan shall establish a monitoring program to measure groundwater levels and contaminant concentrations in monitoring wells inside the barrier wall enclosure and groundwater levels outside the wall to confirm that hydraulic containment is maintained over the long term.

(l) A RD/RA Work Plan for soil vapor extraction to remediate soils located west of the southwest corner of the HCIM Area.

(m) A RD/RA Work Plan for performing soil vapor extraction to remediate soils located on portions of the UPRR Argo Yard.

(n) A Work Plan for excavating contaminated soils at the UPRR Argo Yard. The Work Plan shall contain procedures for managing and determining residual levels of soil contamination in the excavated soil. The Work Plan shall also include proposals for proper offsite disposal of excavated soils from the UPRR Argo Yard, as required.

(o) A Work Plan for placing cover over selected areas of contaminated soil located on the PSC Facility and UPRR Argo Yard.

(p) A Work Plan for conducting enhanced groundwater bioremediation in soil excavation areas on the UPRR Argo Yard by a one-time placement of electron donor material into the base of select excavations prior to placement of backfill.

(q) An Outside Area Groundwater Monitoring Plan to assess groundwater quality: (i) at the established Outside Area point of compliance; (ii) in Argo Yard; and, (iii) in areas downgradient from points of compliance. The monitoring program proposed in the Plan will track the natural attenuation of groundwater contamination over time and thereby provide a means of measuring the performance of the final remedy.

(r) A RD/RA Work Plan for pumping and treating 1,4-dioxane-contaminated groundwater at well CG-122-60 (should this contingent action be required because natural attenuation fails to reduce contaminant concentrations to established levels in a reasonable time, or to low enough concentrations in a reasonable time).

(s) An O&M Plan for the long-term care of Outside Area cleanup action components to ensure that the remedy remains protective of human health and the environment.

3. <u>**Revised EDR**</u>. Ecology shall review the draft EDR and provide comments. Within sixty (60) days of receiving Ecology's comments on the draft EDR, PSC shall submit a revised EDR that satisfactorily addresses Ecology's comments. Ecology will then approve the revised EDR as the final deliverable, approve the revised EDR with changes or conditions, or disapprove the EDR and provide additional comments to PSC. If Ecology disapproves the revised EDR, PSC shall revise the EDR to satisfactorily address Ecology's comments and submit a new revision within forty-five (45) days of receiving Ecology's latest comments. This process shall be repeated, as necessary, until a satisfactory EDR is submitted, or a determination is made under paragraph VII.10 below.

4. PSC shall implement the E-4 Area cleanup action in accordance with the approved EDR, any approved plans submitted after the EDR has been approved, and applicable requirements in WAC 173-340-400(6)(a). After completing any construction required by the EDR, PSC will prepare and submit construction documentation. A cleanup Implementation Report (as-built report) will be prepared to document construction completed for implementation of the CAP. The Implementation Report will be prepared in accordance with WAC 173-340-400(6)(b) and will include as-built drawings, specifications, and documentation for implementation of institutional controls. The Draft EDR may propose whether there will be a single Implementation Report for the entire remedy, or multiple Implementation Reports for selected remedial components.

As required by WAC 173-340-400(6)(c), a revised financial cost estimate will be included in the cleanup Implementation Report with a copy of a revised financial assurance document.

The cleanup Implementation Report (or, Reports, if multiple reports are required for preparation) shall be submitted as "Draft" by the due date(s) established in the approved EDR. Ecology shall review each draft Implementation Report and provide comments. Within forty-five (45) days of receiving Ecology's comments on an Implementation Report, PSC shall submit a revised Report that satisfactorily addresses Ecology's comments. Ecology will then approve the revised Report as the final deliverable, approve the revised Report with changes or conditions, or disapprove the Report and provide additional comments to PSC. If Ecology's disapproves a revised Report, PSC shall revise the Report to satisfactorily address Ecology's

comments and submit a new revision within thirty (30) days of receiving Ecology's latest comments.

5. <u>Vapor Intrusion Assessment Program</u>. The assessment and response to potentially unacceptable vapor intrusion impacts to indoor air in buildings due to Facility releases in the E-4 Area, shall continue to be governed by the approved Inhalation Pathway Interim Measure ("IPIM") Work Plan (August 2002), IPIM Technical Memorandum I (February 2003), and approved modifications made to the program since the approval of Technical Memorandum I until such time Ecology approves a new assessment Plan. Assessment reporting to Ecology shall also continue, as required by these documents, until Ecology approves a change.

6. <u>Vapor Intrusion Mitigation</u>. The inspection, maintenance, and monitoring of vapor intrusion mitigated buildings in the E-4 Area shall continue to be governed by the approved IPIM Long-term Monitoring Plan (January 2005), and approved modifications made to that Plan until such time that Ecology approves a new vapor intrusion inspection, maintenance, and monitoring Plan. The reporting of mitigation inspection, maintenance, and monitoring to Ecology shall also continue, as required by these documents, until Ecology approves a change.

7. <u>Hydraulic Control Interim Measure (HCIM) Performance Monitoring</u>. HCIM performance shall continue to be assessed, and this assessment reported, as required by the approved HCIM Performance Monitoring Plan and approved HCIM Implementation Report until Ecology approves a new performance-monitoring Plan pursuant to VII.3 above.

8. Investigation of potential 1,4-dioxane sources in areas near, but downgradient of the Facility shall be conducted pursuant to the approved Revised Investigation Work Plan for the Former GE Aircraft Engine Plant #2, 637 South Lucile Street. Following execution of the investigation, and per the schedule in Exhibit E, PSC shall prepare a draft report, summarizing the investigation findings.

9. Required deliverables (i.e., plans, reports) under this Order shall, unless an alternative process is approved by Ecology, be submitted, reviewed, and approved per the process described above for the EDR. The first version of the deliverable shall be submitted

"draft." Ecology shall review the draft document and provide comments. After receiving Ecology's comments on a draft document, PSC shall submit a revised document satisfactorily addressing Ecology's comments. Ecology will then approve the revised document as the final deliverable, approve the revised document with changes or conditions, or disapprove the document and provide additional comments to PSC. PSC shall submit successive revisions of required deliverables until a submittal that is satisfactory to Ecology is made, or until a determination is made by Ecology pursuant to paragraph VII.10 below.

Once approved, or modified and approved, in writing by Ecology, submittals are incorporated by reference and become integral and enforceable parts of this Order as if fully set forth herein.

10. 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.

11. **Groundwater Cleanup Level Attainment.** Six months prior to each Ecology Five-year Review, PSC shall prepare and submit a written evaluation of any groundwater contaminant concentrations exceeding cleanup levels. At this time PSC shall evaluate whether contaminant concentrations appear to be attaining their respective cleanup levels within the timeframes described in the CAP. If PSC determines that cleanup levels for any contaminants are unlikely to be attained within the timeframes established by the CAP, the report must present PSC's hypothesis for why this is so. In evaluating any candidate actions to improve remediation performance, PSC shall consider the advisability of implementing the CAP's contingent remedy.

Ecology shall review PSC's evaluation during scheduled Five-year Reviews and may provide comments. Within forty-five (45) days of receiving any Ecology comments, PSC shall submit a revised evaluation that satisfactorily addresses Ecology's comments. Ecology will then approve the revised evaluation as the final deliverable, approve it with changes or conditions, or disapprove it and provide additional comments to PSC.

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If Ecology determines that contaminant concentrations do not appear to be attaining their respective cleanup levels within a reasonable timeframe, or are posing a threat to the Duwamish Waterway, and the problem is due to poor performance by the cleanup action (natural attenuation), Ecology shall either direct PSC to implement the contingent action identified in the CAP or to perform a limited study of several remedial technologies capable of effectively addressing the contamination. The due dates for work plans and other deliverables associated with the action or study shall be set out in PSC's revised evaluation, or in Ecology's letter to PSC, requiring the follow-up action/study.

12. **WAC 173-340-720 Potability Determination**. Six months prior to each Ecology Fiveyear Review, PSC shall prepare and submit a written potability determination for groundwater within the eastern portion of the site where site contamination has led to exceedances of drinking water standards. The determination will update the 2003 RI Report's potability analysis. The determination must be based on the potability tests included in WAC 173-340-720(2)(b)(ii). If PSC concludes that some groundwater, at certain depths, appears to be potable per the tests of WAC 173-340, PSC will propose a modification, as needed, to the site groundwater cleanup levels for that area and depth of groundwater. Likewise, if Ecology determines from its review of PSC's determination that some groundwater, at certain depths, appears to be potable per definitions contained in WAC 173-340, Ecology shall initiate any needed modifications to site groundwater cleanup levels. At this time Ecology may also direct PSC to assess whether the implemented east-of-Fourth Ave. cleanup action will attain these new cleanup levels, and if so, within what timeframe.

13. <u>Effectiveness of Institutional and Other Controls.</u> Six months prior to each Ecology Five-year Review, PSC shall prepare and submit a written evaluation of the effectiveness of all institutional and other controls implemented within the eastern portion of the site to protect human health and the environment. The evaluation shall note any occurrences, known to PSC, where the controls have not been complied with or have otherwise led to exposures to unacceptable levels of site-related contamination. If PSC concludes that some controls have failed to achieve their purpose, PSC shall propose new controls or other actions to better ensure adequate protection.

14. PSC shall notify Ecology's Project Coordinator in writing of any newly-identified solid waste management unit(s) or SWMU(s), newly-discovered release(s) from known SWMU(s), and newly-discovered releases of hazardous substances at the Facility no later than twenty-one (21) days after discovery, and shall investigate and report on these releases as directed by Ecology's Project Coordinator.

15. **Groundwater Monitoring**. Site groundwater monitoring shall continue to be governed by the approved Pre-Corrective Action Monitoring Plan (PCAMP, June 2002), its Quality Assurance Project Plan (March 2002), and approved modifications made to the monitoring program since the approval of these Plans until which time that Ecology approves a new monitoring program. The quarterly reporting of groundwater monitoring results in Progress Reports to Ecology shall also continue, as required by the PCAMP, until Ecology approves a change.

16. <u>Site Progress Reports</u>. PSC shall submit written quarterly progress reports by the 15th of February, May, August, and November for the duration of this Order. Each report shall be submitted 90 days after the completion of the previous quarter's field work, to allow sufficient time for laboratory analysis and data validation..

If Ecology agrees that such a change is appropriate, progress reports required by this section may be submitted at less frequent intervals than quarterly. Progress reports shall include, at a minimum:

- A description of work performed pursuant to site corrective action during the reporting period.
- (ii) A description of corrective action-related work activities planned for the next reporting period.
- (iii) A description of any problems encountered at the site and how problems were resolved.

- (iv) A summary of all site-related significant findings, changes in personnel, and any significant contacts with all federal, state, and local governments, community, and public interest groups.
- (v) The results of any field measurements and/or laboratory analyses (as copies of the original laboratory reporting data, in tabulated format), which approved site plans or reports require to be contained in progress reports. For these results, all associated quality assurance and data validation results will also be included.
- (vi) Figures, if approved site plans or reports require that specific figures be included in progress reports.
- (vii) A detailed description of any deviation from required tasks or the approved corrective action schedule for site-related activities (not otherwise documented in project plans or reports). If the deviation is related to the schedule, the progress report shall also note if deviations from the schedule are anticipated for the next and/or future reporting periods. If so, the report shall propose a plan for recovering lost time and achieving compliance with the schedule by a certain date.

17. **<u>1,4-dioxane</u>**. An evaluation of 1,4-dioxane groundwater concentrations shall be included in the Fourth Quarter (November) 2010 progress report. In this report PSC shall evaluate whether natural attenuation is achieving effective cleanup of 1,4-dioxane within the Outside Area within the timeframe described in the CAP.

Ecology shall review the evaluation and approve it or provide comments. Within fortyfive (45) days of receiving Ecology's comments, PSC shall submit a revised evaluation that satisfactorily addresses Ecology's comments. Ecology will then approve the revised evaluation as the final deliverable, approve it with changes or conditions, or disapprove it and provide additional comments to PSC.

If Ecology concludes that monitoring data and trend projections indicate that 1,4-dioxane concentrations will not attain cleanup levels by 2015, and the problem is due to poor

performance by the cleanup action (natural attenuation), PSC will be directed to propose actions, such as implementation of the contingent remedy, to expeditiously attain cleanup levels.

VIII. TERMS AND CONDITIONS OF ORDER

1. **Public Notice.** RCW 70.105D.030(2)(a) and WAC 173-340-600(11)(c) require that, at a minimum, this Order and accompanying permit be subject to concurrent public notice. If public notice on the Order and permit are done concurrently, the notice period shall be for the longer of the two time periods required in WAC 173-340-600 and WAC 173-303-840(3)(d). 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 the Order is inadequate or improper in any respect.

2. **<u>Remedial Action Costs</u>**. PSC 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). For all costs incurred subsequent to the effective date of this Order, PSC 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 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

3. **Implementation of Remedial Action**. If Ecology determines that PSC has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to PSC, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of PSC's failure to comply with its obligations under this Order, PSC shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.2 (Remedial Action Costs), provided that PSC 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, PSC 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.

4. **Designated Project Coordinators**.

The project manager for Ecology is:

Name:	Mr. Ed Jones	
Address:		
	$3190 - 160^{\text{th}}$ Avenue S.E.	
	Bellevue, Washington 98008-5452	
Telephone:	(425) 649-4449	
FAX:	(425) 649-7098	
E-mail:	ejon461@ecy.wa.gov	

The project coordinator for PSC is:

Name:	Mr. William Beck	
Address:	PSC-Corrective Action Group	
	18000 72 nd Avenue South, Suite 217	
	Kent, Washington 98032-1035	
Telephone:	(425) 227-6149	
FAX:	(425) 227-6191	
E-mail:	wbeck@pscnow.com	

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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 PSC, 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.

5. <u>**Performance**</u>. 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.

PSC 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.

6. Access. Ecology or any Ecology authorized representative shall have the full authority to enter and freely move about all property at the Site that PSC 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 PSC'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 PSC. PSC shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by PSC where PSC will perform remedial activities or investigations pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by PSC 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.

7. <u>Sampling, Data Submittal, and Availability</u>. With respect to the implementation of this Order, PSC 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 V (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, PSC shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by PSC pursuant to implementation of this Order. PSC shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow PSC 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.6 (Access), Ecology shall notify PSC 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.

8. <u>Public Participation</u>. A Public Participation Plan is required for this Site. Per the schedule included in Exhibit E, PSC shall update the current Site public participation plan to include corrective action noticing and participation activities to be performed pursuant to this Order. These activities shall be consistent with applicable requirements in WAC 173-340-600. Ecology will review the plan to determine its appropriateness and whether it requires amendment. Ecology shall then develop a final Public Participation Plan alone or in conjunction with PSC.

Ecology shall maintain the responsibility for public participation at the Site. However, PSC shall cooperate with Ecology, and shall:

- (i) If agreed to by Ecology, develop appropriate mailing lists, prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, engineering design reports, and implementation and performance monitoring reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.
- (ii) 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 PSC 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 PSC that do not receive prior Ecology approval, PSC

shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

- (iii) 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.
- (iv) When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:
 - (a) ActivSpace Luna Park Facility 3400 Harbor Avenue SW, Unit 214 West Seattle, WA 98126
 - (b) Ecology's Northwest Regional Office 3190 160th Ave. SE Bellevue, WA 98008

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

9. <u>Retention of Records</u>. During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, PSC 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, PSC shall make all records available to Ecology and allow access for review within a reasonable time.

10. **Resolution of Disputes.**

(a) 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.2 (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

- Upon receipt of Ecology's project coordinator's written decision or the itemized billing statement, PSC has fourteen (14) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.
- (ii) 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.
- PSC may then request regional management review of the decision. This request shall be submitted in writing to the NWRO Region Hazardous
 Waste Toxics Reduction Section Manager within seven (7) days of receipt of Ecology's project coordinator's written decision.
- (iv) 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 PSC's request for review. The Section Manager's decision shall be Ecology's final decision on the disputed matter.

(b) 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.

(c) 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.

11. **Extension of Schedule**.

a) 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:

(i) The deadline that is sought to be extended;

- (ii) The length of the extension sought;
- (iii) The reason(s) for the extension; and
- (iv) Any related deadline or schedule that would be affected if the extension were granted.

(b) The burden shall be on PSC 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:

- (i) Circumstances beyond the reasonable control and despite the due diligence of PSC, 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 PSC;
- ii) Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or,
- iii) Endangerment as described in Section VI.13 (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 PSC.

(c) Ecology shall act upon any written request for extension in a timely fashion.
Ecology shall give PSC 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.12 (Amendment of Order) when a schedule extension is granted.

(d) 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:

 Delays in the issuance of a necessary permit which was applied for in a timely manner;

- (ii) Other circumstances deemed exceptional or extraordinary by Ecology; or
- (iii) Endangerment as described in Section VI.13 (Endangerment).

12. <u>Amendment of Order</u>. 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.14 (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 PSC. PSC shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and 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.10 (Resolution of Disputes).

13. <u>Endangerment</u>. 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 PSC to cease such activities for such period of time as it deems necessary to abate the danger. PSC shall immediately comply with such direction.

In the event PSC 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, PSC may cease such activities. PSC 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 PSC shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with PSC's cessation of activities, it may direct PSC to resume such activities. If Ecology concurs with or orders a work stoppage pursuant to this Section (Endangerment), PSC'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.11 (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.

14. <u>**Reservation of Rights.</u>** 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 PSC to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against PSC regarding remedial actions required by this Order, provided PSC complies with this Order.</u>

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.

15. <u>**Transfer of Interest in Property.**</u> No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by PSC 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 PSC's transfer of any interest in all or any portion of the Site, and during the effective period of this Order, PSC 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, PSC shall notify Ecology of said transfer. Upon transfer of any interest, PSC shall restrict uses and activities to those consistent with this Order and notify all transferees of the restrictions on the use of the property.

16. <u>Compliance with Applicable Laws</u>.

(a) All actions carried out by PSC 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. The permits or specific federal, state or local requirements that the agency has determined are applicable and that are known at the time of entry of this Order for the E-4 Area have been identified in the CAP (Exhibit D). Ecology has not yet determined that any permits or specific federal, state or local requirements are applicable for addressing the W-4 Area.

(b) Pursuant to RCW 70.105D.090(1), PSC 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, PSC shall comply with the substantive requirements of such permits or approvals. The exempt permits or approvals and the applicable substantive requirements of those permits or approvals, as they are known at the time of entry of this Order for the E-4 Area, have been identified in the CAP (Exhibit D).

PSC 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 PSC 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 PSC shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, PSC 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 PSC and on how PSC must meet those requirements. Ecology shall inform PSC in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. PSC shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

(c) 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 PSC 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.

(d) Some requirements herein are based on the applicable requirements of Chapter70.105 RCW and Chapter 173-303 WAC.

17. Land Use Restrictions. PSC shall record a Restrictive Covenant with the office of the King County Auditor within ten (10) days of the completion of the remedial action for Site properties owned by PSC. PSC shall record a Restrictive Covenant on the Argo Yard Property with the office of the King County Auditor within ten (10) days of obtaining the required signature(s) from the owner(s) of Argo Yard. The Restrictive Covenant shall restrict future uses of these properties within the Site. PSC shall provide Ecology with a copy of the recorded Restrictive Covenants within thirty (30) days of the recording date. PSC shall make reasonable efforts to obtain the signature(s) required for the Restrictive Covenant on Argo Yard. If, after thirty (30) days from initiating its efforts PSC is unsuccessful through reasonable efforts, Ecology may take such actions as may be appropriate and available under applicable law.

18. Financial Assurances.

(a) Financial assurance for corrective action is required by WAC 173-303-64620.
 Ecology's Financial Assurance Officer shall determine when PSC's actions and submissions meet the requirements of WAC 173-303-64620.

(b) PSC must submit the original executed or otherwise finalized financial assurance instruments or documents to Ecology's Financial Assurance Officer; facsimiles or photocopies are not acceptable to meet this requirement. In addition, PSC must also submit copies of financial assurance instruments or documents to Ecology's Project Coordinator.

(c) Unless otherwise specified, the definitions and requirements for allowable financial assurance mechanisms set forth in the current financial assurance rules covering closure and post-closure (40 CFR 264.141, 40 CFR 264.142, 40 CFR 264.143, 40 CFR 264.145, 40 CFR 264.145, 40 CFR 264.148, 40 CFR 264.151, and WAC 173-303-620) will be the definitions and requirements for allowable financial assurance for corrective action under this Order. It is the intention of the Parties that these definitions and requirements will apply to this corrective action, and the term "corrective action" is hereby substituted for the terms "closure," "post closure," "post-closure," or "postclosure" in the above listed regulations as needed to produce this result.

(d) In the absence of final federal regulations governing financial assurance for corrective action, Ecology's Financial Assurance Officer will use the following resources as guidance:

- (i) The Financial Assurance for Corrective Action Proposed Rule, 51 FR 37853 (October 24, 1986);
- (ii) The financial assurance provisions of Corrective Action for Releases from Solid Waste Management Units Advance Notice of Proposed Rulemaking, 61 FR 19432 (May 1, 1996);
- (iii) The Interim Guidance on Financial Responsibility for Facilities Subject to RCRA Corrective Action (U.S. EPA, September 30, 2003); and/or
- (iv) Any other guidance applicable to financial assurance and corrective action that may be available at the time.

The financial assurance provisions of the Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities, 55 FR 30798 (July 27, 1990), may be used as secondary guidance at the discretion of Ecology. Unless otherwise specified herein, where the language of this Order conflicts with these rules, proposed rules, notices, and guidance documents, the language of this Order shall prevail.

(e) Within forty-five (45) days from the effective date of this Order, PSC shall submit to Ecology for review and approval a written cost estimate to cover cleanup activities within the Site, including the E-4 Area as described in the Cleanup Action Plan (Exhibit D).

If Ecology rejects PSC's cost estimate as submitted, Ecology shall provide to PSC a revised cost estimate amount that will be the approved cost estimate. Ecology will, if requested by PSC in writing, provide a written explanation of the variance between PSC's proposed cost estimate and Ecology's approved cost estimate. Within thirty (30) days after Ecology's final approval of PSC's cost estimate amount or PSC's receipt of Ecology's approved cost estimate amount, PSC shall establish and maintain continuous coverage of financial assurance in the amount of the approved cost estimate and submit the applicable financial assurance documentation. If Ecology does not accept, reject, or revise PSC's cost estimate within sixty (60) days after submittal, PSC's cost estimate will be deemed approved for purposes of this paragraph. Ecology revises the right to review and revise PSC's cost estimate after the 60-day review period. If Ecology revises the PSC's cost estimate after the 60-day review period, PSC will have thirty (30) days after the revision to provide an updated financial assurance instrument.

(f) If PSC is required to submit an additional work plan(s) under this Order, or to conduct activities related to corrective action not previously part of the original cost estimate, the process outlined in paragraph 5 shall apply in the submission process of an additional work plan(s).

(g) If PSC believes that the estimated cost of work to complete activities under this Order has diminished below the amount covered by existing financial assurance provided under this Order, PSC may submit a written proposal to Ecology to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining work to be performed. The written proposal shall specify, at a minimum, the cost the remaining work to be performed and the basis upon which such cost was calculated. If Ecology decides to accept such a proposal, Ecology shall notify PSC of its decision in writing. After receiving Ecology's written decision, PSC may reduce the amount of financial assurance only in accordance with and to the extent permitted by such written decision. Within thirty (30) days after receipt of Ecology's written decision, PSC shall submit the applicable financial assurance documentation. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized under this paragraph.

(h) At the time of Order issuance, PSC has established corrective action financial assurance pursuant to requirements in its Permit. This assurance shall be maintained in its present form and amount until which time as:

- Ecology either approves PSC's cost estimate amount for the Site, or PSC receives Ecology's approved cost estimate amount;
- PSC establishes financial assurance in the amount of the approved cost estimate; and
- (iii) PSC submits the applicable financial assurance documentation.

(i) All cost estimates must be based on the costs to the owner or operator of hiring a third party to complete the work. A third party is neither a parent nor a subsidiary of PSC. On a case-by-case basis, Ecology may also determine that a company which shares a common higher-tier corporate parent or subsidiary might not qualify as a third party. A cost estimate may not incorporate any salvage value that may be realized with the sale of wastes, facility structures or equipment, land, or other assets associated with the facility. PSC may also not incorporate a zero cost for wastes that might have economic value.

(j) PSC shall annually adjust all cost estimates for inflation. Adjustments for inflation shall be calculated in accordance with the procedure outlined in 40 CFR 264.143(b).

(k) Acceptable financial assurance mechanisms are trust funds, surety bonds, letters of credit, insurance, the financial test, and the corporate guarantee. Ecology may allow other financial assurance mechanisms if they are consistent with the laws of Washington and if PSC

demonstrates to the satisfaction of Ecology that those mechanisms provide adequate financial assurance.

(1) If PSC is using the financial test or corporate guarantee to meet its financial assurance obligation, the annual inflationary adjustment shall occur within ninety (90) days after the close of PSC's fiscal year. If PSC is using any mechanism other than the financial test or corporate guarantee, this adjustment shall occur each year within thirty (30) days after the anniversary of the effective date of this Order.

(m) If PSC seeks to establish financial assurance by using a surety bond for payment or a letter of credit, PSC shall at the same time establish and thereafter maintain a standby trust fund acceptable to Ecology into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by Ecology, pursuant to the terms of this Order.

(n) PSC shall notify Ecology's Project Coordinator and Financial Assurance Officer by certified mail of the commencement of a voluntary or involuntary bankruptcy proceeding, naming PSC as debtor, within ten (10) days after commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if it is named as debtor as required under the terms of the corporate guarantee.

(o) Once PSC has established financial assurance with an acceptable mechanism as described above, PSC will be deemed to be without the required financial assurance:

- (i) In the event of bankruptcy of the trustee or issuing institution; or
- (ii) If the authority of the trustee institution to act as trustee has been suspended or revoked; or
- (iii) If the authority of the institution issuing the surety bond, letter or credit, or insurance policy has been suspended or revoked.

In the event of bankruptcy of the trustee or a suspension or revocation of the authority of the trustee institution to act as a trustee, PSC must establish a replacement financial assurance

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mechanism by any means specified in WAC 173-303-620 or other financial instrument as approved by Ecology within sixty (60) days after such an event.

Ecology's Financial Assurance Officer is:

Kimberly Goetz Department of Ecology Hazardous Waste and Toxics Reduction Program P.O. Box 47600 Olympia, Washington 98504-7600 Telephone: (360) 407-6754 FAX: (360) 407-6715

E-mail: kgoe461@ecy.wa.gov

19. **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, PSC 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.

20. **Indemnification**. PSC 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 PSC, its officers, employees, agents, or contractors in entering into and implementing this Order. However, PSC 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 PSC's receipt of written notification from Ecology that PSC has completed the remedial activity required by this Order, as amended by any modifications, and that PSC 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:

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

2. 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.

3. In the event PSC refuses, without sufficient cause, to comply with any term of this Order, PSC will be liable for:

(a) 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

(b) Civil penalties of up to twenty-five thousand dollars (\$25,000) per day for each day it refuses to comply.

4. 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:

[SIGNATURES ON FOLLOWING PAGE]

PSC ENVIRONMENTAL, LLC

Paul Lewis PSC - Vice President, Environmental Services Division Telephone: (713) 985-5365

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

Julie Sellick Section Manager Hazardous Waste Toxics Reduction Program Northwest Regional Office Telephone: (425) 649-7053 Agreed Order No. DE 7347 Page 39 of 45

EXHIBIT A

PSC Georgetown Facility

EXHIBIT B

Site-related Environmental Investigation Reports

The PSC Georgetown site has been investigated as part of the RCRA Corrective Action process for over 20 years. The list of documents identified by name below is only a small subset of the investigation reports, plans, and letters contained in Ecology's and the US Environmental Protection Agency's site files. The following documents are all significant and have shaped the preparation of the E-4 Cleanup Action Plan.

Report/Plan	Date	comments
RI Technical Memorandum 6 (VI)	April 20, 2001	Summary of the 2000/2001 supplemental off-site characterization.
Pre-Corrective Action Monitoring Plan (PCAMP) and associated Quality Assurance Project Plan (QAPP)	June 2002	Establishes the site's groundwater monitoring program. The Plan's wells, sampling frequency, and list of analytes have been modified several times over the past nine years.
Revised Inhalation Pathway Interim Measures (IPIM) Work Plan	August 12, 2002	Work plan for assessing vapor intrusion in the area downgradient of the PSC property. In this area indoor air was potentially threatened by shallow groundwater contaminated with VOCs.
Preliminary Design for the Hydraulic Control Interim Measure (HCIM)	November 27, 2002	The 30-60% Design document for the barrier wall system.
Revised IPIM Technical Memorandum 1	February 2003	Report on the development of "GIVFs," the evaluation of paired groundwater and indoor air data, and the evaluation of current VOC levels in shallow groundwater. This memorandum identified buildings between the PSC facility and 1 st Ave. S. where shallow groundwater VOC concentrations could pose a vapor intrusion threat to indoor air quality.
Hydraulic Control Interim Measure (HCIM) Construction Work Plan	April 9, 2003	The final Remedial Design and Remedial Action document for the barrier wall system. Two volumes.
Final IPIM Depressurization System Design Document	May 2003	Work plan proposing how buildings potentially threatened by vapor intrusion would typically be mitigated. The proposed Design was not building or location specific.
Final Comprehensive Remedial Investigation (RI) Report	November 14, 2003	There are seven volumes in Part 1 and one volume in Part 2 of the Report.

Report/Plan	Date	comments
		The Report was not approved by Ecology. To address Ecology's comments on the Report PSC submitted the four RI addenda documents listed below.
HCIM Performance Monitoring Plan	December 11, 2003	The monitoring plan for the barrier wall system.
HCIM Implementation Report	June 28, 2004	The description of the <i>as-built</i> barrier wall system.
Addendum I to the Final Comprehensive RI Report	July 15, 2004	Revised Chapter 7 of the 2003 RI Report
Addendum II to the Final Comprehensive RI Report	August 20, 2004	Revised Chapter 8 and 10 of the RI Report
Barrier Wall (HCIM) Evaluation Report	August 31, 2004	First evaluation of the barrier wall system's performance.
Addendum III to the Final Comprehensive RI Report	September 24, 2004	Revised Chapter 9 of the 2003 RI Report
Addendum IV to the Final Comprehensive RI Report	January 4, 2005	Revised Chapters 12 and 13 of the RI Report
Verification of Depressurization System Effectiveness and Long- term Operations and maintenance Plan for IPIMs	January 2005	Work plan and schedule for inspecting installed mitigation systems and verifying continued performance.
Draft "Site Wide" ¹ Feasibility Study (FS) Report	September 2005	This Report focused on the E-4 Area. The Report was not approved by Ecology. To address Ecology's comments on the Report PSC submitted the five technical memoranda listed below.
Revised FS Technical Memorandum (Tech Memo) #1	June 2006	This memorandum revised portions of the E-4 FS Report dealing with predictive modeling, setting cleanup and remediation levels, and establishing points of compliance.
FS Tech Memo #2	June 2006	This memorandum revised portions of the E-4 FS Report dealing with remediation areas.
FS Tech Memo #3	May 2006	This memorandum revised portions of the E-4 FS Report dealing with vapor intrusion assessment and mitigation.
Revised FS Tech Memo #4	January 2007	This memorandum revised portions of the E-4 FS Report dealing with the screening of remedial technologies.

¹ Meaning: east-of-4th Ave. S.

Report/Plan	Date	comments
FS Tech Memo #5	April 2007	This memorandum revised portions of the FS Report dealing with the evaluation of alternative cleanup actions for the E-4 area.
Draft Cleanup Action Plan (CAP)	February 2008	This is the first version of the draft, prepared by PSC.
Revised Characterization and Preferred Cleanup Approach for the [Union Pacific Railroad] Argo Yard Property	September 2008	Final RI/FS-type report for the contamination detected during investigations (2004-2007) of Union Pacific's Argo Yard. The portion of Argo Yard included in the investigation is immediately east and north of the PSC property.
PSC's <i>per-building</i> Inhalation Pathway Interim Measures (IPIM) documents. These include "Tier 3" (indoor air) investigation Sampling and Analysis Plans, Tier 3 Reports, "Tier 4" (mitigation) <i>as-built</i> reports, and Tier 4 post- mitigation sampling reports.	2003 through 2009	
PSC's annual barrier wall system performance reports	2006 through 2009	
PSC's quarterly progress reports	1991 through 2009	Contain the latest groundwater sampling information. Four of these reports are produced per year.
Project-specific, smaller, RI- related work plans and reports	1988 through 2009	
Ecology comment and approval letters, associated with PSC's submitted plans and reports	2002 through 2009	

NOTE: Although PSC's remedial investigation assessed contamination between the RCRA facility property and areas west to the Duwamish River (as well as contamination immediately north and east on Union Pacific property), other sources of contamination have also been identified in the W-4 area. Presently, three PLPs are conducting remedial investigations in this area. Their site documents are not included here, but are available at Ecology's Northwest Regional Office.

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EXHIBIT C

Site Diagram

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EXHIBIT D

Cleanup Action Plan

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EXHIBIT E

Schedule of Deliverables

Due dates for selected deliverables in Sections VII and VIII of the Order.

Item #	Deliverable	Due Date
VIII.18	Cost estimate to cover cleanup activities within the	30 days from the effective
	eastern part of the site	date of the Agreed Order
VIII.18	Establishment of financial assurance coverage in	Within thirty (30) days after
	the amount of Ecology's approved cost estimate,	Ecology's final approval of
	and submission of applicable financial assurance	PSC's cost estimate amount
	documentation	or PSC's receipt of Ecology's
		approved cost estimate
		amount.
VII.2	Draft Engineering Design Report (EDR)	150 days from the effective
		date of the Agreed Order
VII.3	Revised Engineering Design Report (EDR)	60 days from receipt of
		Ecology's comments
VIII.8	Revised Public Participation Plan (PPP)	60 days from receipt of
		Ecology's comments on the
		Draft EDR.
VII.8	Draft report on the investigation at 637 S. Lucile St.	Within 60 days of receiving
		validated investigation data
VII.17	Evaluation of 1,4-dioxane concentrations in	4 th Quarter (November) 2010
	groundwater and the effectiveness of natural	Progress Report
	attenuation	