



City of Seattle

LOWER DUWAMISH WATERWAY SUPERFUND SITE SLIP 4 EARLY ACTION AREA

Institutional Controls Implementation Report

Submitted to

U.S. Environmental Protection Agency, Region 10

1200 Sixth Avenue

Seattle, WA 98101

Submitted by

City of Seattle

Prepared by



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November 27, 2013

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ACRONYMS AND ABBREVIATIONS

ASAOC	Administrative Settlement Agreement and Order on Consent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
City	City of Seattle
EAA	Early Action Area
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ISIS	Integrated Site Information System
LDW	Lower Duwamish Waterway
MTCA	Model Toxics Control Act
RNA	Regulated Navigation Area
UECA	Uniform Environmental Covenants Act
USCG	U.S. Coast Guard

REPORT CERTIFICATION

The following certifications are provided pursuant to the Administrative Settlement Agreement and Order on Consent for Removal Action, Appendix A, Statement of Work, Task 4 - Removal Action Completion Report and Institutional Control Implementation Report.

CITY OF SEATTLE – PROJECT SPECIFIER CERTIFICATION

I, David Schuchardt, City of Seattle Project Specifier for the removal action work conducted at the Slip 4 Early Action Area, Lower Duwamish Waterway Superfund Site, hereby provide the following certification:

Under penalty of perjury under the laws of the United States, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



David R. Schuchardt, P.E.
Project Specifier
City of Seattle

11/20/13

Date

1 INTRODUCTION

This report documents the implementation of the institutional controls for the Slip 4 Early Action Area (EAA), as required by the Slip 4 Administrative Settlement Agreement and Order on Consent for Removal Action (ASAOC; USEPA 2006b).

1.1 BACKGROUND

The Lower Duwamish Waterway (LDW) was added to U.S. Environmental Protection Agency's (EPA's) National Priorities List (Superfund) in September 2001 because of hazardous substance contamination in sediments. Slip 4 was subsequently identified by EPA and the Washington State Department of Ecology (Ecology) as an Early Action Area (EAA) within the LDW, based primarily on elevated concentrations of polychlorinated biphenyls. The Slip 4 EAA cleanup was conducted pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), under EPA's non-time-critical removal action authority. In May 2006, EPA issued an Action Memorandum (USEPA 2006a) containing its removal action decision for the Slip 4 EAA.

The selected removal action required dredging, excavation, and offsite disposal of contaminated sediment, shoreline soil, and creosote-treated timber piles and other debris, and placement of engineered sediment and slope caps to isolate residual sediment contamination within the EAA. The removal action also included demolition and removal or recycling of a portion of an aging concrete pier and supporting piling on the northwest bank of the slip, and creation of two intertidal beach areas and other shallow-water areas to improve habitat conditions in the slip. Construction activities were initiated in October 2011, and were completed in February 2012. A Removal Action Completion Report (Integral 2012) documenting the cleanup activities was completed and approved by EPA in July 2012.

1.2 PURPOSE

The Action Memorandum for the Slip 4 EAA includes institutional controls as part of the overall remedy for the Slip 4 EAA (USEPA 2006a). The term "institutional controls" refers to non-engineering measures intended to ensure the protectiveness of the remedy and to affect human activities and ecological receptors by preventing or reducing the potential for exposure to contaminated media (USEPA 2000). The purposes of the institutional controls implemented for this project are to support and maintain the integrity and containment function of the capped areas in perpetuity. As defined for this project, the term "capped areas" includes engineered slope caps, sediment caps, and soil covers as those terms are used in the action memorandum and Removal Action Completion Report for the Slip 4 EAA. The Slip 4 EAA boundaries and areas subject to institutional controls are shown in Figure 1.

The specific objectives of the institutional controls for the capped areas in Slip 4 are defined in the Action Memorandum (USEPA 2006a) and in the Institutional Controls Implementation Plan (Appendix J, Design Analysis Report; Integral 2010). These objectives are to:

- Prevent any uncontrolled excavation or construction that may compromise the integrity of the sediment cap, slope caps, or engineered soil covers
- Prevent any current or future land and waterway uses that could compromise the integrity of the sediment cap, slope caps, or engineered soil covers
- Require notification to the state and EPA prior to development actions at the site that may damage the sediment cap, slope caps, or engineered soil covers
- Ensure that these restrictions will run with the land.

Institutional controls will not preclude the Muckleshoot Tribe from exercising treaty-protected fishing activities in the removal action area in the future.

Individual institutional controls are discussed in Section 2, and supporting documentation is provided in Appendices A through G.

1.3 MONITORING

Monitoring of the performance of the institutional controls is included in the Long-Term Monitoring and Reporting Plan for the Slip 4 EAA (Integral 2013). Each monitoring report will include an update on the performance of the institutional controls, an assessment of their effectiveness, and recommendations for any changes in controls or monitoring of controls. Each report will also summarize any event that required notification to EPA (e.g., failure or violation of an institutional control), a description of the entity responsible for addressing the problem, and the actions that were taken to address the failure or violation.

2 SLIP 4 EAA INSTITUTIONAL CONTROLS

The institutional controls implemented at the Slip 4 EAA are summarized in Table 1 and are presented in detail below.

2.1 GOVERNMENTAL CONTROLS

Governmental controls impose restrictions on land or resource use, with the authority of a government entity.

2.1.1 Regulated Navigation Area

A regulated navigation area (RNA) is a water area within a defined boundary for which regulations for vessels navigating within the area have been established under the Code of Federal Regulations (CFR) 22 Part 165. The City of Seattle (City) applied for an EPA-sponsored RNA demarcation for the sediment cap in Slip 4. The purpose of the RNA is to protect the integrity of the Slip 4 sediment cap by prohibiting activities that will disturb the cap surface, such as anchoring, grounding, or spudding. It will not affect vessel transit or navigation of the area.

The RNA was approved by the Seattle City Council on July 8, 2013,¹ as part of Ordinance 124219, which was signed by the Mayor of Seattle on July 16, 2013, and filed with the City Clerk on July 17, 2013. Ordinance 124219, which includes additional Slip 4 EAA institutional controls discussed in this report, is provided in Appendix A.

The RNA is currently awaiting final U.S. Coast Guard (USCG) district command review and signature. Following USCG approval, the draft Proposed Rule regarding the RNA will be published in the Federal Register (Klinger 2013, pers. communication). Following public comment periods (typically 60 days) on both the draft Proposed Rule and later the Final Rule published in the Federal Register, the Final Rule regarding the RNA will be published in the CFR (Klinger 2013, pers. communication). The Final Rule published in the CFR will address comments received during the public comment periods, as appropriate. The RNA and its regulations will also be described in the Notice to Mariners and in updates of the Coast Pilot under the specific CFR reference number (e.g., CFR-165-####). The RNA will also be indicated in magenta-colored hashing on navigational charts of Slip 4, and will include the CFR reference number. Documentation of the publication of the Final Rule regarding the Slip 4 EAA RNA will be provided in an addendum to this report when it becomes available.

¹ Council Bill No: 117804 (<http://clerk.seattle.gov/~scripts/nph-brs.exe?d=ORDF&s1=117804.cbn.&Sect6=HITOFF&l=20&p=1&u=/-public/cbor1.htm&r=1&f=G>)

2.2 PROPRIETARY CONTROLS

Proprietary controls for the Slip 4 EAA include property purchases and restrictive environmental covenants.

2.2.1 Property Purchases

The Slip 4 EAA was previously comprised of three separately owned parcels:

1. The bed of the Slip 4 EAA, currently owned by the City—the City purchased the inner slip from Crowley in 2007 to allow control of the use of the inner slip as a fee owner. Documentation of this purchase is provided in Appendix B. The City directly manages land use, conducts and observes monitoring activities, curtails trespassing, and determines whether any additional institutional controls are appropriate for specific situations that may arise.
2. A small parcel on south shoreline of the Slip 4 EAA, previously owned by First South Properties, LLC (First South)²—the City acquired a 0.23-acre area of First South land that included a small sliver of the capped area on the east side of the slip. This was accomplished through a lot line adjustment, which put that area under the City’s control and negated the need for any institutional controls to be implemented by First South. The lot line adjustment is included in Ordinance 124219, approved by the Seattle City Council on July 8, 2013 (Appendix A), and is reflected in the City’s Environmental Covenant (discussed below), which was filed with the County Recorder on September 24, 2013 (Appendix C). First South is currently working to complete the filing of the lot line adjustment with the County Recorder. Documentation of this filing, when available, will be provided in an addendum to this report.
3. A small portion of the Slip 4 cap that extends onto property owned by the Boeing Company (Boeing)—the City and Boeing have agreed that protection of this portion of the Slip 4 cap will be provided through an environmental covenant, and institutional controls to be implemented as part of Boeing’s Plant 2 site.

2.2.2 Environmental Covenants

On September 18, 2013, the City executed a Model Toxics Control Act (MTCA) environmental covenant in accordance with the Uniform Environmental Covenants Act (UECA).

The purpose of the UECA is to ensure that the remedies and institutional controls established for a site are legally valid and enforceable and will be effective over the life of the cleanup (RCW 64.70.005). The Environmental Covenant under the UECA is intended to restrict the

² First South Properties, LLC is referred to as 1st South Properties, LLC in Appendix A. First South Properties LLC is the name listed in King County Tax Assessor records.

property to uses consistent with the Slip 4 EAA remedy and to attach those restrictions to the property in perpetuity (or until terminated, pursuant to the UECA). The Environmental Covenant will run with the land through transfers of property rights. Under the covenant, EPA and Ecology have full enforcement rights for City-owned property at the Slip 4 EAA (Appendix C). The covenant also provides that the City shall notify Ecology and EPA of any proposed changes in ownership interests in the subject property.

The City's environmental covenant includes the former First South area acquired as described above. Pursuant to RCW 64.70.040(5), EPA consulted with the City of Seattle Department of Planning and Development on the conditions and restrictions to be imposed on the excavation and removal of sediments, capping of other sediments and soils, and placement of institutional controls to limit potential human and/or ecological exposure to remaining contamination, and monitoring to verify the effectiveness of the Non-Time Critical Removal Action for the Slip 4 UECA (Vasquez 2013, pers. comm.). EPA signed the covenant on September 19, 2013.

As stated in the environmental covenant:

The City makes the following covenants as to limitations, restrictions, and uses to which the Property may be put, and specifies that such covenants shall run with the land, as provided by law, shall be perpetual, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"):

1. Any activity on the Property that may result in the release or exposure to the environment of the contaminated sediment or soil that was contained as part of the Removal Action, or create a new exposure pathway, is prohibited, unless prior written approval from EPA is obtained authorizing the specific activity. Prohibited activities include, but are not limited to: altering, modifying or removing the Capped Areas (as defined below); piling installation; dredging, drilling, digging, excavation, placement of any objects, fill, or use of any equipment in the Capped Areas which deforms or stresses the surface beyond its load bearing capability; piercing the surface with a rod, spike or similar item; bulldozing or earthwork; anchoring, grounding or spudding, provided that, some controlled activities that may temporarily disturb Capped Areas are allowed so long as the proposals for such work that may temporarily disturb the Capped Areas are accompanied by detailed plans describing (a) the proposed activity, (b) actions to limit contaminant releases during the activity, (c) actions to restore the integrity of the Capped Areas, and (d) plans for monitoring and reporting. Such proposed activities are subject to written approval by EPA. Examples of such activities that may be allowed include, but are not limited to: excavation for repair or replacement of existing outfalls; excavation for installation of new outfalls or

other utilities; anchoring of construction equipment; cap maintenance (including placement of additional cap material and/or excavation of existing cap materials or underlying soils or sediments). The term 'Capped Areas' in these covenants includes engineered slope caps, sediment caps and soil covers as those terms are used in the Action Memorandum and Removal Action Completion Report for the Slip 4 EAA.

2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Removal Action, or create a new exposure pathway, is prohibited without prior written approval from EPA.
3. The Owner shall properly maintain the Capped Areas of the EAA Removal Action.

In addition to restrictions to protect the capped areas, the City's covenant includes the following provisions:

1. The Owner shall prohibit any uses or activities that are inconsistent with any of the restrictions established in this Covenant, unless such use or activity is approved by EPA in advance in writing.
2. The Owner must notify all Property purchasers, lessees and easement holders of the restrictions set forth in this Covenant, and make compliance with this Covenant a condition of any conveyance of title, easement, lease or other interest in the Property. Any deed, lease, or other conveyance of any interest in the Property shall make adequate provisions for any continued monitoring or maintenance of the Capped Areas on the Property.
3. The Owner shall use best efforts to provide sixty (60) days, but at a minimum shall provide thirty (30) days, advance written notice to EPA of the Owner's intent to convey or transfer any interest in the Property. Such notice shall include the name and address of the proposed transferee.
4. The Owner shall allow authorized representatives of EPA, Ecology and the Holder the right to enter the Property at reasonable times to (1) evaluate compliance with this Covenant and/or the CERCLA response action, (2) inspect, perform oversight of activities, and take samples, (3) inspect any CERCLA or Model Toxics Control Act response actions conducted at the Property, or (4) inspect and perform maintenance on Capped Areas located on the Property. To the extent there is any conflict between the access rights as stated above and those specified in the Settlement Agreement, the terms of the Settlement Agreement shall control.
5. Local permitting requirements augment the existing federal and state permitting requirements that impose conditions on any construction at Slip 4.

The Owner must ensure that all required local permits are obtained prior to any construction, filling and grading, or installation/changes to stormwater configuration and discharges, installation of private utilities or other development activities that may disturb the Capped Areas. Any easements granted by the property Owner must require measures to protect the integrity of the Capped Areas. These permits and easements will require appropriate elements such as (but not limited to) proper handling, characterization and disposal of contaminated sediments or soil and restoration of the Capped Areas if impacted.

The City's environmental covenant was recorded with the County Recorder according to state statute on September 24, 2013; documentation is provided in Appendix C. The covenant was entered into the Environmental Covenants Registry within Ecology's integrated site information system (ISIS) on October 11, 2013 (Musa 2013, pers. comm.). Documentation of this recording is provided in Appendix C.

The City expects that a similar MTCA environmental covenant will also be executed and recorded for the Boeing parcel associated with the Slip 4 EAA. As of August 19, 2013, Boeing's environmental covenant had not yet been finalized and filed (Hupp 2013, pers. comm.). A copy of Boeing's recorded Environmental Covenant will be provided in an addendum to this report when it becomes available.

2.2.3 Agency Enforcement Tools and Administrative Orders

EPA and Ecology have statutory enforcement authority under CERCLA and MTCA, respectively, to protect human health and the environment that can be used in lieu of, or in addition to, other institutional controls. Such authority can be exercised to access, inspect, monitor, and sample to ensure protection of the removal action, or for any other authorized purpose.

The Slip 4 removal action was conducted under an ASAOC (Appendix D), which requires long-term monitoring to be implemented by the City (Integral 2013). EPA will review the effectiveness of the remedy, including monitoring results and institutional control implementation, no less frequently than every 5 years, as required by CERCLA.

2.2.4 Informational Devices

2.2.4.1 Deed Notices

The Slip 4 EAA removal action completion report (Integral 2012, Section 5.1.4.1) stated that the City would file and record a Deed Notice that would describe the restrictions on the property to protect the cap and would remain in effect until EPA or Ecology states in writing that a change in site condition(s) warrants its removal. However, EPA has agreed that it is not necessary to

complete the Deed Notice, because the Deed Notice restrictions and cap protections are adequately addressed in the environmental covenant (Keeley 2013, pers. comm.).

2.2.4.2 State Registry

Ecology compiles contaminated site information in three ways: 1) the Hazardous Sites list, which provides the current status of cleanup plans; 2) the Site Registry, which is a semi-monthly publication that provides notices of enforcement activity, releases, public meetings, public comment periods, hearings, and other information related to the Washington State cleanups; and 3) the ISIS database, which contains information on state cleanup sites as well as a registry of environmental covenants. The state registries are an easily accessible resource for current information about the Slip 4 EAA. Documentation of the Slip 4 EAA on the Hazardous Sites list and in the ISIS database is provided in Appendix E.

2.2.4.3 Slip 4 EAA Sediment Cap Notification Signs

The installation of signs at the mouth of Slip 4 and near the cap boundaries notifying vessel operators of the presence of the sediment cap and noting the prohibition against its disturbance was completed on August 19, 2013 (Appendix F). The last four digits of the CFR number will be installed on the signs once those numbers have been established (see Section 2.1.1). Documentation of the completed CFR number on the signs will be provided after installation.

2.2.4.4 LDW Health Advisories

Fish consumption advisories are an institutional control subject to informed voluntary compliance by the public. There is currently a Washington State Department of Health public fish advisory recommending no consumption of resident fish (e.g., shiner perch, rockfish, English sole), shellfish or clams from the LDW because of chemical contamination. Non-resident fish such as salmon are not included in the advisory.

The advisory referenced currently applies to the Slip 4 EAA, and is anticipated to remain in effect until completion of the LDW remedial action (see documentation provided in Appendix G). Monitoring and maintenance of this health advisory is outside the scope of the Slip 4 EAA removal action and is being addressed within the decision-making process for the overall LDW Superfund site.

3 REFERENCES

Hupp, M. 2013. Personal communication (telephone conversation with S. FitzGerald, Integral Consulting Inc., Seattle, WA, on August 19, 2013, regarding the status of Boeing's Restrictive Covenant for their portion of the Slip 4 EAA capped area). Perkins Coie LLP, Seattle, WA.

Integral. 2010. Lower Duwamish Waterway Slip 4 Early Action Area: 100% Design Submittal, Design Analysis Report. Prepared for City of Seattle and King County. Integral Consulting Inc., Seattle, WA.

Integral. 2012. Lower Duwamish Waterway Slip 4 Early Action Area: Removal Action Completion Report. Prepared for City of Seattle. Integral Consulting Inc., Seattle, WA. July 26.

Integral. 2013. Lower Duwamish Waterway Slip 4 Early Action Area: Long-Term Monitoring and Reporting Plan. Prepared for City of Seattle. Integral Consulting Inc., Seattle, WA. March 21.

Keeley, K. 2013. Personal communication (email to Allison Crowley, Seattle City Light, Seattle, WA, on August 27, 2013 regarding filing of a separate Deed Notice document for the Slip 4 EAA). U.S. Environmental Protection Agency, Region 10, Seattle, WA.

Klinger, N. 2013. Personal communication (telephone conversation with S. FitzGerald, Integral Consulting Inc., Seattle, WA, on June 27, 2013, regarding the process for publishing an RNA in the CFR). U.S. Coast Guard, Waterways Management Division, Seattle, WA.

Musa, D. 2013. Personal communication (email to S. FitzGerald, Integral Consulting Inc., Seattle, WA, on October 10, 2013 regarding entry of the Slip 4 environmental covenant in the ISIS Environmental Covenants Registry database). Washington State Department of Ecology, Northwest Regional Office Toxics Cleanup Program, Bellevue, WA.

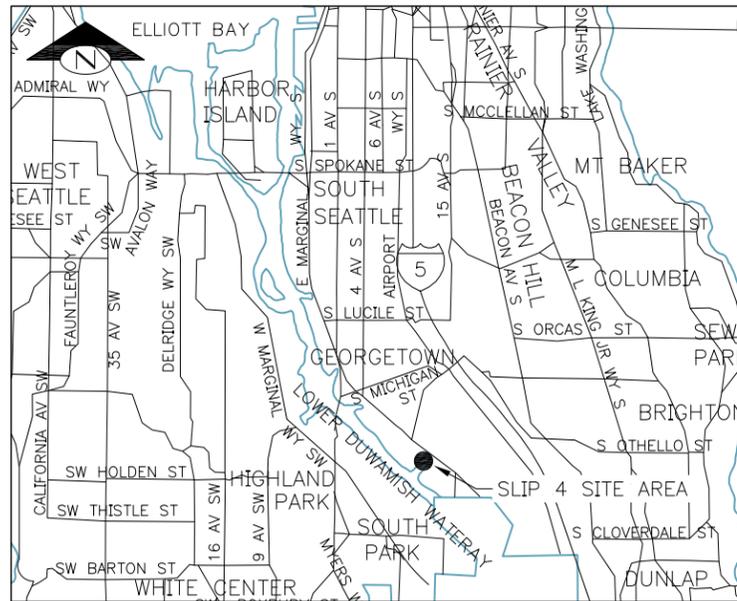
USEPA. 2000. Institutional controls: A site manager's guide to identifying, evaluating and selecting institutional controls at Superfund and RCRA Corrective Action Cleanups.

USEPA. 2006a. Action Memorandum for a Non-Time-Critical Removal Action at the Slip 4 Early Action Area of the Lower Duwamish Waterway Superfund Site, Seattle, Washington. U.S. Environmental Protection Agency, Region 10, Seattle, WA. May 3.

USEPA. 2006b. Administrative Settlement Agreement and Order on Consent for Removal Action, Lower Duwamish Waterway Superfund, Slip 4 Early Action Area, Seattle, Washington. U.S. Environmental Protection Agency, Region 10, Seattle, WA. September 28.

Vasquez, C. 2013. Personal communication (email to K. Keeley, U.S. Environmental Protection Agency, Region 10, Seattle, WA, on October 10, 2012, regarding City of Seattle Department of

Planning and Development consultation on Slip 4 EAA Environmental Covenant). City of Seattle Department of Planning and Development, Seattle, WA.



VICINITY MAP

**Crowley Marine Services, Inc.
Parcel #2136200641**

**City of Seattle
Parcel #2924049110**

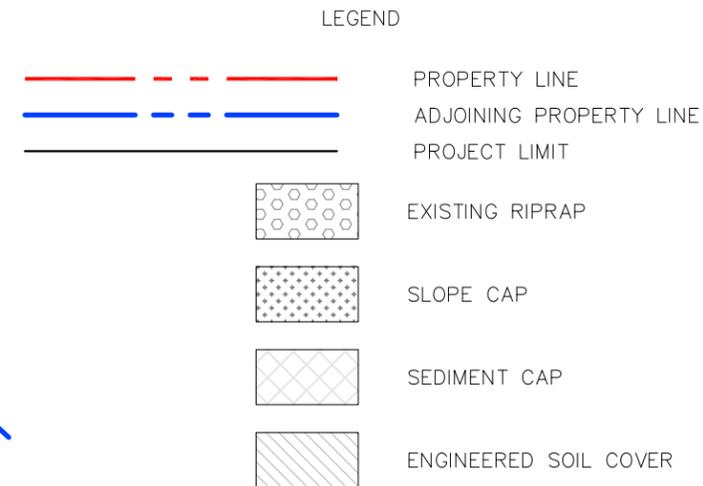
**King County
Parcel #2924049091**

**First South Properties, LLC
Parcel #2924049043**

**Crowley Marine Services, Inc.
Parcel #2136200641**

**The Boeing Company
Parcel #0022000005**

**The Boeing Company
Parcel #0022000005**



AREA SUBJECT TO COVENANT*

	CITY OF SEATTLE	THE BOEING COMPANY
SEDIMENT CAP	2.67	0.02
SLOPE CAP	0.72	0.02
ENGINEERED SOIL COVER	0.15	0
TOTAL	3.54	0.04

* ONLY THE CITY OF SEATTLE PROPERTY IS INCLUDED WITHIN THIS COVENANT. THE PORTION OF THE CAP WITHIN BOEING PROPERTY WILL BE PROTECTED BY A SEPARATE COVENANT, TO BE RECORDED BY THE BOEING COMPANY.

MERIDIAN: WA STATE PLANE COORDINATE SYSTEM (NORTH ZONE), NAD 1983, 1991 ADJUSTMENT.

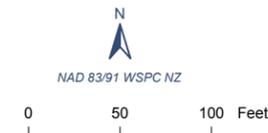


Figure 1.
Area Subject to Environmental Covenant and Institutional Controls
Slip 4 Early Action Area
Institutional Controls Implementation Report

Table 1. Slip 4 EAA Institutional Controls

Institutional Control	Objective	Ownership	Mechanism	Status	Monitoring	Enforcement	Responsibility	Termination
Governmental Controls								
Regulated Navigation Area	Protect the integrity of the sediment cap by restricting vessel operations (e.g., anchoring, grounding, spudding)	City of Seattle	Application to U.S. Coast Guard	Approved by Seattle City Council July 8, 2013, signed by Mayor July 16, filed with City Clerk July 17, 2013. Coast Guard approval is pending. For additional details of the finalization process, see Section 2.1.1 in the text.	Violations may be reported to the Captain of the Port, Puget Sound, Seattle, Washington.	Those found in violation may be subject to civil or criminal penalties as provided for in 33 U.S. Code 1232.	U.S. Coast Guard	Indefinite
Proprietary Controls								
Property Purchase	Allow control over all land uses and monitoring	City of Seattle	Fee-Simple Purchase	The City of Seattle acquired the bed of the Slip property on October 12, 2007; the lot line adjustment with First South Properties, LLC was approved by Seattle City Council July 8, 2013, signed by Mayor July 16, and filed with City Clerk July 17, 2013. First South Properties, LLC is currently working to file the lot line adjustment with the King County Recorder.	Not required.	None	City of Seattle - Seattle Public Utilities	Indefinite
Environmental Covenants	Restrict landowners from activities that might compromise the sediment caps, slope caps, and engineered soil covers	City of Seattle; The Boeing Company	Uniform Environmental Covenants Act	The City Environmental Covenant was approved by City Council July 8, 2013, signed by Mayor July 16, filed with City Clerk July 17. EPA signed and finalized the covenant on September 19; the covenant was filed with the King County Recorder September 24, 2013. The Boeing Environmental Covenant is not yet final.	The City and Boeing Environmental Covenants will be recorded in Ecology's Integrated Site Information System (ISIS) database. Recording of the City's Environmental Covenant in the ISIS Environmental Covenants database was completed on October 10, 2013. Ecology will monitor the covenants by confirming they are filed along with the publicly available property records.	Landowners have a vested interest in enforcing the covenants in order to avoid fines for breaching the covenant.	Although Ecology has an interest in the covenants, the land owners bear responsibility for maintaining them.	
Enforcement and Permit Tools								
Administrative Orders	A government agency exercises authority by mandating a party to take action and/or restrict use	City of Seattle	EPA or Ecology administers directive	A CERCLA Administrative Settlement Agreement and Order on Consent was issued to the City of Seattle and King County on September 28, 2006.	EPA will review long-term monitoring results no less frequently than every five years.	Administrative orders are enforceable in a court of law.	EPA is enforcing the Slip 4 Administrative Settlement Agreement and Order on Consent; The City of Seattle and King County are responsible for implementing all aspects of the removal action.	Although an administrative order may be terminated at the completion of remediation, periodic reviews ensure the institutional controls for the site remain in place.
Informational Devices								
State Registry	A database of sites of concern for public viewing	Washington State Department of Ecology	Ecology Site Register, the Hazardous Sites list, and the ISIS database	The Lower Duwamish Waterway and Slip 4 are listed on the Hazardous Sites list and in the ISIS database. Public notices will be published in the Site Register as needed.	Ecology monitors sites listed on the Hazardous Sites list.	Informational devices are not legally enforceable and primary serve to inform the public.	Ecology maintains the database.	A site is removed from the Site Register upon reaching a No Further Action status.
Notification Signs	Provides on-site notice to vessel operators of the existence of the sediment cap and prohibition of its disturbance	City of Seattle	Signs installed at the mouth of Slip 4 and near the sediment cap boundaries	Installation completed August 19, 2013; CFR number listed on the signs will be completed once the numbers are established, and documentation will be provided to EPA in an addendum to this report.	The condition of the signs will be monitored as part of the Long-Term Monitoring and Reporting Plan.		Signs were installed and will be maintained by the City.	The signs will remain on site indefinitely until a change in conditions warrants their removal.
Health Advisories	Information is dispersed notifying the public of health risks associated with consumption of fish	Fish Consumption Advisories issued by the State Department of Health	Signs, pamphlets, website, etc. (translated into regional languages)	In place for Lower Duwamish Waterway Superfund site. Additional Site-wide advisories may be implemented under EPA and/or Ecology Consent Decree (s) pursuant to the LDW Record of Decision.	The Washington State Department of Health will review data periodically to determine if the advisory should remain in place.		Advisories are created by government agencies (i.e., Department of Health).	Advisories can be terminated when monitoring activities indicate they are no longer needed.

APPENDIX A

CITY COUNCIL ORDINANCE 124219 TO ESTABLISH INSTITUTIONAL CONTROLS

Ordinance No. 124219

Council Bill No. 117804

AN ORDINANCE authorizing Seattle Public Utilities to establish institutional controls relating to the long-term protection of the environmental remediation of Slip 4 of the Lower Duwamish Waterway consisting of development and execution of an environmental covenant with U.S. Environmental Protection Agency that will place restrictions on City of Seattle real property; negotiate and execute a lot line adjustment with 1st South Properties, L.L.C.; negotiate and execute a non-exclusive storm water drainage outfall facility easement with 1st South Properties, L.L.C.; and pursue and establish a permanent Regulated Navigation Area within Slip 4 through coordination with the U.S. Department of Homeland Security.

Related Legislation File: _____

Date Introduced and Referred: <u>6/10/13</u>	To: (committee): <u>Libraries, Utilities, and Center</u>
Date Re-referred:	To: (committee):
Date Re-referred:	To: (committee):
Date of Final Action: <u>7/8/13</u>	Date Presented to Mayor: <u>7/9/13</u>
Date Signed by Mayor: <u>7/16/13</u>	Date Returned to City Clerk: <u>7/17/13</u>
Published by Title Only <input checked="" type="checkbox"/>	Date Vetoes by Mayor:
Published in Full Text	Date Passed Over Veto:
Date Veto Published:	Date Returned Without Signature:

The City of Seattle – Legislative Department

Council Bill/Ordinance sponsored by: Jan Golden

Committee Action:

Date	Recommendation	Vote
<u>7.2.2013</u>	<u>Pass</u> Ordinance	<u>3-0</u> SB JF RC

This file is complete and ready for presentation to Full Council. _____

Full Council Action:

Date	Decision	Vote
<u>July 8, 2013</u>	<u>Passed</u>	<u>9-0</u>

Law Department

CITY OF SEATTLE
ORDINANCE 124219
COUNCIL BILL 117804

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5
6 AN ORDINANCE authorizing Seattle Public Utilities to establish institutional controls relating
7 to the long-term protection of the environmental remediation of Slip 4 of the Lower
8 Duwamish Waterway consisting of development and execution of an environmental
9 covenant with U.S. Environmental Protection Agency that will place restrictions on City
10 of Seattle real property; negotiate and execute a lot line adjustment with 1st South
11 Properties, L.L.C.; negotiate and execute a nonexclusive storm water drainage outfall
12 facility easement with 1st South Properties, L.L.C.; and pursue and establish a permanent
13 Regulated Navigation Area within Slip 4 through coordination with the U.S. Department
14 of Homeland Security.

15
16 WHEREAS, Slip 4 is a 6.4-acre navigational slip in Seattle, King County, Washington, and is
17 located three miles upstream from the confluence of the Lower Duwamish Waterway
18 (LDW) with Elliott Bay and Puget Sound; and

19
20 WHEREAS, approximately 3.5 acres of sediment within Slip 4 was contaminated by historical
21 releases of polychlorinated biphenyls (PCBs), along with metals, organic compounds,
22 and petroleum products; and

23
24 WHEREAS, Slip 4 is one of five priority Early Action Areas (EAAs) within the 5.5-mile long
25 LDW Superfund Site; and

26
27 WHEREAS, in January 2006, the City of Seattle and King County entered into a Memorandum
28 of Understanding that identified the City's responsibility as Primary Manager for the
anticipated investigations, assessments, and Removal Action at the Slip 4 EAA; and

WHEREAS, on May 3, 2006, the U.S. Environmental Protection Agency (EPA) issued an
Action Memorandum for a non-time-critical removal action (remedy) at the Slip 4 EAA
consisting of dredging and excavation of contaminated soils, sediments, and debris, and
capping of the entire Slip 4 remedial area; and

WHEREAS, on September 28, 2006, the City of Seattle and King County entered into an
Administrative Settlement Agreement and Order on Consent with EPA for the remedy in
Slip 4, which included implementing institutional controls because some hazardous
substances would remain on site at levels that do not allow unrestricted use; and



1 WHEREAS, the term “institutional controls” refers to non-engineering measures to ensure the
2 integrity and protectiveness of the Slip 4 remedy and to manage human activities and
3 ecological receptors by preventing or reducing the potential for exposure to contaminated
4 media; and

5 WHEREAS, the City of Seattle managed the Slip 4 remedy construction which was completed
6 on February 7, 2012, and included dredging and offsite disposal of contaminated
7 nearshore soil, sediment, and debris; placement of capping materials; demolition of a
8 large pier structure; and habitat improvements along the riverbank and intertidal areas;
9 and

10 WHEREAS, the Removal Action Completion Report for the Slip 4 remedy (July 26, 2012)
11 describes the institutional controls planned for Slip 4; and

12 WHEREAS, institutional controls for Slip 4 include:

- 13 1. Execution of an environmental covenant with EPA pursuant to the Washington State
14 Uniform Environmental Covenants Act that will place restrictions on City of Seattle
15 real property within the Slip 4 EAA necessary to protect human health and the
16 environment and insure the integrity of the Slip 4 remedy; and
- 17 2. Establishment of a permanent Regulated Navigation Area (RNA) within the Slip 4
18 EAA to prohibit activities that would disturb the riverbed, such as vessel grounding,
19 anchoring, dragging, trawling, spudding or other activities that could disrupt the
20 integrity of the sediment cap (the RNA will not affect transit or navigation of the
21 area); and

22 WHEREAS, an approximately 0.23-acre portion of real property owned by 1st South Properties,
23 LLC is located within the Slip 4 EAA along the southwest bank; and

24 WHEREAS, 1st South Properties, L.L.C. is interested in a lot-line adjustment, which would
25 transfer the portion of their property located within the Slip 4 EAA to the City of Seattle,
26 and such a property transfer would provide the City of Seattle with control over the
27 portion of the remedy currently located on 1st South Properties, L.L.C., so that the City
28 will not have to rely on 1st South Properties, L.L.C. to develop and enforce the
environmental covenant and protect the remedial action; and

WHEREAS, an existing storm drain owned and operated by 1st South Properties, L.L.C. is
located on the property to be transferred to the City, and therefore, a nonexclusive storm
water drainage outfall facility easement must be granted to 1st South Properties, L.L.C. to
allow the existing storm drain to continue functioning. NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS :



1 Section 1. The Director of Seattle Public Utilities (SPU), or his designee, on behalf of
2 the City of Seattle, is hereby authorized to execute and record an environmental covenant with
3 U.S. Environmental Protection Agency (EPA) substantially in the form of Attachment 1 attached
4 hereto that will place restrictions on City of Seattle real property within the Slip 4 Early Action
5 Area (EAA) necessary to protect human health and the environment and insure the long-term
6 integrity of the Slip 4 remedy.

7 Section 2. The SPU Director, or his designee, is further authorized to negotiate and
8 execute a lot line adjustment with 1st South Properties, L.L.C. substantially in the form of
9 Attachment 2 attached hereto.

10 Section 3. The SPU Director, or his designee, is further authorized to negotiate and
11 execute a nonexclusive storm water drainage outfall facility easement with 1st South Properties,
12 L.L.C. substantially in the form of Attachment 3 attached hereto.

13 Section 4. The SPU Director, or his designee, is further authorized to coordinate with
14 the U.S. Department of Homeland Security (Coast Guard) and establish a permanent Regulated
15 Navigation Area within the Slip 4 EAA substantially in the form of Attachment 4 attached hereto
16 to prohibit activities that could impact the long-term integrity of the Slip 4 remedy.
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1 Section 5. This ordinance shall take effect and be in force 30 days after its approval by
2 the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it
3 shall take effect as provided by Seattle Municipal Code Section 1.04.020.

4 Passed by the City Council the 8th day of July, 2013, and
5 signed by me in open session in authentication of its passage this
6 8th day of July, 2013.

7
8 

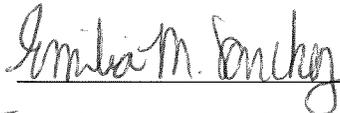
9 President _____ of the City Council

10
11 Approved by me this 16th day of July, 2013.

12
13 

14 Michael McGinn, Mayor

15
16 Filed by me this 17th day of July, 2013.

17
18 

19 for Monica Martinez Simmons, City Clerk

20
21 (Seal)

22
23
24 Attachment 1 – Environmental Covenant for Slip 4 Early Action Area.
25 Attachment 2 – Lot line adjustment with 1st South Properties, L.L.C.
26 Attachment 3 – Storm water drainage outfall easement with 1st South Properties, L.L.C.
27 Attachment 4 – Regulated Navigation Area Rule for Slip 4 Early Action Area.

ATTACHMENT 1

ENVIRONMENTAL COVENANT
(SLIP 4 EARLY ACTION AREA OF LOWER DUMAWISH WATERWAY SUPERFUND
SITE)

RETURN TO: Office of Environmental Cleanup
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

GRANTOR: City of Seattle
Seattle Public Utilities
500 Fifth Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

HOLDER: City of Seattle
Seattle Public Utilities
500 Fifth Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

RELATED DOCUMENTS: N/A

LEGAL DESCRIPTION
OF THE REAL
PROPERTY SUBJECT
TO COVENANT:

PARCEL B, CITY OF SEATTLE LOT BOUNDARY
ADJUSTMENT NO. 3005372, RECORDED UNDER KING
COUNTY RECORDING NO. 20071010900018;

TOGETHER WITH THAT PORTION OF PARCEL E AS
SHOWN AND DELINEATED ON LOT LINE ADJUSTMENT
SURVEY UNDER RECORDING NUMBER 9212019002
DATED NOVEMBER, 1992, THAT PORTION OF THE
SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 24
NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, IN
KING COUNTY, WASHINGTON, specifically described and
depicted in Attachment A.

AN ADDITIONAL ADJACENT PARCEL, NOT OWNED BY
THE CITY OF SEATTLE, IS SUBJECT TO A SEPARATE



Dave Schuchardt
SPU SLIP 4 ICs ORD ATT 1
May 7, 2013
Version #1

COVENANT GRANTED BY THE BOEING COMPANY, AND
IS DESCRIBED AS:

COMMENCING AT THE INTERSECTION WITH THE
EASTERLY LINE OF THE DUWAMISH COMMERCIAL
WATERWAY AND THE MEDIAN LINE OF SLIP No.4
AS DEFINED IN AN AGREEMENT RECORDED UNDER
RECORDING No. 4477307, IN KING COUNTY
RECORDS, specifically described in Attachment B.

TAX PARCEL(S): 292404-911003



ENVIRONMENTAL COVENANT

I. Purpose and Background

This Environmental Covenant (Covenant) made this _____ day of _____, 2013 is executed pursuant to the Washington State Uniform Environmental Covenants Act (“UECA”), RCW Chapter 64.70 *et seq.*, and imposes certain conditions and restrictions on real property located in the City of Seattle, King County, Washington.

In 2001, the U.S. Environmental Protection Agency (“EPA”) placed the Lower Duwamish Waterway Superfund Site (the “Site”) on the National Priorities List under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9601 *et seq.* (“CERCLA”). EPA subsequently established Early Action Areas (“EAAs”) within the Site, including the Slip 4 EAA, consisting of the certain tidelands and bedlands within Slip 4. EPA issued an Action Memorandum for Non-Time Critical Removal Action (“NTCRA”) for the Slip 4 EAA in May 2006, which required excavation and removal of certain sediments, capping of other sediments and soils, placement of institutional controls to limit potential human and/or ecological exposure to remaining contamination, and monitoring to verify the effectiveness of the NTCRA (collectively “Removal Action”). The Action Memorandum and supporting information regarding the Slip 4 EAA are contained in the administrative record that is on file with EPA Region 10 or its successor agency. As of the date of this Covenant, the EPA Region 10 regional office is located at 1200 Sixth Avenue, Suite 900, Seattle, Washington 98101.

An Administrative Settlement Agreement and Order on Consent (“Settlement Agreement”), CERCLA Docket No. 10-2006-0364, was issued by EPA to the City of Seattle and King County in September 2006 for implementation of the NTCRA selected in the Action Memorandum for the Slip 4 EAA.

Pursuant to the Action Memorandum, this Covenant, as an institutional control, is necessary to protect human health and the environment and to ensure the integrity of the NTCRA.

EPA has consulted pursuant to RCW 64.70.040(5) with local land use planning authorities in the development of the land use or activity restrictions in this Covenant.



II. Conveyance and Covenant

Grantor, City of Seattle, hereby binds Grantor, its successors and assigns, and conveys to the Holder the land use restrictions and conditions and such other rights conveyed in this Covenant concerning the area at the Slip 4 EAA owned by the Grantor and legally described above and in Attachment A (hereinafter, the "Property.") EPA and the Washington Department of Ecology ("Ecology") shall have full right of enforcement pursuant to UECA of the restrictions, conditions and other rights conveyed in this Covenant.

Grantor covenants to and with the Holder and its successors and assigns that Grantor owns the Property in fee simple and has the exclusive right to convey the Property or any interest therein, and that the Property is free and clear of encumbrances except those that Grantor has identified to EPA. Grantor will use best efforts to secure from all identified prior encumbrance holders either subordination of such interests to, or a binding recorded agreement to be bound by, these covenants. Grantor will warrant and defend the title and quiet possession of the property.

Grantor makes the following covenants as to limitations, restrictions, and uses to which the Property may be put and specifies that such covenants shall run with the land, as provided by law, shall be perpetual, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"):

1. Any activity on the Property that may result in the release or exposure to the environment of the contaminated sediment or soil that was contained as part of the Removal Action, or create a new exposure pathway, is prohibited, unless prior written approval from EPA is obtained authorizing the specific activity. Prohibited activities include, but are not limited to: altering, modifying or removing the Capped Areas (as defined below); piling installation; dredging, drilling, digging, excavation, placement of any objects, fill, or use of any equipment in the Capped Areas which deforms or stresses the surface beyond its load bearing capability; piercing the surface with a rod, spike or similar item; bulldozing or earthwork; anchoring, grounding or spudding, PROVIDED THAT, some controlled activities that may temporarily disturb Capped Areas are allowed so long as the proposals for such work that may temporarily disturb the Capped



Areas are accompanied by detailed plans describing (a) the proposed activity, (b) actions to limit contaminant releases during the activity, (c) actions to restore the integrity of the Capped Areas, and (d) plans for monitoring and reporting. Such proposed activities are subject to written approval by EPA. Examples of such activities that may be allowed include, but are not limited to: excavation for repair or replacement of existing outfalls; excavation for installation of new outfalls or other utilities; anchoring of construction equipment; cap maintenance (including placement of additional cap material and/or excavation of existing cap materials or underlying soils or sediments). The term 'Capped Areas' in these covenants includes engineered slope caps, sediment caps and soil covers as those terms are used in the Action Memorandum and Removal Action Completion Report for the Slip 4 EAA.

2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Removal Action, or create a new exposure pathway, is prohibited without prior written approval from EPA.
3. The Owner shall properly maintain the Capped Areas of the EAA Removal Action.
4. The Owner shall prohibit any uses or activities that are inconsistent with any of the restrictions established in this Covenant, unless such use or activity is approved by EPA in advance in writing.
5. The Owner must notify all Property purchasers, lessees and easement holders of the restrictions set forth in this Covenant, and make compliance with this Covenant a condition of any conveyance of title, easement, lease or other interest in the Property. Any deed, lease, or other conveyance of any interest in the Property shall make adequate provisions for any continued monitoring or maintenance of the Capped Areas on the Property.
6. The Owner shall use best efforts to provide sixty (60) days, but at a minimum shall provide thirty (30) days, advance written notice to EPA of the Owner's intent to convey or transfer any interest in the Property. Such notice shall include the name and address of the proposed transferee.



7. The Owner shall allow authorized representatives of EPA, Ecology and the Holder the right to enter the Property at reasonable times to (1) evaluate compliance with this Covenant and/or the CERCLA response action, (2) inspect, perform oversight of activities, and take samples, (3) inspect any CERCLA or Model Toxics Control Act response actions conducted at the Property, or (4) inspect and perform maintenance on Capped Areas located on the Property. To the extent there is any conflict between the access rights as stated above and those specified in the Settlement Agreement, the terms of the Settlement Agreement shall control.
8. Local permitting requirements augment the existing federal and state permitting requirements that impose conditions on any construction at Slip 4. The Owner must ensure that all required local permits are obtained prior to any construction, filling and grading, or installation/changes to stormwater configuration and discharges, installation of private utilities or other development activities that may disturb the Capped Areas. Any easements granted by the property Owner must require measures to protect the integrity of the Capped Areas. These permits and easements will require appropriate elements such as (but not limited to) proper handling, characterization and disposal of contaminated sediments or soil and restoration of the Capped Areas if impacted.

III. Reservation of Rights

Grantor hereby reserves unto itself, its representatives, heirs, assigns, and successors all rights accruing from ownership of the Property that are not conditioned, restricted or prohibited by Section II.

IV. Enforcement

Compliance with this Covenant may be enforced pursuant to the Washington State Uniform Environmental Covenants Act. EPA, Ecology and the Holder shall have full enforcement rights. Failure by EPA or Holder to enforce compliance with this Covenant in a timely manner shall not be deemed a waiver of their right to take subsequent enforcement actions.



V. Recordation

Grantor shall submit this instrument for recording in the official records of King County, Washington within 10 days after the execution of this instrument and shall pay the costs associated with recording.

VI. General Provisions

Agency's Interest. Pursuant to RCW 64.70.030, the rights granted to EPA by this Environmental Covenant are not interests in real property.

Liberal Construction. This Covenant shall be liberally construed in favor of effectuating its purposes. If any portion(s) of it is found to be ambiguous, an interpretation consistent with its purposes that would render such portion(s) valid shall be favored over one that would render it invalid.

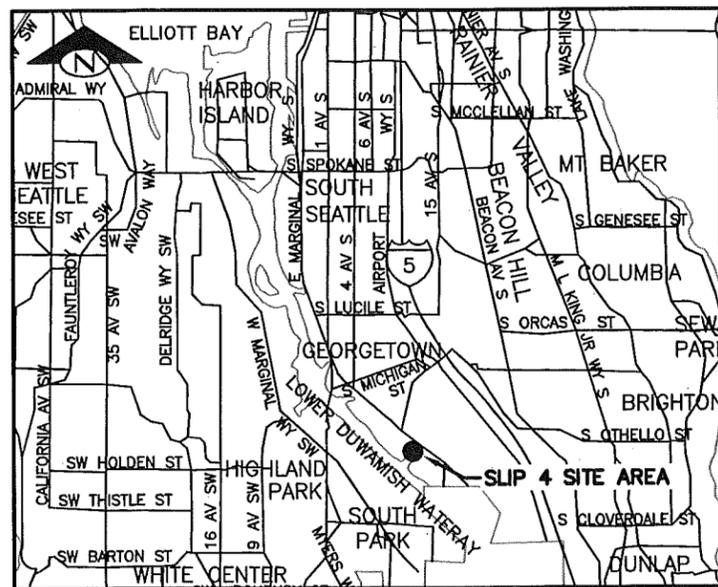
VII. Termination and Modification

This Environmental Covenant may only be amended or terminated in accordance with the amendment and termination provisions of the Washington State Uniform Environmental Covenants Act, RCW 64.70.100.

VIII. Signature and Acknowledgements

Grantor covenants that it is authorized to grant this Covenant and shall warrant and defend the same against all claims and demands challenging such authority. The undersigned parties represent and certify that they are authorized to execute this Covenant.





VICINITY MAP

Crowley Marine Services, Inc.
 Parcel #2136200641

City of Seattle
 Parcel #2924049110

King County
 Parcel #2924049091

SLIP 4
 Crowley Marine Services, Inc.
 Parcel #2136200641

The Boeing Company
 Parcel #0022000005

The Boeing Company
 Parcel #0022000005

LEGEND

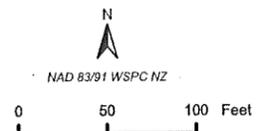
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- PROJECT LIMIT
- EXISTING RIPRAP
- SLOPE CAP
- SEDIMENT CAP
- ENGINEERED SOIL COVER

AREA SUBJECT TO COVENANT*

	CITY OF SEATTLE	THE BOEING COMPANY
SEDIMENT CAP	2.67	0.02
SLOPE CAP	0.72	0.02
ENGINEERED SOIL COVER	0.15	0
TOTAL	3.54	0.04

* ONLY THE CITY OF SEATTLE PROPERTY IS INCLUDED WITHIN THIS COVENANT. THE PORTION OF THE CAP WITHIN BOEING PROPERTY WILL BE PROTECTED BY A SEPARATE COVENANT, TO BE RECORDED BY THE BOEING COMPANY.

MERIDIAN: WA STATE PLANE COORDINATE SYSTEM (NORTH ZONE), NAD 1983, 1991 ADJUSTMENT.



ATTACHMENT A

PARCEL B, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3005372, RECORDED UNDER KING COUNTY RECORDING NO. 20071010900018;

TOGETHER WITH THAT PORTION OF PARCEL E AS SHOWN AND DELINEATED ON LOT LINE ADJUSTMENT SURVEY UNDER RECORDING NUMBER 9212019002 BY DODDS ENGINEERS, INC. DATED NOVEMBER, 1992 LYING WESTERLY OF THE FOLLOWING DESCRIBED LINE:

COMMENCING AT THE MOST NORTHERLY POINT OF SAID PARCEL E;
SAID POINT BEING THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH AND THE LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER KING COUNTY RECORDING NUMBER 59780003, AND THE ORIGINAL EASTERLY BOUNDARY OF SLIP 4 OF THE DUWAMISH WATERWAY;

THENCE SOUTH 09°26'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET TO THE TRUE POINT OF BEGINNING;

THENCE SOUTH 11°34'46" EAST, 71.32 FEET;
THENCE SOUTH 10°54'56" WEST, 45.13 FEET;
THENCE SOUTH 06°26'14" WEST, 16.72 FEET;
THENCE SOUTH 09°58'02" WEST, 80.47 FEET;
THENCE SOUTH 00°25'51" WEST, 37.97 FEET;
THENCE SOUTH 26°27'10" EAST, 12.10 FEET;
THENCE SOUTH 04°33'09" WEST, 8.30 FEET;
THENCE SOUTH 19°00'19" WEST, 8.18 FEET;
THENCE SOUTH 13°11'38" WEST, 9.24 FEET;
THENCE SOUTH 00°12'57" WEST, 28.44 FEET;
THENCE SOUTH 70°28'27" WEST, 29.11 FEET;
THENCE SOUTH 20°09'39" WEST, 14.73 FEET;
THENCE SOUTH 29°57'21" WEST, 45.31 FEET;
THENCE SOUTH 30°24'28" WEST, 120.70 FEET;
THENCE SOUTH 51°37'12" EAST, 13.01 FEET;
THENCE SOUTH 42°02'56" WEST, 62.38 FEET;
THENCE SOUTH 35°17'24" WEST, 41.23 FEET;
THENCE SOUTH 17°49'24" WEST, 12.56 FEET TO INTERSECT THE SOUTHERLY LINE OF SAID PARCEL E AND THE TERMINUS OF THIS DESCRIBED LINE FROM WHICH THE MOST WESTERLY ANGLE POINT CORNER OF SAID PARCEL E BEARS NORTH 52°16'07" WEST, 28.68 FEET DISTANT.



DRAFT LOT LINE ADJUSTMENT DEED
SLIP 4 EARLY ACTION AREA

Recording Request By And
When Recorded Mail To

Seattle Public Utilities Real Property Services
PO Box 34018
Seattle, WA 98124-4018

DEED

Reference #s of Documents Released or Assigned: None
Grantor: First South Properties LLC
Grantee: The City of Seattle, a municipal corporation of the State of
Washington
Legal Description (abbreviated): Por Par I, Sea LBA #3012125, KCR# _____
Assessor's Tax Parcel ID#: 2924049110

GRANTOR, **FIRST SOUTH PROPERTIES LLC**, a Washington limited liability company, hereby grants and conveys, without warranties, to GRANTEE, **THE CITY OF SEATTLE**, a municipal corporation of the State of Washington, acting by, through, and under jurisdiction of Seattle Public Utilities, a City of Seattle department, the following described real estate in fee simple absolute:

THAT PORTION OF PARCEL E AS SHOWN AND DELINEATED ON LOT LINE ADJUSTMENT SURVEY UNDER RECORDING NUMBER 9212019002 BY DODDS ENGINEERS, INC. DATED NOVEMBER, 1992 LYING WESTERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCING AT THE MOST NORTHERLY POINT OF SAID PARCEL E;

SAID POINT BEING THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH AND THE LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER RECORDING KING COUNTY RECORDING NUMBER 5978003, AND THE ORIGINAL EASTERLY SOUNDAY OF SLIP 4 OF THE DUWAMISH WATERWAY;



Dave Schuchardt
SPU SLIP 4 ICs ORD ATT 2
May 7, 2013
Version #1

THENCE SOUTH 09°26'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET TO THE TRUE POINT OF BEGINNING;
THENCE SOUTH 11°34'46" EAST, 71.32 FEET;
THENCE SOUTH 10°54'56" WEST, 45.13 FEET;
THENCE SOUTH 06°26'14" WEST, 16.72 FEET;
THENCE SOUTH 09°58'02" WEST, 80.47 FEET;
THENCE SOUTH 00°25'51" WEST, 37.97 FEET;
THENCE SOUTH 26°27'10" EAST, 12.10 FEET;
THENCE SOUTH 04°33'09" WEST, 8.30 FEET;
THENCE SOUTH 19°00'19" WEST, 8.18 FEET;
THENCE SOUTH 13°11'38" WEST, 9.24 FEET;
THENCE SOUTH 00°12'57" WEST, 28.44 FEET;
THENCE NORTH 70°28'27" WEST, 29.11 FEET;
THENCE SOUTH 20°09'39" WEST, 14.73 FEET;
THENCE SOUTH 29°57'11" WEST, 45.31 FEET;
THENCE SOUTH 30°24'28" WEST, 120.70 FEET;
THENCE SOUTH 51°37'12" EAST, 13.01 FEET;
THENCE SOUTH 42°02'56" WEST, 62.38 FEET;
THENCE SOUTH 35°17'24" WEST, 41.23 FEET;
THENCE SOUTH 17°49'24" WEST, 12.56 FEET;
THENCE SOUTH 52°16'07" EAST, 5.43 FEET TO INTERSECT THE SOUTHERLY LINE OF SAID PARCEL E AND THE TERMINUS OF THIS DESCRIBED LINE FROM WHICH THE SOUTHWESTERLY ANGLE POINT CORNER OF SAID PARCEL E BEARS NORTH 52°16'07" WEST, 28.69 FEET DISTANT.

SITUATED IN THE CITY OF SEATTLE, COUNTY OF KING, STATE OF WASHINGTON.

To the extent allowed by law, Grantee shall indemnify, defend and hold Grantor harmless from and against any and all claims, demands, loss or liability arising out of the negligence of Grantees.



LOT BOUNDARY ADJUSTMENT NUMBER 3013125

GRANTOR (OWNERS): CITY OF SEATTLE
 700 5TH AVE, SUITE 2000
 PO BOX 34019
 SEATTLE, WA 98124-4019

FIRST SOUTH PROPERTIES, LLC.
 7343 E. MARGINAL WAY S.
 SEATTLE, WA 98108

GRANTEE: CITY OF SEATTLE
KING COUNTY, WASHINGTON

CONTACT PERSON: DAVID A. ROBERTSON, PLS.
 TRIAD ASSOCIATES, INC.
 12112 115TH AVE, NE
 KIRKLAND, WA 98034
 425-821-8448 (OFFICE), 425-821-3481 (FAX)

POR SE 1/4 SEC 29	TWP 24 N	RGE 4 E
LOTS (SECTION)	BLOCKS SUBDIVISION (TOWNSHIP)	VOL. PG. (RANGE)

FOR COMPLETE LEGAL DESCRIPTIONS, SEE SHEET 2 OF 3
 ASSESSOR'S PROPERTY TAX PARCEL/ACCOUNT #
 TL# 292404-9010 ; TL# 292404-9043

ACKNOWLEDGMENTS:

STATE OF WASHINGTON)
 COUNTY OF KING) SS

ON THIS DAY PERSONALLY APPEARED BEFORE ME _____ TO ME
 KNOWN TO BE THE _____

_____ THAT EXECUTED THE FOREGOING
 INSTRUMENT, AND ACKNOWLEDGED SUCH INSTRUMENT TO BE THE FREE AND VOLUNTARY ACT
 AND DEED OF SUCH PARTY, FOR THE USES AND PURPOSES THEREIN MENTIONED, AND ON OATH
 STATED THAT (HE/SHE) WAS DULY AUTHORIZED TO EXECUTE SUCH INSTRUMENT.
 GIVEN UNDER MY HAND AND OFFICIAL SEAL THIS ___ DAY OF _____, 2012.

SIGNATURE OF
 NOTARY PUBLIC _____
 PRINTED NAME _____
 NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON,
 RESIDING AT, _____
 MY COMMISSION EXPIRES _____

APPROVAL:

CITY OF SEATTLE
 DEPARTMENT OF PLANNING AND
 DEVELOPMENT
 DIANE SUGMURA, DIRECTOR

EXAMINED AND APPROVED THIS ___ DAY OF _____, 2007.

BY: _____ DIRECTOR, LAND USE DIVISION

(NOTE: APPROVAL OF THIS LOT BOUNDARY ADJUSTMENT BY THE DIRECTOR OF THE
 DEPARTMENT OF PLANNING AND DEVELOPMENT UNDER CHAPTER 23.24 OF THE
 SEATTLE MUNICIPAL CODE, AS AMENDED, IS NOT TO BE CONSTRUED AS
 SATISFACTION OF ANY OTHER APPLICABLE LEGISLATION OR REGULATIONS.)

DECLARATION:

WE THE UNDERSIGNED, OWNER(S) IN FEE SIMPLE OF THE LAND HEREIN DESCRIBED DO
 HEREBY MAKE A LOT BOUNDARY ADJUSTMENT THEREOF PURSUANT TO RCW 88.17.040(6)
 AND DECLARE THIS LOT BOUNDARY ADJUSTMENT TO BE THE GRAPHIC REPRESENTATION OF
 SAME, AND THAT SAID LOT BOUNDARY ADJUSTMENT IS MADE WITH THE FREE CONSENT AND
 IN ACCORDANCE WITH THE DESIRE OF THE OWNER(S).

IN WITNESS WHEREOF WE HAVE SET OUR HANDS AND SEALS.

CITY OF SEATTLE FIRST SOUTH PROPERTIES, LLC.

BY: _____ BY: _____

ITS: _____ ITS: _____

ACKNOWLEDGMENTS:

STATE OF WASHINGTON)
 COUNTY OF KING) SS

ON THIS DAY PERSONALLY APPEARED BEFORE ME _____ TO ME
 KNOWN TO BE THE _____

_____ THAT EXECUTED THE FOREGOING
 INSTRUMENT, AND ACKNOWLEDGED SUCH INSTRUMENT TO BE THE FREE AND VOLUNTARY ACT
 AND DEED OF SUCH PARTY, FOR THE USES AND PURPOSES THEREIN MENTIONED, AND ON OATH
 STATED THAT (HE/SHE) WAS DULY AUTHORIZED TO EXECUTE SUCH INSTRUMENT.
 GIVEN UNDER MY HAND AND OFFICIAL SEAL THIS ___ DAY OF _____, 2012.

SIGNATURE OF
 NOTARY PUBLIC _____
 PRINTED NAME _____
 NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON,
 RESIDING AT, _____
 MY COMMISSION EXPIRES _____

KING COUNTY DEPARTMENT OF ASSESSMENTS:

EXAMINED AND APPROVED THIS ___ DAY OF _____, 2007.

ASSESSOR _____

RECORDER'S CERTIFICATE

FILED FOR RECORD THIS ___ DAY OF _____, 20 ___ AT ___ M
 IN BOOK _____ OF SURVEYS, AT PAGE _____ AT THE REQUEST OF _____

MANAGER _____ SUPERINTENDENT OF RECORDS _____

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR
 UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS
 OF THE SURVEY RECORDING ACT AT THE REQUEST OF
 CEDAR GROVE COMPOSTING, INC
 IN MARCH, 2012

James C. Cole CERT. NO. 21402



12112 115th Ave. NE
 Kirkland, WA 98034-6923
 425.821.8448
 425.821.3481 fax
 800.488.0756 toll free
 www.triadassoc.com



POR NW 1/4, SE 1/4, SEC 29,
 TWP 24 N., RGE 4 E, W.M.
 KING COUNTY, WASHINGTON

DWN. BY	LMM	DATE	MARCH 12, 2012	JOB NO.	11-146
CHKD. BY	LEC	SCALE	N/A	SHEET	1 OF 3

NOTES:

SEE SUBDIVISION GUARANTEE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ORDER NO. NCS-524708-WA-1 DATED: JANUARY 25, 2012 @ 7:30AM

AFFECTS PARCEL I:

- 3. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: OCTOBER 21, 1915 AS RECORDING NO. 1024005 IN FAVOR OF: PUGET SOUND TRACTION, LIGHT & POWER COMPANY FOR: WATER LINES
- 4. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: MARCH 5, 1919 AS RECORDING NO. 1285755 IN FAVOR OF: PUGET SOUND TRACTION, LIGHT & POWER COMPANY FOR: WATER LINES
- 5. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: JULY 3, 1919 AS RECORDING NO. 1322741 IN FAVOR OF: J.E. MORRIS MILL COMPANY, INC. FOR: RAILROAD SPUR TRACK
- 6. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: MAY 17, 1925 AS RECORDING NO. 1616619 IN FAVOR OF: ADJACENT PROPERTY OWNERS FOR: RAILROAD SPUR TRACK
- 7. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT" RECORDED JUNE 9, 1947 AS RECORDING NO. 3693954 OF OFFICIAL RECORDS.
- 8. RIGHT TO MAKE NECESSARY SLOPES FOR CUTS OR FILLS UPON SAID PREMISES FOR FRONTANELL STREET AS RESERVED IN ORDINANCE FILED DECEMBER 11, 1957 AS ORDINANCE NO. 86695.
- 9. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "EASEMENT AGREEMENT" RECORDED JULY 25, 1963 AS RECORDING NO. 5614834 OF OFFICIAL RECORDS.
- 10. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: JULY 25, 1963 AS RECORDING NO. 5614835 IN FAVOR OF: ADJACENT PROPERTY OWNERS FOR: INGRESS AND EGRESS
- 11. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "BOUNDARY AGREEMENT" RECORDED JUNE 30, 1965 AS RECORDING NO. 5897454 OF OFFICIAL RECORDS.
- 12. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "EASEMENT AND AGREEMENT" RECORDED JANUARY 18, 1966 AS RECORDING NO. 5978003 OF OFFICIAL RECORDS.
- 13. RIGHT TO MAKE NECESSARY SLOPES FOR CUTS OR FILLS UPON SAID PREMISES FOR SOUTH OTHELLO STREET AS RESERVED BY ORDINANCE FILED DECEMBER 9, 1966 AS 93351.
- 14. RESTRICTIONS, CONDITIONS, DEDICATIONS, NOTES, EASEMENTS AND PROVISIONS, IF ANY, AS CONTAINED AND/OR DELINEATED ON THE FACE OF THE SURVEY RECORDED MARCH 14, 1989 AS RECORDING NO. 8903149006, IN KING COUNTY, WASHINGTON. DOCUMENT(S) DECLARING MODIFICATIONS THEREOF RECORDED MARCH 21, 1989 AS RECORDING NO. 8903211073 OF OFFICIAL RECORDS.
- 15. RESTRICTIONS, CONDITIONS, DEDICATIONS, NOTES, EASEMENTS AND PROVISIONS, IF ANY, AS CONTAINED AND/OR DELINEATED ON THE FACE OF THE BOUNDARY LINE ADJUSTMENT RECORDED DECEMBER 1, 1992 AS RECORDING NO. 9212019002, IN KING COUNTY, WASHINGTON.
- 16. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "RELEASE OF DAMAGES" RECORDED DECEMBER 10, 1997 AS RECORDING NO. 9712100227 OF OFFICIAL RECORDS.
- 17. RESTRICTIONS, CONDITIONS, DEDICATIONS, NOTES, EASEMENTS AND PROVISIONS, IF ANY, AS CONTAINED AND/OR DELINEATED ON THE FACE OF THE BOUNDARY LINE ADJUSTMENT RECORDED OCTOBER 10, 1007 AS RECORDING NO. 20071010900018, IN KING COUNTY, WASHINGTON.
- 18. COVENANTS, CONDITIONS, RESTRICTIONS AND/OR EASEMENTS: RECORDED: OCTOBER 12, 2007 RECORDING NO.: 20071012000592 DOCUMENT RE-RECORDED JUNE 4, 2008 AS RECORDING NO. 20080604000516 OF OFFICIAL RECORDS.
- 19. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "LIMITED RELEASE AGREEMENT" RECORDED OCTOBER 12, 2007 AS RECORDING NO. 20071012000593 OF OFFICIAL RECORDS.
- 20. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "LIMITED INDEMNITY AGREEMENT" RECORDED OCTOBER 12, 2007 AS RECORDING NO. 20071012000594 OF OFFICIAL RECORDS.

AFFECTS PARCEL II:

- 22. RESERVATION OF UTILITIES IN VACATED STREET AREA AND THE RIGHT TO MAINTAIN THE SAME AS SET FORTH IN ORDINANCE NO. 70513 A COPY OF WHICH WAS FILED DECEMBER 26, 1940
- 23. EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN: RECORDING INFORMATION: MAY 17, 1954 AS RECORDING NO. 4447302 IN FAVOR OF: CITY OF SEATTLE FOR: RAILROAD SPUR AFFECTS: VACATED SOUTH WEBSTER STREET
- 24. RESTRICTIONS, CONDITIONS, DEDICATIONS, NOTES, EASEMENTS AND PROVISIONS, IF ANY, AS CONTAINED AND/OR DELINEATED ON THE FACE OF THE BOUNDARY LINE ADJUSTMENT RECORDED DECEMBER 1, 1992 AS RECORDING NO. 9212019002, IN KING COUNTY, WASHINGTON.
- 25. COVENANTS, CONDITIONS, RESTRICTIONS AND/OR EASEMENTS: RECORDED: NOVEMBER 25, 1997 RECORDING NO.: 9711232194
- 26. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "GRADE RELEASE" RECORDED JANUARY 28, 2000 AS RECORDING NO. 20000128000132 OF OFFICIAL RECORDS.
- 27. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "COVENANT GEOLOGIC HAZARD AREA" RECORDED DECEMBER 23, 2003 AS RECORDING NO. 20031223002209 OF OFFICIAL RECORDS.

AFFECTS PARCEL II: (CONTINUED)

- 28. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "MEMORANDUM OF DRAINAGE CONTROL" RECORDED NOVEMBER 29, 2006 AS RECORDING NO. 20061129000248 OF OFFICIAL RECORDS.
- 29. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "SIDE SEWER HOLD HARMLESS AND INDEMNIFICATION AGREEMENT" RECORDED NOVEMBER 29, 2006 AS RECORDING NO. 20061129000249 OF OFFICIAL RECORDS.

ORIGINAL LEGAL DESCRIPTION:

PARCEL I
THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 24 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH WITH THE NORTH MARGIN OF SOUTH WEBSTER STREET, AS PER PLAT OF ABRAM'S ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 11 OF PLATS, PAGE 30, RECORDS OF KING COUNTY, WASHINGTON; THENCE NORTH 49°00'12" WEST ALONG SAID SOUTHWESTERLY MARGIN, 519.00 FEET; THENCE SOUTH 40°59'48" WEST 10.00 FEET; THENCE NORTH 49°00'12" WEST, PARALLEL WITH SAID SOUTHWESTERLY MARGIN, 75.00 FEET; THENCE NORTH 40°59'48" EAST 10.00 FEET TO SAID SOUTHWESTERLY MARGIN; THENCE NORTH 49°00'12" WEST ALONG SAID SOUTHWESTERLY MARGIN, 35.00 FEET; THENCE SOUTH 23°43'29" WEST 62.83 FEET; THENCE NORTH 49°00'12" WEST, PARALLEL WITH SOUTHWESTERLY MARGIN, 98.66 FEET; THENCE NORTH 40°59'48" EAST 60.00 FEET TO SAID SOUTHWESTERLY MARGIN; THENCE NORTH 49°00'12" WEST, ALONG SAID SOUTHWESTERLY MARGIN, 128.68 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT, SAID POINT BEING ON THE EASTERLY LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER RECORDING NUMBER 5978003, RECORDS OF SAID COUNTY AND ON THE ORIGINAL EASTERLY BOUNDARY OF SLP NO. 4 OF THE DUWAMISH WATERWAY; THENCE SOUTH 09°28'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125.00 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65, RECORDS OF SAID COUNTY; THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 48.12 FEET; THENCE SOUTH 18°26'38" EAST 47.31 FEET; THENCE SOUTH 02°23'55" EAST 29.58 FEET; THENCE SOUTH 12°22'45" WEST 168.00 FEET; THENCE SOUTH 51°58'02" EAST 43.09 FEET; THENCE SOUTH 35°07'32" WEST 7.84 FEET; THENCE NORTH 54°42'31" WEST 11.64 FEET; THENCE SOUTH 20°09'12" WEST 55.01 FEET; THENCE SOUTH 29°57'21" WEST 45.31 FEET; THENCE SOUTH 30°24'28" WEST 127.33 FEET; THENCE SOUTH 60°59'35" WEST 34.73 FEET; THENCE SOUTH 42°24'49" WEST 45.22 FEET; THENCE SOUTH 33°42'36" WEST 31.87 FEET; THENCE NORTH 52°16'07" WEST 73.55 FEET TO THE TRUE POINT OF BEGINNING OF THE DUWAMISH WATERWAY; THENCE CONTINUING NORTH 52°16'07" WEST 137.48 FEET; THENCE NORTH 29°57'21" WEST 45.31 FEET; THENCE SOUTH 30°24'28" WEST 135.35 FEET TO INTERSECT THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 2148.98 FEET; THE CENTER OF WHICH BEARS NORTH 83°21'29" WEST; THENCE NORTHERLY ALONG SAID CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 5°09'46" AN ARC DISTANCE OF 193.64 FEET TO A POINT OF COMPOUND CURVE; THENCE NORTHERLY ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 304.80 FEET, THROUGH A CENTRAL ANGLE OF 19°43'31" AN ARC DISTANCE OF 104.93 FEET TO THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY; THENCE SOUTH 49°00'12" EAST, ALONG SAID SOUTHWESTERLY MARGIN, 350.37 FEET TO THE TRUE POINT OF BEGINNING;

(ALSO KNOWN AS PARCEL B, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3005372, RECORDED OCTOBER 10, 2007 AS RECORDING NO. 20071010900018, IN KING COUNTY, WASHINGTON.)

PARCEL II
THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 24 NORTH, RANGE 4 EAST, W.M., IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH WITH THE NORTH MARGIN OF SOUTH WEBSTER STREET, OF ABRAM'S ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 11 OF PLATS, PAGE 30, IN KING COUNTY, WASHINGTON; THENCE NORTH 49°00'12" WEST ALONG SAID SOUTHWESTERLY MARGIN, 519.00 FEET; THENCE SOUTH 40°59'48" WEST 10.00 FEET; THENCE NORTH 49°00'12" WEST PARALLEL WITH SAID SOUTHWESTERLY MARGIN, 75.00 FEET; THENCE NORTH 40°59'48" EAST 10.00 FEET TO SAID SOUTHWESTERLY MARGIN; THENCE NORTH 49°00'12" WEST, ALONG SAID SOUTHWESTERLY MARGIN, 35.00 FEET; THENCE SOUTH 23°43'29" WEST 62.83 FEET; THENCE NORTH 49°00'12" WEST, PARALLEL WITH SAID SOUTHWESTERLY MARGIN, 98.66 FEET; THENCE NORTH 40°59'48" EAST 60.00 FEET TO SAID SOUTHWESTERLY MARGIN; THENCE NORTH 49°00'12" WEST ALONG SAID SOUTHWESTERLY MARGIN, 128.68 FEET TO A POINT ON THE EASTERLY LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER RECORDING NUMBER 5978003, RECORDS OF SAID COUNTY AND ON THE ORIGINAL EASTERLY BOUNDARY OF SLP NUMBER 4 OF THE DUWAMISH WATERWAY; THENCE SOUTH 09°28'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125.00 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTH LINE OF BLOCK 6 OF DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 21 OF PLATS, PAGE 65, IN KING COUNTY, WASHINGTON; THENCE NORTH 89°58'01" WEST PARALLEL WITH SAID NORTH LINE, 48.12 FEET; THENCE SOUTH 18°26'38" EAST 47.31 FEET; THENCE SOUTH 02°23'55" EAST 29.58 FEET; THENCE SOUTH 12°22'45" WEST 168.00 FEET; THENCE SOUTH 51°58'02" EAST 43.09 FEET; THENCE SOUTH 35°07'32" WEST 7.84 FEET; THENCE NORTH 54°42'31" WEST 11.64 FEET; THENCE SOUTH 20°09'12" WEST 55.01 FEET; THENCE SOUTH 29°57'21" WEST 45.31 FEET; THENCE SOUTH 30°24'28" WEST 127.33 FEET; THENCE SOUTH 60°59'35" WEST 34.73 FEET; THENCE SOUTH 42°24'49" WEST 45.22 FEET; THENCE SOUTH 33°42'36" WEST 31.87 FEET; THENCE NORTH 52°16'07" EAST 34.10 FEET TO A POINT ON THE ORIGINAL EASTERLY BOUNDARY OF SLP NUMBER 4 OF THE DUWAMISH WATERWAY; THENCE SOUTH 89°22'37" EAST ALONG SAID EAST MARGINAL WAY SOUTH TO THE EAST MARGIN OF SAID SOUTH WEBSTER STREET; THENCE SOUTH 89°22'37" EAST ALONG SAID SOUTH MARGIN, 276.00 FEET TO A POINT 104.00 FEET WEST OF, WHEN MEASURED AT RIGHT ANGLES TO, THE CENTERLINE OF 12TH AVENUE SOUTH TO THE NORTHWEST CORNER OF LOT 5, BLOCK 5, ABRAM'S ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 11 OF PLATS, PAGE 11 OF KING COUNTY, WASHINGTON; THENCE NORTH 60°32'53" EAST, PARALLEL WITH SAID CENTERLINE 24.00 FEET TO THE NORTH MARGIN OF SAID SOUTH WEBSTER STREET; THENCE SOUTH 89°22'37" EAST ALONG SAID NORTH MARGIN, 371.98 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

(ALSO KNOWN AS PARCEL E OF LOT LINE ADJUSTMENT NUMBER 89003, RECORDED UNDER RECORDING NUMBER 9212019002).

REVISED LEGAL DESCRIPTION:

PARCEL I
PARCEL B, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3005372, RECORDED UNDER KING COUNTY RECORDING NO. 20071010900018;

TOGETHER WITH THAT PORTION OF PARCEL E AS SHOWN AND DELINEATED ON LOT LINE ADJUSTMENT SURVEY UNDER RECORDING NUMBER 9212019002 BY DODDS ENGINEERS, INC. DATED NOVEMBER, 1992 LYING WESTERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCING AT THE MOST NORTHERLY POINT OF SAID PARCEL E;

SAID POINT BEING THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH AND THE LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER KING COUNTY RECORDING NUMBER 5978003, AND THE ORIGINAL EASTERLY BOUNDARY OF SLIP 4 OF THE DUWAMISH WATERWAY;

THENCE SOUTH 09°28'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET TO THE TRUE POINT OF BEGINNING;
THENCE SOUTH 11°34'46" EAST, 71.32 FEET;
THENCE SOUTH 10°54'56" WEST, 45.13 FEET;
THENCE SOUTH 06°28'14" WEST, 16.72 FEET;
THENCE SOUTH 09°58'02" WEST, 80.47 FEET;
THENCE SOUTH 02°25'51" WEST, 37.97 FEET;
THENCE SOUTH 26°27'10" EAST, 12.10 FEET;
THENCE SOUTH 04°33'09" WEST, 8.30 FEET;
THENCE SOUTH 19°00'19" WEST, 8.18 FEET;
THENCE SOUTH 13°11'38" WEST, 9.24 FEET;
THENCE SOUTH 0012'57" WEST, 28.44 FEET;
THENCE NORTH 70°28'27" WEST, 29.11 FEET;
THENCE SOUTH 20°09'39" WEST, 14.73 FEET;
THENCE SOUTH 59°17'24" WEST, 45.31 FEET;
THENCE SOUTH 30°24'28" WEST, 120.70 FEET;
THENCE SOUTH 51°37'12" EAST, 13.01 FEET;
THENCE SOUTH 42°02'56" WEST, 62.38 FEET;
THENCE SOUTH 35°17'24" WEST, 41.23 FEET;
THENCE SOUTH 17°49'24" WEST, 12.56 FEET TO INTERSECT THE SOUTHERLY LINE OF SAID PARCEL E AND THE TERMINUS OF THIS DESCRIBED LINE FROM WHICH THE MOST WESTERLY ANGLE POINT CORNER OF SAID PARCEL E BEARS NORTH 52°16'07" WEST, 28.68 FEET DISTANT.

PARCEL II
PARCEL E AS SHOWN AND DELINEATED ON THE LOT LINE ADJUSTMENT NUMBER 89003, RECORDED UNDER RECORDING NUMBER 9212019002 BY DODDS ENGINEERS, INC. DATED NOVEMBER, 1992;

EXCEPT THAT PORTION OF SAID PARCEL E LYING WESTERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCING AT THE MOST NORTHERLY POINT OF SAID PARCEL E;

SAID POINT BEING THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH AND THE LINE OF THAT CERTAIN DRAINAGE EASEMENT DESCRIBED IN DOCUMENT RECORDED UNDER RECORDING KING COUNTY RECORDING NUMBER 5978003, AND THE ORIGINAL EASTERLY BOUNDARY OF SLIP 4 OF THE DUWAMISH WATERWAY;

THENCE SOUTH 09°28'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY BOUNDARY, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET TO THE TRUE POINT OF BEGINNING;
THENCE SOUTH 11°34'46" EAST, 71.32 FEET;
THENCE SOUTH 10°54'56" WEST, 45.13 FEET;
THENCE SOUTH 06°28'14" WEST, 16.72 FEET;
THENCE SOUTH 09°58'02" WEST, 80.47 FEET;
THENCE SOUTH 02°25'51" WEST, 37.97 FEET;
THENCE SOUTH 26°27'10" EAST, 12.10 FEET;
THENCE SOUTH 04°33'09" WEST, 8.30 FEET;
THENCE SOUTH 19°00'19" WEST, 8.18 FEET;
THENCE SOUTH 13°11'38" WEST, 9.24 FEET;
THENCE SOUTH 0012'57" WEST, 28.44 FEET;
THENCE NORTH 70°28'27" WEST, 29.11 FEET;
THENCE SOUTH 20°09'39" WEST, 14.73 FEET;
THENCE SOUTH 59°17'24" WEST, 45.31 FEET;
THENCE SOUTH 30°24'28" WEST, 120.70 FEET;
THENCE SOUTH 51°37'12" EAST, 13.01 FEET;
THENCE SOUTH 42°02'56" WEST, 62.38 FEET;
THENCE SOUTH 35°17'24" WEST, 41.23 FEET;
THENCE SOUTH 17°49'24" WEST, 12.56 FEET TO INTERSECT THE SOUTHERLY LINE OF SAID PARCEL E AND THE TERMINUS OF THIS DESCRIBED LINE FROM WHICH THE MOST WESTERLY ANGLE POINT CORNER OF SAID PARCEL E BEARS NORTH 52°16'07" WEST, 28.68 FEET DISTANT.

REVISIONS:
1. REVISED LEGAL DESCRIPTIONS AUGUST 28, 2012

8/29/12

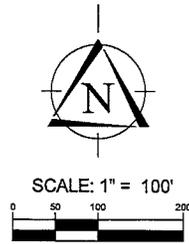
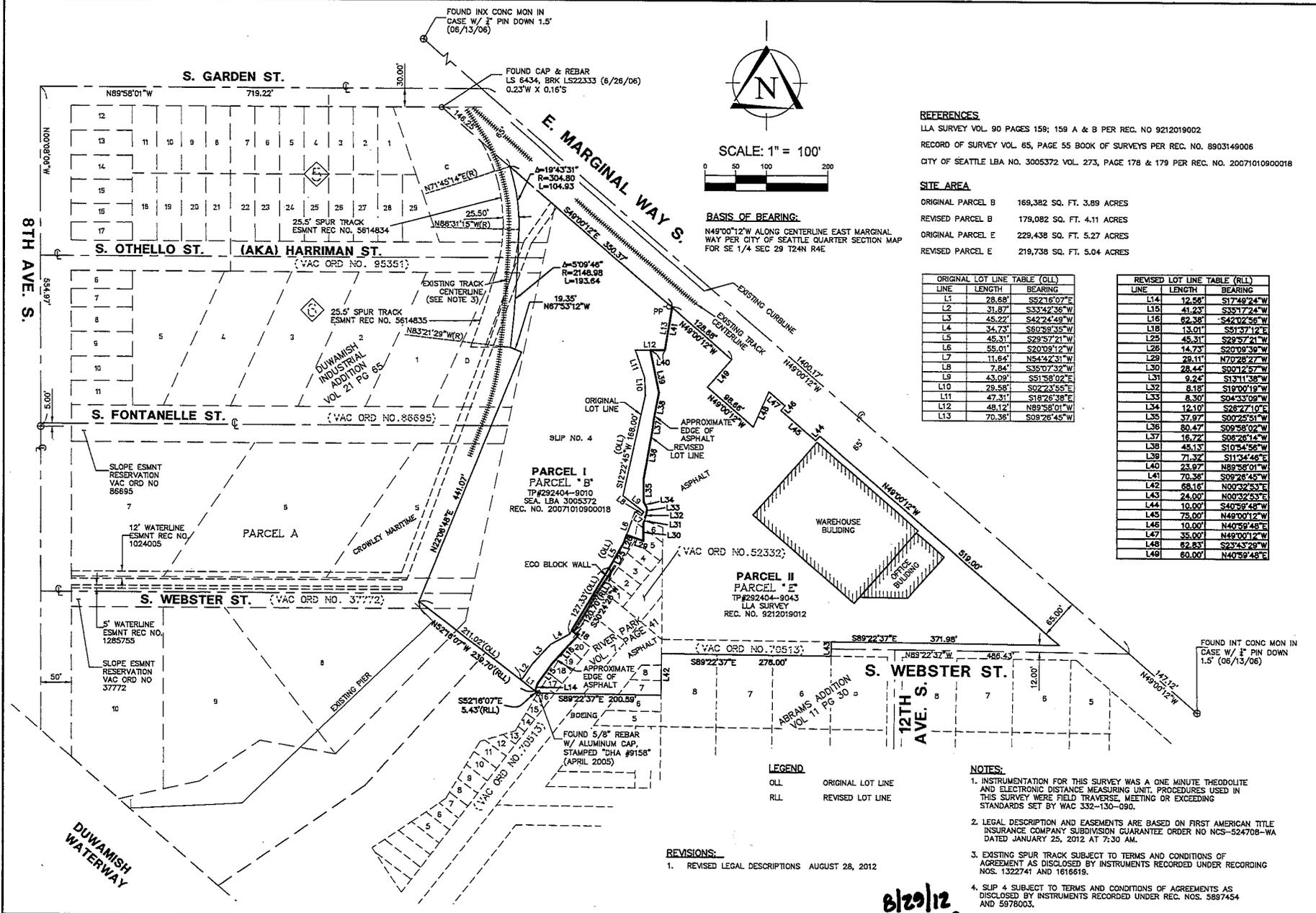


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POR NW 1/4, SE 1/4, SEC 29,
TWP 24 N., RGE 4 E, W.M.
KING COUNTY, WASHINGTON

DWN. BY	LMM	DATE	MARCH 12, 2012	JOB NO.	11-146
CHKD. BY	LEC	SCALE	N/A	SHEET	2 OF 3



REFERENCES
 LLA SURVEY VOL. 90 PAGES 158; 159 A & B PER REC. NO. 9212019002
 RECORD OF SURVEY VOL. 65, PAGE 55 BOOK OF SURVEYS PER REC. NO. 8903149006
 CITY OF SEATTLE LBA NO. 3005372 VOL. 273, PAGE 178 & 179 PER REC. NO. 20071010900018

SITE AREA
 ORIGINAL PARCEL B 169,382 SQ. FT. 3.89 ACRES
 REVISED PARCEL B 179,082 SQ. FT. 4.11 ACRES
 ORIGINAL PARCEL E 229,436 SQ. FT. 5.27 ACRES
 REVISED PARCEL E 219,738 SQ. FT. 5.04 ACRES

BASIS OF BEARING:
 N49°00'12"W ALONG CENTERLINE EAST MARGINAL WAY PER CITY OF SEATTLE QUARTER SECTION MAP FOR SE 1/4 SEC 29 T24N R4E

ORIGINAL LOT LINE TABLE (OLL)	REVISED LOT LINE TABLE (RL)				
LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
L1	28.68'	S5216°07'E	L14	12.58'	S1748°24"W
L2	31.87'	S3342°36"W	L15	41.23'	S3317°24"W
L3	45.22'	S4224°49"W	L16	62.38'	S4202°56"W
L4	34.72'	S6059°35"W	L18	13.01'	S5137°12'E
L5	45.31'	S2957°21"W	L29	45.31'	S2957°21"W
L6	55.01'	S2009°17"W	L26	14.73'	S2009°39"W
L7	11.64'	N5442°31"W	L28	28.11'	N7228°27"W
L8	7.84'	S3507°32"W	L30	28.44'	S0012°57"W
L9	43.09'	S5158°02'E	L31	9.24'	S1311°38"W
L10	28.58'	S0223°55'E	L32	8.18'	S1800°19"W
L11	47.31'	S1826°38'E	L33	8.30'	S0433°09"W
L12	48.12'	N8958°01"W	L34	12.10'	S2877°10'E
L13	70.38'	S0926°45"W	L35	37.97'	S0223°55"W
			L36	80.47'	S0258°02"W
			L37	16.72'	S0826°14"W
			L38	45.13'	S1054°56"W
			L39	71.32'	S11344°48"E
			L40	23.97'	N8958°01"W
			L41	70.38'	S0926°45"W
			L42	68.61'	N0223°55"E
			L43	24.00'	N0223°55"E
			L44	10.00'	S4059°48"W
			L45	75.00'	N4900°12"W
			L46	10.00'	N4059°48"E
			L47	35.00'	N4900°12"W
			L48	82.83'	S2943°28"W
			L49	60.00'	N4059°48"E

LEGEND
 OLL ORIGINAL LOT LINE
 RLL REVISED LOT LINE

NOTES:
 1. INSTRUMENTATION FOR THIS SURVEY WAS A ONE MINUTE THEODOLITE AND ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE FIELD TRAVERSE, MEETING OR EXCEEDING STANDARDS SET BY WAC 332-130-080.
 2. LEGAL DESCRIPTION AND EASEMENTS ARE BASED ON FIRST AMERICAN TITLE INSURANCE COMPANY SUBDIVISION GUARANTEE ORDER NO. NCS-524708-WA DATED JANUARY 25, 2012 AT 7:30 AM.
 3. EXISTING SPUR TRACK SUBJECT TO TERMS AND CONDITIONS OF AGREEMENT AS DISCLOSED BY INSTRUMENTS RECORDED UNDER RECORDING NOS. 1322741 AND 1616619.
 4. SLIP 4 SUBJECT TO TERMS AND CONDITIONS OF AGREEMENTS AS DISCLOSED BY INSTRUMENTS RECORDED UNDER REC. NOS. 3897454 AND 5978003.

REVISIONS:
 1. REVISED LEGAL DESCRIPTIONS AUGUST 28, 2012

8/29/12



12112 115th Ave. NE
 Kirkland, WA 98034-6923
 425.821.8448
 425.821.3481 fax
 800.488.0756 toll free
 www.triadassociates.net



POR NW 1/4, SE 1/4, SEC 29,
 TWP 24 N., RGE 4 E, W.M.
 KING COUNTY, WASHINGTON

DWN. BY	KBR	DATE	MARCH 12, 2012	JOB NO.	11-146
CHKD. BY	LEC	SCALE	1"=100'	SHEET	3 OF 3

ATTACHMENT 3

Dave Schuchardt
SPU SLIP 4 ICs ORD ATT 3
May 7, 2013
Version #1

DRAFT OUTFALL EASEMENT
SLIP 4 EARLY ACTION AREA

DRAFT 3/19/2013

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

Seattle Public Utilities Real Property Services
Post Office Box 34018
Seattle, WA 98124-4018

STORM WATER DRAINAGE OUTFALL EASEMENT AGREEMENT

Reference Nos. of Document Released:	None
Grantor:	City of Seattle
Grantee:	First South Properties L.L.C.
Legal Description (abbreviated):	Por Par I, Sea LBA#3013125,KCR#
Assessor's Tax Parcel ID No.	<u>292404-9110</u>

This Agreement is made effective as of the ____ day of _____, 2013 by and between City of Seattle, a Washington municipal corporation, acting by and through Seattle Public Utilities ("Grantor"), and First South Properties L.L.C., a limited liability company of the State of Washington ("Grantee").

RECITALS

WHEREAS, Grantor owns King County, WA Assessor Tax Parcel Number 292404-9110, more specifically described as Parcel I, SEA. LBA #3013125, King County REC. NO. _____ ("Grantor's Property"); and

WHEREAS, Grantee owns a private storm water outfall pipeline existing on, under, across, and through a portion of Grantor's Property (the "Grantee's Private Outfall Facility"); and



DRAFT OUTFALL EASEMENT SLIP 4 EARLY ACTION AREA

WHEREAS, a CERCLA removal action (hereafter "Removal Action") was conducted at the Property by the Grantor under an Agreed Order on Consent with the U.S. Environmental Protection Agency, dated 9/28/2006 ("AOC"), The Removal Action conducted at the property is described in the following documents:

USEPA. 2006. Action Memorandum for a Non-Time-Critical Removal Action at the Slip 4 Early Action Area of the Lower Duwamish Waterway Superfund Site, Seattle, Washington. U.S. Environmental Protection Agency, Region 10, Seattle, WA. May 3.

Integral. 2006. Lower Duwamish Waterway Slip 4 Early Action Area: Slip 4 Engineering Evaluation/Cost Analysis. Prepared for City of Seattle and King County, WA. Integral Consulting Inc., Mercer Island, WA.

Integral. 2010. Lower Duwamish Waterway Slip 4 Early Action Area: 100% Design Submittal, Design Analysis Report. Prepared for City of Seattle and King County. Integral Consulting Inc., Seattle, WA.

Integral. 2012. Lower Duwamish Waterway Slip 4 Early Action Area: Draft Removal Action Completion Report. Prepared for City of Seattle and King County. Integral Consulting Inc., Seattle, WA. (Draft submitted to EPA April 23, 2012. Approval pending.)

WHEREAS,
Sediments and soils containing materials exceeding CERCLA/MTCA cleanup standards may be present in the easement area and are contained beneath an engineered cap (Cap); and the physical integrity of the cap must be maintained; and

WHEREAS,
The Cap is subject to a restrictive covenant which contains specific provisions for protection of the Cap;

NOW, THEREFORE, the parties agree as follows:

EASEMENT

In consideration of the public good, mutual benefits and other good and valuable consideration, receipt of which are hereby acknowledged, Grantor, insofar as it has rights, title and interest, or herein after acquires rights, title or interest in Grantor's Property hereby conveys and grants to Grantee a nonexclusive storm water drainage outfall facility easement (the "Easement") over, under, through, across and upon Grantor's Property legally described in Exhibit A (the "Easement Area"), attached hereto and incorporated herein.

This Easement shall include only such rights in the Easement Area as shall be necessary for operation, inspection, maintenance, repair and replacement of Grantee's Private



DRAFT OUTFALL EASEMENT SLIP 4 EARLY ACTION AREA

Outfall Facility, and reasonable access thereto (the "Purposes"). Grantor, its successors and assigns, shall have the right to use the Easement Area in any way and for all purposes which do not unreasonably interfere with the easement rights for the Purposes herein granted to Grantee and which are consistent with the terms and conditions of this Easement.

EASEMENT TERMS

1. Grantee acknowledges that it hereby is placed on notice that the Easement herein conveyed is located on a site that has been placed by the United States Environmental Protection Agency on the National Priorities list of "Superfund" sites and by the State of Washington on its list of hazardous sites.
2. Grantee shall at all times exercise its rights under this easement in accordance with applicable statutes, orders, rules and regulations of any public authority having jurisdiction. Grantee accepts the Easement Area in its present physical condition, AS IS. Grantee does hereby release, indemnify and promise to defend and save harmless Grantor from and against any and all liability, loss, damage, expense, actions and claims, including costs and reasonable attorneys' fees incurred by Grantor in connection therewith, arising directly or indirectly on account of or out of the exercise by Grantee, its servants, agents, employees and contractors of the right granted in the easement or Grantee's obligations hereunder.
3. In the event of violation of the terms of his Easement, Grantor shall be entitled to all remedies at law or in equity, including without limitation bringing an action for injunctive relief or specific performance, it being recognized that monetary damages may not provide an adequate remedy to Grantor.
4. The Grantee hereby agrees that in exercising its rights under this Easement, it will not alter, modify, or disturb the Cap without written permission from the Grantor and EPA Region 10 ("EPA") and the Washington State Department of Ecology ("Ecology"), and will restore the Easement Area to its pre-existing condition following the disturbance or removal of any debris, soil sediment, or other particles from the Easement Area. Grantee further consents to Grantor allowing access to the Easement Area, for the sole purpose of inspections or/ maintenance of the Cap, by EPA, The Washington Department of Ecology, and their authorized employees, representative, and contractors. Grantee further consents to Grantor allowing access to the Easement Area by the Respondents to the AOC and their representatives and contractors, as is reasonable and necessary to fulfill the obligations of the Respondents under the ASAOC.
5. Any activity on the Easement Area by the Grantee that may result in the release or exposure to the environment of the contaminated sediment that was contained as



DRAFT OUTFALL EASEMENT SLIP 4 EARLY ACTION AREA

part of the Removal Action, or create a new exposure pathway, is prohibited, unless the specific activity is approved in writing by EPA and Ecology.

6. Any activity on the Easement Area by the Grantee that may interfere with the long-term integrity of the Removal Action and continued protection of human health and the environment is prohibited.
7. Any activity on the Easement Area by the Grantee that may result in the release or exposure to the environment of a hazardous substance that remains on the Easement Area as part of the Removal Action, or create a new exposure pathway, is prohibited.
8. The Grantee must give thirty (30) day advance written notice to EPA, Ecology and the Grantor of the Grantees' intent to convey any interest in the Easement Area.
9. The Grantees' use of the Easement Area is restricted to uses and activities consistent with the terms of this Easement.
10. The Grantee must notify and obtain approval from EPA, Ecology and the Grantor prior to any use of the Easement Area that is inconsistent with the terms of this Easement.
11. The Grantee shall allow authorized representatives of EPA, Ecology and the Grantor or the Grantor's designees the right to enter the Easement Area at reasonable times for the purpose of inspecting/evaluating the Removal Action.
12. This Easement shall be a covenant running with the land, and shall bind Grantor's successors and assigns and all future owners of the real property affected by this easement.
13. In the event of violation of the terms of in this Easement, Grantor shall be entitled to all remedies at law or in equity, including without limitation bringing an action for injunctive relief or specific performance, it being recognized that monetary damages may not provide an adequate remedy to Grantor.

Indemnification and Insurance

- I. To the extent permitted by law, Grantor and Grantee shall protect, defend, indemnify, and save harmless the other party, and its officers, officials, employees, and agents from any and all costs, claims, demands, judgments, damages, or liability of any kind including injuries to persons or damages to property (each, a "Claim"), to the extent caused by the negligent acts or omissions of the indemnifying party. Each party agrees that its obligations under this indemnity extend to any claim, demand, or cause of action brought by, or on behalf of, any of its employees or agents. For this purpose, each party, by mutual negotiation, hereby waives, with respect to the other



DRAFT OUTFALL EASEMENT SLIP 4 EARLY ACTION AREA

party only, any immunity that would otherwise be available against such claims under the industrial insurance provisions of Title 51 RCW. In the event of any claims, demands, actions or lawsuits, the indemnifying party upon prompt notice from the other party shall assume all costs of defense thereof, including legal fees incurred by the other party, and of all resulting judgments that may be obtained against the other party. The prevailing party shall be entitled to recover its reasonable costs and expenses (including reasonable attorneys' fees) incurred to enforce the provisions of this section.

Compliance with Laws

Grantee and Grantor in the exercise of their respective rights under this Easement Agreement shall comply with all applicable federal, state and local laws, ordinances, and regulations, including environmental laws and regulations.

Runs with Land

This Easement and each of the terms, provisions, conditions and covenants herein shall run with the land and be binding upon and inure to the benefit of the parties hereto and their respective heirs, successors, assigns and successors-in-title.

Grantor and Grantee hereby represent and warrant to each other that it has necessary authorization to enter into this Easement and that it has been executed by a duly authorized officer of Grantor and Grantee respectively.

*[THE REST OF THIS PAGE IS LEFT INTENTIONALLY BLANK]
[SIGNATURE(S) ON ATTACHED PAGE(S)]*



DRAFT OUTFALL EASEMENT
SLIP 4 EARLY ACTION AREA

EXHIBIT A

LEGAL DESCRIPTION OF EASEMENT AREA

A STRIP OF LAND TWELVE (12) FEET IN WIDTH, LOCATED IN THAT PORTION OF PARCEL I, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3013125, RECORDED UNDER KING COUNTY, WASHINGTON, RECORDING NO. _____; AND LYING 6 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTER LINE:

COMMENCING AT THE INTERSECTION OF THE EAST LINE OF PARCEL I CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3013125 AND THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH;

THENCE SOUTH 09°26'45" WEST, ALONG SAID EAST LINE, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET;

THENCE SOUTH 11°34'46" EAST, 71.32 FEET;

THENCE SOUTH 10°54'56" WEST, 45.13 FEET;

THENCE SOUTH 06°26'14" WEST, 16.72 FEET;

THENCE SOUTH 09°58'02" WEST, 27.26 FEET TO A POINT ON THE CENTERLINE OF A 10-INCH DIAMETER POLYVINYL CHLORIDE PIPE AND THE TRUE POINT OF BEGINNING OF SAID CENTERLINE;

THENCE NORTH 77°01'35" WEST, 21.44 FEET TO A POINT AT THE TERMINUS OF SAID PIPE;

THENCE CONTINUING NORTH 77°01'35" WEST, 10.00 FEET MORE OF LESS ALONG THE TRAJECTORY OF SAID PIPE TO THE ORIGINAL EASTERLY BOUNDARY OF SLIP 4 OF THE DUWAMISH WATERWAY AND TERMINUS OF SAID CENTERLINE.

CONTAINING APPROXIMATELY 377.5 SQ FT +/-



Dave Schuchardt

SPU SLIP 4 ICs ORD ATT 3

May 7, 2013

Version #1

**1ST SOUTH PROPERTIES OUTFALL EASEMENT
@ SLIP 4 OF THE DUWAMISH WATERWAY**

**TRIAD JOB NO. 11-146
MARCH 04, 2013**

A STRIP OF LAND TWELVE (12) FEET IN WIDTH, LOCATED IN THAT PORTION OF PARCEL I, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO.3013125, RECORDED UNDER KING COUNTY, WASHINGTON, RECORDING NO. _____; AND LYING 6 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTER LINE:

COMMENCING AT THE INTERSECTION OF THE EAST LINE OF PARCEL I CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3013125 AND THE SOUTHWESTERLY MARGIN OF EAST MARGINAL WAY SOUTH;

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CONTAINING APPRXIMATELY 377.5 SQ FT +/-

WRITTEN BY: KBR
CHECKED BY: LEC



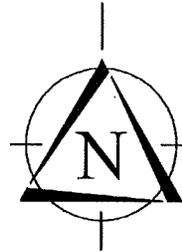
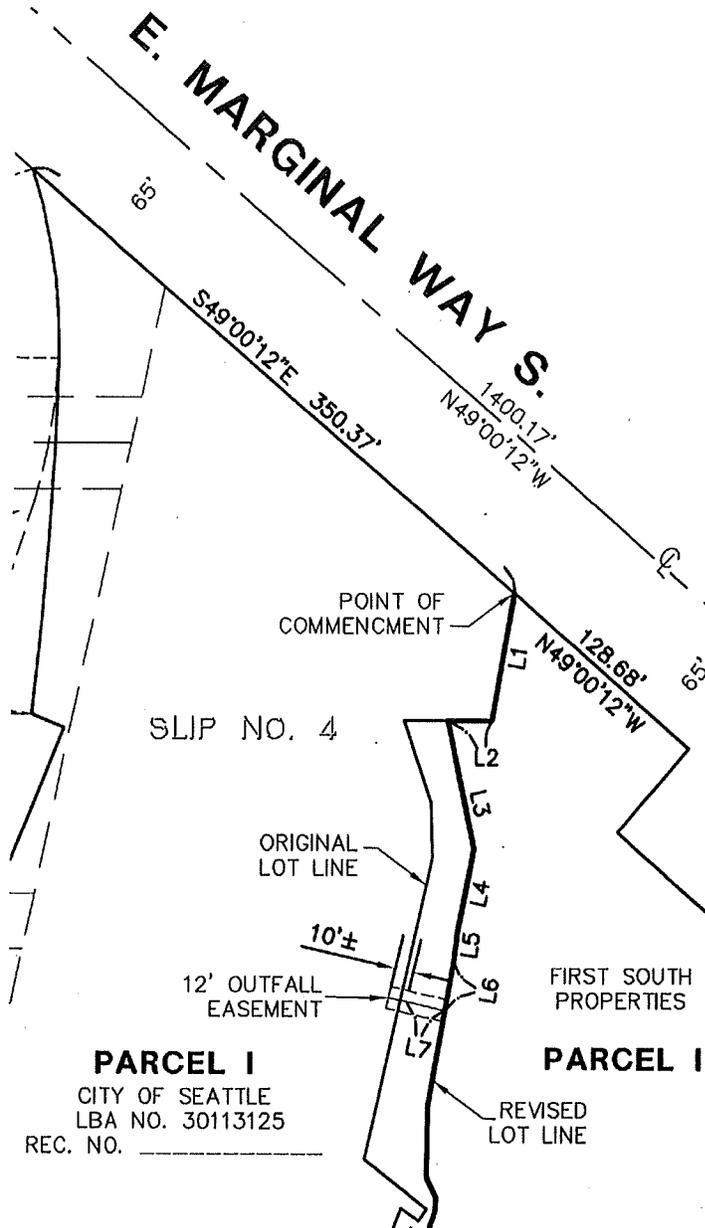
12112 115th Avenue NE Kirkland, Washington 98034-9623
425.821.8448 • 800.488.0756 • Fax 425.821.3481
www.triadassociates.net

Land Development Consultants

Dave Schuchardt
 SPU SLIP 4 ICs ORD ATT 3
 May 7, 2013
 Version #1

1ST SOUTH PROPERTIES OUTFALL EASEMENT
 @ SLIP 4 OF THE DUWAMISH WATERWAY

TRIAD JOB NO. 11-146
 MARCH 04, 2013



SCALE: 1" = 100'

LINE TABLE		
LINE	LENGTH	BEARING
L1	70.36'	S09°26'45"W
L2	23.97'	N89°58'01"W
L3	71.32'	S11°34'46"E
L4	45.13'	S10°54'56"W
L5	16.72'	S06°26'14"W
L6	27.26'	S09°58'02"W
L7	21.44'	N77°01'35"W



3/6/13

THIS EXHIBIT HAS BEEN PREPARED TO ASSIST IN THE INTERPRETATION OF THE ACCOMPANYING LEGAL DESCRIPTION. IF THERE IS A CONFLICT BETWEEN THE WRITTEN LEGAL DESCRIPTION AND THIS SKETCH, THE LEGAL DESCRIPTION SHALL PREVAIL.



12112 115th Avenue N.E. Kirkland, Washington 98034-6929
 425.821.8448 - 800.488.0756 - Fax 425.821.3481
 www.triadassociates.net

11146 13-0304 1ST S PROPERTY OUTFALL LEGAL.dwg

Land Development Consultants



MEMORANDUM

To: Rear Admiral Keith Taylor Coast Guard District Commander

From: Karen Keeley, U.S. Environmental Protection Agency Region 10

Cc: Allison Crowley, City of Seattle; David Schuchardt, City of Seattle; Reid Carscadden, Integral Consulting, Inc.

Date: February, 2013

Subject: Request for Establishment of Regulated Navigation Area; Slip 4 Early Action Area, Lower Duwamish Waterway Superfund Site, Seattle, Washington

This memorandum is to request the establishment of a regulated navigation area (RNA) within a portion of the Lower Duwamish Waterway in Seattle, Washington. Specifically, the RNA will protect the riverbed in the U.S. Environmental Protection Agency (EPA)'s Slip 4 Early Action Area (EAA), located within the Lower Duwamish Waterway (LDW) Superfund Site (EPA ID No. WA0002329803). This RNA will prohibit activities that would disturb the riverbed, such as vessel grounding, anchoring, dragging, trawling, spudding or other activities that could disrupt the integrity of the engineered sediment and slope caps that have been placed within the Slip 4 EAA to isolate underlying contaminated sediments. It will not affect transit or navigation of the area. The remainder of this memo provides background for this request, the purpose of this request, and information required for proposing RNAs per the Code of Federal Registration (CFR) Title 33, Part 165.

Background and Purpose

The LDW was added to the EPA's National Priorities List (Superfund) in September 2001 because of hazardous substance contamination in sediments. Slip 4 was subsequently identified by EPA and the Washington Department of Ecology (Ecology) as an EAA within the LDW, based primarily on elevated concentrations of polychlorinated biphenyls (PCBs). Slip 4 EAA cleanup activities were conducted pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), under EPA's non-time-critical removal action (NTCRA) authority. In May 2006, EPA issued an Action Memorandum containing its removal action decision for the Slip 4 EAA. The Slip 4 EAA removal action was conducted by the City of Seattle (City) under an administrative settlement agreement and order on consent (ASAOC), CERCLA Docket No. 10-2006-0364.

The selected removal action required dredging, excavation, and offsite disposal of 17,202 tons of contaminated sediment, shoreline soil, and creosote-treated timber piles and other



debris, and placement of engineered sediment and slope caps throughout the EAA (approximately 3.43 acres) to isolate residual sediment contamination within the EAA. In addition, the removal action included demolition and removal/recycling of a portion of an aging concrete pier and supporting piling on the northwest bank of the slip, and creation of two intertidal beach areas and other shallow-water areas to improve habitat conditions in the slip. Construction activities were initiated in October 2011, and were completed in February 2012. A Removal Action Completion Report documenting the cleanup activities was completed and approved by EPA in July 2012.

Required Information

Specific details, as requested in CFR Title 33 Part 165.5, related to this request are provided below.

1. Name of person submitting the request:

Karen Keeley, Project Manager, U.S. Environmental Protection Agency Region 10, Seattle, Washington.

2. The location and boundaries of the RNA:

All waters within the northern portion of Slip 4 bounded by the shoreline and the southern boundary of the EAA defined as the line beginning at a point on the shore at 47° 32' 8.47" N, 122° 19' 12.00" W, thence southeast to 47° 32' 7.64" N, 122° 19' 10.41" W, thence southwest to 47° 32' 7.59" N, 122° 19' 10.48" W, thence southeast to a point on the shoreline at 47° 32' 6.79" N, 122° 19' 9.31" W (Datum: NAD 1983/91). The location of the proposed RNA is shown on Figure 1 (attached).

3. Date, Time, and Duration that the RNA should be established:

The RNA should be established as soon as possible and last in perpetuity, or until otherwise approved by EPA.

4. Description of the activities planned for the RNA:

With conditions noted in the following paragraph, this proposed RNA is not intended to affect transit or navigation within the area, nor is it intended to conflict with the Suquamish or Muckleshoot tribal treaty fishing rights and the tribes are not restricted from any type of fishing in the described area.

5. Nature of the restrictions desired:

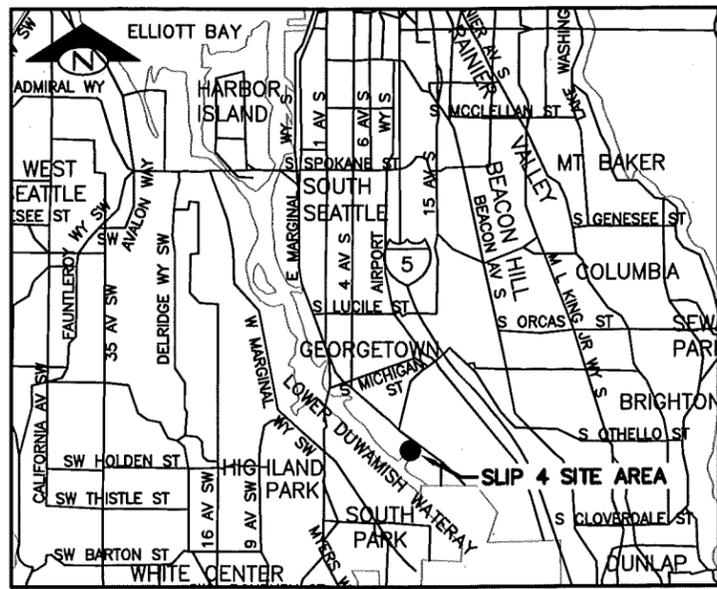
This RNA is intended to prohibit all vessels and persons from activities that would disturb the riverbed, such as vessel grounding, anchoring, dragging, trawling, spudding, or other activities that involve disrupting the integrity of the sediment and slope caps installed in the designated RNA. Vessels may otherwise transit or navigate within this area without reservation. The proposed restrictions do not apply to vessels or persons engaged in activities associated with the Slip 4 EAA NTCRA.

6. Reason why the restrictions are desired:

This requested RNA is needed to comply with the long-term operations, monitoring, and maintenance requirements for the sediment and slope caps constructed within the Slip 4 EAA NTCRA. Pursuant to the ASAOC, the City of Seattle is required by EPA to maintain the structural integrity of the capped areas in perpetuity.

Upon review of this request, please provide EPA with an estimated schedule for the rule-making process to establish the RNA. If you need additional information, please contact Karen Keeley at (206) 553-2141 or via email at keeley.karen@epa.gov.





VICINITY MAP

Dave Schuchardt
 SPU SLIP 4 ICs ORD ATT 4
 May 7, 2013
 Version #1

Crowley Marine Services, Inc.
 Parcel #2136200641

NORTHING 198949.15
 EASTING 1273202.47
 LAT. N 47° 32' 8.47"
 LONG. W 122° 19' 12.00"

Crowley Marine Services, Inc.
 Parcel #2136200641

The Boeing Company
 Parcel #0022000005

Proposed Regulated Navigation Area
 City of Seattle
 Parcel #2924049110

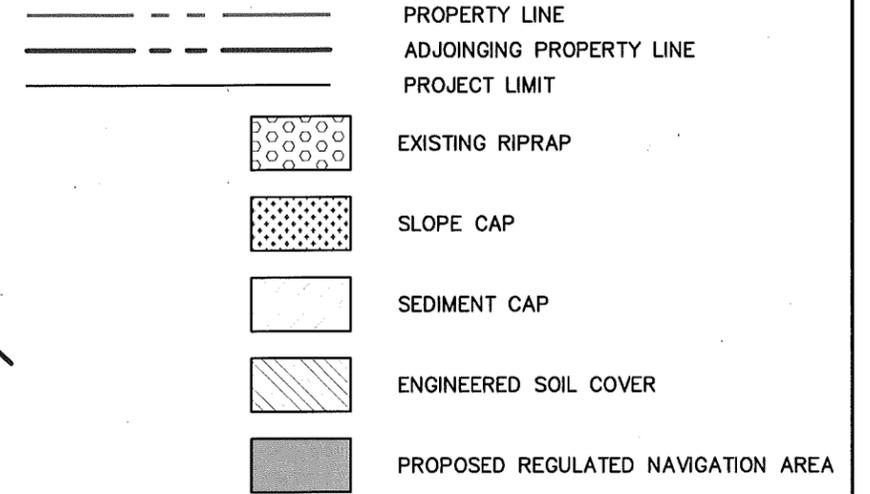
First South Properties
 Parcel #2924049043

NORTHING 198799.06
 EASTING 1273389.33
 LAT. N 47° 32' 7.02"
 LONG. W 122° 19' 9.23"

The Boeing Company
 Parcel #0022000005

East Marginal Way S.

King County
 Parcel #2924049091



REGULATED NAVIGATION AREA:
 ALL WATERS WITHIN THE NORTHERN PORTION OF SLIP 4 BOUNDED BY THE SHORELINE AND THE SOUTHERN BOUNDARY OF THE EAA DEFINED AS THE LINE BEGINNING AT A POINT ON THE SHORE AT 47° 32' 8.47" N 122° 19' 12.00" W, THENCE SOUTHEAST TO A POINT ON THE SHORELINE AT 47° 32' 7.02" N 122° 19' 9.23" W.

MERIDIAN: WA STATE PLANE COORDINATE SYSTEM (NORTH ZONE), NAD 1983, 1991 ADJUSTMENT.

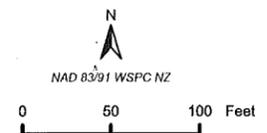


Figure 1.
 Proposed Regulated Navigation Boundary Area
 Slip 4 Early Action Area
 Lower Duwamish Waterway Superfund Site



FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	CBO Analyst/Phone:
Seattle Public Utilities	Dave Schuchardt/5-1642	Craig Stampher/4-0535

Legislation Title: AN ORDINANCE authorizing Seattle Public Utilities to establish institutional controls relating to the long-term protection of the environmental remediation of Slip 4 of the Lower Duwamish Waterway consisting of development and execution of an environmental covenant with U.S. Environmental Protection Agency that will place restrictions on City of Seattle real property; negotiate and execute a lot line adjustment with 1st South Properties, L.L.C.; negotiate and execute a nonexclusive storm water drainage outfall facility easement with 1st South Properties, L.L.C.; and pursue and establish a permanent Regulated Navigation Area within Slip 4 through coordination with the U.S. Department of Homeland Security.

Summary of the Legislation: This legislation helps implement institutional controls for the City's cleanup of contaminated sediment in Slip 4 of the Lower Duwamish Waterway (LDW) Superfund Site. Institutional controls are non-engineering measures intended to ensure the integrity and protectiveness of an environmental cleanup (remedy) where contaminated material remains at the site after active cleanup is finished. These institutional controls will help manage human activities by preventing or reducing exposure to contaminated sediments located beneath the protective cap placed in Slip 4 in late 2011 and early 2012.

Background: Slip 4 is a 6.4-acre navigable inlet on the LDW in Seattle, King County, Washington, and is located three miles upstream from the confluence of the LDW with Elliott Bay. Approximately 3.5 acres of sediment within Slip 4 is contaminated with polychlorinated biphenyls (PCBs) along with metals, organic compounds, and petroleum products. Due to this contamination, Slip 4 is one of five priority Early Action Areas (EAAs) within the 5.5-mile long LDW Superfund Site.

Consistent with agreements with King County and administrative orders with the U.S. Environmental Protection Agency (EPA), the City managed the Slip 4 remedy construction, which was completed on February 7, 2012. Construction included dredging and offsite disposal of contaminated nearshore soil, sediment, and debris; placing capping materials; demolishing a large pier structure; and habitat improvements along the riverbank and intertidal areas. A significant portion of the upland and aquatic areas that underwent remediation in Slip 4 is owned by the City of Seattle and managed by SPU. The EPA order also requires the City to implement institutional controls at Slip 4 because some hazardous substances would remain on site at levels that do not allow unrestricted use.



Institutional controls for Slip 4 include:

1. Executing an environmental covenant with EPA that will place restrictions on City property within the Slip 4 EAA to protect human health and the environment and insure the integrity of the Slip 4 remedy, and
2. Establishing a permanent regulated navigation area within the Slip 4 EAA to prohibit activities that would disturb the riverbed (this will not affect transit or navigation of the area).

In addition, a lot-line adjustment along the boundary of City property in Slip 4 and an adjacent parcel owned by 1st South Properties would provide the City with better control over the remedy and facilitate development and implementation of the environmental covenant. Granting a storm water drainage outfall facility easement to 1st South Properties is a necessary component of this lot-line adjustment.

Note: Although the proposed legislation would authorize Seattle Public Utilities to purchase property through a lot line adjustment, there is no purchase price for the property and no money will be exchanged between Seattle Public Utilities and 1st South Properties for the lot line adjustment or the related storm water drainage easement.

Please check one of the following:

This legislation does not have any financial implications.

This legislation has financial implications.

Other Implications:

- a) Does the legislation have indirect financial implications, or long-term implications?**
The proposed environmental covenant and regulated navigational area will likely be in place as long as contaminated sediment remains contained (beneath the remedial cap) at Slip 4. These administrative instruments, to some extent, constrain the use of City owned property, but are a component of the cleanup process and required by the regulatory agencies. These restrictions also preserve the long-term integrity of the restored aquatic habitat that was established as a component of the remedy.
- b) What is the financial cost of not implementing the legislation?**
Not implementing the legislation would leave the sediment remedy in Slip 4 vulnerable to damage. If the sediment cap were to be damaged or breached by, for example, navigational activity or other disturbances, the City would be exposed to substantial costs (hundreds of thousands to millions of dollars) to repair the cap and remediate contamination that was released. In addition, because the institutional controls are required by the regulatory agency (EPA), not implementing the legislation would likely lead to penalties and legal orders from the federal government to implement the controls.

- c) **Does this legislation affect any departments besides the originating department?**
Yes, Seattle Public Utilities and Seattle City Light share all costs for Slip 4. As stated in item (b) above, not implementing the legislation could impose costs on Seattle Public Utilities and Seattle City Light
- d) **What are the possible alternatives to the legislation that could achieve the same or similar objectives?**
There are no practical or feasible alternatives to the legislation at this time. Because some contamination remains beneath an engineered cap at the Site as part of the EPA-approved cleanup, institutional controls must be in place to protect human health and the environment.
- e) **Is a public hearing required for this legislation?**
No
- f) **Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation?**
No.
- g) **Does this legislation affect a piece of property?**
Yes. Maps showing the property involved are attached to the proposed Ordinance.
- h) **Other Issues:** None.

List attachments to the fiscal note below:
None.





City of Seattle
Office of the Mayor

May 28, 2013

Honorable Sally Clark
President
Seattle City Council
City Hall, 2nd Floor

Dear Council President Clark:

I am pleased to transmit the attached proposed Council Bill which would authorize the director of Seattle Public Utilities to fulfill obligations in an Administrative Settlement Agreement and Order on Consent by the U. S. Environmental Protection Agency (EPA).

SPU has conducted cleanup actions in Slip 4 of the Lower Duwamish Waterway, with construction completed in 2012. Part of the City's ongoing commitment to maintaining a protective cleanup in Slip 4 is a requirement to establish "institutional controls" to manage human activities at the site, so contaminated sediment contained under an engineered cap is not disturbed. These controls put limits on uses of the City-owned property in Slip 4. These controls include: 1) executing an environmental covenant with EPA; 2) executing a lot line adjustment that expands City property limits to include capped areas; 3) executing an outfall easement for an adjacent property owner; and 4) coordinating with the Department of Homeland Security to establish a Regulated Navigation Area in Slip 4. This proposed ordinance allows the City to fulfill those obligations.

This legislation builds on over a decade of significant and continuous effort to remedy historic contamination in the lower Duwamish. If you have any questions, please contact David Schuchardt at 615-1642.

Sincerely,

Michael McGinn
Mayor of Seattle

cc: Honorable Members of the Seattle City Council



APPENDIX B

PROPERTY PURCHASES

DOCUMENTATION

**2007 REAL ESTATE PURCHASE
AND SALE AGREEMENT**

REAL ESTATE PURCHASE AND SALE AGREEMENT

THIS REAL ESTATE PURCHASE AND SALE AGREEMENT ("Agreement") is made as of the 18th day of May, 2007, by THE CITY OF SEATTLE ("City"), a Washington municipal corporation, EIGHTH AVENUE TERMINALS, INC., a California corporation, formerly known as Pacific Terminals, Inc. (collectively known as "PTI"), and CROWLEY MARINE SERVICES, INC. ("Crowley"), a Delaware corporation. The real property that is the subject of this Agreement is located in King County, Washington and is legally described in the attached Exhibit A (hereafter the "Property"). The Property is a portion of the parcel known as Revised Slip #4 and a portion of the parcel known as Parcel D, which parcels were created by Lot Line Adjustment recorded under Recording No. 9212019002, records of King County, Washington. Crowley owns Parcel D and PTI owns Revised Slip #4.

Section 1. Purchase Price. Subject to the terms of this Agreement, PTI and Crowley shall sell and City shall buy the Property for a price of FIVE HUNDRED AND FIFTY THOUSAND DOLLARS (\$550,000) (the "Purchase Price") payable as follows:

1.1 Deposit. Within five (5) business days of the execution of this Agreement by all parties, City shall open an escrow account with Chicago Title Insurance Company located at 701 Fifth Avenue, Suite 3400, Seattle, WA 98104 (hereafter "Escrow Agent"), and deliver to Escrow Agent a deposit of FIFTY-FIVE THOUSAND DOLLARS (\$55,000) (the "Deposit") together with a fully executed copy of this Agreement. Escrow Agent shall place the Deposit in an interest-bearing account for the benefit of the City and shall apply or disburse the Deposit as provided in this Agreement.

1.2 Remainder of Purchase Price. The balance of the Purchase Price shall be payable in cash, certified funds, or wire transfer at Closing.

Section 2. Title. Each of PTI and Crowley shall convey good, marketable, and insurable title to the portion of the Property which it owns to the City by special warranty deed, subject to the liens, encumbrances, defects, easements, leases, conditions, covenants, agreements, releases, rights, and restrictions listed on the attached Exhibit B and any others accepted in writing by the City (collectively referred to as "Permitted Title Exceptions").

Section 3. Title Insurance. Title to the Property shall be insured under an ALTA owner's title insurance policy issued pursuant to the preliminary commitment for title insurance from Chicago Title Insurance Company, under order number 1210101 (the "Commitment"), subject only to the Permitted Title Exceptions. If any additional title exceptions are reported after the date of this Agreement, and if the exception(s) are not acceptable to the City, the City shall have the right to terminate this Agreement by written notice to Crowley and PTI within 30 days after receipt of the new exception(s)

and in that event the Deposit shall be returned to the City. If the City does not elect to terminate this Agreement, the new exception(s) shall become Permitted Title Exceptions.

Section 4. Pier Responsibilities

4.1 Pier. The legal description of the Property in Exhibit A includes a portion of a pier located on and over a portion of the Property up to the face of the bulkhead along the bank of the slip underneath the pier. In acquiring the Property, the City is also acquiring ownership of the pier and pilings located on the Property, and the City agrees to be responsible for all maintenance, repair and/or removal of the portions of the pier which it owns in accordance with all applicable institutional controls or requirements imposed by the United States Environmental Protection Agency ("EPA") or the Washington State Department of Ecology ("Ecology") or that are necessary to implement and/or maintain any CERCLA or MTCA remedy involving the Property. Crowley agrees to be responsible for all maintenance, repair and/or removal of the bulkhead itself; provided, however, that the City shall be responsible for and shall indemnify, hold harmless and defend Crowley and PTI against any property damage, personal injury, or penalties, including reasonable attorney's fees, to the extent arising from damage to the bulkhead caused by the acts or omissions of the City or its contractors, whether during pier maintenance, repair and/or removal work, and implementation of any CERCLA or MTCA remedy involving the Property through completion of the Slip 4 Early Action Area Removal Action; however, the City shall not be responsible for and shall not indemnify Crowley and PTI against property damage, personal injury or penalties to the extent arising from damage to the bulkhead that is caused by the acts or omissions of Crowley or PTI.

Crowley agrees that prior to Closing, it will disconnect or relocate power and water utilities currently located at or under portions of the pier that the City will own and shall notify the City when this work has been completed so that demolition of these utilities can be safely performed in conjunction with demolition of the City's portion of the pier.

Section 5. Access and Temporary Occupancy.

5.1 Upland Access and Temporary Occupancy. Crowley acknowledges that the City will need access and temporary occupancy of a portion of Crowley's property to perform construction and removal work (including pre-construction planning, surveying and inspection work) required by EPA pursuant to the Administrative Settlement Agreement and Order on Consent for Slip 4 Removal Action ("ASAOC") (collectively the "Removal Work"). In accordance with the terms described in this Section 5, Crowley is committed to cooperating with the City to negotiate with existing Crowley tenants to allow for reasonable and timely access to the City for the Removal Work.

Following execution of this Real Estate Purchase and Sale Agreement, Crowley and the City will work together in good faith with the existing tenants (Alaska Logistics and UPRR) to negotiate an access agreement for the areas identified in Exhibit E ("Construction Access Options") that is acceptable to Crowley, Crowley's tenants, and

the City ("Access Agreement"), and, at that time, shall be added to this Agreement as Exhibit F. Subject to approval by existing tenants, the Parties agree that the Access Agreement will include the following provisions:

5.1.1 The Parties agree that to the extent practical to allow for execution of the Removal Work, the City access and staging area footprint will be limited to the boundaries shown on either of the Construction Access Options, Exhibit E;

5.1.2 Subject to the rights of the existing tenants, Crowley will agree to provide the City and its contractors reasonable and timely access to its property for pre-construction planning, surveying, and inspection work;

5.1.3 City will provide at least 90 days advance notice of: (a) the estimated date of commencement of the construction portion of the Removal Work, (b) the approximate boundaries of the access area and the details of the staging, loading and transportation plan for the area, and (c) the estimated duration of the construction portion of the Removal Work and to the extent possible, the estimated duration of all other occupancy and access by the City. The City will provide revised details of items (a), (b) and (c) above to Crowley as soon as the Contractor's work plans are finalized;

5.1.4 City will cooperate with Crowley and the existing tenants to the extent feasible to minimize the adverse impacts on the existing tenants;

5.1.5 City will agree to implement appropriate safety practices and fund/install improvements to access areas to minimize the potential for accidents arising from the interaction of the City activities with those of the existing tenants, including the addition of road and traffic signage, traffic safety personnel at all times during upland Removal Work (i.e., flaggers), lighting for any night transportation work, and traffic barriers along the length of the site access route;

5.1.6 For areas where transportation occurs across tenant leaseholds, other than areas used for sediment loading and storage directly adjacent to the pier, the City will agree to reasonably ensure that site tenants enjoy the right-of-way at all times;

5.1.7 City will agree to provide reasonable site security to the extent necessary to ensure that City access and occupancy, including but not limited to nighttime operations, do not increase risk of theft or vandalism to tenant goods or equipment;

5.1.8 The City will agree to compensate existing Crowley tenants directly, for the area used by the City for the Removal Work, at a rate comparable with the rate currently required under Crowley's tenant leases. If necessary, the City will agree to compensate Crowley for the area used by the City at a similar rate but only if Crowley must compensate its tenants for giving up a portion of their

leasehold property to accommodate the Removal Work or any part of the Removal Work;

5.1.9 City will agree to clean up spills of sediment, hazardous substances, or any other materials or substances deposited on Crowley's property by the City or any agent or employee of the City as a result of the Removal Work as required by state, local or federal law or regulation and, upon completion of the Removal Work, will ensure that each leasehold and other Crowley property is returned to the condition it was in upon initiation of Removal Work activities; and

5.1.10 City will agree to indemnify and defend Crowley and PTI for any claims, costs (including defense costs), losses and liabilities to the extent arising out of the acts or omissions of the City or its contractors in connection with the City's or its contractor's occupancy of and access through Crowley's property, including any property damage, personal injury and liability for contamination arising out of the acts or omissions of the City or its contractors, except that City shall not indemnify and defend Crowley and PTI for claims, costs, losses and liabilities to the extent arising out of the negligence of Crowley and PTI.

In addition to the provisions above, the parties understand that, in order to reach an Access Agreement with existing tenants, the existing tenants may expect to be compensated for their reasonable, actual, and quantifiable business losses or added expenses incurred due to the loss of operational space within tenant's leasehold resulting from the Removal Work. In no event does this Agreement constitute a warranty or representation by Crowley that an Access Agreement acceptable to both existing tenants can be reached, even under the conditions approved above. If the City, Crowley and the existing tenants are not able to reach agreement on terms of the Access Agreement within sixty (60) days after mutual execution of this Agreement, either party may terminate this Agreement by written notice to the other and EPA.

5.2 Outer and Middle Berth Access and Temporary Occupancy. The Parties acknowledge that the two Slip 4 outer berths are regularly occupied by large barges that will need to be shifted in order for the City's marine contractor to access the inner berth and head of the slip with its equipment to perform the Slip 4 Early Action Area Removal Work. The outer berth is regularly occupied by Samson Tug and Barge under an agreement with Alaska Logistics, one of Crowley's tenants. The middle berth is regularly occupied by a Crowley barge. Crowley acknowledges that the City will need regular access to the middle berth area for required water quality monitoring for the Removal Work, and agrees to relocate its barge for the period from September 15, 2007 to February 14, 2008. The City agrees to pay for the costs of relocating and mooring the Crowley barge in the alternate location for this period. It is impossible at this time to project usage of the berth by Samson after Closing; however, after the schedule for Removal Work is finalized and Crowley receives a copy of the schedule from the City or its contractor, Crowley agrees to include a provision in its renewal lease with Alaska Logistics a requirement that Alaska Logistics require Samson to permit the City and its

marine contractor to move the Samson barge when necessary to perform the Removal Work. The City and its marine contractor shall be responsible for performing this shifting and for all costs associated with this shifting. The City shall be responsible for and shall indemnify, hold harmless and defend Crowley and PTI against any property damage, personal injury, or penalties, including reasonable attorney's fees, to the extent arising from damages caused by the acts or omissions of the City or its contractors in shifting the Samson barge; however, the City shall not be responsible for and shall not indemnify Crowley and PTI against property damage, personal injury or penalties to the extent arising from the acts or omissions of Crowley or PTI. The City will similarly agree to indemnify Samson in connection with the Access Agreement with Samson.

Following execution of this Real Estate Purchase and Sale Agreement, Crowley and the City will work together in good faith with the existing tenant (Alaska Logistics) to negotiate and finalize a provision in the Access Agreement regarding access to the outer and middle berth areas similar to that described above.

Section 6. Condition Precedent. The City's obligations under this Agreement are contingent upon fulfillment and satisfaction of the following condition, which may be waived only in writing by the City. If this condition is not fully satisfied or waived in writing by the City by the date of Closing or such earlier date as is specified in this Agreement, then this Agreement shall terminate and the parties shall have no further obligations under it, except that the City shall be entitled to the return of the Deposit, with accrued interest.

Execution of Limited Release and Limited Indemnity Agreements.

Agreement and execution by the City and King County of the "Limited Release Agreement" (Exhibit C) and agreement and execution by City of the "Limited Indemnity Agreement" (Exhibit D) as provided for in Section 11 of this Agreement is a condition precedent to the City's obligation to purchase the Property (the "Limited Release and Indemnity Condition") as well as a condition to Crowley's and PTI's obligation to sell the Property.

Section 7. Title review and approval. Crowley will obtain an updated Commitment and forward it to the City within 15 days of the date of this Agreement. The City will have 30 days after receipt of the updated Commitment to notify Crowley that it has accepted or has not accepted the exceptions contained in the updated Commitment. If the City accepts the exceptions contained in the updated Commitment, any exceptions not previously listed on Exhibit B will be considered Permitted Title Exceptions.

Section 8. Condition of the Property. The City accepts the Property "as is, where is", without any warranties whatsoever except as set forth in this Agreement including, without limitation, no warranties or representations as to environmental condition, or suitability for any given use or purpose, with full knowledge that the Property contains contamination by Hazardous Substances (defined below) above federal and state regulatory levels, including as described in the environmental reports described in Section 10 (the "Environmental Reports"). Crowley and PTI shall not release additional contamination or waste materials into or on the Property prior to or after Closing. On the

date of Closing, Crowley shall ensure that all construction cranes, intermodal containers and all other equipment, machinery, and useable timbers are removed from the upland portion of the Property. In addition, Crowley shall pay the City \$10,000 within thirty (30) days of Closing to offset the costs of removing other materials from the upland portion of the Property including garbage, brush, concrete, rock, debris, and other waste materials. The City shall perform this removal work and shall be responsible for the remaining costs of such removal.

Section 9. Property Improvements. Except as required of the City under Section 5 and the Access Agreement, Crowley shall be responsible for installation and maintenance of any improvement that may be needed or required on its own property by Crowley or its tenants as a result of this Agreement or the transfer of the Property to the City, including but not limited to fencing, gates, curbing, railings, crane rails, bumpers, bollards, electrical wiring, lighting, etc. The City shall be responsible for installation and maintenance of any improvement that may be needed or required on the Property following Closing.

Section 10. Environmental Information. Crowley has provided the City with copies of or the City had already obtained copies of, the Environmental Reports that to the knowledge of Crowley are in Crowley's possession.

Section 11. City/County Limited Release and City Limited Indemnity. At Closing, the City and King County shall execute a Release, in the form of Exhibit C hereto, both in favor of Crowley and PTI as follows: The City and King County hereby release Crowley and PTI from any and all Environmental Liability directly or indirectly arising from Hazardous Substances that were or may have been discharged prior to Closing in or on the Property, including claims based on any type of Environmental Liability, claims based on common-law causes of action for trespass, negligence, nuisance or other common law theories, claims for business losses, and claims directly or indirectly arising from or related to Hazardous Substances that were removed from the Property prior to Closing. The term "Hazardous Substances" includes all substances that are regulated under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Solid Waste Disposal Act (SWDA) as amended by the Resource Conservation and Recovery Act (RCRA), The Toxic Substances Control Act (TSCA), and the Washington State Model Toxics Control Act (MTCA). The term "Environmental Liability" includes any claim that may be brought and any order that may be issued pursuant to one of the statutes listed above and associated regulations, and claims based upon common law causes of action for trespass, negligence, nuisance or other common law theories, claims for lost property value, claims for business losses, and claims for personal injuries arising from or related to Hazardous Substances.

In addition, at Closing the City shall execute an Indemnity, in the form of Exhibit D, in favor of Crowley and PTI, under which the City agrees to indemnify and defend Crowley and PTI from any Environmental Liability described above, directly or indirectly arising from Hazardous Substances in or on the Property prior to Closing with the sole exception of claims for damages to natural resources brought pursuant to CERCLA; the Clean

Water Act, 33 U.S.C. §1251 *et seq.*; the Oil Pollution Act, 33 U.S.C. §2701 *et seq.*; MTCA; Chapter 90.48 RCW; or Chapter 90.56 RCW. Both the City/County Limited Release and City Limited Indemnity shall be recorded in the chain of title for the Property at Closing and shall be covenants that run with the land and are binding on the City's successors and assigns.

Section 12. Indemnity Procedure. Crowley shall notify the City in writing within fifteen (15) business days of Crowley's or PTI's receipt of a written claim for which Crowley or PTI believes it is entitled to indemnity pursuant to the City Limited Indemnity described in Section 11 above. The City shall retain legal counsel that is acceptable to Crowley and PTI and shall defend any claim, action or proceeding against Crowley or PTI that is covered by their indemnity. Crowley and PTI shall not unreasonably withhold acceptance of legal counsel. Crowley and PTI shall reasonably cooperate with the City in the defense, including, but not limited to: securing and providing evidence; using good faith efforts to make witnesses available for interviews, hearings, depositions, and trials; providing a suitable person to be Crowley's management representative in court proceedings; participating in alternative dispute resolution processes; and complying with other reasonable requests from the City and the legal counsel hired to defend Crowley; provided that Crowley, as owner of PTI, shall not be required to maintain PTI's corporate existence beyond Closing of this sale.

Section 13. Assignment of Claims. At Closing, Crowley and PTI assign to the City and King County, with full power of substitution, any and all causes of action, in law or in equity, defenses, counterclaims, demands, and all other rights, in the nature of contribution, indemnification or otherwise, known and unknown, suspected or unsuspected (collectively, "Claims"), they may have against any other third party for or with respect to any Environmental Liability directly or indirectly arising from Hazardous Substances in, on, or under the Property prior to Closing, except that (a) Crowley and PTI reserve any Claims they may have against their insurer(s); (b) Crowley and PTI reserve all Claims related to the balance of Parcel D and Slip 4, respectively; (c) this provision does not include assignment of Claims Crowley or PTI may retain under this Agreement against the City or King County; and (d) Crowley and PTI reserve all claims for damages to natural resources brought pursuant to CERCLA; the Clean Water Act, 33 U.S.C. §1251 *et seq.*; the Oil Pollution Act, 33 U.S.C. §2701 *et seq.*; MTCA; Chapter 90.48 RCW; or Chapter 90.56 RCW.

Section 14. Crowley's and PTI's Limited Release. At Closing, the deeds executed by Crowley and PTI shall include a Release by Crowley and PTI in favor of the City and King County, the text of which will be in the following form: "Crowley and PTI release and waive all claims Crowley or PTI have or may have against the City and/or King County, arising directly or indirectly, from Hazardous Substances that were or may have been discharged prior to Closing in or on the Property from City or King County facilities, including, but not limited to, storm drains, sanitary sewers, streets, and the flume for the Georgetown Steam Plant except that:

- (a) Crowley and PTI reserve any Claims they may have against their insurer(s);

(b) Crowley and PTI reserve all Claims related to the balance of Parcel D and Slip 4, respectively;

(c) Crowley and PTI may terminate the release favoring King County contained in this Section 14 where: (i) the substance and basis of such claim is first presented in a claim to the City of Seattle for indemnity under this Agreement; (ii) Crowley has a good faith basis to believe the claim is covered by the City's indemnity and defense obligation; and (iii) the City failed to, refused to, or was unable to fully indemnify and defend Crowley and/or PTI for the claim or a portion thereof. In such case, Crowley and PTI's termination of this release as to the relevant claim shall take effect upon written notice to King County that includes evidence that the written claim for indemnity required in Section 12 was provided to the City, a brief summary of the basis for Crowley's good faith belief that the claim is covered by the City's indemnity and defense obligation, and evidence of the City's failure to fully defend and/or indemnify Crowley for the claim; and

(d) Crowley and PTI reserve all claims for damages to natural resources brought pursuant to CERCLA; the Clean Water Act, 33 U.S.C. §1251 *et seq.*; the Oil Pollution Act, 33 U.S.C. §2701 *et seq.*; MTCA; Chapter 90.48 RCW; or Chapter 90.56 RCW.

Subject to the foregoing exceptions, the release in this Section 14 includes claims based on any type of Environmental Liability, claims based on common-law causes of action for trespass, negligence, nuisance or other common law theories, claims for business losses, and claims directly or indirectly arising from or related to Hazardous Substances that were removed from the Property prior to Closing. Crowley and PTI shall provide written notice of this release to their insurer(s) and, on or before Closing, Crowley and PTI shall provide the City and County with a copy of the notice with evidence of receipt by their insurer(s).

Section 15. No Admission of Liability; No Release of Non-Parties. This Agreement shall not constitute nor shall be used as evidence of any admission of law or fact, or a waiver of any right or defense by any party, except as expressly set forth in this Agreement. The parties do not admit to any fact or to any liability under, or violation of any federal, state or local law, rule or regulation, and no part of this Agreement shall constitute such an admission. This Agreement is not intended to, nor shall it, release, discharge or affect any rights or causes of action that any of the parties hereto may have against any other person or entity, except as otherwise expressly stated in this Agreement, and each of the parties reserves all such rights. The releases contained in this Agreement shall not impair the rights of the parties to assert or bring any proceeding to enforce the terms of this Agreement or the terms of the agreements attached as exhibits hereto.

Section 16. Crowley's Warranties and Representations. As of the date that Crowley executes this Agreement and as of the date of Closing, Crowley represents and warrants the following:

16.1 Authority to sell. Crowley and the person signing this Agreement on behalf of Crowley have full power and authority to execute this Agreement and perform Crowley's obligations under it. When executed and delivered by Crowley, PTI and the City, this Agreement shall constitute a legal, valid, and binding obligation by Crowley.

16.2 Litigation and liens. To Crowley's knowledge at the time of execution of this Agreement and at the time of Closing:

1. No litigation or proceeding which might materially impair the value or use of the Property, or which might prevent the City from acquiring the Property in accordance with this Agreement, is pending or threatened against Crowley, including, but not limited to, a bankruptcy filing;
2. No judgments, orders, or decrees that might affect Crowley's ability to perform its obligations under this Agreement or the City's intended use of the Property are pending against Crowley;
3. No claims or liens for labor, material, or equipment have been filed against the Property and all contracts with Crowley that could result in such claims or liens have been paid;
4. No consent or approval by any federal, state, or local court or agency is required in order for Crowley to fulfill its obligations under this Agreement;
5. The Property is not subject to any leases, tenancies, or rights of persons in possession, except for a lease to Alaska Logistics;
6. Crowley has not released any person or entity, other than Evergreen Marine Leasing as part of Crowley's purchase agreement, who may have legal responsibility for any Hazardous Substance on, in, or under the Property, or for any Environmental Liability arising directly or indirectly from Hazardous Substances on, in, or under the Property. Regardless of the foregoing, Crowley does not make any representations or warranties as to the validity of its claims or of any defenses against those claims.
7. Crowley has not assigned, conveyed or otherwise transferred to any other person or entity any claims, demands, causes of action, rights or obligations related in any way to the Environmental Liability claims assigned or released in this Agreement.

Section 17. PTI's Warranties and Representations. As of the date that PTI executes this Agreement and as of the date of Closing, PTI represents and warrants the following:

17.1 Authority to sell. PTI, and the person signing this Agreement on behalf of PTI, have full power and authority to execute this Agreement and perform PTI's obligations under it. When executed and delivered by PTI, Crowley, and the City, this Agreement shall constitute a legal, valid, and binding obligation by PTI.

17.2 Litigation and liens. To the best of PTI's knowledge at the time of execution of this Agreement and at the time of Closing:

1. No litigation or proceeding which might materially impair the value or use of the Property, or which might prevent the City from acquiring the Property in accordance with this Agreement, is pending or threatened against PTI, including, but not limited to, a bankruptcy filing;
2. No judgments, orders, or decrees that might affect PTI's ability to perform its obligations under this Agreement or the City's intended use of the Property are pending against PTI;
3. No claims or liens for labor, material, or equipment have been filed against the Property and all contracts with PTI that could result in such claims or liens have been paid;
4. No consent or approval by any federal, state, or local court or agency is required in order for PTI to fulfill its obligations under this Agreement;
5. The Property is not subject to any leases, tenancies, or rights of persons in possession, except for a lease to Alaska Logistics;
6. PTI has not released any person or entity, other than Evergreen Marine Leasing as part of Crowley's purchase agreement who may have legal responsibility for any Hazardous Substance on, in, or under the Property, or for any Environmental Liability arising directly or indirectly from Hazardous Substances on, in, or under the Property. Regardless of the foregoing, PTI does not make any representations or warranties as to the validity of its claims or of any defenses against those claims.
7. PTI has not assigned, conveyed or otherwise transferred to any other person or entity any claims, demands, causes of action, rights or obligations related in any way to the Environmental Liability claims assigned or released in this Agreement.

Section 18. New instruments. From and after the date that Crowley and PTI execute this Agreement and continuing until Closing or termination of this Agreement, neither

Crowley nor PTI shall enter into or record any leases, trust deeds, mortgages, restrictions, encumbrances, liens, licenses, releases, purchase and sale agreements, options to sell, or other instruments or agreements affecting the Property without the prior written consent of the City.

Section 19. Closing.

19.1 Closing Date. Following satisfaction or waiver of all conditions precedent set forth in Section 6 and execution of the Access Agreement described in Section 5, Closing shall occur in the office of Escrow Agent on a date mutually agreeable to Crowley, PTI and City. To attempt to minimize interference with Crowley tenant operations and avoid leaseback to Crowley or its tenants, the parties agree to set the Closing on a date as close as is practicable to the start of Removal Work and shall set such date so as to be able to provide Crowley tenants with ninety (90) days notice of Closing. Closing shall be on June 20, 2007, unless such date is extended by the Parties in writing.

19.2 Deposit. The Deposit and accrued interest, if any, shall be credited against the Purchase Price.

19.3 Prorations and closing costs. Crowley and PTI shall pay real estate excise taxes at Closing and their prorated share of surface water management fees, other fees (if any) owed to governmental entities, and real property taxes. If Crowley or PTI is entitled to a reimbursement for overpayment of real property taxes, it shall be their responsibility to seek such reimbursement from the appropriate taxing authority outside of Closing. Crowley's and PTI's monetary liens on the Property, if any, shall be discharged in full out of the Purchase Price at Closing. City will pay the premium for its owners title insurance policy, the Escrow Agent's fees, and the cost of recording the Boundary Line Adjustment and the special warranty deeds from Crowley and PTI.

19.4 Documents. Crowley, PTI and City shall deposit in escrow with Escrow Agent all instruments, documents, and money necessary to complete the sale in accordance with this Agreement. At Closing, Crowley and PTI shall execute and deliver to City in escrow the following documents, special warranty deeds containing the text set forth in Section 14, and each of the following which shall be in a form and substance satisfactory to City and Crowley and PTI: real estate excise tax affidavits; affidavits evidencing that Crowley and PTI are exempt from the withholding requirements of Section 1445 of the Internal Revenue Code, evidence that Crowley is a corporation in good standing under the laws of the State of Delaware, that PTI is a corporation in good standing under the laws of the State of California and that the persons signing on their behalf are authorized to carry out the obligations under this Agreement; and a copy of the approved Boundary Line Adjustment and accompanying survey.

19.5 Possession. The City shall be entitled to possession of the Property from Crowley and PTI upon Closing.

19.6 Leaseback. The City acknowledges that Crowley's current tenant on a portion of the upland part of the Property adjacent to the Pier (Alaska Logistics) may desire to continue to lease said portion of the Property for up to sixty (60) days following Closing. The City agrees in principle to allow Alaska Logistics to lease said portion of the Property on a month-to-month basis for a maximum of sixty (60) days following Closing; however in no event shall the lease period extend beyond September 1, 2007.

Section 20. Remedies on default. If one party has performed its obligations under this Agreement and another party defaults under the terms and conditions of this Agreement, the performing party shall be entitled to terminate this Agreement without further obligation to the other party or parties; provided that if the City is the non-defaulting party, it shall receive the Deposit from the Escrow Agent, plus interest, if any. If the defaulting party is the City, then the Deposit shall be paid to Crowley and PTI and their receipt of the Deposit shall constitute liquidated damages and shall be their sole and exclusive remedy.

Section 21. Broker representation. Each party represents and warrants to the other that it has not incurred, and is not obliged to pay, finder's or broker's fees, or other commissions or fees in connection with the sale of the Property. If any party incurs or is obliged to pay such fees or commissions in violation of this provision, it shall indemnify and hold the other parties harmless for the fees or commissions.

Section 22. General provisions.

22.1 Notices. Any demand, request or notice which any party hereto desires or may be required to make or deliver to the other shall be in writing and shall be deemed given when personally delivered, or when delivered by confirmed facsimile or by private courier service (such as Federal Express), or three days (3) after being deposited in the United States Mail, in registered or certified form, return receipt requested, addressed as follows:

To Crowley or PTI: c/o Crowley Marine Services, Inc.
Attn: Stephen Wilson
P.O. Box 2287
1102 S.W. Massachusetts St.
Seattle, WA 98134-1030
Facsimile: (206) 332-8333

with a copy to: Cascadia Law Group
Attn: Rodney L. Brown, Jr.
1201 Third Avenue, Suite 320
Seattle, WA 98101
Facsimile: (206) 292-6301

To the City: c/o Martin Baker
Seattle Public Utilities
Seattle Municipal Tower, Suite 4900
P.O. Box 34027
Seattle, WA 98104-4127
Facsimile: (206) 684-4631

with a copy to: Seattle City Attorney's Office
Attn: Stephen Karbowski
600 Fourth Avenue, 4th Floor
P.O. Box 94769
Seattle, WA 98101
Facsimile: (206) 684-8284

or to such other address which is not a post office box and person as either party may communicate to the other by like written notice.

22.2 Entire Agreement. This Agreement contains the entire understanding between the parties and supersedes any prior understandings and agreements between them respecting the subject matter hereof. There are no other representations, agreements, arrangements or understandings, oral or written, between and among the parties hereto or any of them, relating to the subject matter of this Agreement. No amendment of or supplement to this Agreement shall be valid or effective unless made in writing and executed by the parties hereto.

22.3 Construction. The headings and subheadings throughout this Agreement are for convenience and reference only and the words contained in them shall not be held to expand, modify, amplify or aid in the interpretation, construction or meaning of this Agreement. All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine, neuter, singular or plural as the identification of the person or persons, firm or firms, corporation or corporations may require. "Person" shall mean an individual, firm, association, corporation, trust or any other form of business or legal entity. The locative adverbs "herein", "hereunder", "hereto", "hereby", "hereinafter", etc., whenever the same appear herein, mean and refer to this Agreement in its entirety and not to any specific section or subsection hereof. Any reference in this Agreement to "days" means consecutive calendar days. Any reference in this Agreement to "business days" means days in which the recording office of the county in which the Land is located and national banks are open in the State of Washington. All parties hereto have been represented by legal counsel in this transaction and accordingly hereby waive the general rule of construction that an agreement shall be construed against its drafter.

22.4 Attorneys' Fees. In the event of litigation between the parties hereto, declaratory or otherwise, in connection with or arising out of this Agreement, the prevailing party shall recover from the non-prevailing party all actual costs, actual damages and actual expenses, including attorneys' fees and charges, paralegal and clerical fees and charges and other professional or consultants' fees and charges

expended or incurred in connection therewith, as set by the court, including for appeals, which shall be determined and fixed by the court as part of the judgment.

22.5 Assignment. The City may not assign all or any of its interest in this Agreement without Crowley's and PTI's prior written consent.

22.6 Knowledge. References herein to the "knowledge of Crowley" or "Crowley's knowledge" or "the knowledge of PTI" or "PTI's knowledge" shall mean the knowledge of R. Stephen Wilson on the date Crowley executes this Agreement.

22.7 Binding. Subject to any limiting provisions otherwise set forth in this Agreement, this Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

22.8 Time of the Essence. Time is of the essence in each and every term, covenant and condition of this Agreement.

22.9 Applicable Law. This Agreement shall be construed and interpreted under the laws of the state where the Property is located.

22.10 Counterparts. This Agreement may be executed in any number of counterparts and all counterparts shall be deemed to constitute a single agreement. The execution of one counterpart by any party shall have the same force and effect as if that party had signed all other counterparts.

22.11 Survival. All warranties, representations, covenants, obligations and agreements contained in or arising out of this Agreement shall survive the Closing and the transfer and conveyance of the Property hereunder and any and all performance hereunder.

22.12 Tax-Deferred Exchange. Crowley may elect to sell the Property as part of a tax deferred exchange under Section 1031 of the Internal Revenue Code and if so will assign this Agreement for the purpose of effecting the exchange to an exchange facilitator. The City agrees to cooperate with Crowley in effecting such exchange provided that the City shall not be required to incur any cost or liability as a result of such cooperation.

22.13 Exhibits. The Exhibits listed below, attached hereto, are a part of this Agreement as if incorporated herein.

- Exhibit A – Property Description
- Exhibit B – Permitted Title Exceptions
- Exhibit C – Limited Release Agreement
- Exhibit D – Limited Indemnity Agreement
- Exhibit E – Construction Access Options

THE CITY OF SEATTLE,
a Washington municipal corporation

By: 
Its: David SPC

By: _____
Its: _____

Approved as to Form:
Office of the City Attorney

By: 
Asst. City Attorney

EIGHTH AVENUE TERMINALS, INC.,
a California corporation

By: 
Its: SR VP+GM MARINE SERV.

CROWLEY MARINE SERVICES, INC.,
a Delaware corporation

By: 
Its: SR VP+GM MARINE SERV.

**2007 SECOND AMENDMENT TO
REAL ESTATE PURCHASE AND
SALE AGREEMENT**

**SECOND AMENDMENT TO
REAL ESTATE PURCHASE AND SALE AGREEMENT**

THIS SECOND AMENDMENT TO REAL ESTATE PURCHASE AND SALE AGREEMENT (this "Second Amendment") is made and entered into as of the 28th day of Sept., 2007, by and between THE CITY OF SEATTLE ("City"), a Washington municipal corporation, EIGHTH AVENUE TERMINALS, INC., a California corporation, formerly known as Pacific Terminals, Inc. (collectively known as "PTI"), and CROWLEY MARINE SERVICES, INC. ("Crowley"), a Delaware corporation (collectively, the "Parties").

RECITALS

WHEREAS, the City as buyer and PTI and Crowley as Seller have entered into that certain Real Estate Purchase and Sale Agreement dated May 18, 2007 (the "Agreement");

WHEREAS, the Parties first amended the Agreement on June 20, 2007 to extend the Closing Date to September 28, 2007;

WHEREAS, Closing items and unexpected delays in the likely schedule for the start of the Removal Work have made it necessary to briefly extend the Closing Date; and

WHEREAS, the parties desire to further amend the Agreement in accordance with the terms set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the sufficiency of which consideration is acknowledged by all parties hereto, it is hereby agreed as follows:

1. Section 5.1 shall be replaced in its entirety with the following text:

5.1 Upland Access and Temporary Occupancy. Crowley acknowledges that the City will need access and temporary occupancy of a portion of Crowley's property to perform construction and removal work (including pre-construction planning, surveying and inspection work) required by EPA pursuant to the Administrative Settlement Agreement and Order on Consent for Slip 4 Removal Action ("ASAOC") (collectively the "Removal Work"). In accordance with the terms described in this Section 5, Crowley is committed to cooperating with the City to negotiate with Crowley tenant(s) to allow for reasonable and timely access to the City for the Removal Work.

Following Closing, Crowley and the City will work together, in good faith, with any tenant leasing Crowley property for a term extending beyond or after July 31, 2009 (collectively, "Crowley tenant"), to negotiate an access agreement for the areas identified in Exhibit E ("Construction Access Options") that is acceptable to Crowley, the Crowley tenant(s), and the City ("Access Agreement"). Such

Access Agreement shall be added to the lease of the Crowley tenant(s). Subject to approval by the relevant Crowley tenant(s), the Parties agree that the Access Agreement will include the following provisions:

5.1.1 The Parties agree that to the extent practical to allow for execution of the Removal Work, the City access and staging area footprint will be limited to the boundaries shown on either of the Construction Access Options, Exhibit E;

5.1.2 Subject to the rights of the Crowley tenant(s), Crowley will agree to provide the City and its contractors reasonable and timely access to its property for pre-construction planning, surveying, and inspection work;

5.1.3 City will provide at least 90 days advance notice of: (a) the estimated date of commencement of the construction portion of the Removal Work, (b) the approximate boundaries of the access area and the details of the staging, loading and transportation plan for the area, and (c) the estimated duration of the construction portion of the Removal Work and to the extent possible, the estimated duration of all other occupancy and access by the City. The City will provide revised details of items (a), (b) and (c) above to Crowley as soon as the Contractor's work plans are finalized;

5.1.4 City will cooperate with Crowley and the Crowley tenant(s) to the extent feasible to minimize the adverse impacts on the Crowley tenant(s);

5.1.5 City will agree to implement appropriate safety practices and fund/install improvements to access areas to minimize the potential for accidents arising from the interaction of the City activities with those of the Crowley tenant(s), including the addition of road and traffic signage, traffic safety personnel at all times during upland Removal Work (i.e., flaggers), lighting for any night transportation work, and traffic barriers along the length of the site access route;

5.1.6 For areas where transportation occurs across tenant leaseholds, other than areas used for sediment loading and storage directly adjacent to the pier, the City will agree to reasonably ensure that site tenants enjoy the right-of-way at all times;

5.1.7 City will agree to provide reasonable site security to the extent necessary to ensure that City access and occupancy, including but not limited to nighttime operations, do not increase risk of theft or vandalism to tenant goods or equipment;

5.1.8 The City will agree to compensate existing Crowley tenant(s) directly, at the time of the Removal Work, for the area used by the City for the Removal Work, at a rate comparable with the rate currently required under Crowley's tenant leases. If necessary, the City will agree to compensate Crowley for the area used by the City at a similar rate but only if Crowley must compensate its tenants for giving up a portion of their leasehold property to accommodate the Removal Work or any part of the Removal Work;

5.1.9 City will agree to clean up spills of sediment, hazardous substances, or any other materials or substances deposited on Crowley's property by the City or any agent or employee of the City as a result of the Removal Work as required by state, local or federal law or regulation and, upon completion of the Removal Work, will ensure that each leasehold and other Crowley property is returned to the condition it was in upon initiation of Removal Work activities; and

5.1.10 City will agree to indemnify and defend Crowley and PTI for any claims, costs (including defense costs), losses and liabilities to the extent arising out of the acts or omissions of the City or its contractors in connection with the City's or its contractor's occupancy of and access through Crowley's property, including any property damage, personal injury and liability for contamination arising out of the acts or omissions of the City or its contractors, except that the City shall not indemnify and defend Crowley and PTI for claims, costs, losses and liabilities to the extent arising out of the negligence of Crowley and PTI.

In addition to the provisions above, the parties understand that, in order to reach an Access Agreement with Crowley tenant(s), the Crowley tenant(s) may expect to be compensated for their reasonable, actual, and quantifiable business losses or added expenses incurred due to the loss of operational space within tenant's leasehold resulting from the Removal Work. In no event does this Agreement constitute a warranty or representation by Crowley that an Access Agreement acceptable to Crowley tenant(s) can be reached, even under the conditions approved above.

2. Paragraph 5.2 shall be replaced in its entirety with the following text:

5.2 Outer and Middle Berth Access and Temporary Occupancy. The Parties acknowledge that the two Slip 4 berths (middle and outer) are regularly occupied by large barges that will need to be shifted in order for the City's marine contractor to access the inner berth and head of the slip with its equipment to perform the Slip 4 Early Action Area Removal Work. Crowley acknowledges that the City will need regular access to the middle berth area for required water quality monitoring for the Removal Work, and agrees to periodically relocate its barge (or that of Crowley tenant(s) or subtenant(s)) during the period from September 15, 2009 to February 14, 2010, or during the same September-to-February period beginning in any year after 2009 that the Removal Work begins. The City agrees to pay for the reasonable and actual costs of relocating and mooring the Crowley barge in the alternate location for this period. It is impossible at this time to project usage of the berth by a particular barge company tenant or subtenant after Closing; however, after the schedule for Removal Work is finalized and Crowley receives a copy of the schedule from the City or its contractor, Crowley agrees to include a provision in its lease with any tenant leasing a Crowley berth for a term extending beyond or after July 31, 2009 (collectively, "berth tenant"), a

requirement that the berth tenant allow, or in a sublease require its subtenant to allow the City and its marine contractor to move the berth tenant/subtenant's barge when necessary to perform the Removal Work. The City and its marine contractor shall be responsible for performing this shifting and for all reasonable and actual costs associated with this shifting. Alternatively, the berth tenant has the option to move the berth tenant/subtenant's barge itself and the City will compensate the tenant/subtenant for the reasonable and actual costs of the barge relocation. The City shall be responsible for and shall indemnify, hold harmless and defend Crowley and PTI against any property damage, personal injury, or penalties, including reasonable attorney's fees, to the extent arising from damages caused by the acts or omissions of the City or its contractors in shifting the berth tenant or subtenant's barge; however, the City shall not be responsible for and shall not indemnify Crowley and PTI against property damage, personal injury or penalties to the extent arising from the acts or omissions of Crowley or PTI. The City will similarly agree to indemnify the berth tenant and any subtenant in the Access Agreement identified below.

Following Closing, Crowley and the City will work together in good faith with the berth tenant to negotiate and finalize an Access Agreement regarding access to the outer and middle berth areas similar to that described above.

3. The second paragraph of Section 4.1 is hereby amended and replaced to read as follows:

At Closing, the Parties agree to enter into a permit ("Permit") to allow Crowley, subsequent to Closing, to maintain its water and power utilities located at or under portions of the pier that the City will own. In addition, the Permit will allow Crowley to maintain an existing security fence across the extreme southern portion of the pier that the City will own. In accordance with the other terms of the Permit, Crowley may maintain the Permit through 2008, and beyond 2008 if Removal Work is not scheduled to commence in 2009 and the Parties mutually agree to maintain the Permit. When the City is to commence the Removal Work, the City shall give Crowley a ninety (90) day notice to re-route the Utilities and relocate the fence onto Crowley's real property. Sixty days thereafter, the City shall serve a 30-day notice of termination of the Permit. Prior to termination, Crowley will: 1) disconnect and/or re-route power and water utilities currently located at or under portions of the pier that the City owns; 2) Crowley shall remove the security fence from the portion of the pier that the City owns and shall reconstruct a temporary security fence to allow for City access for the Removal Work and the Construction Access Option selected by the City (see Exhibit E); and 3) shall notify the City when the work described in this section 4.1 – 1) and 2) has been completed so that demolition of the remaining utility infrastructure can be safely performed in conjunction with the Removal Work, including but not limited to demolition of the City's portion of the pier. The City shall be responsible for the reasonable and actual costs of constructing and

demolishing the temporary security fence to accommodate the City's access to Crowley property to perform the Removal Work; however, Crowley shall be responsible for the costs of removing the existing security fence prior to such access and constructing a permanent security fence after the access for the Removal Work is no longer needed by the City. Crowley and PTI shall be responsible for and shall indemnify, hold harmless and defend the City against any property damage, personal injury, or penalties, including reasonable attorney's fees, to the extent arising from damages caused by the acts or omissions of Crowley, PTI or its contractors in maintaining, using, disconnecting and re-routing the utilities at or under portions of the pier that the City will own, or in maintaining, using or relocating the existing security fence; provided however, that Crowley and PTI shall not be responsible for and shall not indemnify the City against property damage, personal injury or penalties to the extent arising from the acts or omissions of the City.

4. The fourth sentence of Section 8 of the Agreement is deleted and replaced with the following sentence:

In addition, Crowley shall pay the City \$10,000 at Closing to offset the costs of removing other materials from the upland portion of the Property including garbage, brush, concrete, rock, debris, and other solid, non-hazardous waste materials.

5. Section 19.1, as amended, is deleted and replaced in its entirety with the following:

19.1 Closing Date. Following satisfaction or waiver of all conditions precedent set forth in Section 6, Closing shall occur in the office of the Escrow Agent on or before October 12, 2007, unless such date is extended by the Parties in writing.

6. Paragraph 19.6 is hereby deleted in its entirety.

7. Counterparts. This Second Amendment may be executed in multiple counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Second Amendment to Purchase and Sale Agreement as of the date first above written.

CITY OF SEATTLE

Approved as to Form:
Seattle City Attorney's Office

By: 
Assistant City Attorney

By: 
Chuck Clarke
Director, Seattle Public Utilities

EIGHTH AVENUE TERMINALS, INC.,
a California corporation

By: Arthur F. Mead
Name: Arthur Mead
Title: Director

CROWLEY MARINE SERVICES, INC.
a Delaware corporation

By: John Douglass
Name: John Douglass
Title: Director

APPENDIX C

ENVIRONMENTAL COVENANT

2013 ENVIRONMENTAL
COVENANT (SLIP 4 EARLY
ACTION AREA OF LOWER
DUWAMISH WATERWAY
SUPERFUND SITE)

Return Address:

OFFICE OF ENVIRONMENTAL CLEANUP
U.S.E.P.A.
1200 SIXTH AVENUE, Suite 900
SEATTLE, WA 98101

CONFORMED COPY

20130924000503

TAD SHIMAZU COV-RER 85.00
PAGE-001 OF 014
09/24/2013 09:26

Please print or type information WASHINGTON STATE RECORDER'S Cover Sheet (RCW 65.04)

Document Title(s) (or transactions contained therein): (all areas applicable to your document must be filled in)

- 1. ENVIRONMENTAL COVENANT
- 2. _____
- 3. _____
- 4. _____

Reference Number(s) of Documents assigned or released: N/A

Additional reference #'s on page _____ of document

Grantor(s) Exactly as name(s) appear on document

- 1. CITY OF SEATTLE, SEATTLE Public Utilities
- 2. _____

Additional names on page _____ of document.

Grantee(s) Exactly as name(s) appear on document

- 1. CITY OF SEATTLE, SEATTLE Public Utilities
- 2. _____

Additional names on page _____ of document.

Legal description (abbreviated: i.e. lot, block, plat or section, township, range)

SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 24 NORTH, RANGE 4 EAST,
WILLAMETTE MERIDIAN IN KING COUNTY, WA

Additional legal is on page 1-2 of document.

Assessor's Property Tax Parcel/Account Number assigned 292404-911003

Assessor Tax # not yet

The Auditor/Recorder will rely on the information provided on this form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

"I am signing below and paying an additional \$50 recording fee (as provided in RCW 36.18.010 and referred to as an emergency nonstandard document), because this document does not meet margin and formatting requirements. Furthermore, I hereby understand that the recording process may cover up or otherwise obscure some part of the text of the original document as a result of this request."

Signature of Requesting Party

Note to submitter: Do not sign above nor pay additional \$50 fee if the document meets margin/formatting requirements

COPIES RECEIVED

ENVIRONMENTAL COVENANT
(SLIP 4 EARLY ACTION AREA OF LOWER DUWAMISH WATERWAY SUPERFUND
SITE)

SEATTLE CITY ATTORNEY

RETURN TO: Office of Environmental Cleanup
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

GRANTOR: City of Seattle
Seattle Public Utilities
500 Fifth Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

HOLDER: City of Seattle
Seattle Public Utilities
500 Fifth Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

RELATED DOCUMENTS: N/A

**LEGAL DESCRIPTION
OF THE REAL
PROPERTY SUBJECT
TO COVENANT:**

**PARCEL B, CITY OF SEATTLE LOT BOUNDARY
ADJUSTMENT NO. 3005372, RECORDED UNDER KING
COUNTY RECORDING NO. 20071010900018;**

**TOGETHER WITH THAT PORTION OF PARCEL E AS
SHOWN AND DELINEATED ON LOT LINE ADJUSTMENT
SURVEY UNDER RECORDING NUMBER 9212019002
DATED NOVEMBER, 1992, THAT PORTION OF THE
SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 24
NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, IN
KING COUNTY, WASHINGTON, specifically described and
depicted in Attachment A.**

**AN ADDITIONAL ADJACENT PARCEL, NOT OWNED BY
THE CITY OF SEATTLE, IS SUBJECT TO A SEPARATE**

COVENANT GRANTED BY THE BOEING COMPANY, AND
IS DESCRIBED AS:

COMMENCING AT THE INTERSECTION WITH THE
EASTERLY LINE OF THE DUWAMISH COMMERCIAL
WATERWAY AND THE MEDIAN LINE OF SLIP No.4
AS DEFINED IN AN AGREEMENT RECORDED UNDER
RECORDING No. 4477307, IN KING COUNTY
RECORDS, specifically described in Attachment B.

TAX PARCEL(S): 292404-911003

ENVIRONMENTAL COVENANT

I. Purpose and Background

This Environmental Covenant (Covenant) made this 18th day of Sept, 2013 is executed pursuant to the Washington State Uniform Environmental Covenants Act ("UECA"), RCW Chapter 64.70 *et seq.*, and imposes certain conditions and restrictions on real property located in the City of Seattle, King County, Washington.

In 2001, the U.S. Environmental Protection Agency ("EPA") placed the Lower Duwamish Waterway Superfund Site (the "Site") on the National Priorities List under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9601 *et seq.* ("CERCLA"). EPA subsequently established Early Action Areas ("EAAs") within the Site, including the Slip 4 EAA, consisting of the certain tidelands and bedlands within Slip 4. EPA issued an Action Memorandum for Non-Time Critical Removal Action ("NTCRA") for the Slip 4 EAA in May 2006, which required excavation and removal of certain sediments, capping of other sediments and soils, placement of institutional controls to limit potential human and/or ecological exposure to remaining contamination, and monitoring to verify the effectiveness of the NTCRA (collectively "Removal Action"). The Action Memorandum and supporting information regarding the Slip 4 EAA are contained in the administrative record that is on file with EPA Region 10 or its successor agency. As of the date of this Covenant, the EPA Region 10 regional office is located at 1200 Sixth Avenue, Suite 900, Seattle, Washington 98101.

An Administrative Settlement Agreement and Order on Consent ("Settlement Agreement"), CERCLA Docket No. 10-2006-0364, was issued by EPA to the City of Seattle and King County in September 2006 for implementation of the NTCRA selected in the Action Memorandum for the Slip 4 EAA.

Pursuant to the Action Memorandum, this Covenant, as an institutional control, is necessary to protect human health and the environment and to ensure the integrity of the NTCRA.

EPA has consulted pursuant to RCW 64.70.040(5) with local land use planning authorities in the development of the land use or activity restrictions in this Covenant.

II. Conveyance and Covenant

Grantor, City of Seattle, hereby binds Grantor, its successors and assigns, and conveys to the Holder the land use restrictions and conditions and such other rights conveyed in this Covenant concerning the area at the Slip 4 EAA owned by the Grantor and legally described above and in Attachment A (hereinafter, the "Property.") EPA and the Washington Department of Ecology ("Ecology") shall have full right of enforcement pursuant to UECA of the restrictions, conditions and other rights conveyed in this Covenant.

Grantor covenants to and with the Holder and its successors and assigns that Grantor owns the Property in fee simple and has the exclusive right to convey the Property or any interest therein, and that the Property is free and clear of encumbrances except those that Grantor has identified to EPA. Grantor will use best efforts to secure from all identified prior encumbrance holders either subordination of such interests to, or a binding recorded agreement to be bound by, these covenants. Grantor will warrant and defend the title and quiet possession of the property.

Grantor makes the following covenants as to limitations, restrictions, and uses to which the Property may be put and specifies that such covenants shall run with the land, as provided by law, shall be perpetual, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"):

1. Any activity on the Property that may result in the release or exposure to the environment of the contaminated sediment or soil that was contained as part of the Removal Action, or create a new exposure pathway, is prohibited, unless prior written approval from EPA is obtained authorizing the specific activity. Prohibited activities include, but are not limited to: altering, modifying or removing the Capped Areas (as defined below); piling installation; dredging, drilling, digging, excavation, placement of any objects, fill, or use of any equipment in the Capped Areas which deforms or stresses the surface beyond its load bearing capability; piercing the surface with a rod, spike or similar item; bulldozing or earthwork; anchoring, grounding or spudding, PROVIDED THAT, some controlled activities that may temporarily disturb Capped Areas are allowed so long as the proposals for such work that may temporarily disturb the Capped

Areas are accompanied by detailed plans describing (a) the proposed activity, (b) actions to limit contaminant releases during the activity, (c) actions to restore the integrity of the Capped Areas, and (d) plans for monitoring and reporting. Such proposed activities are subject to written approval by EPA. Examples of such activities that may be allowed include, but are not limited to: excavation for repair or replacement of existing outfalls; excavation for installation of new outfalls or other utilities; anchoring of construction equipment; cap maintenance (including placement of additional cap material and/or excavation of existing cap materials or underlying soils or sediments). The term 'Capped Areas' in these covenants includes engineered slope caps, sediment caps and soil covers as those terms are used in the Action Memorandum and Removal Action Completion Report for the Slip 4 EAA.

2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Removal Action, or create a new exposure pathway, is prohibited without prior written approval from EPA.
3. The Owner shall properly maintain the Capped Areas of the EAA Removal Action.
4. The Owner shall prohibit any uses or activities that are inconsistent with any of the restrictions established in this Covenant, unless such use or activity is approved by EPA in advance in writing.
5. The Owner must notify all Property purchasers, lessees and easement holders of the restrictions set forth in this Covenant, and make compliance with this Covenant a condition of any conveyance of title, easement, lease or other interest in the Property. Any deed, lease, or other conveyance of any interest in the Property shall make adequate provisions for any continued monitoring or maintenance of the Capped Areas on the Property.
6. The Owner shall use best efforts to provide sixty (60) days, but at a minimum shall provide thirty (30) days, advance written notice to EPA of the Owner's intent to convey or transfer any interest in the Property. Such notice shall include the name and address of the proposed transferee.

7. The Owner shall allow authorized representatives of EPA, Ecology and the Holder the right to enter the Property at reasonable times to (1) evaluate compliance with this Covenant and/or the CERCLA response action, (2) inspect, perform oversight of activities, and take samples, (3) inspect any CERCLA or Model Toxics Control Act response actions conducted at the Property, or (4) inspect and perform maintenance on Capped Areas located on the Property. To the extent there is any conflict between the access rights as stated above and those specified in the Settlement Agreement, the terms of the Settlement Agreement shall control.
8. Local permitting requirements augment the existing federal and state permitting requirements that impose conditions on any construction at Slip 4. The Owner must ensure that all required local permits are obtained prior to any construction, filling and grading, or installation/changes to stormwater configuration and discharges, installation of private utilities or other development activities that may disturb the Capped Areas. Any easements granted by the property Owner must require measures to protect the integrity of the Capped Areas. These permits and easements will require appropriate elements such as (but not limited to) proper handling, characterization and disposal of contaminated sediments or soil and restoration of the Capped Areas if impacted.

III. Reservation of Rights

Grantor hereby reserves unto itself, its representatives, heirs, assigns, and successors all rights accruing from ownership of the Property that are not conditioned, restricted or prohibited by Section II.

IV. Enforcement

Compliance with this Covenant may be enforced pursuant to the Washington State Uniform Environmental Covenants Act. EPA, Ecology and the Holder shall have full enforcement rights. Failure by EPA or Holder to enforce compliance with this Covenant in a timely manner shall not be deemed a waiver of their right to take subsequent enforcement actions.

V. Recordation

Grantor shall submit this instrument for recording in the official records of King County, Washington within 10 days after the execution of this instrument and shall pay the costs associated with recording.

VI. General Provisions

Agency's Interest. Pursuant to RCW 64.70.030, the rights granted to EPA by this Environmental Covenant are not interests in real property.

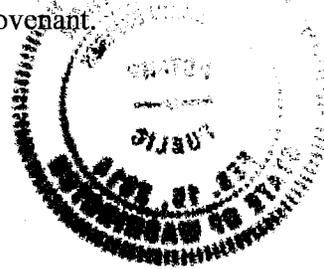
Liberal Construction. This Covenant shall be liberally construed in favor of effectuating its purposes. If any portion(s) of it is found to be ambiguous, an interpretation consistent with its purposes that would render such portion(s) valid shall be favored over one that would render it invalid.

VII. Termination and Modification

This Environmental Covenant may only be amended or terminated in accordance with the amendment and termination provisions of the Washington State Uniform Environmental Covenants Act, RCW 64.70.100.

VIII. Signature and Acknowledgements

Grantor covenants that it is authorized to grant this Covenant and shall warrant and defend the same against all claims and demands challenging such authority. The undersigned parties represent and certify that they are authorized to execute this Covenant.



ATTACHMENT A

PARCEL B, CITY OF SEATTLE LOT BOUNDARY ADJUSTMENT NO. 3005372, RECORDED
UNDER KING COUNTY RECORDING NO. 20071010900018;

TOGETHER WITH THAT PORTION OF PARCEL E AS SHOWN AND DELINEATED ON LOT
LINE ADJUSTMENT SURVEY UNDER RECORDING NUMBER 9212019002 BY DODDS
ENGINEERS, INC. DATED NOVEMBER, 1992 LYING WESTERLY OF THE FOLLOWING
DESCRIBED LINE:

COMMENCING AT THE MOST NORTHERLY POINT OF SAID PARCEL E;
SAID POINT BEING THE INTERSECTION OF THE SOUTHWESTERLY MARGIN OF EAST
MARGINAL WAY SOUTH AND THE LINE OF THAT CERTAIN DRAINAGE EASEMENT
DESCRIBED IN DOCUMENT RECORDED UNDER KING COUNTY RECORDING NUMBER
59780003, AND THE ORIGINAL EASTERLY BOUNDARY OF SLIP 4 OF THE DUWAMISH
WATERWAY;

THENCE SOUTH 09°26'45" WEST, ALONG SAID EASTERLY LINE AND SAID EASTERLY
BOUNDARY, 70.36 FEET TO A POINT 125 FEET SOUTHERLY OF, WHEN MEASURED AT
RIGHT ANGLES TO, THE NORTHERLY LINE OF BLOCK 6, DUWAMISH INDUSTRIAL
ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF, RECORDED IN
VOLUME 21 OF PLATS, PAGE 65 RECORDS OF KING COUNTY, WASHINGTON;

THENCE NORTH 89°58'01" WEST, PARALLEL WITH SAID NORTH LINE, 23.97 FEET TO THE
TRUE POINT OF BEGINNING;

THENCE SOUTH 11°34'46" EAST, 71.32 FEET;

THENCE SOUTH 10°54'56" WEST, 45.13 FEET;

THENCE SOUTH 06°26'14" WEST, 16.72 FEET;

THENCE SOUTH 09°58'02" WEST, 80.47 FEET;

THENCE SOUTH 00°25'51" WEST, 37.97 FEET;

THENCE SOUTH 26°27'10" EAST, 12.10 FEET;

THENCE SOUTH 04°33'09" WEST, 8.30 FEET;

THENCE SOUTH 19°00'19" WEST, 8.18 FEET;

THENCE SOUTH 13°11'38" WEST, 9.24 FEET;

THENCE SOUTH 00°12'57" WEST, 28.44 FEET;

THENCE SOUTH 70°28'27" WEST, 29.11 FEET;

THENCE SOUTH 20°09'39" WEST, 14.73 FEET;

THENCE SOUTH 29°57'21" WEST, 45.31 FEET;

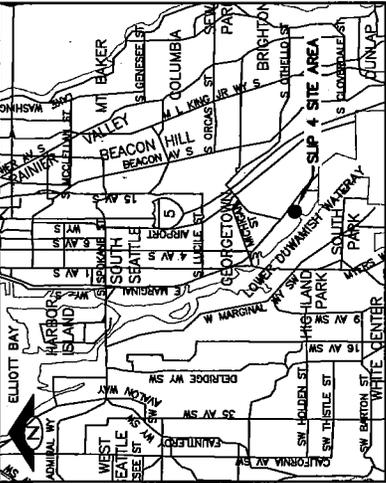
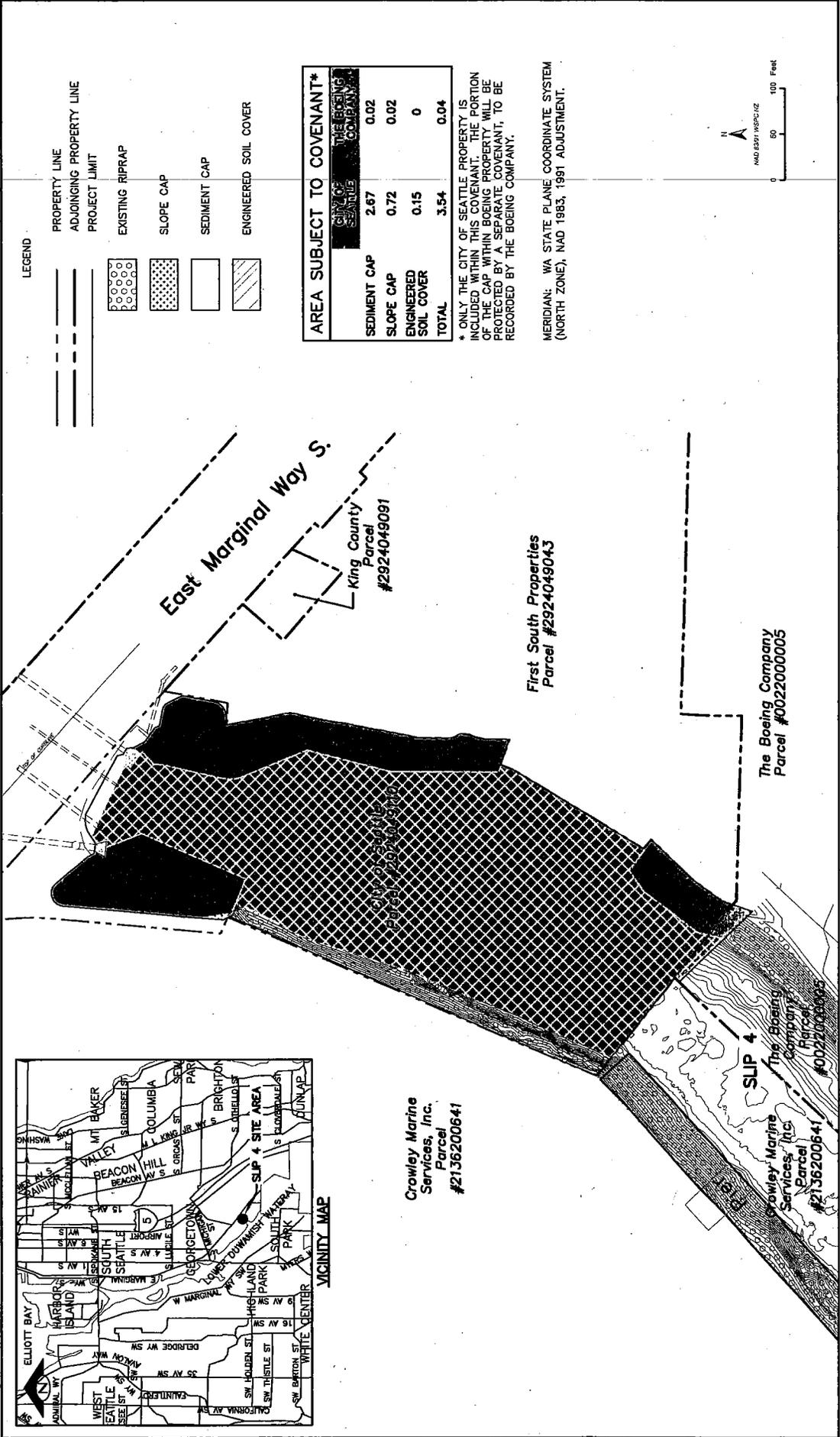
THENCE SOUTH 30°24'28" WEST, 120.70 FEET;

THENCE SOUTH 51°37'12" EAST, 13.01 FEET;

THENCE SOUTH 42°02'56" WEST, 62.38 FEET;

THENCE SOUTH 35°17'24" WEST, 41.23 FEET;

THENCE SOUTH 17°49'24" WEST, 12.56 FEET TO INTERSECT THE SOUTHERLY LINE OF SAID
PARCEL E AND THE TERMINUS OF THIS DESCRIBED LINE FROM WHICH THE MOST
WESTERLY ANGLE POINT CORNER OF SAID PARCEL E BEARS NORTH 52°16'07" WEST,
28.68 FEET DISTANT.



VICINITY MAP

Crowley Marine Services, Inc.
Parcel #2136200641

First South Properties
Parcel #2924049045

The Boeing Company
Parcel #0022000005

SLIP 4
Crowley Marine Services, Inc.
Parcel #2136200641
The Boeing Company
Parcel #0022000005

LEGEND

- PROPERTY LINE
- ADJOINING PROPERTY LINE
- PROJECT LIMIT
- EXISTING RIPRAP
- SLOPE CAP
- SEDIMENT CAP
- ENGINEERED SOIL COVER

AREA SUBJECT TO COVENANT*

SEDIMENT CAP	2.67	0.02
SLOPE CAP	0.72	0.02
ENGINEERED SOIL COVER	0.15	0
TOTAL	3.54	0.04

* ONLY THE CITY OF SEATTLE PROPERTY IS INCLUDED WITHIN THIS COVENANT. THE PORTION OF THE CAP WITHIN BOEING PROPERTY WILL BE PROTECTED BY A SEPARATE COVENANT, TO BE RECORDED BY THE BOEING COMPANY.

MERIDIAN: WA STATE PLANE COORDINATE SYSTEM (NORTH ZONE), NAD 1983, 1991 ADJUSTMENT.



ATTACHMENT B

COMMENCING AT THE INTERSECTION WITH THE EASTERLY LINE OF THE DUWAMISH COMMERCIAL WATERWAY AND THE MEDIAN LINE OF SLIP No.4 AS DEFINED IN AN AGREEMENT RECORDED UNDER RECORDING No. 4477307, IN KING COUNTY RECORDS. (POINT ALSO BEING KNOWN AS THE MOST NORTHWESTERLY POINT OF THE BOEING COMPANIES PLANT 2 BOUNDARY LOCATED IN SEATTLE, WASHINGTON).

THENCE NORTH 56° 29' 43" EAST, ALONG SAID MEDIAN LINE, 290.45 FEET TO AN ANGLE POINT IN SAID MEDIAN LINE; THENCE NORTH 43°08'07" EAST, ALONG SAID MEDIAN LINE, A DISTANCE OF 286.12 FEET TO THE TRUE POINT OF BEGINNING. THENCE SOUTH 43°46'28" EAST, A DISTANCE OF 111.33 FEET; THENCE NORTH 18°14'05" EAST, A DISTANCE OF 22.66 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF THE BOEING COMPANIES PLANT 2 BOUNDARY; THENCE NORTH 51°08'00" WEST, ALONG SAID BOUNDARY, A DISTANCE OF 101.92 FEET TO THE INTERSECTION WITH SAID MEDIAN LINE; THENCE SOUTH 43°08'07" WEST, ALONG SAID MEDIAN LINE, A DISTANCE OF 6.96 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 1,468 SQUARE FEET, OR +/- 0.034 ACRES MORE OR LESS.

WASHINGTON STATE
DEPARTMENT OF ECOLOGY
INTEGRATED SITE INFORMATION
SYSTEM (ISIS) ENVIRONMENTAL
COVENANT REGISTRY ENTRY,
SLIP 4 EARLY ACTION AREA

King County

SITE ID and LOCATION

FS ID	CS ID	Cleanup Site Name & Address	Site Manager	NFA Date	Site Status & Rank
29959714	2732	Duwamish River Slip 4 SLIP 4 DUWAMISH RIVER SEATTLE 98108	Smith, Andrew		Cleanup Started 0

ENVIRONMENTAL COVENANTS & other INSTITUTIONAL CONTROLS

Instrument Type	Notes	County Recording #	County Recording Date	Control Type Details	
Environmental Covenant	Environmental Covenant	20130924000503	9/24/2013	Engineering Control	Engineered Cap
				Use Restriction	Anchorage Restriction
				Use Restriction	Maintenance Requirements
				Use Restriction	No Dredge Zone
				Use Restriction	Prohibit Excavation
				Use Restriction	Restrict Land Use
				Use Restriction	Restrict Soil Use
				Use Restriction	Restrictive Signage

Report Legend

The **Environmental Covenants* Registry** is a list of sites that have residual contamination remaining on them after the cleanup has been completed. These sites have environmental covenants or deed restrictions limiting certain uses of the property. Example covenants would be those prohibiting the drilling of a water supply well on the property or use of the property for residential uses.

* The terms 'Environmental Covenant', 'Institutional Control' and 'Restrictive Covenant' have been used synonymously over time.

Acronyms

FS ID = Facility-Site Identification Number (Ecology use)

CS ID = Cleanup Site Identification Number (Toxics Cleanup Program use)

NFA = 'No Further Action' determination

Rank = WASHINGTON Ranking Method or WARM Score (0-Federal Superfund, 1-Highest Assessed Risk, through 5-Lowest Assessed Risk).

UECA_DetailReport02.rdl

APPENDIX D

CERCLA SETTLEMENT AGREEMENT FOR THE SLIP 4 EARLY ACTION AREA

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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION X

IN THE MATTER OF:)	ADMINISTRATIVE SETTLEMENT
)	AGREEMENT AND ORDER ON
)	CONSENT FOR REMOVAL ACTION
Lower Duwamish Waterway Superfund)	
Slip 4 Early Action Area)	U.S. EPA Region X
Seattle, Washington,)	CERCLA Docket No. 10-2006-0364
)	
City of Seattle, King County, Washington)	Proceeding Under Sections 104, 106(a), 107
)	and 122 of the Comprehensive
)	Environmental Response, Compensation,
)	and Liability Act, as amended, 42 U.S.C.
Respondents.)	§§ 9604, 9606(a), 9607 and 9622.
_____)	

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1 **I. JURISDICTION AND GENERAL PROVISIONS**

2 1. This Administrative Settlement Agreement and Order on Consent (Settlement
3 Agreement) is entered into voluntarily by the United States Environmental Protection Agency,
4 Region X (EPA), and by the City of Seattle (City) and King County, Washington (County), as
5 Respondents. This Settlement Agreement provides for the performance of a non-time-critical
6 removal action by Respondents and the reimbursement of certain response costs incurred by the
7 United States at or in connection with such action for the Slip 4 Early Action Area (EAA) at
8 approximately River Mile 2.8 on the Duwamish Waterway, and within the Lower Duwamish
9 Waterway Superfund Site (Site or LDW Site) in Seattle, Washington.

10 2. This Settlement Agreement is issued under the authority vested in the President of
11 the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental
12 Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and
13 9622, as amended (CERCLA).

14 3. EPA has notified the State of Washington Department of Ecology (State or
15 Ecology) of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a). Ecology is
16 co-managing and overseeing cleanup of the Site jointly with EPA.

17 4. EPA and Respondents recognize that this Settlement Agreement has been
18 negotiated in good faith and that the actions undertaken by Respondents in accordance with this
19 Settlement Agreement do not constitute admissions of any liability. Respondents do not admit,
20 and retain the right to controvert in any subsequent proceedings other than proceedings to
21 implement or enforce this Settlement Agreement, the validity of the findings of facts,
22 conclusions of law, and determinations in Sections IV and V of this Settlement Agreement.
23 Respondents agree to comply with and be bound by the terms of this Settlement Agreement and
24 further agree that they will not contest the basis or validity of this Settlement Agreement or its
25 terms. Respondents agree to undertake all actions required by this Settlement Agreement,
26 including any modifications thereto, and consent to and will not contest EPA's authority to issue

1 or to enforce this Settlement Agreement. Except as expressly provided in this Settlement
2 Agreement, each party reserves all rights and defenses it may have.

3 **II. PARTIES BOUND**

4 5. This Settlement Agreement applies to and is binding upon EPA and upon
5 Respondents and their successors and assigns. Any change in governmental status of a
6 Respondent including, but not limited to, any transfer of assets or real or personal property shall
7 not alter such Respondents' responsibilities under this Settlement Agreement.

8 6. Respondents are jointly and severally liable for carrying out all activities required
9 by this Settlement Agreement. In the event of the insolvency or other failure of one Respondent
10 to implement the requirements of this Settlement Agreement, the remaining Respondent shall
11 complete all such requirements. Respondents shall ensure that their contractors, subcontractors,
12 and representatives receive a copy of this Settlement Agreement within 14 days from the
13 Effective Date or within 14 days of their contract to work on the project, and that they comply
14 with this Settlement Agreement. Respondents shall be responsible for any noncompliance with
15 this Settlement Agreement.

16 **III. DEFINITIONS**

17 7. Unless otherwise expressly provided herein, terms used in this Settlement
18 Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall
19 have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed
20 below are used in this Settlement Agreement or in the appendices attached hereto and
21 incorporated hereunder, the following definitions shall apply:

22 a. "CERCLA" shall mean the Comprehensive Environmental Response,
23 Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

24 b. "Day" shall mean a calendar day. In computing any period of time under
25 this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal
26 holiday, the period shall run until the close of business of the next working day.

1 c. "Effective Date" shall be the effective date of this Settlement Agreement
2 as provided in Section XXX.

3 d. "Engineering Evaluation/Cost Analysis" (EE/CA) shall have the definition
4 and attributes described in the NCP, as may be modified by this Settlement Agreement.

5 e. "EPA" shall mean the United States Environmental Protection Agency
6 and any successor departments or agencies of the United States.

7 f. "Ecology" or "State" shall mean the State of Washington Department of
8 Ecology and any successor departments or agencies thereof.

9 g. "Future Response Costs" shall mean all costs, including, but not limited
10 to, direct and indirect costs, that the United States has incurred in planning, developing and
11 negotiating this Settlement Agreement, in reviewing or developing plans, reports and other items
12 pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing,
13 overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs,
14 contractor costs, travel costs, laboratory costs, costs incurred by EPA associated with EPA's
15 preparation of any EPA decision documents (including any Action Memoranda), the costs
16 incurred pursuant to Paragraph 23 (costs and attorneys fees and any monies paid to secure
17 access, including the amount of just compensation), Paragraph 33 (emergency response), and
18 Paragraph 59 (work takeover), as well as any other activities related to the Slip 4 Early Action
19 Area undertaken by EPA and/or Ecology at Respondents' request.

20 h. "Interest" shall mean interest at the rate specified for interest on
21 investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507,
22 compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The
23 applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of
24 interest is subject to change on October 1 of each year.

25 i. "National Contingency Plan" or "NCP" shall mean the National Oil and
26 Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of
CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

1 of Engineers, completed in 1917. Industrial uses of and along the Waterway have been extensive
2 since its construction. The Waterway is also habitat to numerous fish and other aquatic species,
3 and is a migratory corridor for threatened and other anadromous fish species. Sources of releases
4 to the Waterway include but are not limited to, industrial releases, combined sewer overflows
5 and urban run-off.

6 b. On September 13, 2001, the Site was listed on the National Priorities List
7 pursuant to Section 105 of CERCLA, 42 U.S.C. 9605, at 66 Fed. Reg. 47583.

8 c. The Lower Duwamish Waterway, including the sediments in the vicinity
9 of Slip 4, has been the subject of numerous studies by various governmental and private entities
10 which Respondents (with two other parties) have assembled, integrated and evaluated during
11 Phase I of the remedial investigation process required by the Lower Duwamish Waterway
12 CERCLA remedial investigation/feasibility study (RI/FS) Administrative Order on Consent
13 (AOC) issued in December 2000 to Respondents and two other parties. In 2003, pursuant to the
14 LDW RI/FS AOC, the sediments and portions of the bank in Slip 4 were identified as a candidate
15 “Early Action Area” (the Slip 4 EAA). Contaminants found at or in the Slip 4 EAA sediment
16 and/or banks to date include, but are not limited to, polychlorinated biphenyls (PCBs), poly-
17 aromatic hydrocarbons (PAHs), mercury and other metals and phthalates. EPA decided to
18 expeditiously proceed with early action clean up at the Slip 4 EAA due primarily to high levels
19 of PCBs.

20 d. The Slip 4 Early Action Area (EAA) consists of Slip 4 at approximately
21 River Mile 2.8 on the eastern side of the Lower Duwamish Waterway and west of East Marginal
22 Way, immediately north of the Boeing Plant 2 facility at which The Boeing Company (Boeing)
23 has been implementing RCRA Corrective Action, including sediment work, pursuant to a RCRA
24 3008(h) Administrative Order on Consent (AOC) issued in January 1994, and the areal extent of
25 contamination at or from Slip 4 which EPA has determined in the Action Memorandum should
26

1 be addressed as part of the Slip 4 EAA.

2 e. Sources of releases to Slip 4 include industrial releases, some of which
3 may have come from a Seattle City Light facility upstream of Slip 4 and from Boeing Plant 2,
4 sewer system outfalls operated by Respondents which drain King County International Airport
5 (a/k/a Boeing Field) owned by the County, and urban stormwater releases.

6 f. The term "Early Action Area" or "EAA" is used to avoid the confusion
7 inherent in having a site (or many sites as there may be many Lower Duwamish removals) within
8 a Site, and depending on an upper or lower case "S" to distinguish between them. However, the
9 generic term "site" is used in numerous EPA guidance, policy and other documents, as well as
10 statutes and regulations. For purposes of these documents the terms "site" and "Early Action
11 Area" are wholly interchangeable, and where "site" may inadvertently be used in deliverables or
12 exchanges of information pursuant to this Order, any ambiguities which cannot be clearly
13 resolved based on context may require further inquiry.

14 g. Pursuant to the RI/FS AOC for the LDW Site, a Work Plan for
15 Investigation Tasks for the Slip 4 EAA (Work Plan) dated October 16, 2003, and a revised Work
16 Plan for Investigation Tasks, dated June 3, 2004, were submitted by Respondents and approved
17 by EPA. Pursuant to that Work Plan, EPA has approved the following documents for the Slip 4
18 EAA: 1) Summary of Existing Information and Identification of Data Gaps, dated January 15,
19 2004; 2) Sampling and Analysis Plan for Boundary Definition, dated March 4, 2004; 3)
20 Technical Memorandum for Tier 2 Analysis, dated July 12, 2004; 4) Cruise and Data Report,
21 dated November 10, 2004; 5) Revised Draft Technical Memorandum on Proposed Boundary of
22 the Removal Action, dated January 14, 2005; and Engineering Evaluation/Cost Analysis
23 (EE/CA), dated February 10, 2006. EPA issued a non-time-critical removal (NTRC) Action
24
25
26

1 Memorandum on May 5, 2006 for the Slip 4 EAA.

2 h. The City of Seattle is the largest municipality in the state of Washington.
3 Seattle City Light is a utility subdivision of the City. King County is the most populous county
4 in the state of Washington.

5 i. EPA has not completed a Potentially Responsible Party search for the Site
6 or for the Slip 4 EAA. Additional parties may be responsible for releases and contamination at
7 the Site and the Slip 4 EAA.

8 j. Respondents have been cooperating in the performance of the necessary
9 response actions to date with respect to the Slip 4 EAA.

10
11 **V. CONCLUSIONS OF LAW AND DETERMINATIONS**

12 9. Based on the Findings of Fact set forth above EPA has determined that:

13 a. The Slip 4 EAA is a “facility” as defined by Section 101(9) of CERCLA,
14 42 U.S.C. § 9601(9).

15 b. The contamination found at the Slip 4 EAA, as identified in the Findings
16 of Fact above, includes “hazardous substances” as defined by Section 101(14) of CERCLA, 42
17 U.S.C. § 9601(14), and/or pollutants or contaminants which may present an imminent and
18 substantial danger to the public health or welfare.

19 c. Each Respondent is a “person” as defined by Section 101(21) of
20 CERCLA, 42 U.S.C. § 9601(21).

21 d. Each Respondent is a responsible party under Section 107(a) of CERCLA,
22 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response action and
23 for response costs incurred and to be incurred at the Slip 4 EAA. Respondents are either the
24 “owners” and/or “operators” of a portion of the facility, as defined by Section 101(20) of
25 CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42
26 U.S.C. § 9607(a)(1); and/or arranged for disposal or treatment, or arranged with a transporter for

1 transport for disposal or treatment of hazardous substances at the facility, within the meaning of
2 Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

3 e. The conditions described in the Findings of Fact above constitute an actual
4 or threatened “release” of a hazardous substance from the facility as defined by Section 101(22)
5 of CERCLA, 42 U.S.C. § 9601(22).

6 f. The removal action required by this Settlement Agreement is necessary to
7 protect the public health, welfare, or the environment and, if carried out in compliance with the
8 terms of this Settlement Agreement, will be considered consistent with the NCP, as provided in
9 Section 300.700(c)(3)(ii) of the NCP.

10 g. A planning period of at least six months exists before field activities
11 required by this Settlement Agreement. An EE/CA has been performed.

12 **VI. SETTLEMENT AGREEMENT AND ORDER**

13 Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the
14 Administrative Record for the Site, including the Slip 4 EAA, it is hereby Ordered and Agreed
15 that Respondents shall comply with all provisions of this Settlement Agreement, including, but
16 not limited to, all attachments to this Settlement Agreement and all documents incorporated by
17 reference into this Settlement Agreement.

18 **VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR**

19 10. Respondents shall retain one or more contractors to perform the Work and shall
20 notify EPA of the name(s) and qualifications of such contractor(s) within 10 days of the
21 Effective Date. Respondents shall also notify EPA in writing of the name(s) and qualification(s)
22 of any other contractor(s) or subcontractor(s) retained to perform the Work at least 7 days prior
23 to commencement of such Work. EPA retains the right to disapprove of any or all of the
24 contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected
25 contractor in writing, Respondents shall retain a different contractor and shall notify EPA of that
26 contractor’s name and qualifications within 30 days of EPA’s disapproval.

1 15. The actions to be implemented generally include, but are not limited to, the
2 implementation of the Action Memorandum for the Slip 4 EAA, dated May 5, 2006, as set forth
3 in the SOW.

4 16. The EPA Guidance on Conducting Non-Time-Critical Removal Actions under
5 Superfund (OSWER Directive 9360.0-32) and any additional relevant guidance shall be followed
6 in implementing the SOW.

7 17. The primary objective of this removal action is to significantly reduce the
8 potential risk to human health and the environment resulting from potential exposure to
9 contaminants present in the Slip 4 EAA.

10 18. For all Work, EPA may approve, disapprove, require revisions to, or modify a
11 deliverable in whole or in part. If EPA requires revisions, Respondents shall submit a revised
12 deliverable within 10 days of receipt of EPA's notification of the required revisions, unless
13 otherwise noted in the SOW. Respondents shall implement the Work as approved in writing by
14 EPA in accordance with the schedule approved by EPA. Once approved, or approved with
15 modifications, the Work and the schedule, and any subsequent modifications, shall be
16 incorporated into and become fully enforceable under this Settlement Agreement.

17 19. Respondents shall not commence any Work except in conformance with the terms
18 of this Settlement Agreement. Respondents shall not commence implementation of the Work
19 developed hereunder until after receiving written EPA approval pursuant to this Section.

20 20. Reporting.

21 a. Respondents shall submit a written progress report to EPA concerning
22 actions undertaken pursuant to this Settlement Agreement every 30th day after the Effective Date
23 until termination of this Settlement Agreement, unless otherwise directed in writing by the EPA
24 Project Coordinator. These reports shall describe all significant developments during the
25 preceding period, including the actions performed and any problems encountered, analytical data
26 received during the reporting period, and the developments anticipated during the next reporting

1 period, including a schedule of actions to be performed, anticipated problems, and planned
2 resolutions of past or anticipated problems.

3 b. At least 30 days prior to the conveyance of any interest in real property at
4 or adjacent to the Slip 4 EAA owned or controlled by Respondents, Respondents shall give
5 written notice to the transferee that the property is subject to this Settlement Agreement and
6 written notice to EPA and Ecology of the proposed conveyance, including the name and address
7 of the transferee. Respondents also agree to require that their successor(s), if any, comply with
8 the immediately preceding sentence and Sections IX (Access) and X (Access to Information).

9 21. Off-Site Shipments.

10 a. Respondents shall, prior to any off-site shipment of Waste Material from
11 the Slip 4 EAA to an out-of-state waste management facility, provide written notification of such
12 shipment of Waste Material to the appropriate state environmental official in the receiving
13 facility's state and to the EPA Project Coordinator. However, this notification requirement shall
14 not apply to any off-site shipments when the total volume of all such shipments will not exceed
15 10 cubic yards.

16 i. Respondents shall include in the written notification the following
17 information: 1) the name and location of the facility to which the Waste Material is to be
18 shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule
19 for the shipment of the Waste Material; and 4) the method of transportation. Respondents shall
20 notify the state in which the planned receiving facility is located of major changes in the
21 shipment plan, such as a decision to ship the Waste Material to another facility within the same
22 state, or to a facility in another state.

23 ii. The identity of the receiving facility and state will be determined
24 by Respondents following the award of the contract for the removal action. Respondents shall
25 provide the information required by Paragraph 21(a) and 21(b) as soon as practicable after the
26 award of the contract and before the Waste Material is actually shipped.

1 shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining
2 such access, in accordance with the procedures in Section XV (Payment of Response Costs).

3 24. Notwithstanding any provision of this Settlement Agreement, EPA retains all of
4 its access authorities and rights, as well as all of its rights to require land/water use restrictions,
5 including enforcement authorities related thereto, under CERCLA, RCRA, and any other
6 applicable statutes or regulations.

7 **X. ACCESS TO INFORMATION**

8 25. Respondents shall provide copies to EPA, upon request, of all documents and
9 information within their possession or control or that of their contractors or agents relating to
10 activities at the Slip 4 EAA or to the implementation of this Settlement Agreement, including,
11 but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs,
12 receipts, reports, sample traffic routing, correspondence, or other documents or information
13 related to the Work. Respondents shall also make available to EPA, for purposes of
14 investigation, information gathering, or testimony, their employees, agents, or representatives
15 with knowledge of relevant facts concerning the performance of the Work.

16 26. Respondents may assert business confidentiality claims covering part or all of the
17 documents or information submitted to EPA under this Settlement Agreement, specifically
18 including contractor costs and documentation thereof, but specifically excluding deliverables
19 required by the attached SOW on which EPA may rely in remedy selection either for the Slip 4
20 EAA or for the Site, to the extent permitted by and in accordance with Section 104(e)(7) of
21 CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information
22 determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part
23 2, Subpart B. If no claim of confidentiality accompanies documents or information when they
24 are submitted to EPA, or if EPA has notified Respondents that the documents or information are
25 not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2,
26 Subpart B, the public may be given access to such documents or information without further
notice to Respondents.

1 upon request by EPA or Ecology, Respondents shall deliver any such records or documents to
2 EPA or Ecology. Respondents may assert that certain documents, records and other information
3 are privileged under the attorney-client privilege or any other privilege recognized by federal
4 law. If Respondents assert such a privilege, they shall provide EPA or Ecology with the
5 following: 1) the title of the document, record, or information; 2) the date of the document,
6 record, or information; 3) the name and title of the author of the document, record, or
7 information; 4) the name and title of each addressee and recipient; 5) a description of the subject
8 of the document, record, or information; and 6) the privilege asserted by Respondents. However,
9 no documents, reports or other information created or generated pursuant to the requirements of
10 this Settlement Agreement shall be withheld on the grounds that they are privileged.

11 31. Each Respondent hereby certifies individually that to the best of its knowledge
12 and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise
13 disposed of any records, documents or other information (other than identical copies) relating to
14 its potential liability regarding the Slip 4 EAA since notification of potential liability by EPA or
15 Ecology or the filing of suit against it regarding the Slip 4 EAA and that it has fully complied
16 with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of
17 CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

18 **XII. COMPLIANCE WITH OTHER LAWS**

19 32. Respondents shall perform all actions required pursuant to this Settlement
20 Agreement in accordance with all applicable local, state, and federal laws and regulations except
21 as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e)
22 and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all actions required pursuant to this
23 Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the
24 exigencies of the situation, attain applicable or relevant and appropriate requirements under
25 federal environmental, tribal environmental, or state environmental or facility siting laws.

26

1 **XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES**

2 33. In the event of any action or occurrence during performance of the Work which
3 causes or threatens to cause a release of Waste Material from the Slip 4 EAA that constitutes an
4 emergency situation or may present an immediate threat to public health or welfare or the
5 environment, Respondents shall immediately take all appropriate action. Respondents shall take
6 these actions in accordance with all applicable provisions of this Settlement Agreement, in order
7 to prevent, abate or minimize such release or endangerment caused or threatened by the release.
8 Respondents shall also immediately notify the EPA Project Coordinator or, in the event of
9 his/her unavailability, the Regional Duty Officer, Environmental Cleanup Office, Emergency
10 Response Unit, EPA Region X, 206-553-1263, of the incident or conditions. In the event that
11 Respondents fail to take appropriate response action as required by this Paragraph, and EPA
12 takes such action instead, Respondents shall reimburse EPA all costs of the response action not
13 inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

14 34. In addition, in the event of any release of a hazardous substance from the Slip 4
15 EAA, Respondents shall immediately notify the EPA Project Coordinator and the National
16 Response Center at (800) 424-8802. Respondents shall submit a written report to EPA within
17 7 days after each release, setting forth the events that occurred and the measures taken or to be
18 taken to mitigate any release or endangerment caused or threatened by the release and to prevent
19 the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu
20 of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the
21 Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11001, *et seq.*

22 **XIV. AUTHORITY OF EPA PROJECT COORDINATOR**

23 35. The EPA Project Coordinator shall be responsible for overseeing Respondents’
24 implementation of this Settlement Agreement. The Project Coordinator shall have the authority
25 vested in an On-Scene Coordinator (OSC) by the NCP, including the authority to halt, conduct,
26 or direct any Work required by this Settlement Agreement, or to direct any other removal action
undertaken at the Slip 4 EAA, as well as the authority of a Remedial Project Manager (RPM) as

1 set forth in the NCP. Absence of the EPA Project Coordinator from the Slip 4 EAA shall not be
2 cause for stoppage of work unless specifically directed by the EPA Project Coordinator.

3 **XV. PAYMENT OF RESPONSE COSTS**

4 36. Payments for Future Response Costs.

5 a. Respondents shall pay EPA all Future Response Costs not inconsistent
6 with the NCP. On a periodic basis, EPA will send Respondents a bill requiring payment that
7 includes a SCORPIOS or other regionally prepared cost summary, which includes direct and
8 indirect costs incurred by EPA and its contractors. Respondents shall make all payments within
9 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 39
10 of this Settlement Agreement.

11 b. Respondents shall make all payments required by this Paragraph by a
12 certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund,"
13 referencing the name and address of the parties making payment, the Docket Number of this
14 Settlement Agreement, and EPA Site/Spill ID number 10AJ, and shall be clearly designated as
15 Response Costs: LDW-Slip 4. Respondents shall send the check(s) to:

16 Mellon Bank
17 EPA-Region X Superfund
18 P.O. Box 371099M
Pittsburgh, PA 15251

19 c. At the time of payment, Respondents shall send notice that payment has
20 been made to EPA as provided in Paragraph 12 above, to the Financial Management Officer,
21 Environmental Protection Agency, Region X, 1200 Sixth Avenue, M/S OMP-146, Seattle,
22 Washington 98101-1128.

23 37. The total amount to be paid by Respondents pursuant to this Section shall be
24 deposited in the Lower Duwamish Waterway Superfund Site Special Account within the EPA
25 Hazardous Substance Superfund to be retained and used to conduct or finance response actions at
26 or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance
Superfund.

1 Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial
2 inability to complete the Work, increased cost of performance, or a failure to attain performance
3 standards/action levels selected by EPA.

4 44. If any event occurs or has occurred that may delay the performance of any
5 obligation under this Settlement Agreement, whether or not caused by a *force majeure* event,
6 Respondents shall notify EPA orally within 24 hours of when Respondents first knew that the
7 event might cause a delay. Within 10 days thereafter, Respondents shall provide to EPA in
8 writing an explanation and description of the reasons for the delay; the anticipated duration of
9 the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for
10 implementation of any measures to be taken to prevent or mitigate the delay or the effect of the
11 delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to
12 assert such a claim, including supporting documentation for such a claim; and a statement as to
13 whether, in the opinion of Respondents, such event may cause or contribute to an endangerment
14 to public health, welfare or the environment. Failure to comply with the above requirements
15 shall preclude Respondents from asserting any claim of *force majeure* for that event for the
16 period of time of such failure to comply and for any additional delay caused by such failure.

17 45. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure*
18 event, the time for performance of the obligations under this Settlement Agreement that are
19 affected by the *force majeure* event will be extended by EPA for such time as is necessary to
20 complete those obligations. An extension of the time for performance of the obligations affected
21 by the *force majeure* event shall not, of itself, extend the time for performance of any other
22 obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused
23 by a *force majeure* event, EPA will notify Respondents in writing of its decision. If EPA agrees
24 that the delay is attributable to a *force majeure* event, EPA will notify Respondents in writing of
25 the length of the extension for performance of the obligations affected by the *force majeure*
26 event.

1 **XVIII. STIPULATED PENALTIES**

2 46. Respondents shall be liable to EPA for stipulated penalties in the amounts set
3 forth in this Section for failure to comply with the requirements of this Settlement Agreement
4 specified below, unless excused under Section XVII (*Force Majeure*). "Compliance" by
5 Respondents shall include completion of the activities under this Settlement Agreement or any
6 work plan or other plan approved under this Settlement Agreement identified below in
7 accordance with all applicable requirements of law, this Settlement Agreement, all Appendices,
8 and any plans or other documents approved by EPA pursuant to this Settlement Agreement and
9 within the specified time schedules established by and approved under this Settlement
10 Agreement.

11 47. Stipulated Penalty Amounts - Work.

12 a. The following stipulated penalties shall accrue per violation per day for
13 any noncompliance identified in Paragraph 47(b):

14

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 1,000	1st through 7th day
\$ 2,000	8th through 14th day
\$ 3,500	15th through 30th day
\$ 7,500	31st day through 90th day

17

18 b. The final and all submitted drafts of the following Compliance Milestones:

- 19 1. Project Design Documents;
20 2. Removal Action Work Plan;
21 3. Removal Action Completion Report;
22 4. Long-term Monitoring and Reporting Plan.

23 48. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall
24 accrue per violation per day for failure to submit timely or adequate final and all submitted draft
25 reports or other written documents pursuant to this Settlement Agreement that are not listed in
Paragraph 47(b):

26

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500	1st through 7th day

1	\$ 1,000	8th day through 14th day
2	\$ 2,500	15th through 30th day
3	\$ 5,000	31st day through 90th day

4 49. All penalties shall begin to accrue on the day after the complete performance is
5 due or the day a violation occurs, and shall continue to accrue through the final day of the
6 correction of the noncompliance or completion of the activity. However, stipulated penalties
7 shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be
8 Performed), during the period, if any, beginning on the 31st day after EPA’s receipt of such
9 submission until the date that EPA notifies Respondents of any deficiency; and 2) with respect to
10 a decision by the ECL Director under Section XVI (Dispute Resolution), during the period, if
11 any, beginning on the 21st day after the Negotiation Period begins until the date that the ECL
12 Director issues a final decision regarding such dispute. Nothing herein shall prevent the
13 simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

14 50. Following EPA’s determination that Respondent has failed to comply with a
15 requirement of this Settlement Agreement, EPA may give Respondent written notification of the
16 failure and describe the noncompliance. EPA may send Respondents a written demand for
17 payment of the penalties. However, penalties shall accrue as provided in the preceding
18 Paragraph regardless of whether EPA has notified Respondents of a violation.

19 51. All penalties accruing under this Section shall be due and payable to EPA within
20 30 days of Respondents’ receipt from EPA of a demand for payment of the penalties, unless
21 Respondents invoke the dispute resolution procedures under Section XVI (Dispute Resolution).
22 All payments to EPA under this Section shall be paid by certified or cashier’s check(s) made
23 payable to “EPA Hazardous Substances Superfund,” shall be mailed to the Lockbox number and
24 address set forth in Paragraph 36b, above, shall indicate that the payment is for stipulated
25 penalties, and shall reference the EPA Region and Site/Spill ID Number 10AJ, the EPA Docket
26 Number of this Settlement Agreement, and the name and address of the parties making payment.
Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s),

1 shall be sent to EPA as provided in Paragraph 12, and to other receiving officials at EPA
2 identified in Paragraph 36c, above.

3 52. The payment of penalties shall not alter in any way Respondents' obligation to
4 complete performance of the Work required under this Settlement Agreement.

5 53. Penalties shall continue to accrue during any dispute resolution period, but need
6 not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's
7 decision.

8 54. If Respondents fail to pay stipulated penalties when due, EPA may institute
9 proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the
10 unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph
11 50.

12 55. Nothing in this Settlement Agreement shall be construed as prohibiting, altering,
13 or in any way limiting the ability of EPA to seek any other remedies or sanctions available by
14 virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations
15 upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and
16 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section
17 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil
18 penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to
19 Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided
20 herein, except in the case of a willful violation of this Settlement Agreement or in the event that
21 EPA assumes performance of a portion or all of the Work pursuant to Section XX, Paragraph 59.
22 Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion,
23 waive any portion of stipulated penalties that have accrued pursuant to this Settlement
24 Agreement.

25 **XIX. COVENANT NOT TO SUE BY EPA**

26 56. In consideration of the actions that will be performed and the payments that will
be made by Respondents under the terms of this Settlement Agreement, and except as otherwise

1 specifically provided in this Settlement Agreement, EPA covenants not to sue or to take
2 administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42
3 U.S.C. §§ 9606 and 9607(a), for the Work and for Future Response Costs. This covenant not to
4 sue shall take effect upon the Effective Date and is conditioned upon the complete and
5 satisfactory performance by Respondents of all obligations under this Settlement Agreement,
6 including, but not limited to, payment of Future Response Costs pursuant to Section XV. This
7 covenant not to sue extends only to Respondents and does not extend to any other person.

8 **XX. RESERVATIONS OF RIGHTS**

9 57. Except as specifically provided in this Settlement Agreement, nothing herein shall
10 limit the power and authority of EPA or the United States to take, direct, or order all actions
11 necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize
12 an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous
13 or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking
14 legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other
15 legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in
16 the future to perform additional activities pursuant to CERCLA or any other applicable law.

17 58. The covenant not to sue set forth in Section XIX above does not pertain to any
18 matters other than those expressly identified therein. EPA reserves, and this Settlement
19 Agreement is without prejudice to, all rights against Respondents with respect to all other
20 matters, including, but not limited to:

21 a. claims based on a failure by Respondents to meet a requirement of this
22 Settlement Agreement;

23 b. liability for costs not included within the definition of Future Response
24 Costs;

25 c. liability for performance of response action other than the Work;

26 d. criminal liability;

1 e. liability for damages for injury to, destruction of, or loss of natural
2 resources, and for the costs of any natural resource damage assessments;

3 f. liability arising from the past, present, or future disposal, release or threat
4 of release of Waste Materials outside of the Slip 4 EAA; and

5 g. liability for costs incurred or to be incurred by the Agency for Toxic
6 Substances and Disease Registry related to the Slip 4 EAA.

7 59. Work Takeover. In the event EPA determines that Respondents have ceased
8 implementation of any portion of the Work, are seriously or repeatedly deficient or late in their
9 performance of the Work, or are implementing the Work in a manner which may cause an
10 endangerment to human health or the environment, EPA may assume the performance of all or
11 any portion of the Work as EPA determines necessary. Respondents may invoke the procedures
12 set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of
13 the Work is warranted under this Paragraph. Costs incurred by the United States in performing
14 the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents
15 shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other
16 provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take
17 any and all response actions authorized by law.

18 **XXI. COVENANT NOT TO SUE BY RESPONDENTS**

19 60. Respondents covenant not to sue and agree not to assert any claims or causes of
20 action against the United States, or its contractors or employees, with respect to the Work, Future
21 Response Costs, or this Settlement Agreement, including, but not limited to:

22 a. any direct or indirect claim for reimbursement from the Hazardous
23 Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111,
24 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other
25 provision of law;

26 b. any claim arising out of response actions at or in connection with the Slip
4 EAA, including any claim under the United States Constitution, the Washington State

1 Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. §
2 2412, as amended, or at common law; or

3 c. any claim against the United States pursuant to Sections 107 and 113 of
4 CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Slip 4 EAA. The covenants not to sue in
5 this Section shall not apply in the event the United States brings a cause of action or issues an
6 order pursuant to the reservations set forth in Paragraphs 58 (b), (c), and (e) - (g), but only to the
7 extent that Respondents' claims arise from the same response action, response costs, or damages
8 that the United States is seeking pursuant to the applicable reservation.

9 61. Nothing in this Agreement shall be deemed to constitute approval or
10 preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or
11 40 C.F.R. § 300.700(d).

12 **XXII. OTHER CLAIMS**

13 62. By issuance of this Settlement Agreement, the United States and EPA assume no
14 liability for injuries or damages to persons or property resulting from any acts or omissions of
15 Respondents. The United States or EPA shall not be deemed a party to any contract entered into
16 by Respondents or their directors, officers, employees, agents, successors, representatives,
17 assigns, contractors, or consultants in carrying out actions pursuant to this Settlement
18 Agreement.

19 63. Except as expressly provided in Section XIX (Covenant Not to Sue by EPA),
20 nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or
21 cause of action against Respondents or any person not a party to this Settlement Agreement, for
22 any liability such person may have under CERCLA, other statutes, or common law, including
23 but not limited to any claims of the United States for costs, damages and interest under Sections
24 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

25 64. No action or decision by EPA pursuant to this Settlement Agreement shall give
26 rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. §
9613(h).

XXIII. CONTRIBUTION

65. The Parties agree that:

a. This Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work and Future Response Costs.

b. This Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work and Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

66. Respondents agree that with respect to any suit or claim for contribution brought by them for matters related to this Settlement Agreement, they will notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondents further agree that with respect to any suit or claim for contribution brought against them for matters related to this Settlement Agreement, they will notify EPA in writing within 10 days of service of the complaint on them. In addition, Respondents shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

1 below is received from EPA, Respondents shall establish and maintain financial security in the
2 amount of \$5,000,000.00 to assure the Work and any other obligations required under this
3 Settlement Agreement in one or more of the following forms:

- 4 a. A surety bond guaranteeing performance of the Work;
- 5 b. One or more irrevocable letters of credit equaling the total estimated cost
6 of the Work;
- 7 c. A trust fund;
- 8 d. A guarantee to perform the Work by one or more parent corporations or
9 subsidiaries, or by one or more unrelated corporations that have a substantial business
10 relationship with at least one of Respondents; or
- 11 e. A demonstration that one or more of the Respondents satisfy the
12 requirements of 40 C.F.R. Part 264.143(f).

13 73. If Respondents seek to demonstrate the ability to complete the Work through a
14 guarantee by a third party pursuant to Paragraph 74(a) of this Section, Respondents shall
15 demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If
16 Respondents seek to demonstrate their ability to complete the Work by means of the financial
17 test or the corporate guarantee pursuant to Paragraph 74(d) or (e) of this Section, they shall
18 resubmit sworn statements conveying the information required by 40 C.F.R. 264.143(f) annually,
19 on the anniversary of the Effective Date. In the event that EPA determines at any time that the
20 financial assurances provided pursuant to this Section are inadequate, Respondents shall, within
21 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one
22 of the other forms of financial assurance listed in Paragraph 74 of this Section. Respondents'
23 inability to demonstrate financial ability to complete the Work shall not excuse performance of
24 any activities required under this Settlement Agreement.

25 74. If, after the Effective Date, Respondents can show that the estimated cost to
26 complete the remaining Work has diminished below \$5,000,000.00, Respondents may, on any
anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the

1 amount of the financial security provided under this Section to the estimated cost of the
2 remaining Work to be performed. Respondents shall submit a proposal for such reduction to
3 EPA, in accordance with the requirements of this Section, and may reduce the amount of the
4 security upon approval by EPA. In the event of a dispute, Respondents may reduce the amount
5 of the security in accordance with the written decision resolving the dispute.

6 75. Respondents may change the form of financial assurance provided under this
7 Section at any time, upon notice to and approval by EPA, provided that the new form of
8 assurance meets the requirements of this Section. In the event of a dispute, Respondents may
9 change the form of the financial assurance only in accordance with the written decision resolving
10 the dispute.

11 **XXVII. MODIFICATIONS**

12 76. The EPA Project Coordinator may make modifications to any plan or schedule in
13 writing or by oral direction. Any oral modification will be memorialized in writing by EPA
14 promptly, but shall have as its effective date the date of the EPA Project Coordinator's oral
15 direction. Any other requirements of this Settlement Agreement may be modified in writing by
16 mutual agreement of the parties.

17 77. If Respondents seek permission to deviate from any approved work plan or
18 schedule or Statement of Work, Respondents' Project Coordinator shall submit a written request
19 to EPA for approval outlining the proposed modification and its basis. Respondents may not
20 proceed with the requested deviation until receiving oral or written approval from the EPA
21 Project Coordinator pursuant to Paragraph 76.

22 78. No informal advice, guidance, suggestion, or comment by the EPA Project
23 Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or
24 any other writing submitted by Respondents shall relieve Respondents of their obligation to
25 obtain any formal approval required by this Settlement Agreement, or to comply with all
26 requirements of this Settlement Agreement, unless it is formally modified.

1 **XXVIII. NOTICE OF COMPLETION OF WORK**

2 79. When EPA determines, after EPA’s review of the Final Removal Action
3 Completion Report, that all Work has been fully performed in accordance with this Settlement
4 Agreement, with the exception of any continuing obligations required by this Settlement
5 Agreement, including post-removal site controls and monitoring, if any, payment of Future
6 Response Costs, or record retention, EPA will provide written notice to Respondents. If EPA
7 determines that any such Work has not been completed in accordance with this Settlement
8 Agreement, EPA will notify Respondents, provide a list of the deficiencies, and require that
9 Respondents correct such deficiencies. Respondents shall implement the modified and approved
10 Work Plan and shall submit a modified Final Removal Action Completion Report in accordance
11 with the EPA notice. Failure by Respondents to implement the approved modified Work Plan
12 shall be a violation of this Settlement Agreement.

13 **XXIX. SEVERABILITY/INTEGRATION/APPENDICES**

14 80. If a court issues an order that invalidates any provision of this Settlement
15 Agreement or finds that Respondents have sufficient cause not to comply with one or more
16 provisions of this Settlement Agreement, Respondents shall remain bound to comply with all
17 provisions of this Settlement Agreement not invalidated or determined to be subject to a
18 sufficient cause defense by the court’s order.

19 81. This Settlement Agreement and its appendices constitute the final, complete and
20 exclusive agreement and understanding among the Parties with respect to the settlement
21 embodied in this Settlement Agreement. The Parties acknowledge that there are no
22 representations, agreements or understandings relating to the settlement other than those
23 expressly contained in this Settlement Agreement. The following appendices are attached to and
24 incorporated into this Settlement Agreement:

- 25 a. Appendix A: Statement of Work.
- 26 b. Appendix B: Map generally depicting the Slip 4 EAA.

1 **XXX. EFFECTIVE DATE**

2 82. This Settlement Agreement shall be effective on the day it is issued by EPA. The
3 undersigned representatives of Respondents certify that they are fully authorized to enter into the
4 terms and conditions of this Settlement Agreement and to bind the parties they represent to this
5 document.

6 **XXXI. NOTICES AND SUBMISSIONS**

7 83. Documents including work plans, reports, approvals, disapprovals, and other
8 correspondence which must be submitted under this Settlement Agreement, shall be sent to the
9 individuals at the addresses specified below, unless those individuals give written notice of a
10 change to the other parties. All notices and submissions shall be considered effective one
11 business day after receipt by Respondent's Project Coordinator, unless otherwise provided.
12 Upon request by EPA, Respondents shall submit such documents in electronic form.

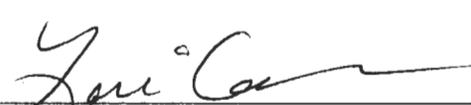
13 a. Twelve (12) copies of documents to be submitted to EPA shall be
14 forwarded to:

15 Karen Keeley
16 U.S. Environmental Protection Agency
17 1200 Sixth Avenue, ECL-111
18 Seattle, Washington 98101

19 b. One (1) copy of documents to be submitted to EPA shall be forwarded to:

20 Dan Cargill
21 Washington Department of Ecology
22 Northwest Regional Office
23 3190 160th Avenue SE
24 Bellevue, Washington 98504

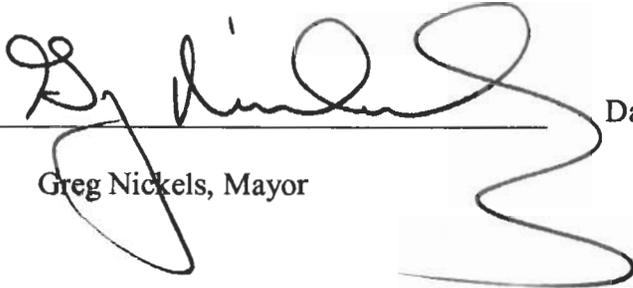
25 It is so ORDERED and AGREED.

26 By: 
Sheila M. Eckman, Unit Manager
Site Cleanup Unit 3
Office of Environmental Cleanup
U.S. EPA, Region 10

Date: 9-28-2006

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For Respondent City of Seattle:

By:  Date 7 July 2006
Greg Nickels, Mayor

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For Respondent King County:

By: 

Date 9-28-2006

Ron Sims, King County Executive

APPENDIX A

STATEMENT OF WORK

SLIP 4 EARLY ACTION AREA LOWER DUWAMISH WATERWAY SUPERFUND SITE SEATTLE, WASHINGTON

I. PURPOSE

The purpose of this Statement of Work (SOW) is to fully implement the Administrative Settlement Agreement and Order on Consent (Settlement Agreement) for Removal Action.

The Work to be completed under this SOW shall include preparation and delivery of and implementation of: 1) Prefinal and Final Project Design Documents; 2) a Draft and Final Biological Assessment; 3) a Draft and Final Removal Action Work Plan and implementation of the removal action; 4) a Draft and Final Removal Action Completion Report and a Draft and Final Institutional Control Implementation Report; 5) a Draft and Final Long-Term Monitoring and Reporting Plan to ensure that the objectives outlined in this SOW are achieved in Slip 4; and, 6) Community Involvement Activities.

Removal activities shall be completed in accordance with Table 1 of this SOW. The goal is to initiate the construction phase of the removal action in 2007, or as otherwise approved by EPA. Construction of the Removal Action will not commence until adequate source control efforts have been implemented to minimize potential for sediment recontamination. EPA will ensure that sources of contamination are adequately controlled prior to construction of the Slip 4 Removal Action to minimize the potential for recontamination of Slip 4 sediments.

II. WORK TO BE PERFORMED BY RESPONDENTS

Respondents shall complete the following tasks:

Task 1 - Project Design Documents

Respondents shall prepare project design documents, including construction plans and specifications, to implement the removal action in the project area as described in this SOW and shall demonstrate that the removal action shall meet all objectives of the Action Memorandum. Respondents shall meet regularly with EPA prior to and during development of design documents and provide EPA, for review and approval, the key technical documents that support the removal design (see below). Design documents, including plans and specifications, shall be submitted in accordance with the schedule set forth in Table 1 of this SOW.

Prefinal and Final Designs

Respondents shall submit the prefinal design when the design effort is 60 percent complete. Respondents shall submit for EPA approval the final design when the design effort is 100 percent complete. The Final Design shall fully address all EPA comments made on the Prefinal Design. Prefinal and Final Design shall include:

1) ***Prefinal (60%) Design Analysis Report*** shall provide the design criteria and the basis of design for the removal action. Examples of the types of information to be included are described below:

- Technical parameters and supporting calculations upon which the design will be based, including but not limited to design requirements for each active remedy (e.g., dredging, capping);
- If the selected alternative includes capping:
 - appropriate physical and chemical characteristics of materials to be used for sediment capping and method for identifying and testing clean source material, including acceptance criteria for such sediment;
 - determinations regarding potential propellor-driven erosion for capped areas;
 - cap placement techniques;
- If the selected alternative includes dredging and/or excavation:
 - determinations on requirements to the contractor of how dredged or excavated sediments will be handled, stockpiled, de-watered, transported (including haul routes), and disposed of, including identification of any best management practices, monitoring, and/or analyses necessary to protect on-site personnel and area residents from chemical hazards posed by this Removal Action (such activities may be further described in the contractor's Health and Safety Plan);
 - design dredge or excavation depths and overcut allowances, dredged or excavated material volumes, and dredging or excavation techniques;
 - identification of potential upland landfill location for disposal of dredged or excavated sediments;
- If the selected alternative includes treatment or other methods:
 - design criteria and the basis of design for the selected method, such as pretreatment requirements, volume and types of media requiring treatment,

treatment schemes, input/output of flow streams, influent/effluent qualities of flow streams;

- Descriptions of the analyses conducted to select the design approach, including a summary and detailed justification of design assumptions and verification that design will meet performance standards;
- Evaluation of the potential for imbedded debris (e.g., submerged pilings or logs, buried cables or concrete material, rip rap) in the sediments to affect remedy implementation or achievement of performance standards;
- Access and easement requirements, and permit requirements or substantive requirements of permits;
- Plan for minimizing negative effects on the environment and community during the construction phase(s);
- If the selected remedy includes institutional controls, submit a draft Institutional Control Implementation Plan (ICIP). The ICIP must describe institutional controls (ICs) that will be designed to prevent exposure to contamination at the site where contaminant levels do not allow for unlimited use and unrestricted exposure. The ICIP should include analysis and recommendations on ICs needed to ensure the long-term effectiveness of the removal action, including the objectives and goals for each institutional control; descriptions of the portions of the site where each IC applies; descriptions of how such controls would be implemented, monitored, and enforced, and by whom and under what enforcement mechanism; a timeframe for how long the ICs must remain in place; and, under what circumstances such controls could be removed or terminated. The ICIP shall describe the four categories of ICs (governmental, proprietary, enforcement, informational) identified in EPA guidance, and shall consider site-specific ICs that could be implemented under each category as well as the “layering” of ICs to enhance the protectiveness of the remedy. A restrictive covenant (or easement) substantively in compliance with WAC 173-340-440(9) is anticipated to address future proprietary activities in such areas. The ICIP must specifically address any necessary easements or other proprietary controls, including how prospective changes in stormwater and/or wastewater/sewer conveyancing, utility easements and such other contingencies such as fiberoptic cable and/or other technological conveyancing could impact areas subject to ICs. The ICIP must itemize projected components for the Institutional Control Implementation Report (see Task 4) with a projected schedule. See “Institutional Controls” OSWER 9355.0-74FS-P, EPA 540-F-00-005, September 2000; “Strategy to Ensure Institutional Control Implementation at Superfund Sites, OSWER 9355.0-106, September 2004; “Institutional Controls” OSWER 9255.0-98, February 2005).

If the selected alternative includes capping, the cap design shall follow appropriate EPA guidance, including “Guidance for In-situ Subaqueous Capping of Contaminated Sediments”

(EPA 905-B96-004). Capping must be performed consistent with federal laws and regulations, including requirements of Sections 404 and 401 of the CWA, and any stricter state laws and regulations.

If the selected alternative includes dredging, the performance standards must be consistent with federal regulations, including requirements of Sections 404 and 401 of the CWA and Section 10 of the Rivers and Harbors Act, and any stricter state laws and regulations.

2) *Prefinal (60%) Construction Documents and Schedule*, including:

- Construction plans/drawings/sketches and required specifications;
- Proposed locations of processes/construction activity;
- Construction schedule.

3) *Prefinal (60%) Design Plans*, including:

- Draft Construction Quality Assurance Plan (see Section III of this SOW) which shall detail the remediation verification method and approach to quality assurance during construction activities in the project area, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs). The Plan will describe the methods used to measure compliance with measurement quality objectives (such as performance and method requirements), including target dredge or excavation depths, if appropriate. The Plan will include, as an attachment, a Draft Removal Action Sampling and Analysis Plan (see Section III of this SOW), which shall include a field sampling plan and a quality assurance project plan (QAPP). If the selected alternative includes capping, performance monitoring will include characterization of in-place capping materials (e.g., coverage and thickness) through such methods as video surveys, grab samples, digital photographic interpretation, or bathymetric surveys. If the selected alternative includes dredging or excavation, performance monitoring will be performed to confirm that dredged or excavated material is properly staged, dewatered, and transported to a suitable upland disposal site; and that field construction activities are properly sequenced. The Plan also will specify a quality assurance official (QAO), independent of the Respondents' Project Coordinator and independent of the project engineer/site supervisor, to conduct a quality assurance program during the construction phase of the project. The QAO is responsible for implementation and maintenance of the CQAP, and for maintaining awareness of the entire project to detect conditions that may adversely affect quality. The QAO shall, at a minimum, have knowledge, technical qualifications, and experience relating to sediment remediation projects, and shall be in daily contact with the Respondents' Project Coordinator and project engineer/site supervisor.
- Draft Water Quality Monitoring Plan and its associated Quality Assurance Project Plan and Health and Safety Plan (see Section III of this SOW), which shall detail water quality

monitoring to confirm that water quality standards as defined by substantive requirements of CWA Section 401 water quality certification for compliance with the requirements in CWA Section 404(b)(1) guidelines are met (or ensure approval to allow temporary exceedances of water quality standards has been received) during any capping and dredging operations and where return-water from barges or de-watering (as appropriate) may affect the water column. The plan shall describe the specific water quality monitoring requirements, including: schedule; sampling locations; sampling intervals; sampling equipment and parameters; analytical methods; key contacts; reporting requirements (including daily reports); daily contacts for notifications of any and all exceedances; result summaries; and draft and final Water Quality Monitoring reports. A QAPP and a Health and Safety Plan specific to water quality monitoring shall be included in this deliverable.

4) *Final Design Analysis Report and Plans:*

The 100 % Final Design submittal shall include the final Design Analysis Report; final construction documents and schedule, including final plans and specifications; final Design Plans, including a final ICIP; final cost estimate for the Removal Action and estimated cost for long-term monitoring; and a schedule for the construction and implementation of the Removal Action that identifies major milestones, including all necessary elements for implementation of the final ICIP.

The final contractor bid documents will be prepared by the City of Seattle following EPA's notification to Respondents that adequate Source Control efforts have been implemented.

Task 2 - Biological Assessment

In order to identify the presence of threatened, endangered, proposed, or candidate species, or their habitat within the vicinity of the proposed Slip 4 Early Action Area, Respondents will prepare, for EPA approval, a draft Biological Assessment (BA) to ensure compliance with the Endangered Species Act. The BA will characterize baseline conditions of the existing habitat, address potential project impacts that the removal action will have on these species, their habitat, and their food stocks; and describe best management practices and conservation measures designed to avoid or minimize potential impacts.

Task 3 - Removal Action Work Plan and Implementation of Removal Action

Respondents shall prepare a Removal Action Work Plan that outlines the implementation of the selected removal action alternative, including how those construction activities are to be implemented by Respondents and coordinated with EPA. The Work Plan shall include the following elements, at a minimum:

- Description of the removal action and construction activities, including project organization; construction contractor selection; site mobilization and preparatory work;

dredging activities; dredged or excavated material handling; bathymetric surveys; dredged or excavated material spill prevention; procedures and plans for the decontamination of equipment and the disposal of contaminated decontamination materials; stormwater pollution prevention plan; capping activities; performance verification; water quality monitoring; quality assurance; and implementation of the ICIP;

- Schedule of activities for completion of the Removal Action, including those inspections, meetings, and documents referenced in this task;
- Schedule for developing and submitting other required Removal Action plans;
- Formulation of the Removal Action team;
- Construction quality control plan and statement of qualifications (by constructor);
- Procedures for processing design changes and securing EPA review and approval of such changes to ensure changes conform to performance standards and requirements of this SOW, and are consistent with the objectives of this removal action;
- Procedures for coordinating with EPA regarding compliance with EPA's Off-Site Rule.

The Removal Action Work Plan also shall include a schedule for implementation of all Removal Action tasks identified in the Final Design Report, as approved by EPA. In addition, the Work Plan shall include a Health and Safety Plan that is designed to protect on-site personnel and area residents from physical, chemical, and all other hazards posed by this Removal Action. The safety plan shall follow EPA guidance and all OSHA requirements as outlined in 29 C.F.R. 1910 and 1926. Respondents may utilize existing Health and Safety Plan (HASP) project documents or other company/contractor HASPs provided that Respondents demonstrates the HASP has been modified, as necessary, or otherwise sufficiently addresses the activities covered by this SOW. Draft and Final versions of the Removal Action Work Plan shall be submitted to EPA for review and approval in accordance with the schedule set forth in Table 1 of this SOW.

As described in Table 1, Respondents shall provide notification to EPA thirty (30) days prior to initiation of fieldwork to allow EPA to coordinate field oversight activities.

Respondents shall complete the sediment removal actions in accordance with the approved Final Design documents and Removal Action Work Plan. The following activities shall be completed in constructing the Removal Action.

EPA and Respondents shall participate in a preconstruction meeting to:

- Review methods for documenting and reporting data, and compliance with specifications and plans including methods for processing design changes and securing EPA review and approval of such changes as necessary;

- Review methods for distributing and storing documents and reports;
- Review work area security and safety protocols, as appropriate;
- Demonstrate that construction management is in place, and discuss any appropriate modifications of the Construction Quality Assurance Plan (CQAP) to ensure that project-specific considerations are addressed;
- Conduct a site tour in the project area to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations, as appropriate.

Respondents shall transmit (electronically) key points and action items of the preconstruction meeting to all parties within seven (7) days of the meeting. Respondents shall submit final key points and action items of the preconstruction meeting to all parties within fourteen (14) days of the meeting.

Pursuant to the CQAP, written weekly reports shall be prepared and submitted to EPA for review during the removal action. Weekly reports shall include work performed, problems encountered and solutions proposed, water quality monitoring results, and work to be performed during the following week. Respondents shall inform EPA of the disposal facility proposed to receive any debris or dredged/excavated materials from Slip 4.

Within seven (7) days after Respondents makes a preliminary determination that construction is complete, Respondents shall orally notify EPA for the purposes of scheduling a final inspection and/or meeting. Within fourteen (14) days after the final inspection and/or meeting, Respondents shall send a letter to EPA stating that construction is complete and responding to any outstanding issues that were raised by EPA during the final inspection/meeting.

Task 4 - Removal Action Completion Report and Institutional Control Implementation Report

Within 60 days after completion of the construction phase of the non-time-critical removal action, Respondents shall submit for EPA review and approval a Removal Action Completion Report. This report shall contain a description of the Work described in the Removal Action Work Plan and the Work that was actually performed. In the report, a registered professional engineer and Respondents shall state that the removal action has been constructed in accordance with the design and specifications. The report shall provide as-built drawings, signed and stamped by a professional engineer, showing the area and depth of the location remediated. The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Order, a listing of quantities and types of materials removed off-site or handled on-site, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed (including a map showing the

locations of any confirmatory samples), and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). All analytical data collected under this Settlement Agreement shall be provided electronically to EPA in a format compatible with that used for the Remedial Investigation at the LDW Site. The final Water Quality Monitoring report may be submitted as an appendix to the Removal Action Completion Report.

When submitting the final Removal Action Completion Report to EPA, the Respondent shall identify the Work that has been fully performed in accordance with this Order, and shall identify all continuing obligations, including post-removal site controls and monitoring, required by the Order, as described in Section XXVIII of the Settlement Agreement. The Respondent shall also identify a time line for continuing obligations with “in perpetuity” identified for all obligations for which a time line cannot reasonably be fixed.

If the remedy included institutional controls, the Removal Action Completion Report shall also contain a description of ICIP implementation to date, with copies of all implementing documentation, a schedule for completion of all outstanding ICIP tasks, and a proposed submittal date for a draft and final Institutional Control Implementation Report. The Institutional Control Implementation Report must document complete implementation of the ICIP, including copies of all relevant paperwork (e.g., easements, filings with Recorders Offices).

The final Removal Action Completion Report and the final Institutional Control Implementation Report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

“Under penalty of perjury under the laws of the United States, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Task 5 - Long-Term Monitoring and Reporting Plan

Respondents shall prepare a Long-Term Monitoring and Reporting Plan for the removal action implemented at Slip 4. The goal of the Plan is to monitor the long-term effectiveness of the remedy. The Long-Term Monitoring and Reporting Plan shall describe the required monitoring activities, including inspections and analyses, and schedules; the responsible party for performing each activity; the specific reporting requirements, and the process to be followed for addressing any contingency or corrective actions.

The Long-Term Monitoring and Reporting Plan shall describe monitoring objectives, an overview of the monitoring approach, design of the monitoring program (e.g., sampling strategy, station locations and replication, field sampling methods, laboratory methods), data analysis and interpretation, reporting requirements, and a schedule. The Plan shall include, as appropriate,

visual inspection, bathymetric survey, sediment deposition monitoring, chemical monitoring, and sediment samples in capped areas and non-capped areas (including excavated areas) to monitor for recontamination. If institutional controls are part of the selected remedy, the Long-term Monitoring and Reporting Plan shall also include a description of monitoring of ICs to ensure that all requirements remain in place and that the ICs continue to work effectively. The Plan shall include notification requirements to EPA when an IC fails or a land use restriction is violated, and provisions shall be included that describe what actions should be taken in the event of a failure or violation, and what entity should be responsible for addressing the problem. Data from long-term monitoring shall be assembled into reports and submitted to EPA in accordance with the schedule set forth in the Long-Term Monitoring and Reporting Plan. Based on long-term monitoring results, EPA shall determine if future response actions are needed to achieve the cleanup objectives.

For each final long-term monitoring report submitted to EPA pursuant to the Long-Term Monitoring and Reporting Plan, each final report shall include the following certification signed by a person who supervised or directed the preparation of that report:

“Under penalty of perjury under the laws of the United States, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Task 6 - Community Involvement Activities

As requested by EPA, Respondents shall provide information supporting EPA’s community involvement programs related to the Work performed pursuant to this Order, and shall participate in public meetings that may be held or sponsored by EPA to discuss activities concerning Work performed pursuant to this Order. Respondents shall coordinate with EPA on any other community involvement activities they take related to the Work performed pursuant to this Order.

Upon request by EPA, Respondents shall submit copies of plans, technical memoranda, raw data, and other reports to EPA except those documents that are privileged.

III. CONTENT OF SUPPORTING PLANS

Sampling and Analysis Plan

Respondents shall develop a project-specific Sampling and Analysis Plan (SAP), comprised of a Field Sampling Plan (FSP) and project-specific Quality Assurance Project Plan (QAPP) for sample analysis and data handling for any samples collected at the early action area. The SAP shall be based upon the Settlement Agreement, SOW, and EPA guidance. As appropriate, the

SAP will ensure that sample collection and analytical activities are conducted in accordance with the Puget Sound Estuary Program protocols.

The FSP will define in detail the sampling and data-gathering methods that will be used on the project. It will include sampling objectives, a detailed description of sampling activities, sample locations, sample analysis, sampling equipment and procedures, sampling schedule, station positioning, and sample handling (e.g., sample containers and labels, sample preservation).

The QAPP will describe the quality assurance and quality control protocols necessary to achieve required data quality objectives. The QAPP will be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) and "Guidance on Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002). The QAPP will address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting, and personnel qualifications. The laboratory performing the work must have and follow an approved Quality Assurance (QA) program, which complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA. If a laboratory not in the EPA Contract Laboratory Program (CLP) is selected, the QAPP shall be consistent with the requirements of the CLP for laboratories proposed outside the CLP. Respondents will provide assurances that EPA has access to laboratory personnel, equipment and records for sample collection, transportation, and analysis.

All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain-of-custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance.

Upon request by EPA, Respondents shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondents agree that EPA personnel may audit any laboratory that performs analytical work under this Settlement Agreement. Prior to awarding any work to an analytical laboratory, Respondents will inform the laboratory that an audit may be performed, and that the laboratory agrees to coordinate with EPA prior to performing analyses. Respondents shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondents shall notify EPA not less than 14 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondents to take split or duplicate samples of any samples it takes as part of its oversight of Respondents' implementation of the Work.

All analytical data collected under this Settlement Agreement shall be provided electronically to EPA.

Health and Safety Plan(s)

The Health and Safety Plan(s) ensure protection of the public health and safety during performance of on-site Work under this Order. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. Respondents shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the duration of the removal action.

Construction Quality Assurance Plan

The Construction Quality Assurance Plan (CQAP) describe the project-specific components of the performance methods and quality assurance program to ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft Plan shall be submitted with the Prefinal design and the Final Plan shall be submitted with the Final Design. The Final Plan shall be submitted prior to the start of construction in accordance with the approved construction schedule. The Plan shall provide requirements for the following elements:

- Responsibilities and authorities of all organization and key personnel involved in the Removal Action construction, including EPA and other agencies.
- Qualifications of the Construction Quality Assurance (CQA) Officer. Establish the minimum training and experience of the CQA Officer and supporting inspection personnel.
- Inspection and verification activities. Establish the observations and tests that will be required to monitor the construction and/or installation of the components of the Removal Action. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements and ensure compliance with all health and safety procedures.
- Performance standards and methods. Describe all performance standards and methods necessary to ensure implementation of the removal construction. Performance monitoring requirements shall be stated to demonstrate that best management practices have been implemented for dredging operations, transportation of dredged or excavated material, and proper cap placement techniques.
- Sampling activities. Establish requirements for quality assurance sampling activities, including the sampling protocols, sample size, sample locations, frequency of testing,

acceptance and rejection data sheets, and plans for correcting problems as addressed in the project specifications.

- Documentation. Establish the reporting requirements for construction quality assurance activities. This shall include such items as daily and weekly summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Settlement Agreement shall be included.

IV. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

The schedule for submission to EPA of deliverables described in the SOW is presented in Table 1.

TABLE 1 - Project Schedule

Task 1	A.1 Prefinal (60 percent) Design A.2 Final (100 percent) Design	A.1 Due October 2006. A.2 Within 75 days after receipt of EPA comments on Prefinal Design, or within 105 days after submittal of Prefinal Design, whichever is later.
Task 2	A.1 Draft Biological Assessment A.2 Final Biological Assessment	A.1 Submit to EPA with Prefinal (60 percent) Design. A.2 Submit to EPA with Final (100 percent) Design.
Task 3	A.1 Draft Removal Action Work Plan A.2 Final Removal Action Work Plan A.3 Notification of Removal Action Start A.4 Removal Action Start	A.1 Within 210 days after EPA approval of the Final Design providing EPA notifies the Respondents in writing within 30 days of approval of Final Design that sources of contamination are adequately controlled to minimize the potential for recontamination of Slip 4 sediments. A.2 Within 14 days after receipt of EPA comments on draft Removal Action Work Plan. A.3 Provide notification to EPA 30 days prior to initiation of removal action fieldwork to allow EPA to coordinate field oversight activities. A.4 Within 30 days after approval of Removal Action Work Plan, consistent with environmental windows for in-water work.
Task 4	A.1 Draft Removal Action Completion Report A.2 Final Removal Action Completion Report	A.1 Within 60 days after completion of removal action (construction phase). A.2 Within 30 days after receipt of EPA comments on Draft Removal Action Completion Report.
	A.3 Draft Institutional Control Implementation Report A.4 Final Institutional Control Implementation Report	A.3 and A.4 Submit to EPA in accordance with EPA-approved schedule set forth in Final Removal Action Completion Report.

Task 5	<p>A.1 Draft Long-Term Monitoring and Reporting Plan</p> <p>A.2 Final Long-Term Monitoring and Reporting Plan</p> <p>A.3 Monitoring Data Reports</p>	<p>A.1 Within 60 days after EPA approval of the Final Removal Action Completion Report.</p> <p>A.2 Within 30 days after receipt of EPA comments on the draft Long-term Monitoring and Reporting Plan.</p> <p>A.3 Schedule to be proposed by Respondents in the Long-Term Monitoring and Reporting Plan.</p>
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APPENDIX B

MAP GENERALLY DEPICTING THE SLIP 4 EARLY ACTION AREA

SLIP 4 EARLY ACTION AREA LOWER DUWAMISH WATERWAY SUPERFUND SITE SEATTLE, WASHINGTON

(excerpted from Figure 2 of Action Memorandum, EPA, May 5, 2006)

Map Document: (O:\Projects\Dredmsh_OI\Y\Projects\Slip4_EECA\Figure_2-17_Slip4_2004_Clean-up_Boundary_Map_Asize.mxd)
 1/13/2006 -- 2:52:46 PM



Map Feature Sources:
 King County GIS, Seattle Public Utilities,
 USACE, Ecology, Windward Environmental,
 David Evans, Inc., and others
 Sediment Chemistry:
 Lower Duwamish Project Database and 2004
 Slip 4 Survey PCB analysis results

Figure 2-18
 Slip 4 - EE/CA
 Slip 4 Preliminary
 Removal Action Boundary

Figure 2 of Action Memorandum, EPA, May 5, 2006

APPENDIX E

WASHINGTON STATE SITE REGISTRY DOCUMENTATION

WASHINGTON STATE
DEPARTMENT OF ECOLOGY
HAZARDOUS SITE REGISTER

Hazardous Sites List

SITE REGISTER SPECIAL ISSUE -- February 27, 2013

King

FS ID	SITE NAME	CITY	RANK	STATUS	RU
2524	CHEVRON BULK 61002620	GROTTO	3	Awaiting Cleanup	NW
2110	CHROMIUM INC	SEATTLE	5	Awaiting Cleanup	NW
2487	CHS AUBURN	AUBURN	3	Cleanup Started	NW
2322	CIRCLE K STA 1461	SEATTLE	3	Cleanup Started	NW
26296554	CLEANING CENTER OF REDMOND	REDMOND	2	Cleanup Complete-Active O&M/Monitoring	HQ
77732426	COLEMAN CREOSOTING WORKS	SEATTLE	5	Cleanup Started	NW
2070	CONOCOPHILLIPS RENTON TERMINAL	RENTON	5	Cleanup Started	NW
2588	COVROX INC	KENT	2	Cleanup Started	NW
1940187	CROWLEY MARINE SERVICES INC 8TH AVE S	SEATTLE	2	Cleanup Started	NW
6258254	DEARBORN CORPORATION CAMPUS GOODWILL	SEATTLE	2	Awaiting Cleanup	NW
2578	DISCOVERY PARK OLD MAINT YD	SEATTLE	5	Awaiting Cleanup	NW
97573251	DOUGLAS MANAGEMENT DOCK	SEATTLE	5	Cleanup Started	NW
4907326	DRIVEWAY 1025 S CENTRAL AVE	KENT	3	Awaiting Cleanup	NW
21945598	DUWAMISH MARINE CENTER	SEATTLE	1	Cleanup Started	NW
29959714	DUWAMISH RIVER SLIP 4	SEATTLE	0 ▲	Cleanup Started	NW
2071	DUWAMISH SHIPYARD INC	SEATTLE	2	Cleanup Started	NW
2258	EASTERN SUPPLY CO	SEATTLE	2	Construction Complete-Performance Monitoring	NW
2247	ELECTROFINISHING CO	AUBURN	4	Awaiting Cleanup	NW
301518	ELLIOTT BAY BICYCLES	SEATTLE	5	Awaiting Cleanup	NW
2084	EMERALD TOOL INC	SEATTLE	5	Awaiting Cleanup	NW
11385314	ENGINEERED COATING SYSTEMS	NORTH BEND	1	Awaiting Cleanup	NW
2069	ER & JR SUTTER	SEATTLE	1	Awaiting Cleanup	NW
2568	FIELDS CORP KENT	KENT	1	Cleanup Started	NW
2201	FIRST AVE BRIDGE LANDFILL	SEATTLE	4	Awaiting Cleanup	NW
98981573	FISHER PROPERTY	SEATTLE	5	Awaiting Cleanup	NW
2282	FOX AVE BLDG	SEATTLE	1	Cleanup Started	NW
2402	GACO WESTERN LLC	TUKWILA	3	Cleanup Started	NW
139	GAS WORKS PARK WA NATURAL GAS	SEATTLE	1	Cleanup Started	NW
2522	GENERAL ELECTRIC AVIATION DIV	SEATTLE	2	Cleanup Started	NW
2035	GENERAL TRANSPORT CO 13TH AVE SW	SEATTLE	0 ▲	Cleanup Started	EP
23881883	GLACIER NORTHWEST INC	SEATTLE	1	Cleanup Started	NW
2127	HARBOR AVE LANDFILL	SEATTLE	0 ▲	Cleanup Started	EP
2021	HARBOR ISLAND	SEATTLE	0 ▲	Cleanup Started	EP
989871	HARBOR ISLAND EAST WATERWAY	SEATTLE	0 ▲	Cleanup Started	NW
67887948	HARRINGTON BEALL GREENHOUSES	VASHON	2	Awaiting Cleanup	NW
25793762	HERMAN PROPERTY	FEDERAL WAY	1	Awaiting Cleanup	NW
43881387	HOUSE OF KLEEN INC	SEATTLE	3	Awaiting Cleanup	NW
2356	HYDRAULIC REPAIR & DESIGN INC	KENT	3	Awaiting Cleanup	NW
2534	HYLITE MIRROR	SEATTLE	3	Awaiting Cleanup	NW
2154	INDUSTRIAL CONTAINER SERVICES WA LLC	SEATTLE	4	Cleanup Started	NW
2033	INDUSTRIAL OFFICE COMPLEX	SEATTLE	0 ▲	Cleanup Started	EP
2133	INDUSTRIAL PLATING CORP	SEATTLE	4	Awaiting Cleanup	NW
2331	INTERBAY BNR	SEATTLE	1	Cleanup Started	NW
2335	INTERSTATE COATINGS	SEATTLE	2	Awaiting Cleanup	NW
2316	ISLAND AUTO WRECKING I	VASHON	3	Awaiting Cleanup	NW
23199267	ISLAND AUTO WRECKING II	VASHON	5	Awaiting Cleanup	NW
15842283	ISSAQUAH SPORTSMEN CLUB 1	ISSAQUAH	3	Awaiting Cleanup	NW
98935455	ISSAQUAH SPORTSMEN CLUB 2	ISSAQUAH	4	Awaiting Cleanup	NW
2431	JAMES OIL CO INC	ENUMCLAW	1	Cleanup Started	NW
98913848	JAPANESE AUTO WRECKING	KENT	2	Awaiting Cleanup	NW
1339184	JC COMMERCIAL PROPERTIES LLC	SEATTLE	5	Awaiting Cleanup	NW
2446	JOHNNYS WRECKING YARD	WOODINVILLE	2	Awaiting Cleanup	NW
2382	JORGENSEN FORGE CORP	SEATTLE	1	Cleanup Started	NW
2163	KELLY MOORE PAINT CO	SEATTLE	5	Cleanup Started	NW
2348	KENMORE INDUSTRIAL PARK AKA LAKEPOINTE	KENMORE	1	Cleanup Started	NW
2042	KENT HIGHLANDS LANDFILL	KENT	0 ▼	Cleanup Complete-Active O&M/Monitoring	NW
33353226	KENT SEWAGE LAGOONS	KENT	4	Cleanup Started	NW
2457	KEVIK CLEANERS	BELLEVUE	4	Awaiting Cleanup	NW

Hazard Sites List Legend:

- ◆ New site added to the ranked list
- New site added to the National Priorities List (NPL)
- ❖ Site re-ranked
- ▼ Superfund site; State has lead
- ▲ Superfund site; Federal (EPA) has lead
- ▶ Superfund site; Joint lead
- ◀ Superfund site; Under a Federal Facilities Agreement
- ▶◀ Tacoma Smelter Plume (State Lead)

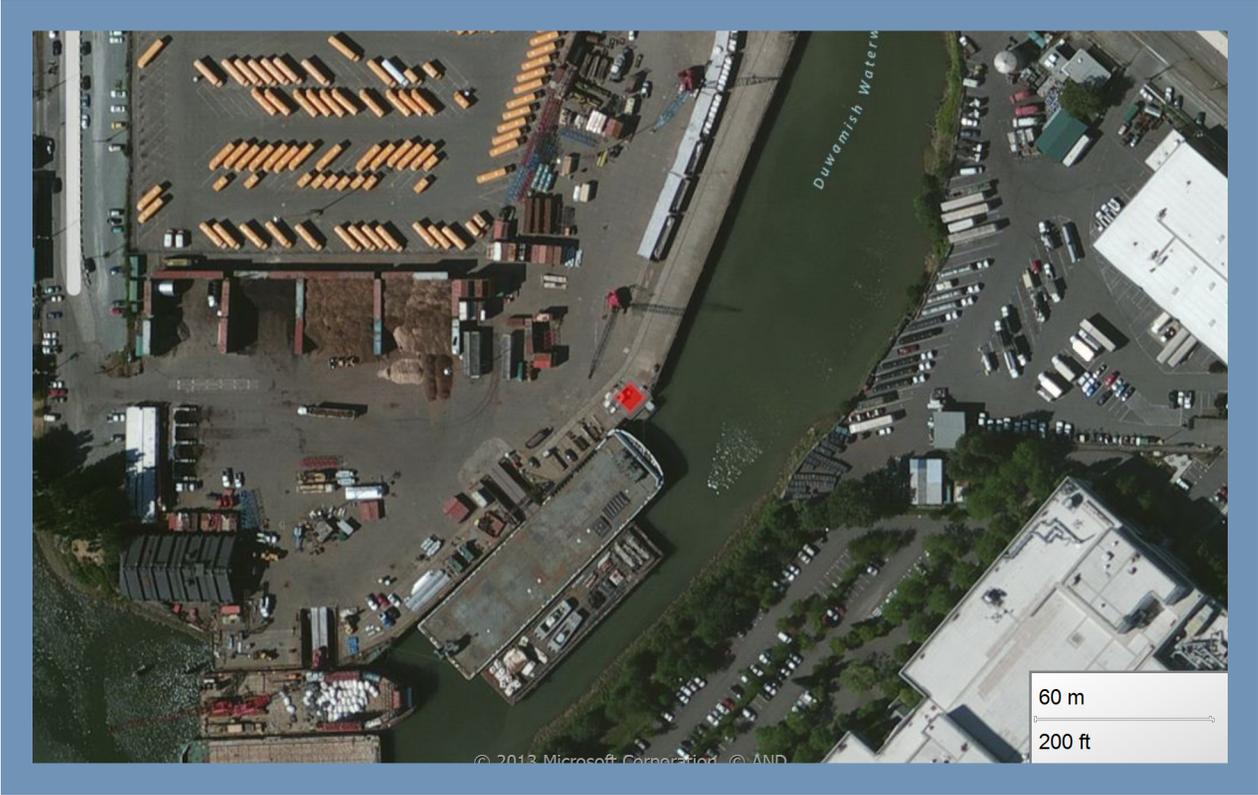
Responsible Unit (RU) Site Contacts

Central Regional Office: Frosti Smith (509) 454-7841/Ted Benson (360) 407-6683
 Eastern Regional Office: Patti Carter (509) 329-3522/Ted Benson (360) 407-6683
 Northwest Regional Office: Donna Musa (425) 649-7136/Ted Benson (360) 407-6683
 Southwest Regional Office: Rebecca Lawson (360) 407-6241/T Benson (360) 407-6683
 Headquarters Site Cleanup Section: Barry Rogowski (360) 407-7243/T Benson (360) 407-6683
 Industrial Section: Paul Skyllingstad (360) 407-6949/T Benson (360) 407-6683
 Nuclear Waste Program: John Price (509) 372-7921/Brenda Jentzen (509) 372-7912

WASHINGTON STATE
DEPARTMENT OF ECOLOGY
SLIP 4 FACILITY SITE REPORT

Facility/Site: Duwamish River Slip 4
29959714

Also known as: ALASKA LOGISTICS, CROWLEY MARINE SERVICES, Duwamish River Slip 4, EVERGREEN MARINE LEASING, MARINE LOGISTICS, NORTHLAND SERVICES INC., SEGALE



Address

SLIP 4 DUWAMISH RIVER

Decimal Coordinates

Latitude: 47.53556

WASHINGTON STATE
DEPARTMENT OF ECOLOGY
INTEGRATED SITE INFORMATION
SYSTEM (ISIS) SITE LISTING

SEATTLE WA 98108

Longitude: -122.31967

Geographic Information

Ecology Region: NWRO

Legislative District: 11

WRIA: 9

County: King

Congressional District: 7

Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
State Cleanup Site	TOXICS	(360) 407-7224		9/28/1998	
Hazardous Waste Generator	HAZWASTE	(360) 407-6023	WAD980977029	3/18/1985	12/31/1991

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

SIC Code	SIC Description
<u>9999</u>	NONCLASSIFIABLE ESTABLISHMENTS

County	City	Facility Site Id (Primary)	Cleanup Site ID	Site Name	Address	Zip Code
King	SEATTLE	29959714	2732	Duwamish River Slip 4	SLIP 4 DUWAMISH RIVER	98108

APPENDIX F

SLIP 4 EARLY ACTION AREA
SEDIMENT CAP NOTIFICATION
SIGNS



Photo 1 – Sediment cap notice sign on dolphin at mouth of Slip 4.



Photo 2 – Sediment cap notice sign on Crowley pier.



Photo 3 – Sediment cap notice sign on Boeing bank.



Photo 4 – View of sediment cap notice sign on Boeing bank, seen from mouth of Slip 4.

APPENDIX G

HEALTH ADVISORIES FOR LOWER DUWAMISH WATERWAY SUPERFUND SITE

WASHINGTON STATE
DEPARTMENT OF HEALTH
LOWER DUWAMISH WATERWAY
SUPERFUND SITE FACT SHEET

Lower Duwamish Waterway Superfund Site Fact Sheet November 2007

DOH PUB NO. 334-139 Revised 10/2008

Background

The Lower Duwamish Waterway is currently undergoing cleanup under U.S. Environmental Protection Agency's (EPA) Superfund program. The site includes a 5.5 mile portion of the Lower Duwamish River which flows into Elliott Bay near Seattle, Washington and was added to EPA's National Priorities List of Superfund sites on September 13, 2001.

Contaminants have been released into the river over the past 100 years, and residential areas such as South Park and Georgetown have a history of heavy industrial use. Contaminants in the waterway sediments include polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons, mercury and other metals, and phthalates.

Contaminants of Concern

The primary contaminants of concern in the Lower Duwamish Waterway seafood are polychlorinated biphenyls (PCBs). PCBs were banned in 1977 due to their impacts on health and persistence in the environment. Children exposed to PCBs may develop learning and behavior problems later in life. PCBs can also impact the immune system.

The main pathway for exposure to contaminants in the Lower Duwamish Waterway is through seafood consumption. Soils and sediments at public access areas along the river may also contain PCBs and other toxic contaminants.

The following recommendations will lower your exposure to contaminants from sediments and seafood from the Lower Duwamish Waterway until cleanup activities effectively lower contaminant levels in sediments, crab, shellfish, and fish.



Duwamish River seafood consumption advisory sign at Terminal 105

How to Reduce Exposure to Contaminants in Sediments and Seafood

Although health risks from recreational activities on the Lower Duwamish Waterway beaches are relatively low, common sense approaches can reduce exposure to contaminants. People may swallow small amounts of soil and dust (and any contaminants they contain) without realizing it. Young children often put hands, toys, pacifiers, and other things in their mouths swallowing dirt or dust.

Keep Clean

- If you go to the beach, wash your hands and face with soap afterwards, especially before eating.
- Clean dirt from under your nails.
- Wash soiled clothing separately.
- Young children are especially sensitive to contaminants. Remember to wash your children's hands, toys, and pacifiers.
- Keep pets clean.

Avoid Bringing Contaminants Home

- Remove shoes before or immediately upon entering the house. Place a wipe-off mat outside and a place for shoes inside.

Stay in Public Use Areas

- Trespassing on private property may expose you to higher contaminant levels.

Swimming in the Lower Duwamish Waterway

- You can swim in the river, but be aware there are several combined sewer overflows that can discharge waste water into the waterway during periods of heavy rain.
- Public Health-Seattle & King County recommends against swimming near combined sewer overflows for a period of 48 hours (2 days) after the last heavy rain.

Healthy Seafood Eating Advice for the Lower Duwamish River Waterway

The following seafood eating recommendations are for the general public, especially young children, and women who are pregnant, may become pregnant, and nursing mothers.

DO NOT EAT any crab, shellfish, or fish (the exception is salmon) from the Lower Duwamish Waterway.

Salmon Are Safe to Eat

Salmon spend a short time in the Duwamish River and have similar contaminant levels as salmon caught elsewhere in Puget Sound.

One meal is 8 ounces of fish uncooked.

Chum, Coho, Pink, and Sockeye - You can safely eat 2-3 meals per week.

Chinook - You can safely eat 1 meal per week.

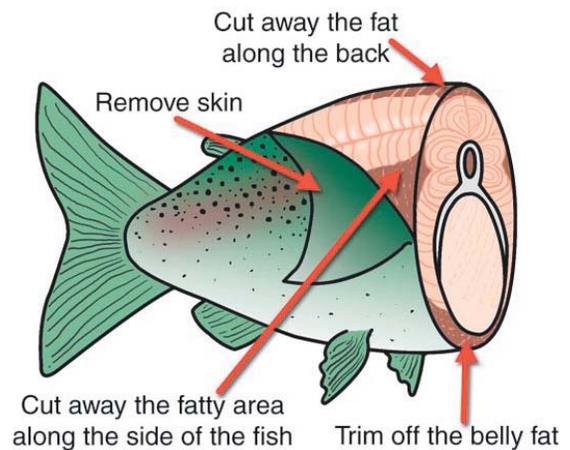
Blackmouth (resident Chinook) – Limit your consumption to 2 meals per month.

For more information visit www.doh.wa.gov/fish

DOH Fish Preparation Recommendations

The following recommendations can reduce, by up to 50 percent, PCBs and other contaminants that collect in the fat of fish. Mercury is stored in the muscle (fillet) and cannot be reduced by preparing this way.

- When cleaning salmon remove the skin, fat, and internal organs before cooking.
- Grill, bake, or broil fish so that fat drips off while cooking.
- Do not use the fat drippings for sauces or gravies.



For more information contact:

Washington State Department of Health
Office of Environmental Health Assessments
Toll Free 1-877-485-7316
www.doh.wa.gov/ehp/oehas/

Fish Advisories in Washington State
Toll Free 1-877-485-7316
www.doh.wa.gov/fish

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WASHINGTON STATE
DEPARTMENT OF HEALTH
UPDATED FISH CONSUMPTION
ADVISORY

Health Consultation

Lower Duwamish Waterway Site: Updated Fish Consumption Advisory
and Evaluation of Marine Tissue Collected from the Lower Duwamish
Waterway in August and September 2004.
Seattle, Washington

September 7, 2005

Prepared by

**The Washington State Department of Health
Under a Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry**



DOH Pub. No. 333-103

Foreword

The Washington State Department of Health (DOH) has prepared this health consultation in cooperation with the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR is part of the U.S. Department of Health and Human Services and is the principal federal public health agency responsible for health issues related to hazardous waste. This health consultation was prepared in accordance with methodologies and guidelines developed by ATSDR.

The purpose of this health consultation is to identify and prevent harmful human health effects resulting from exposure to hazardous substances in the environment. Health consultations focus on specific health issues so DOH can respond to requests from concerned residents or agencies for health information on hazardous substances. DOH evaluates sampling data collected from a hazardous waste site, determines whether exposures have occurred or could occur, reports any potential harmful effects, and recommends actions to protect public health. The findings in this report are relevant to conditions at the site during the time of this health consultation, and should not necessarily be relied on if site conditions or land use changes in the future.

For more information or questions about DOH or the contents of this health consultation, please call the health advisor who prepared this document:

Gary Palcisko
Washington State Department of Health
Office of Environmental Health Assessments
P.O. Box 47846
Olympia, WA 98504-7846
(360) 236-3377
FAX (360) 236-3383
1-877-485-7316
Web site: www.doh.wa.gov/ehp/oehas/sashome.htm

For more information about ATSDR, contact the ATSDR Information Center at 1-888-422-8737 or visit the agency's Web site: www.atsdr.cdc.gov/.

Glossary

Acute	Occurring over a short time [compare with chronic].
Agency for Toxic Substances and Disease Registry (ATSDR)	The principal federal public health agency involved with hazardous waste issues, responsible for preventing or reducing the harmful effects of exposure to hazardous substances on human health and quality of life. ATSDR is part of the U.S. Department of Health and Human Services.
Carcinogen	Any substance that causes cancer.
Chronic	Occurring over a long time (more than 1 year) [compare with acute].
Contaminant	A substance that is either present in an environment where it does not belong or is present at levels that might cause harmful (adverse) health effects.
Dose (for chemicals that are not radioactive)	The amount of a substance to which a person is exposed over some time period. Dose is a measurement of exposure. Dose is often expressed as milligram (amount) per kilogram (a measure of body weight) per day (a measure of time) when people eat or drink contaminated water, food, or soil. In general, the greater the dose, the greater the likelihood of an effect. An “exposure dose” is how much of a substance is encountered in the environment. An “absorbed dose” is the amount of a substance that actually got into the body through the eyes, skin, stomach, intestines, or lungs.
Environmental Protection Agency (EPA)	United States Environmental Protection Agency.
Exposure	Contact with a substance by swallowing, breathing, or touching the skin or eyes. Exposure may be short-term [acute exposure], of intermediate duration, or long-term [chronic exposure].
Ingestion	The act of swallowing something through eating, drinking, or mouthing objects. A hazardous substance can enter the body this way [see route of exposure].
Ingestion rate	The amount of an environmental medium that could be ingested typically on a daily basis. Units for IR are usually liter/day for water, and mg/day for soil.
Oral Reference Dose (RfD)	An amount of chemical ingested into the body (i.e., dose) below which health effects are not expected. RfDs are published by EPA.

<p>Parts per billion (ppb)/Parts per million (ppm)</p>	<p>Units commonly used to express low concentrations of contaminants. For example, 1 ounce of trichloroethylene (TCE) in 1 million ounces of water is 1 ppm. 1 ounce of TCE in 1 billion ounces of water is 1 ppb. If one drop of TCE is mixed in a competition size swimming pool, the water will contain about 1 ppb of TCE.</p>
<p>Remedial investigation</p>	<p>The CERCLA process of determining the type and extent of hazardous material contamination at a site.</p>

Purpose

The purpose of this health consultation is to update the Lower Duwamish Waterway fish consumption advisory that has been in effect since July 2002. Recent fish tissue data collected as part of the on-going Remedial Investigation of the Lower Duwamish Waterway Superfund site in Seattle, Washington has prompted the Washington State Department of Health to re-evaluate the existing advisory.

It is important to note that this health consultation differs in scope and purpose from continuing Remedial Investigation (RI) studies associated with hazardous waste cleanup in the Lower Duwamish Waterway. While a risk assessment conducted under the U.S. Environmental Protection Agency and Washington State Department of Ecology's Remedial Investigation / Feasibility Study (RI/FS) process is used to support the selection of a remedial measure at a site, the health consultation is a mechanism used to provide the impacted community with information on the public health implications of a specific site identifying people for which more health actions, outreach, education, or studies are needed.

Background and Statement of Issues

The Lower Duwamish Waterway (LDW) site is located in King County, Washington on the south shore of Elliott Bay and consists of nearly 5 miles of the Duwamish River south of downtown Seattle (Figure 1). The LDW has been Seattle's major industrial corridor since it was first created by widening and straightening the Duwamish River (and forming Harbor Island) by the U.S. Army Corps of Engineers from 1913 to 1920.¹ Over 90 years of intense industrial use and municipal effluent has resulted in chemical contamination to sediments and some fish species.

The LDW site was listed on the National Priorities List (NPL) on September 13, 2001 by the U.S. Environmental Protection Agency (EPA). The NPL is EPA's list of the Nation's most contaminated hazardous waste sites, also known as Superfund sites. Four potentially liable parties collectively known as the Lower Duwamish Waterway Group (LDWG) including the Port of Seattle, King County, City of Seattle and the Boeing Company, are working with EPA and the Washington State Department of Ecology (Ecology) to investigate the nature and extent of chemical contamination in LDW sediments and evaluate cleanup alternatives. This process is commonly called a Remedial Investigation / Feasibility Study (RI/FS).

The Remedial Investigation (RI) for the LDW site is being conducted in two phases. The first phase, completed in 2003, compiled, evaluated, and summarized existing data collected during historical environmental investigations to identify locations within the LDW where early cleanup actions were suitable, identified data gaps, and prepared a work plan to complete the RI. So far, the LDWG has prepared an initial RI and has identified several sites along the LDW that have been slated for early cleanup.² One early cleanup has been completed, and preparation for cleanup has begun at three other early action areas. The objectives of the second phase are to conduct additional studies to fill data gaps, prepare a baseline ecological and human health risk assessment, and estimate residual health risk at the site considering completed or planned early cleanup actions.

Duwamish Fish Advisory 2002

In 2002, the Washington State Department of Health (DOH) completed a draft for public comment Public Health Assessment of the Lower Duwamish Waterway site. DOH concluded in the document, later finalized in 2003, that people who often eat resident fish from the LDW may be at risk for adverse health effects from exposure to contaminants, primarily PCBs, in fish.^{a,3} DOH recommended that no more than one eight-ounce resident fish meal per month be consumed, fish be cleaned and prepared in a manner to further reduce exposure to PCBs, and not to consume crab butter. A shellfish consumption advisory recommending no consumption was already in place along the LDW (and King County shoreline except Vashon) primarily because of sewage. This fish advisory was communicated to the public through an extensive community outreach and education plan to convey the message that utilized print and broadcast media, public meetings, fish cleaning demonstrations, sign postings, and frequent community visits by outreach professionals.

Phase 2 Sample collection and analysis

The Lower Duwamish Waterway Group collected fish, crab, and shellfish samples in August and September 2004 as part of the phase 2 RI to fill data gaps identified in the first phase of the RI. Marine tissue was collected from four areas along the LDW (Figure 2) and analyzed for many contaminants including polychlorinated biphenyls (PCBs),⁴ which will be the focus of this health consultation.

Species sampled were targeted to represent seafood that may be consumed by humans and wildlife. English sole, starry flounder, three types of perch (shiner surfperch, pile perch, and striped perch), two crab species (Dungeness crab, and slender crab), and eastern soft-shell clams were the seafood species collected relevant to human health.⁵ Pacific staghorn sculpin were collected specifically for ecological risk data needs.

PCBs Aroclors^b were analyzed in all species using EPA method 8082a. Aroclor results were summed to derive total PCBs. A subset of samples was analyzed for all 209 PCB congeners^c using EPA method 1668. The sum of these congeners represents the total amount of PCBs. Another subset of English sole samples was analyzed for PCB Aroclors to determine PCB levels in fish with skin-on versus fish with skin removed. For more information on PCBs, refer to Appendix A.

EPA has conducted quality assurance and quality control (QA / QC) on Aroclor results, but is still validating PCB congener data.⁶ Data QA / QC is necessary to ensure that the analytical results are accurate and valid. Congener data for clams has been validated.

^a More details and the full text of the Public Health Assessment of the Lower Duwamish Waterway can be accessed at http://www.atsdr.cdc.gov/HAC/PHA/lowerduwamish/ldw_toc.html

^b Aroclors are a trade name of varying mixtures of PCB congeners.

^c Congeners are structural variations of PCBs that vary by the number and location of chlorine atoms on the base structure.

Discussion

Results of the recent (Phase 2) and historical tissue PCB analyses are presented in Table 1. Total PCBs are reported as either the sum of Aroclor mixtures, or the sum of all 209 PCB congeners. PCB levels are highest in whole body fish and crab hepatopancreas compared with fish fillets or crab muscle. Crab muscle and clam tissue have lower PCB levels than fish fillets. PCB levels in English sole and shiner surfperch appear to be higher at three downstream locations (Areas 1-3) compared to one upstream location (Area 4) [Figure 2].

Generally, average PCB levels are higher in phase 2 samples compared with historical samples of the same species and tissue type. The reason for this increase has not yet been determined.

Table 1. Recent and historical average polychlorinated biphenyl (PCB) concentrations in fish and crab tissue collected in the Lower Duwamish Waterway Seattle, Washington

Phase 2 samples collected August - September 2004							Historical samples collected 1992-1999 ^a		
Fish or Crab type	Tissue type	C / I	N	Mean PCBs Aroclor ug/kg	N	Mean PCBs Congeners ug/kg	C / I	N	Mean PCBs Aroclor ug/kg
English Sole	Whole body	C	21	3,120	7	2,024	I	3	958
	Fillet with skin	C	7	1,426	7	955			NA
	Fillet with skin	I	10	849	NA	NA			NA
	Skinless fillet	I	10	716	NA	NA	C / I	18 / 9	267 ^b
Starry Flounder	Fillet with skin	C	1	450	1	300			NA
	Whole body	C	3	570	1	458			NA
Pile Perch	Fillet with skin	C	1	300	1	192			NA
Striped perch	Fillet with skin	C	1	630	1	442	C / I	8 / 1	160
Shiner surfperch	Whole body	C	24	2,582	9	3,190	C	3	496
Dungeness crab	Muscle	C	7	240	3	136	I	3	130
	Hepatopancreas	C	3	4,667	2	3,619	I	1	1,647
Slender crab	Muscle	C	12	210	4	155			NA
	Hepatopancreas	C	4	1,818	2	919			NA
Eastern soft-shell clam	Clam tissue (minus shell)	C	14	143	9	222			NA

NA –Not analyzed

N = number of samples

C = composite sample (tissue from five or more animals homogenized as one sample)

I = individual sample (tissue from one organism per sample)

a - Values including a portion of samples caught in waterways east and west of Harbor Island (outside the LDW site)

boundaries)

b -Weighted average of composite and individual samples

Data appropriate for Fish Advisory Update

Regardless of the cause, recent data collected as part of the phase 2 RI indicate that PCB levels in resident fish and crab were higher than earlier sampling efforts. Given that previous PCB levels were high enough to trigger a fish consumption advisory and extensive community outreach/education, an update to the health message to the community is considered in this health consultation contingent upon evaluation of the appropriateness of these data.

Data were considered appropriate for the following reasons:

- EPA conducted QA/QC evaluation of Aroclor analytical results and determined that the data are valid. Although congener data are still undergoing QA/QC evaluation, they lend support that PCB levels in LDW resident fish are indeed elevated.
- The sampling design was largely geared to collect available resident fish and crabs likely to be harvested and eaten by humans at a time of year (summer) when people were most likely to catch fish or crab from the LDW. Therefore, resident fish species sampled are representative of what people could eat from the LDW.
- The sampling design incorporated the use of a composite sampling scheme for all species minimizing the analytical measurements required to approximate an average concentration of contaminant (PCBs) in fish and crab tissue.
- PCB levels were consistently elevated above 200 ppb in all tissue types and at all areas sampled. This PCB level approximates a decision point above which DOH may recommend that people avoid eating seafood.

Determining Allowable Consumption Rates

DOH calculated fish meal limits using a method outlined in EPA's "Guidance for Assessing Chemical Contaminant Data for Use in Fish Consumption Advisories."⁷ By using the known concentration of a contaminant in a fish species, it is possible to calculate an allowable amount that can be eaten for that species without exceeding the reference dose (RfD) for that contaminant.

The RfD is defined as an exposure dose at or below which adverse noncancer health effects are not likely. The RfD for PCBs (0.00002 mg/kg/day) is based on adverse immune system effects observed in exposed monkeys, but PCBs have also been shown to cause adverse developmental effects in children exposed in the womb. More information on the toxicity of PCBs is presented in Appendix A.

Exceeding an RfD does not necessarily mean that adverse health effects will occur because numerous safety factors are applied to ensure the protection of public health. If a dose exceeds the RfD, it suggests only the potential for adverse health effects. The magnitude of this potential can be inferred from the degree to which this value is exceeded.

The equation used to calculate a safe consumption rate is shown below with exposure parameters as defined in Table 2.

$$8\text{- ounce fish meals per month} = \frac{\text{RfD} \times (\text{Days} / \text{Month}) \times \text{BW}}{\text{Meals size} \times \text{C}}$$

Table 2. Exposure parameters for calculating 8-ounce fish meal limits.

Parameter	Value	Units	Source
Reference Dose (RfD)	0.00002	mg/kg-day	EPA IRIS ^a
Days / Month	30.4	Days per month	
Body Weight (BW)	70 (adult)	kg	EPA Exposure Factors Handbook
Concentration in fish (C)	Mean contaminant concentration. Specific to fish species.	mg/kg	Phase 2 Aroclor data
Meal size	0.227	kg	kg per 8 oz.

a - Environmental Protection Agency's Integrated Risk Information System value for Aroclor 1254⁸

Applying the preceding calculation to recent LDW fish tissue data (PCB Aroclors) results in calculated meal limits of less than one meal per month for all species and tissue types (Table 3). Slender crab, Dungeness crab, and eastern softshell clams have the highest calculated meal limits at 0.9, 0.8, and 0.8 meal per month, respectively. It should be noted that DOH Office of Food Safety and Shellfish and Public Health – Seattle and King County (PH-SKC) advise against consumption of clams in the LDW and the King County shoreline (except Vashon Island) due to pathogens from urban sewage releases and potential chemical contamination.

English sole fillet and shiner surfperch whole body have the lowest calculated meal limit at 0.1 meal per month. It should be noted the recommended meal limits derived from these calculation is designed to protect a 70 kg adult eating an 8-ounce fish meal. Meal sizes for people weighing more or less than 70 kg would increase or decrease proportionally. DOH does not typically recommend fish consumption at meal limits lower than one meal per month.

Table 3. Meal limits calculated for resident fish, crab, and clams based on phase 2 PCB (Aroclor) tissue sampling Lower Duwamish Waterway site Seattle, Washington.

General Fish or Crab	Specific fish or crab and tissue type	Calculated meal limit (meal per month)
Bottomfish	English sole fillet with skin	0.1
	Starry flounder muscle ^a	0.2
Perch	Pile perch fillet ^a	0.6
	Striped perch fillet ^a	0.3
	Shiner surfperch whole body	0.1
Crab	Dungeness crab muscle	0.8
	Slender crab muscle	0.9
Shellfish	Eastern soft-shell clam	0.8 ^b

a – based on single composite sample

b – based on congener data as opposed to Aroclors. Congener data for clams has been validated.

Child Health Considerations

DOH and ATSDR recognize that infants and children may be more vulnerable to chemical exposures than adults when faced with contamination of air, water, soil, or food. This vulnerability is a result of the following factors:

- Children are smaller and receive higher doses of chemical exposure per body weight.
- Children's developing body systems are more vulnerable to toxic exposures, especially during critical growth stages in which permanent damage may be incurred.

PCBs are the main contaminant of public health concern found in LDW seafood. These chemicals have been shown to cause adverse developmental effects in children exposed in the womb.⁹ For this reason, it is important for pregnant women and women considering pregnancy to pay special attention to the recommendations of this health consultation.

Conclusions

1. Recent samples of resident fish and crab in the LDW showed levels of PCBs that are higher than previous samples.
 - DOH evaluated these data as a follow-up to the Public Health Assessment written in 2002 and 2003. The Public Health Assessment recommended fish consumption limits.
2. Eating even minimal amounts of resident seafood from the LDW would result in exposure to PCBs at levels of public health concern. For this reason, consumption of LDW resident seafood (fish and shellfish that live in the LDW) is a *public health hazard*.
 - Eating frequent meals of resident fish (fish that live in the Duwamish most of the year such as English sole, flounder, and perch), crab, and shellfish may cause health problems, particularly for children and infants. Polychlorinated biphenyls (PCBs) in these fish may affect the immune system and cause learning problems in children exposed in the womb.

Recommendations

1. The fish advisory for the Lower Duwamish Waterway should be updated based on recent PCB data.
 - DOH recommends that no resident fish (e.g., English sole, starry flounder, perch) or crab be eaten from the LDW due to PCB contamination. This recommendation does not include salmon or other non-resident fish.

- In concurrence with both PH-SKC and DOH Office of Food Safety and Shellfish Programs, consumption of shellfish from the LDW should be avoided due to potential chemical and biological contamination.
2. Future updates of the LDW fish advisory should be based on long-term fish tissue monitoring trends.
 3. The Washington State Department of Fish and Wildlife (WDFW) should restrict or actively discourage fishing for the resident species identified in this health consultation to support protecting public health. DOH recommends that WDFW consider non-penalty enforcement because public health is the key issue rather than resource protection.

Public Health Action Plan

1. DOH will release and communicate the following message to media outlets, community groups and individuals, and government agencies.
 - Do not eat resident fish (i.e., fish other than salmon), crab, or shellfish from the LDW.
2. DOH will prepare fact sheets and flyers in multiple languages to distribute to the community
 - Materials will be distributed while conducting community visits and outreach.
 - Materials and health consultation to be posted on DOH webpage.
3. DOH will conduct community education and outreach to communities near the LDW site, including immigrant and low-income communities in south Seattle, to communicate the updated fish consumption advisory.
4. DOH will request assistance from PH-SKC and WDFW to assist with education and outreach activities.
5. DOH will consider future updates to the fish advisory message only when it has been demonstrated that PCB levels in fish and crab have consistently decreased over time.

Preparer of Report

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Site Assessment Section

Designated Reviewer

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Washington State Department of Health

ATSDR Technical Project Officer

Alan Parham
Division of Health Assessment and Consultation
Agency for Toxic Substances and Disease Registry

Figure 1. Lower Duwamish Waterway site location, Seattle, Washington

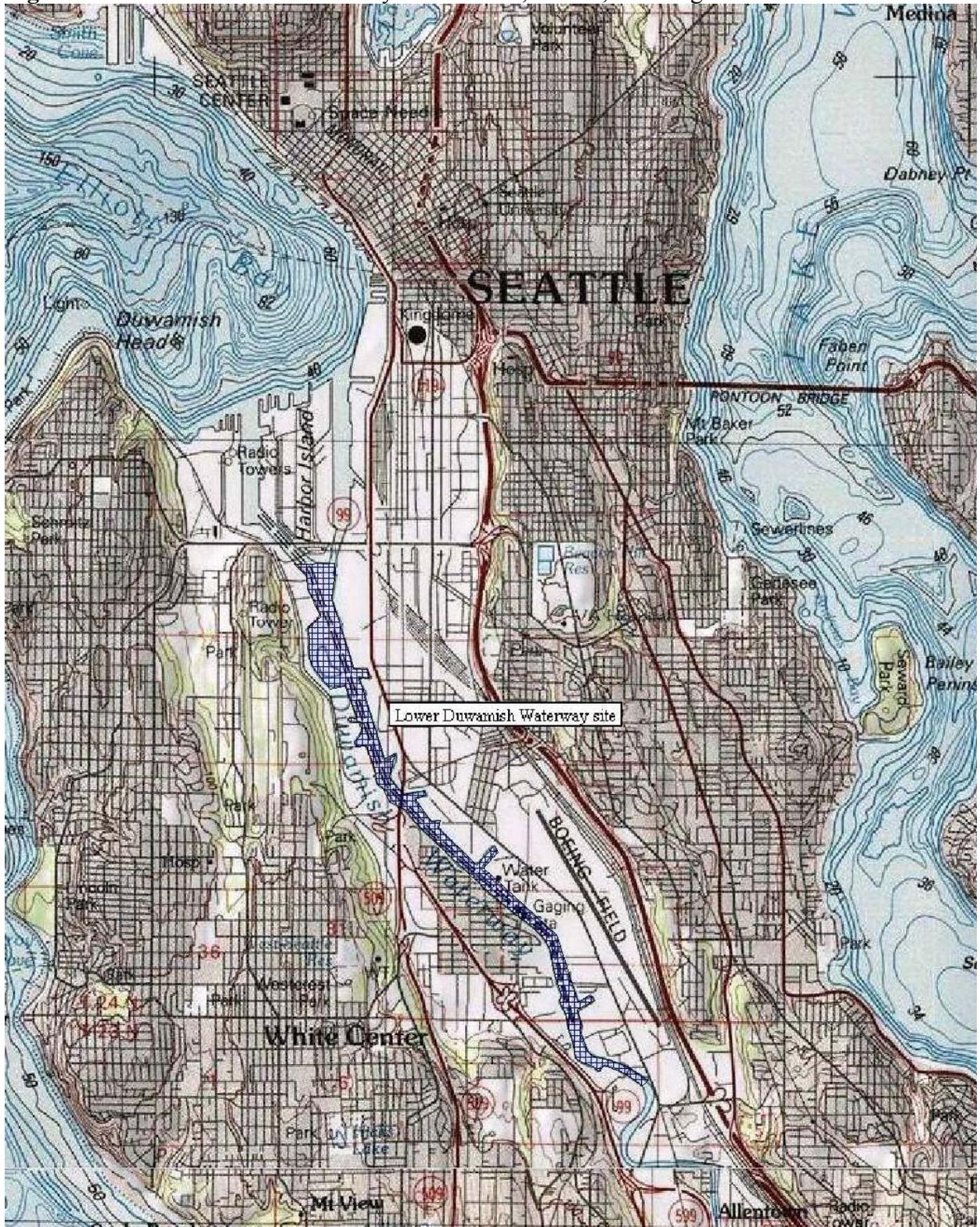
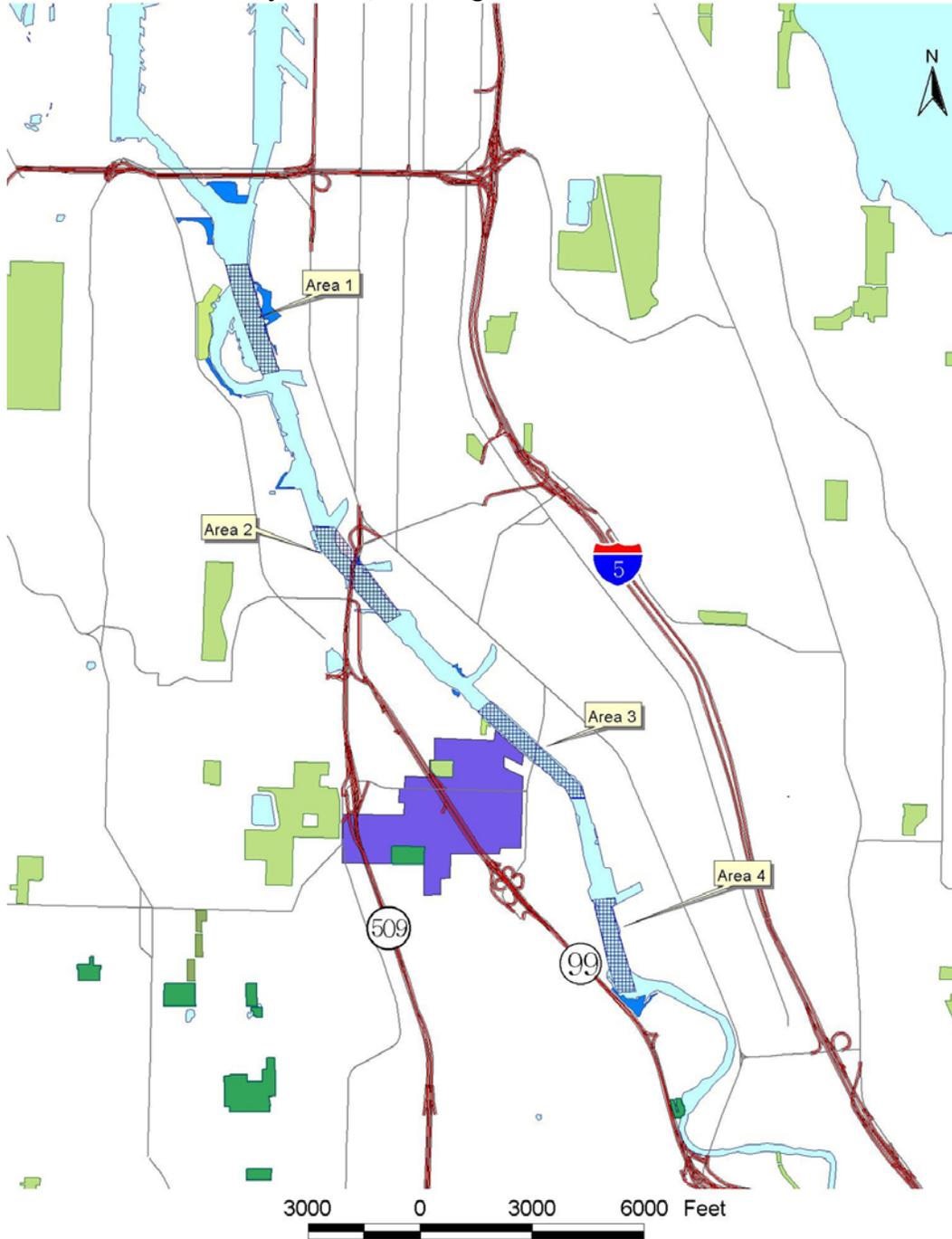


Figure 2. Approximate sample areas (1-4) and average PCB levels (ug/kg) in fish and crab tissue in Lower Duwamish Waterway Seattle, Washington.



Tissue Type	Area 1	Area 2	Area 3	Area 4
E. sole fillet	1465	1925	1245	710
E sole whole	3650	3850	2568	1700
Shiner surfperch whole	1387	4315	3832	795
Dungeness crab muscle	234	NA	246	240
Slender crab muscle	273	195	178	NA

Appendix A: PCB Toxicity

Polychlorinated biphenyls (PCBs)

PCBs are a group of human-made chlorinated organic chemicals that were first introduced into commercial use in 1929 as insulating fluids for electric transformers and capacitors. Other applications were soon developed that included their use in hydraulic fluids, paint additives, plasticizers, adhesives, and fire retardants. Production of PCBs in the United States stopped in 1977 following concerns over toxicity and persistence in the environment.¹⁰

There are 209 structural variations of PCBs, called congeners that vary by the number and location of chlorine atoms on the base structure. PCBs are often identified by one of their trade names, Aroclor. Aroclors are various mixtures of congeners defined by a four-digit number. The first two digits represent the number of carbon atoms while the second two digits give the percent by weight of chlorination for the congeners in that mixture. In general, PCB persistence and toxicity increases with the degree of chlorination in the mixture.

Liver toxicity has been demonstrated in animals given high doses of PCBs. Liver toxicity and developmental effects are also well documented in residents of Taiwan and Japan exposed to relatively high levels of PCBs through ingestion of contaminated rice oil. However, the association of these effects with PCB exposure is complicated by concurrent exposure to chlorinated dibenzofurans.⁹

While the "rice oil" incidents in Taiwan and Japan provide good evidence of PCB toxicity in humans, recent studies demonstrate that developmental effects can occur at lower levels of PCB exposure. Deficits in neurobehavioral function in children exposed *in utero* represent the most compelling evidence that environmental exposure to PCBs have caused adverse health effects in humans. Studies of various human populations exposed to PCBs, primarily through the ingestion of fish, have demonstrated deficits in neurobehavioral function. Learning deficits were maintained in the children of one Lake Michigan fish-eating cohort through 11 years of age. Animal studies have also shown adverse effects on development following prenatal exposure of the fetus.¹¹

Thyroid dysfunction has also been associated with PCB exposure. Several *in vitro* and animal studies have shown a reduction in thyroid hormone (thyroxine) levels in response to PCB exposure. A study in rats exposed *in utero* to PCBs found hearing deficits concurrent with decreasing thyroxine levels. This finding suggests that interference with thyroxine levels could be a mechanism for the developmental effects associated with children exposed to PCBs prior to birth. The potential for PCBs to disrupt hormone function, including the endocrine system, has been suggested as a mechanism for the reproductive effects of PCBs seen in animals. Some human epidemiological studies provide support for the reproductive toxicity of PCBs including effects on menstrual cycles in women and male fertility.⁹

ATSDR has recently reviewed its minimal risk level (MRL) considering the more recent human developmental studies discussed above. This review concluded that immune system effects seen in monkeys still represent the most sensitive toxic endpoint of PCB exposure. Further, ATSDR concluded that the existing MRL based on this endpoint should not change and would be

protective of the developmental effects found in the more recent human epidemiological studies discussed above.⁹

While high dose animal studies demonstrate that PCBs can cause liver tumors in rats, *evidence that PCBs can cause cancer in humans is conflicting*. Some studies have linked human exposure to organochlorines with breast cancer while other studies have found no association. Other studies suggest a link between PCB exposure in humans and non-Hodgkin's lymphoma (NHL) based on higher PCB blood serum levels in NHL patients versus controls. One recent analysis of a large cohort of workers exposed while manufacturing PCB containing transformers showed no increase in mortality despite high PCB blood serum levels. The previously mentioned rice oil-poisoning incident in Taiwan did not reveal elevations in cancer mortality. However, an examination of residents similarly exposed in Japan did show an increase in mortality from liver cancer.

Certification

This Health Consultation was prepared by the Washington State Department of Health under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the health consultation were begun.

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The Division of Health Assessment and Consultation, ATSDR, has reviewed this public health consultation and concurs with the findings.

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