STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:

The City of Bellingham

SECOND AMENDMENT TO AGREED ORDER

No. DE 2186

TO:

City of Bellingham 210 Lottie Street Bellingham, WA 98225

A. INTRODUCTION

Agreed Order No. DE 2186 (2005 Order), entered into by the State of Washington, Department of Ecology (Ecology) and the City of Bellingham (City) in 2005, requires the City to conduct a remedial investigation and feasibility study (RI/FS) for the RG Haley Site (Site) in Bellingham, Washington. The First Amendment to the 2005 Order (First Amendment) removed Douglas Management as a signatory party from further obligation under the 2005 Order and added the City as signatory to complete its requirements. This Second Amendment to the 2005 Order (Second Amendment) requires the City to perform an interim action to contain petroleum hydrocarbons emerging from sediment in Bellingham Bay at the RG Haley Site. This amendment also contemplates the potential for additional interim actions at this Site, and sets out a process for approval of any interim actions proposed by the City.

B. JURISDICTION

This Second Amendment is issued by Ecology pursuant to the authority of RCW 70.105D.050(1).

C. AMENDMENT

This amendment does not attempt to recite all of the provisions of the 2005 Order or the First Amendment thereto. Provisions of the 2005 Order, as amended, not specifically addressed in this amendment shall remain in full force and effect. This amendment results in substantial changes to the work being performed and has been the subject of public notice and comment under WAC 173-340-600.

The 2005 Order is hereby amended to incorporate the following provisions, which are integral and enforceable parts of the 2005 Order:

1. Section III (Ecology Determinations) of the 2005 Order is hereby amended to add the following determination in addition to the determinations already set forth:

13. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. Petroleum from the Site is serving as a source of contamination to Bellingham Bay and poses an ongoing threat to human health and/or the environment. Based on these circumstances, Ecology has determined that an interim action is warranted under WAC 173-340-430.

2. Section IV (Work to Be Performed) of the 2005 Order is hereby amended to add the following requirements in addition to those requirements already set forth:

9. Interim Action Scope of Work and Schedule: The City shall conduct an interim action that utilizes amended or reactive cap material in the area of sheen emergence to contain petroleum hydrocarbons emerging from sediment in Bellingham Bay at the RG Haley Site. The Scope of Work for the interim action is more fully described in Exhibit 6 to this Order (Scope of Work and Description of Interim Action). Within thirty (30) days of the effective date of this amendment, the City shall prepare an Interim Action Work Plan according to the attached Scope of Work for Ecology's review and approval, which includes a schedule for completing the interim action within six (6) months of the effective date of this Second Amendment. Within fifteen (15) days of the receipt of Ecology's comments, the City shall incorporate Ecology's comments and submit a revised Interim Action Work Plan for review. The revised Interim Action Work Plan will be considered final after Ecology's approval. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of the 2005 Order, and the City is required to perform the interim action according to the work plan and schedule contained therein.

- 10. Interim Action Completion Report: Within ninety (90) days following completion of the interim action construction, the City shall submit to Ecology a final interim action completion report.
- 11. The City may propose that interim actions in addition to the specific interim action required in paragraph 9 above be taken. After consulting with the City, Ecology will determine if the interim action(s) are warranted under WAC 173-340-430. Should Ecology determine a particular interim action proposed by the City may be warranted, the City will prepare and submit a work plan that includes a proposed scope of work and schedule (Work Plan). The Work Plan shall be subject to public review and comment. Upon approval by Ecology following public review, the Work Plan becomes an integral and enforceable part of the 2005 Order, and the City is required to perform the interim action according to the work plan and schedule contained therein. The PLP shall not perform any interim actions until Ecology approves the Work Plan.

3. Section V.4 (Designated Project Coordinators) is hereby amended in part to change the project coordinator for Ecology as follows:

The project coordinator for Ecology is:

Name:

Mark Adams

Address:

Department of Ecology

Northwest Regional Office 3190 160th Avenue SE Bellevue, WA 98008-5452

Phone:

(425) 649-7107

4. Section V.12 (Compliance with Other Applicable Laws) is hereby replaced in its entirety as follows:

12. Compliance with Applicable Laws

A. All actions carried out by the City pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. At this time, no federal, state, or local requirements have been identified as being applicable to the actions related to the RI/FS required by this Order. The permits and environmental review process applicable to the specific interim action required by this Second Amendment and that are known at the time of entry of this amendment are identified in Exhibit 7 (Applicable Permits and Requirements). The permits or

specific federal, state, or local requirements applicable to any interim action that Ecology may approve in the future will be identified in the work plan for that interim action, which will be subject to public comment. Ecology's approval of any such work plan following public comment reflects Ecology's determination as to the permits or specific federal, state or local requirements that apply.

- Pursuant to RCW 70.105D.090(1), the City is exempt from the procedural B. requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the City shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section for the RI/FS work required by this Order. As to the specific interim action required by this Second Amendment, the exempt permits or approvals plus a general description of some of the related substantive requirements, as they are known at the time of entry of this amendment, are identified in Exhibit 8. The applicable substantive requirements will be more particularly identified in the Interim Action Work Plan. Ecology's approval of the Interim Action Work Plan reflects Ecology's determination on the substantive requirements that apply. As to any interim action that Ecology may approve in the future, any exempt permits or approvals and the applicable substantive requirements of those permits or approvals will be identified in the work plan for that interim action, which will be subject to public comment. Ecology's approval of any such work plan following public comment reflects Ecology's determination on the substantive requirements that apply.
- C. The City has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial actions under this Order. In the event either Ecology or the City determine that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial actions under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or the City shall be responsible to contact the

appropriate state and/or local agencies. If Ecology so requires, the City shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the City and on how they must meet those requirements. Ecology shall inform the City in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The City shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

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

5. Exhibits "6," "7" and "8" attached hereto are hereby incorporated into the 2005 Order and the Table of Contents is amended to include the following:

Exhibit 6:

Scope of Work and Description of Interim Action

Exhibit 7:

Applicable Permits and Environmental Review Process

Exhibit 8:

Permit Exemptions and Substantive Requirements

D. SIGNATURE AUTHORITY

The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this amendment and to execute and legally bind such party to the same.

E. EFFECTIVE DATE

This Second Amendment shall be effective upon execution by the City and Ecology.

Effective date of this Second Amendment: 8-14-13	
CITY OF BELLINGHAM KEŁLI LINVILLE Mayor, City of Bellingham (360) 778-8100	ROBERT W. WARREN, P. Hg., MBA Regional Manager, Northwest Regional Office Toxics Cleanup Program (425) 649-7054
Dated: July 3, 2013	Dated: 8-14-13
APPROVED AS TO FORM:	9
Office of the City Attorney	-
ATTEST: Simbal Galein	
Aty Clerk Representative	
Dated: 7/3/20/3	
DEPARTMENTAL APPROVAL: Peter Ruffatto City Attorney	

EXHIBIT 6 SCOPE OF WORK AND DESCRIPTION OF THE INTERIM ACTION

SCOPE OF WORK

Task 1 - Preparation of an Interim Action Work Plan

An interim action is required under the Agreed Order (as amended) to address petroleum hydrocarbons observed on the southern portion of the shoreline at the RG Haley Site (the Site). Compass directions are based on "project north," shown in Figure 1. The City of Bellingham (City) will prepare and submit to the Washington State Department of Ecology (Ecology) for review an interim action Work Plan in accordance with the requirements of the Model Toxics Control Act (MTCA). The Work Plan shall include, as appropriate:

- A summary of existing site conditions.
- A description of the interim action including its purpose and general requirements. The interim
 action shall be designed in a manner that will not preclude reasonable alternatives for any
 future cleanup action that may be required.
- Information regarding design and construction requirements including a proposed schedule.
- A Compliance Monitoring Plan (CMP).
- A Health and Safety Plan (HSP).
- A sampling and analysis plan (SAP), if applicable.

The City shall prepare and submit to Ecology two (2) paper copies and one electronic (PDF) copy of the draft interim action Work Plan and one copy of the Work Plan text in Word electronic format for review. Revisions based on Ecology's comments will be incorporated into the draft Work Plan to prepare the final Work Plan for the interim action. The City shall submit two (2) paper copies and one electronic (PDF) copy of the final Work Plan to Ecology.

Task 2 - Conduct the Interim Action

The City shall conduct an interim action to address petroleum hydrocarbons observed on the southern portion of the shoreline at the Site. The interim action will be conducted in accordance with WAC 173-340-430 and the Ecology-approved final interim action Work Plan.

Task 3 - Prepare an Interim Action Completion Report

Upon completion of the interim action, the City shall prepare and submit an interim action Completion Report to Ecology. The interim action Completion Report will present the results of the interim action and document the construction of the interim action. The report will document variations from the

interim action Work Plan and present the results of compliance monitoring or other environmental testing conducted as part of the interim action.

The City shall prepare and submit to Ecology two (2) paper copies and one electronic (PDF) copy of the interim action Completion Report. Because the interim action Completion Report is limited in scope to documenting the implementation of the interim action, it is not anticipated that revisions will be required in response to Ecology review, so the report will not be submitted in draft form to Ecology. However, the report shall be revised by the City and resubmitted if Ecology determines that revision to the report is warranted.

DESCRIPTION OF THE INTERIM ACTION

BACKGROUND

As required in the Agreed Order (as amended) between Ecology and the City, the City shall conduct an interim action to address petroleum hydrocarbons that have been intermittently observed as sheen on the southern portion of the shoreline at the Site. The intermittent petroleum hydrocarbon sheen has been emerging from near-shore sediment at the location shown in Figure 2.

This interim action is needed to prevent the spread of contamination to the waters of Bellingham Bay. The action will contain petroleum hydrocarbons in the area where sheen has been observed to be emanating from impacted sediment. Containment will be achieved by placing amended or reactive cap material on top of the contaminated sediment. The proposed interim action is intended to contain contaminants while the City completes the Remedial Investigation and Feasibility Study (RI/FS) process in accordance with MTCA. The proposed interim action will not preclude the evaluation or selection of alternatives for the final cleanup action.

SITE CONDITIONS

The City conducts quarterly monitoring at the Site to measure petroleum thicknesses in upland monitoring wells and observe the near-shore environment for petroleum-related sheens. On December 12, 2012, sheen was observed on surface water near the shoreline in the area identified in Figure 2. Agency notifications were made in response to the observed sheen that included Ecology, the Washington State Emergency Management Division and National Response Center. A containment boom and oil-sorbent materials were deployed to contain and collect the petroleum sheen. Regular monitoring and maintenance are ongoing to contain and capture the petroleum hydrocarbon sheen. The sheen is sporadic in occurrence and has diminished in size since it was first observed in December 2012.

The petroleum hydrocarbons are emerging from a portion of the intertidal zone where sediment exhibits a petroleum sheen when agitated. Sediment in this area contains elevated concentrations of

petroleum hydrocarbons (up to 50,000 milligrams per kilogram [mg/kg]) based on previous investigations. Sediment in this area exhibits petroleum sheen at depths greater than two feet.

Historical releases of petroleum in upland portions of the Site have accumulated on the groundwater table as a floating plume of light non-aqueous phase liquid (LNAPL). The LNAPL has produced a "smear zone" in soil as a result of seasonal or tidally-induced fluctuations of the groundwater table. The estimated extent of the upland LNAPL plume and smear zone based on past investigations is presented in Figure 2. The petroleum hydrocarbon emergence area is located offshore of the upland LNAPL plume and smear zone, south of an existing sheet pile cutoff wall designed to contain LNAPL in the upland. The sheet pile wall was installed during a previous limited remedial action (2001).

The interpreted extent of the smear zone beneath the upland and intertidal zone is presented in Cross Section A-A' (Figure 3). The smear zone is generally present near the groundwater table beneath the upland and appears to extend into the intertidal zone at an elevation approximately mid-way between mean higher high water (MHHW) and mean lower low water (MLLW). Near the shoreline, the smear zone appears to occur primarily in a wood debris (fill) unit.

The petroleum hydrocarbon sheen appears to be emerging from the intertidal zone near sediment sample PS-20 (Figures 3 and 4). Sediment in this area contains elevated petroleum hydrocarbon concentrations based on field screening (sheen) and chemical analytical results from previous studies. Both the petroleum-impacted sediment at this location and migration of upland LNAPL are believed to be contributing to the the intermittent sheens observed on surface water.

INTERIM ACTION

The specific components and procedures of the interim action will be documented in an interim action Work Plan provided to Ecology for review and approval in accordance with the Second Amendment to the Agreed Order and submittal requirements of WAC 173-340-430. The following discussion provides the general scope of the proposed interim action.

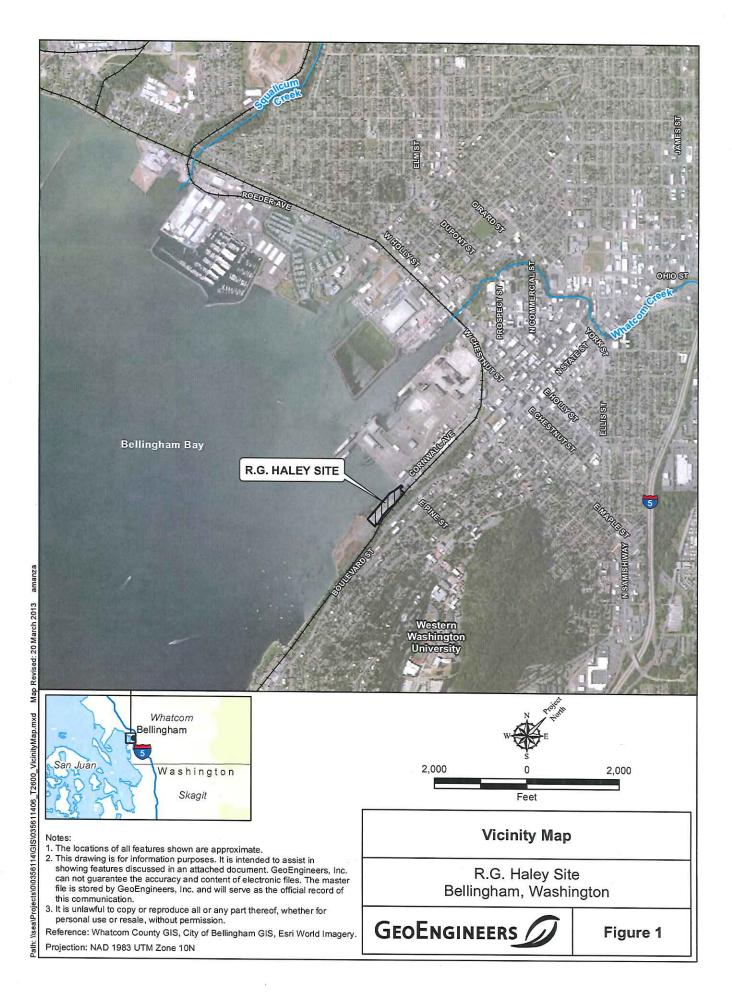
The interim action will utilize amended or reactive cap material in the area of sheen emergence to contain petroleum hydrocarbons emanating from impacted sediment. The cap material will be placed over approximately 5,000 square feet of intertidal zone, from near the bottom of the shoreline bank to an approximate elevation of 0 feet MLLW (Figures 4 and 5). This area will be adjusted, as needed, based on additional field screening results obtained prior to cap placement. Amendments in the cap material will be designed to capture petroleum hydrocarbons that exist as LNAPL. Amended cap material has been successfully used in this application at other contaminated sediment sites.

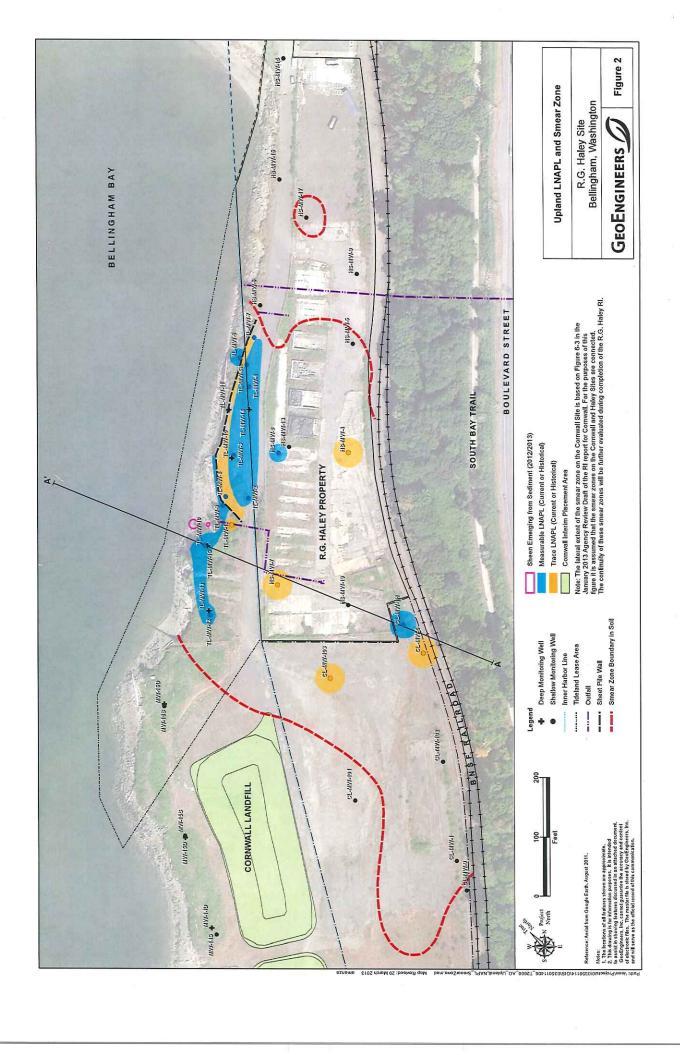
Preparation of the cap area may include clearing and grading/excavation to remove obstructions (e.g., remnant piling, debris, boulders, etc.) and to provide a smooth surface upon which to place the cap.

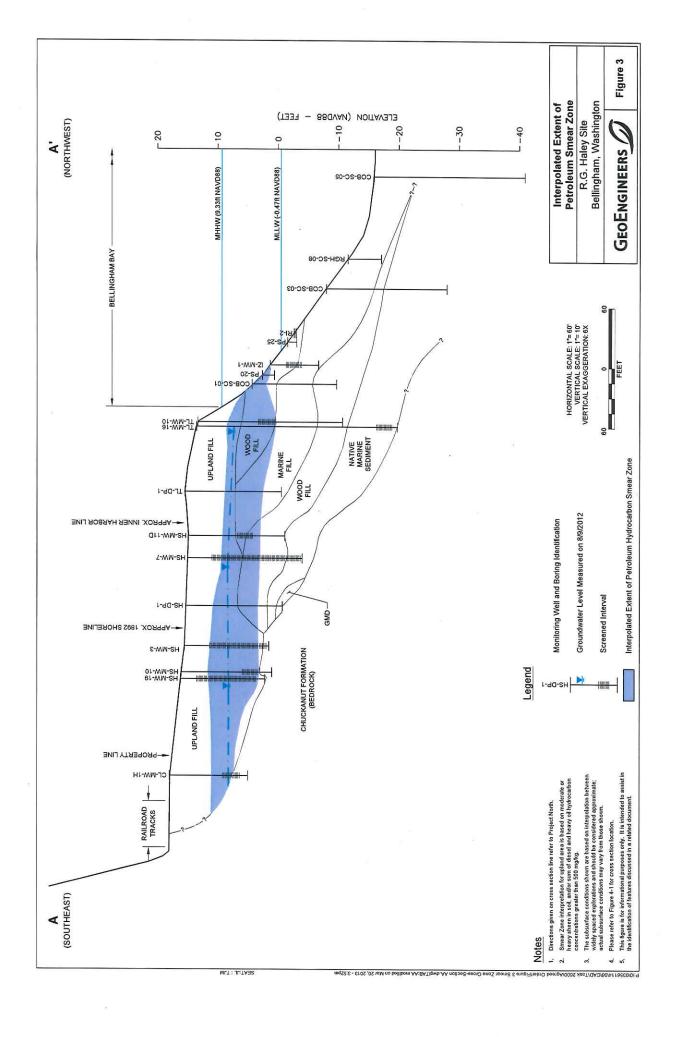
Remnant piling in the cap area may be cut or broken off at or below the sediment surface. Material removed from the cap area will be stored in the upland portion of the Site pending disposal.

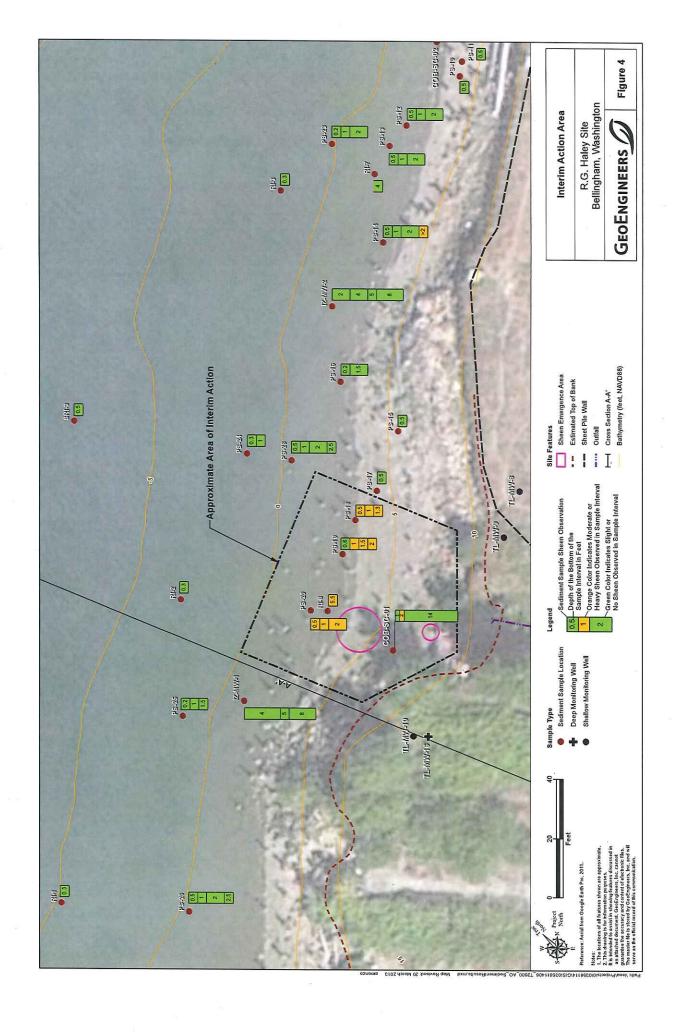
Imported clean sand may be placed, where necessary, to fill localized depressions created by the removal of obstructions to provide a relatively even base in the cap area. The cap would then be placed on the prepared surface. A layer of suitable armoring material will be placed over the cap.

The proposed interim action is planned to be conducted during construction work windows as specified by the Washington Department of Fish and Wildlife (WDFW). Preparation of the cap area and other activities that disturb the existing sediment surface will be performed "in the dry" when the work area is not inundated with surface water. Preparation of the cap area may require the operation of equipment below the ordinary high water (OHW) line. Placement of cap and/or armor material will likely be performed in the dry but may be performed in water. Night-time work may be required to take advantage of low tides during construction work windows. The interim action construction is anticipated to take up to four weeks to complete.









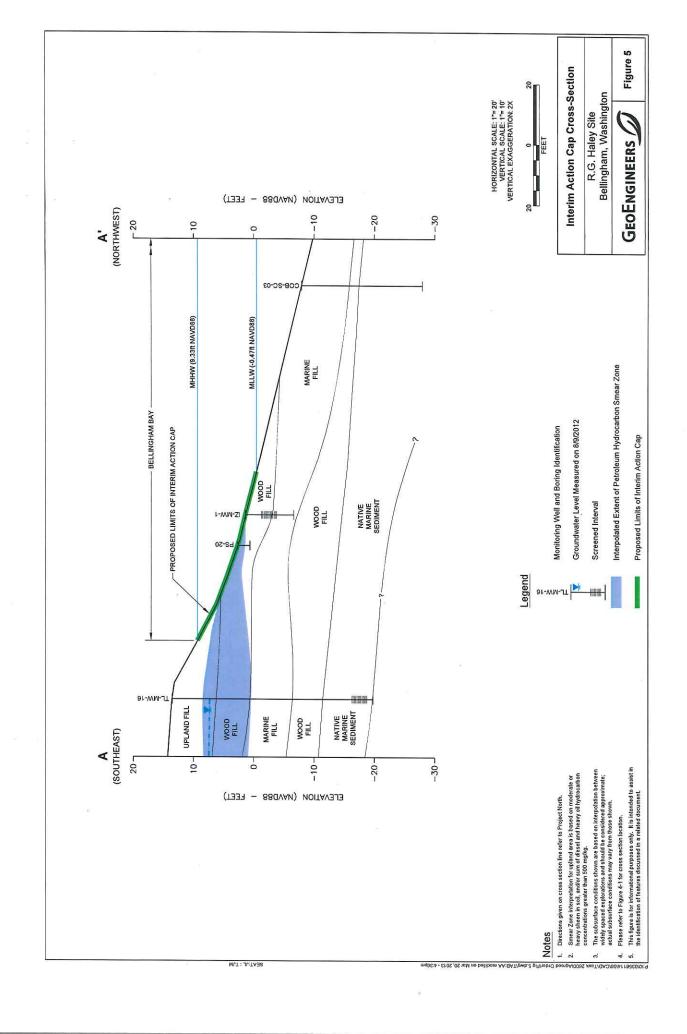


EXHIBIT 7 APPLICABLE PERMITS AND ENVIRONMENTAL REVIEW

The interim action to be performed at the RG Haley Site requires the following permit and environmental review processes:

United States Army Corps of Engineers Nationwide Permit 38

Section 404 of the Clean Water Act, 33 U.S.C. § 1344 requires a permit prior to discharging dredged or fill material into the waters of the United States including special aquatic sites such as wetlands. The City of Bellingham (City) will obtain and comply with the conditions of a Nationwide Permit 38, which covers the Cleanup of Hazardous and Toxic Waste that are performed, ordered or sponsored by a government agency with established legal or regulatory authority.

State Environmental Policy Act Integrated Compliance (RCW 43.21C.036 and WAC 197-11-250 through -259)

Compliance with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, will be achieved by conducting SEPA review in accordance with applicable regulatory requirements, including WAC 197-11-268, and Ecology guidance as presented in Ecology Policy 130A (Ecology 2004). SEPA review will be conducted concurrent with public review of the amendment to the Agreed Order to include performance of an interim action. The City will act as the SEPA lead agency and will coordinate SEPA review. It is planned that public review for the Agreed Order amendment will be conducted by Ecology concurrently with public review for the SEPA documentation. The City will coordinate closely with Ecology to ensure that the two public review processes are consistent and concurrent.

EXHIBIT 8

PERMIT EXEMPTIONS AND SUBSTANTIVE REQUIREMENTS

The exempt permits or approvals plus general description of some of the related substantive requirements, as they are known at the time of entry of this amendment, are identified below. The applicable substantive requirements for each exempt permit and approval will be more particularly identified in the Interim Action Work Plan. Ecology's approval of the Interim Action Work Plan reflects Ecology's determination on the substantive requirements that apply.

Washington Department of Fish & Wildlife Hydraulic Project Approval

Chapter 220-110 WAC (Hydraulic Code Rules) and Chapter 77.55 RCW (Construction Projects in State Waters) regulate work that uses, diverts, obstructs, or changes the natural flow or bed of any of the salt or fresh waters of state and includes bed reconfiguration, all construction or other work waterward, under and over the ordinary high water line, and may include projects landward of the ordinary high water line (e.g., activities outside the ordinary high water line that will directly impact fish life and habitat, falling trees into streams or lakes, bridge maintenance, dike construction, etc.). The Washington Department of Fish and Wildlife (WDFW) issues Hydraulic Project Approvals (HPA) with appropriate conditions to protect these resources. Through the Nationwide Permit 38 process the City of Bellingham (City) will complete a Joint Aquatic Resources Permit Application (JARPA) that will also be provided to WDFW. Through the JARPA process, HPA substantive requirements will be identified. The City will coordinate closely with Ecology and WDFW as necessary to ensure that the substantive requirements of the HPA are met.

City of Bellingham Shoreline Substantial Development Permit (Bellingham Municipal Code Title 22)

Pursuant to the City of Bellingham Shoreline Master Program (SMP) (Bellingham Municipal Code [BMC] Title 22), the interim action must meet the substantive requirements of a City Shoreline Substantial Development Permit (SDP) for projects that involve more than 50 cubic yards of grading within the shoreline zone. The interim action will occur within the regulated shoreline area designated by BMC Title 22 as Waterfront District - Recreational Use sub-area. The substantive requirements include: meeting the general conditions for a SDP; requirements and conditions of the Waterfront District - Recreational Use sub-area shoreline designation applicable use activity policies, procedures, and regulations; and the critical areas requirements of the SMP.

City of Bellingham Construction Stormwater Permit (BMC Title 15.42)

Pursuant to the City of Bellingham Stormwater Management ordinance (BMC 15.42), the interim action must meet the substantive requirements of a City Stormwater Permit. The substantive requirements include preparation of a stormwater site plan, preparation of a construction stormwater pollution prevention plan, source control of pollution, preservation of natural drainage systems and outfalls, on-site stormwater management, run off treatment, flow control, and system operations and maintenance.