**Exhibit C – Scope of Work**

**PURPOSE**

The work under this Agreed Order (AO) with Bertch Timberlands, LLC and Whatcom County Parks and Recreation (PLPs) involves completing a Closure Plan, developing a Remedial Investigation (RI) Work Plan, conducting an RI, conducting a Feasibility Study (FS), and preparing a preliminary Draft Cleanup Action Plan (DCAP) to select a cleanup alternative. The Clean Closure plan addresses closure activities that will result in full removal of all waste and full removal or decontamination of all environmental media (such as soil and groundwater) affected by releases at the Site. The purpose of the RI, FS, and preliminary DCAP for the Site is to provide sufficient data, analysis, and evaluations to enable Ecology to select a cleanup alternative for the upland portions of the Site.

The PLPs shall coordinate with Ecology throughout the development of the Closure Plan, Work Plan, RI, FS, and preliminary DCAP and shall keep Ecology informed of changes to project plans, and of any issues or problems as they develop as required by the AO.

The Scope of Work (SOW) is divided into eight major tasks as follows:

Task 1. Closure Plan

Task 2. Remedial Investigation Work Plan

Task 3. Remedial Investigation

Task 4. Interim Action(s) (if required)

Task 5. Feasibility Study

Task 6. State Environmental Policy Act (SEPA) Compliance

Task 7. Public Participation

Task 8. Draft Cleanup Action Plan (DCAP)

Task 9. Monthly Progress Reports

**TASK 1.** **CLOSURE PLAN**

The PLPs shall prepare a Closure Plan. The Closure Plan shall include closure activities that result in full removal of all waste and full removal or decontamination of all structures, equipment, debris, environmental media (such as soil and groundwater), and other materials affected by releases from a unit. Closure activities will be performed in accordance with requirements in WAC 173-303-610(2)(b) and 40 CFR 264 Subparts G and H.

**TASK 2.** **RI WORK PLAN**

The PLPs shall prepare an RI Work Plan (Work Plan). The Work Plan shall include an overall description and schedule of all RI activities. The Work Plan shall clearly describe the project-management strategy for implementing and reporting on RI activities.

An RI Planning Meeting will be held prior to submittal of the Work Plan. The purpose of the RI Planning Meeting is to review requirements for the Work Plan and plan RI fieldwork, discuss the preliminary Conceptual Site Model, and identify project data needs and possible interim actions.

The Work Plan shall describe general facility information; site history and conditions, including previous operations; past field investigations, including any data collection and analysis of soils, groundwater, surface water, and/or sediments compared to screening levels; a preliminary conceptual site model showing contaminants, migration pathways in all environmental media, potential receptors, and screening levels based on the conceptual site model; geology and groundwater system characteristics; past, current, and future land use; identification of natural resources and ecological receptors; hazardous substances and their sources, etc., in compliance with WAC 173-340-350 and WAC 173-204-550.

As part of the project background, existing environmental data on site soil, groundwater, surface water, and/or sediments will be compiled and evaluated for data gaps. The data gaps will be used as the basis for conducting additional site investigations, if necessary.

The Work Plan also will identify specific data collection procedures in a Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) as part of the Work Plan in compliance with WAC 173-340-820 and WAC 173-204-600 for defining the nature and extent of contamination. The Work Plan will also contain a Health and Safety Plan (HSP) to be followed during implementation of the RI/FS.

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

The QAPP will be prepared in accordance with the Guidance for Preparation of Quality Assurance Project Plans, EPA Region 10, Quality Data Management Program, QA/R-5 and requirements of the EPA Contract Laboratory Program. The QAPP will also follow Ecology’s Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (July 2004, [http://www.ecy.wa.gov/biblio/0403 03 0 .html](http://www.ecy.wa.gov/biblio/0403%2003%200%20.html)), and Sediment Sampling and Analysis Plan Appendix (February 2008, http://www.ecy.wa.gov/biblio/qapp.html) if sediment sampling is needed. Laboratories must meet the accreditation standards established in WAC 173-50.

The SAP, including the QAPP and HSP, will be submitted to Ecology for review and approval. As with all environmental work at the Site, work may not begin without written approval from Ecology. The plan shall provide seven (7) business days’ notice to Ecology prior to beginning sampling. Ecology may obtain split samples.

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

RI tasks and subtasks may include, but are not limited to the following, as necessary to address data gaps identified in the Work Plan:

* Sampling and analysis of soil, groundwater, sediments, and surface water;
* Sampling and analysis of stormwater;
* Developing a conceptual site model for the Site, including evaluation of all potential pathways and potential receptors that exist for contaminants of concern at the Site;
* Evaluating the potential to contaminate or re-contaminate sediments, including analysis of the following pathways:
  + Direct discharges
  + Stormwater discharges
  + Overland flow
  + Groundwater discharges and seeps
  + Soil erosion
  + Site operations
  + Spills, dumping, leaks, housekeeping, and management practices
* Defining the nature and extent of contamination based on screening levels protective of all receptors at and down gradient of the Site.

The Work Plan shall not be implemented until approved by Ecology. Once approved by Ecology, the PLPs will implement the Work Plan according to this Exhibit’s schedule.

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

The PLPs shall prepare the Agency Review Draft Work Plan including one electronic copy each in Word (.doc) and Adobe (.pdf) formats and one hard copy, to Ecology for review and comment. After resolving Ecology’s comments on the Agency Review Draft Work Plan and after Ecology approval, the PLPs shall prepare the Final Work Plan and submit it electronically, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

**TASK 3. REMEDIAL INVESTIGATION**

The PLPs shall conduct an RI that meets the requirements of WAC 173-340-350(7) and WAC 173-204-550 according to the Final Work Plan (Task 1) as approved by Ecology. The RI will determine the nature and extent of contamination exceeding Model Toxics Control Act (MTCA) preliminary cleanup levels, Sediment Management Standards (SMS) and other regulatory requirements. The RI must provide sufficient data and information to define the nature and extent of contamination.

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

The PLPs shall provide interim data analytical reports and updates to Ecology as new site data and information become available. Laboratory analysis data shall also be provided in electronic format when it has been validated. Raw laboratory data will be provided to Ecology upon request. Validated analytical data shall be uploaded into EIM within thirty (30) days of the submittal of the RI and any other report containing new data.

Prior to submittal of the Agency Review Draft RI Report sections, an RI Pre-Report Check-In will be held. During the RI Pre-Report Check-In, Ecology and the PLPs will review available data and an updated conceptual site model and discuss the content and organization of the Draft RI Report sections.

The PLPs shall compile the results of the Site investigation into Agency Review Draft RI Report sections, that will be included in the RI/FS Report. The PLPs shall prepare the Agency Review Draft RI Report sections and submit them electronically, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. Agency Review Draft RI Report sections will include data associated with initial rounds of groundwater monitoring. Data for all required rounds of groundwater monitoring will be included in the RI/FS Report.

After incorporating Ecology’s comments on the Agency Review Draft RI Report sections and obtaining Ecology approval, the PLPs shall commence with development of the FS as described below in Task 4. The RI will not be considered final until after a public review and comment period on the RI/FS Report.

If the data collected during this investigation is insufficient to define the full nature and extent of contamination, Ecology shall request the PLPs conduct an additional phase of investigation to define the extent of contamination.

**TASK 4. INTERIM ACTIONS (if required)**

The following remedial actions may be implemented prior to completion of the RI/FS, including those that:

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

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

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

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

* Soil or sediment removal
* Groundwater remediation
* Repair or replacement of creek culvert.
* Installation of best management practices

If an interim action is to be performed, the PLPs will prepare and submit for Ecology approval an Agency Review Draft Interim Action Work Plan (IAWP) with detail commensurate with the work to be performed. The Agency Review Draft IAWP shall include, as appropriate:

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

The PLPs will also submit a copy of the Health and Safety Plan for the project. The PLPs will be responsible for complying with the State Environmental Policy Act (SEPA) Rules, including preparing and submitting an environmental checklist for the interim action, and will assist Ecology with presentations at any additional meetings or hearings that might be necessary for SEPA compliance or as part of the Public Participation Plan.

The PLPs shall prepare two (2) copies of the Agency Review Draft Interim Action Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. The PLPs shall incorporate Ecology’s comments and then prepare two (2) copies of the Public Review Draft IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology. After a public notice and comment period for the Public Review Draft IAWP (and SEPA determination), Ecology will approve the IAWP (if appropriate) and the document will be considered final. The PLPs shall prepare five (5) copies of the Final Interim Action Work Plan submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

Once Ecology approves the IAWP, the PLPs will implement the interim action according to the schedule contained in the IAWP.

Upon successful completion of the work, the PLPs will prepare an Agency Review Draft Interim Action Report as a separate deliverable. The PLPs shall prepare two (2) copies of the Agency Review Draft Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. After incorporating Ecology’s comments on the Agency Review Draft Interim Action Report and after Ecology approval of a revised Report, the PLPs shall prepare three (3) copies of the Final Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology. Electronic GIS and AutoCAD files shall also be provided for all Final Reports.

**TASK 5.** **FEASIBILITY STUDY**

The PLPs shall use the information contained in the RI to prepare an Agency Review Draft FS focused on the upland portion of the Site that meets the applicable requirements of WAC 173-340-350(8) according to the Schedule in this exhibit.

The FS shall include at least one permanent cleanup action alternative and a reasonable number and type of cleanup option alternatives for the cleanup actions at the Site. The Agency Review Draft FS will evaluate remedial alternatives for site cleanup, consistent with MTCA and SMS requirements to ensure protection of human health and the environment by eliminating, reducing, or otherwise controlling risk posed through each exposure pathway and migration route.

Prior to beginning the FS, a Key Project Meeting will be held to review Applicable or Relevant and Appropriate Requirements (ARARs), potential remedial alternatives and establish points of compliance.

The Agency Review Draft FS must include a detailed analysis of each remedial alternative according to the applicable requirements of WAC 173-340-350 and 173-204-550. The remedial alternatives will be evaluated for compliance with the applicable requirements of WAC 173-340-360 and 173-204-570, including a detailed evaluation of remedial alternatives relative to the following criteria:

* Compliance with cleanup standards and applicable laws
* Protection of human health
* Protection of the environment
* Provision for a reasonable restoration time frame
* Use of permanent solutions to the maximum extent practicable
* The degree to which recycling, reuse, and waste minimization are employed
* Short-term effectiveness
* Long-term effectiveness
* Net environmental benefit
* Implementability
* Provision for compliance monitoring
* Cost-effectiveness
* Prospective community acceptance

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

The PLPs shall prepare two (2) copies of the Agency Review Draft FS sections and submit, including one electronic copy in Word (.doc) and Adobe (.pdf) formats, to Ecology for review. After incorporating Ecology’s comments on the Agency Review Draft FS sections, the PLPs shall prepare five (5) hard copies of the Public Review Draft RI/FS and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. The RI/FS shall include data from all rounds of groundwater monitoring. The RI/FS submittal to Ecology shall include electronic survey data for monitoring locations, electronic lab data, and electronic GIS and AutoCAD files including maps of contaminant distribution. The RI/FS will not be considered Final until after a public review and comment period.

**TASK 6. SEPA COMPLIANCE**

The PLPs shall be responsible for complying with the State Environmental Policy Act (SEPA) Rules, including preparing and submitting an environmental checklist. The property (as defined in the AO) will be undergoing redevelopment. As such, the redevelopment activities are subject to City of Seattle permitting, including complying with the State Environmental Policy Act (SEPA) Rules including preparing and submitting an environmental checklist. The SEPA checklist for the redevelopment may include the environmental components of the cleanup action, or a separate SEPA checklist may be developed for the cleanup action, with separate redevelopment SEPA to follow. The SEPA checklist will be provided to Ecology for review as a requirement of this AO.

If, after completion of the Preliminary DCAP, additional remedial actions are necessary that require permits and which trigger an additional SEPA review, and additional SEPA checklist will be completed as required by the permitting agency.

If the result of the threshold determination is a determination of significance (DS), the PLPs shall be responsible for the preparation of Draft and Final environmental impact statements. The PLPs shall assist Ecology with coordinating SEPA public involvement requirements with MTCA public involvement requirements whenever possible, such that public comment periods and meetings or hearings can be held concurrently.

**TASK 7. PUBLIC PARTICIPATION**

The PLPs shall assist Ecology to prepare a Draft and Final Public Participation Plan that complies with the provisions of WAC 173-340-600(9).

The PLPs shall support Ecology in presenting the Public Review RI/FS Report, Public Review Draft CAP, and SEPA evaluations at a public meeting if such a meeting takes place. The PLPs will assist Ecology with presentations at any additional meetings or hearings that might be necessary for SEPA compliance or as part of the Public Participation Plan.

Separate public comment periods will be held for 1) the RI/FS Report, and 2) the Draft CAP and SEPA evaluation. After each public comment period is completed, the PLPs shall prepare an Agency Review Draft Responsiveness Summary that addresses public comments. The PLPs shall prepare two (2) copies of the Agency Review Draft Responsiveness Summary and submit them to Ecology for review and approval, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

For each public comment period, after addressing Ecology’s comments and after Ecology approval, the PLPs shall prepare five (5) hard copies of the Final Responsiveness Summary and final technical documents (RI/FS Report; DCAP and SEPA) after public comments are incorporated and submit them to Ecology for distribution, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

**TASK 8. PRELIMINARY DRAFT CLEANUP ACTION PLAN**

Upon Ecology approval of the Public Review Draft RI/FS Report, a Key Project Meeting will be held regarding the Cleanup Action Plan. The Cleanup Action Plan Meeting will be used to review the approach for developing the Agency Review Draft Preliminary Draft Cleanup Action Plan (DCAP).

The PLPs shall prepare an Agency Review Draft Preliminary DCAP in accordance with WAC 173-340-380 that provides a proposed remedial action to address the contamination present on the upland portion of the Site. The Preliminary DCAP shall include a general description of the proposed remedial actions, cleanup standards developed from the RI/FS and rationale regarding their selection, a schedule for implementation, description of any institutional controls proposed, and a summary of applicable local, state, and federal laws pertinent to the proposed cleanup actions.

The PLPs shall submit an Agency Review Draft Preliminary DCAP electronically, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. The Agency Review Draft Preliminary DCAP will include, but not be limited to, the information listed under WAC 173-340-380.

After incorporating Ecology’s comments on the Agency Review Draft Preliminary DCAP, if any, the PLPs shall revise the Preliminary DCAP and submit five (5) hard copies of the Public Review DCAP including one electronic copy each in Word (.doc) and Adobe (.pdf) formats. Electronic GIS and AutoCAD files shall also be provided.

**TASK 9. MONTHLY PROGRESS REPORTS**

As required by the AO, the PLPs shall submit Progress Reports on a monthly basis to Ecology electronically; this submittal frequency may be revised in accordance with Section VII (C) of the AO. Progress Reports will be submitted to the Ecology project coordinator every third month by the 15th of the month following the reporting period. If this day is a weekend or holiday, Progress Reports will be submitted to Ecology on the next business day. At a minimum, Progress Reports will contain the following information regarding the preceding reporting period:

* + A list of on-site activities that have taken place during the month.
  + Summaries of sampling and testing reports and other data reports received by the PLPs.
  + Detailed descriptions of any deviation from required tasks not otherwise documented.
  + Description of all deviations from the Scope of Work and Schedule during the quarter and any planned or necessary deviations in the upcoming quarter.
  + For deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule.
  + Summaries of solutions developed and implemented or planned to address any actual or anticipated problems or delays.
  + Summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal governments
  + Changes in key personnel
  + A description of work planned for the next reporting period, including a list of deliverables for the upcoming month.