



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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December 16, 2011

Ms. Nduta Mbuthia  
Project Engineer  
City of Bothell Public Works  
9654 NE 182nd Street  
Bothell, WA 98011

**RE: Final Bothell Landing RI/FS Work Plan Submittal And Notice To Proceed With Phase 1 RI/FS Work**

Dear Ms. Mbuthia:

Following the receipt of a Final Bothell Landing RI/FS Work Plan last September 30, 2011, and results from our meeting of December 12, 2011, on the Bothell Landing site, the Department of Ecology (Ecology) is issuing this approval of the RI/FS Work Plan document and notice to proceed with Phase 1 of the work plan.

As agreed, implementation of subsequent phases of RI/FS work will require a technical proposal memorandum for that phase of work. The enclosed meeting minutes from our meeting documents our mutual understanding of our respective protocols, deliverables, resolutions, and expectations for the phased RI/FS and Interim Action work for this site.

Ecology appreciates your initiative in conducting remedial action under an Agreed Order. If you have any questions you may reach me at 425-648-7094.

Sincerely,

Jerome B. Cruz  
Site Manager  
Toxic Cleanup Program

tn

Enclosure (1)

cc: Robert Warren, Section Manager, Ecology  
Ching-Pi Wang, Unit Supervisor, Ecology  
Sunny Becker, Environmental Engineer, Ecology  
Steven Morikawa, City of Bothell



Downtown Bothell Contamination Remediation

**MEETING MINUTES**

December 12, 2011

Coordination Meeting with Ecology (Bothell PW Dawson)

**Attendees:**

Ching Pi Wang (Ecology - Supervisor)

Jerome Cruz (Ecology Site Manager)

Sunny Becker (Ecology Site Manager)

Nduta Mbutia (City's Project contact)

Steven Morikawa (City - Supervisor)

Arnie Sugar (City's consultant, HWA)

**Meeting Purpose:**

To discuss the Remedial Investigation (RI) work plans submitted to Ecology for Bothell Landing and Bothell Former Hertz

**Discussion:**

- The attached table summarizes the items discussed in red text

**Next steps:**

Set up a follow-up meeting in January 2012 to discuss:

- the Hertz work plan comments
- the Paint and Riverside sites

Checklist of Issues in RI/FS Work Plan for Bothell Landing Site (November 30, 2011)

Topic or Issue	Ecology Comment	Bothell Response	Ecology Response	Resolution or Understanding
<p>Level of detail provided in RI/FS planning and specifying nature and scope of work for subsequent Phases of RI/FS work;</p>	<p>Need for more detailed work plans for scope of work under Agreed Order and for conceptual site model. More details are being requested in order to sign off on the extent or scope of work presented so far, future remedial grant payments, agreement on sample location, depth, analytical suite, and data objectives in support of the RI/FS report and DCAP.</p>	<p>City has requested phased approach due to construction schedule, access issues.</p> <p>Drafts for hazardous waste handling and disposal (as part of bid specification Haz Mat sections) were submitted to Ecology. They contain the interim soil action work as well as some sampling plans.</p>	<p>Each of the subsequent phases will require submission of a document with more detailed set of plans and information on how that phase will be implemented. For example:</p> <ul style="list-style-type: none"> <li>• Study objectives</li> <li>• Investigative Approach</li> <li>• Data Acquisition Objectives</li> <li>• Maps and descriptive tables of planned monitoring wells</li> <li>• Geoprobe or boring locations, sampling depths, soil boring logs, pit or trench sample location and depths, related field notes and photo documentation</li> <li>• Related information like media to be sampled and analytical suites/methods</li> </ul> <p>The minimum for the above would be submission of a Sampling and Analysis Plan.</p> <p>Please coordinate with Ecology for review schedule to avoid delays to construction plans. At present, Ecology estimates at least 45 days review time. Ecology will review and approve these plans before Bothell implements the phase.</p>	<p>Approval of Phase 1 only.</p> <p>Subsequent Phases will require more detailed Work Plan submissions (minimum 45 day review) and understanding to proceed only with Ecology approval. Technical planning to be done collaboratively and transparently.</p> <p><u>12/12/2011</u></p> <ul style="list-style-type: none"> <li>• SAPs are boiler plate and will not be re-submitted for each phase</li> <li>• Subsequent phases 2 – 6: Technical proposal memo will provide description of situation and objectives. This could include Maps, Tables, Sampling objectives</li> <li>• Consult face-to-face with Ecology when timing opportunities arise – amendments can be made to agreed to phases of work scope</li> <li>• Cite or incorporate any work plans or reports that have relevance to the RIFS work plans</li> <li>• City explained that for risk management, the construction documents show information that may appear different from the IAWP documents. Ecology not expected to review City’s construction documents</li> <li>• Incorporate Construction documents that are relevant to the RIFS work – as an appendix</li> <li>• In agreement on Phase 1 – soil excavation to contract limits. Any new discoveries to be dealt with in the future.</li> <li>• Phase 1 completion report (different from IA cleanup report) to be issued with any recommendations. IACR will be cited in the Phase 1 report</li> <li>• Ecology to approve the Final RIWP in concept with the understanding that all the subsequent phases of work will be pre-approved by Ecology</li> <li>• Each phase will have closure – work plan through reporting (tech memo)</li> <li>• RIFS report will incorporate all Phases 1 – 6</li> <li>• Ecology will issue an approval letter for the Final RIFS work plan within the next 2 weeks</li> </ul>
<p>Some significant details for RI work are in construction documents but never mentioned in RI/FS work plan, such as potholing to</p>	<p>Ecology has asked why RI/FS work (sampling maps and related material) were never incorporated or at least referenced in the RI/FS work plan, especially if they constitute RI/FS work. This should be collaboratively planned and worked on to establish expectations for the work and also for remedial action grant payments.</p>	<p>Bothell has stated that this was never brought up before. Responding to this issue cited in Ecology’s June 28, 2011 letter, Bothell wrote: “will address in the Final RI/FS work plan; this is a new comment not provided during the first and second round of comment</p>	<p>If such remediation plans are part of a separate construction document<sup>1</sup>, they must be incorporated in the work plan document for that phase <b>or referenced clearly and thoroughly</b>. Any later adjustments to such plans will require Ecology approval before implementation.</p> <p>Environmental samples such as those planned for utility line trenching, or during potholing prior to the interim soil remedial action at the</p>	<p>Maps and samples in question were incorporated in Former Hertz RI/FS Work Plan.</p> <p>Ecology, under the Agreed Order, has authority to evaluate the scope of work being presented in the work plan and if at that time finds an anomalous situation, can seek clarification and revision. RI/FS related activities should</p>

<sup>1</sup> Section 02210 “Excavation and Disposal of Contaminated Soil” and map drawings CT1 and CT2 (Sheets 1 and 2) “Contaminated Soils Plan” in the Crossroads Ph III contract plans and specifications (PS&E) for the Phase 1 interim cleanup and limited remedial investigation work.

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precharacterize excavation, and pothole sampling along utility lines in case more contamination is discovered, and for soil end use or disposal.	<p>Documented in Ecology's letter of June 28, 2011.</p> <p>The plan for potholing that will be used to pre-characterize the soil contamination before resumption of contaminated soil excavation at the northern portion of the site was not incorporated or referenced as part of this RI/FS work plan.</p> <p>Instead, this plan for potholing, along with related sampling and analysis of soil samples during utility trenching, was specified in a separate construction document (see footnote 1). This activity is investigative in nature and would typically be mentioned in a work plan for a cleanup site. Ecology expects such separate plans to be made as part of the work plan or at least referenced as appropriate.</p>	<p>reviews" (July 5, 2011 letter)</p> <p>HWA has communicated that they are for end use/disposal purposes, for geotechnical measurements, and if contamination is discovered during utility line work.</p>	<p>northern property boundary, are ostensibly for geotechnical measurement or soil end use or disposal. However, in previous discussions, it was indicated by HWA Geosciences that the utility line trenching may uncover unknown areas of contamination at the site and therefore they will be taken for contaminant analysis as well. It is unclear if this indicates that there are other areas of contamination that are suspected to exist, but are not part of the remedial investigation and characterization.</p> <p>Based on Phase III Contaminated Soils Plan (CT2), the estimated soil remediation (excavation limits) area is a northeast lobate zone in the ROW. Suspected soil contamination (chiefly petroleum hydrocarbon and related) may easily extend further toward Speedy Auto and the Grease Monkey property. However, there is little contingency on paper for RI work toward these adjacent sites and the plan appears to fall short of these areas.</p>	<p>not be made as a separate construction document with no mention at all in the RI/FS work plans being drafted. Bothell should also actively seek site manager approval of such plans and provide better details on what will be done (such as sampling details, analytical suites, purpose, expected outcomes).</p> <p>Ecology may still require subsurface investigation in mediate nearby sites (Speedy Auto and Grease Monkey) to confirm noninteraction if that is the case inferred from the interim remedial action/limited RI work.</p> <p><u>12/12/2011</u></p> <ul style="list-style-type: none"> <li>• No action expected. Expectations discussed above</li> </ul>
Independent investigations	<p>Ecology has requested early submission of all reports or investigations done by Bothell before the Agreed Order, including ROW studies or environmental diligence or discipline reports, environmental studies carried out with EPA or County grant funding. During technical discussions, these are being used to limit the scope of investigation when under question. In some instances, Ecology does not agree with the representativeness, duration, investigative scope or depth of such investigations. Ecology feels it is premature to cite these as evidence that no further investigation is needed for that area or topic under discussion.</p>	<p>Sensitive to the issue.</p>	<p>Any independent or relevant environmental investigations and studies related to the site must be promptly communicated to Ecology even if in its planning stage, such as EPA or King County Brownfields assistance relating to the Bothell sites and adjacent areas. Also, the results must be submitted promptly to Ecology for review and concurrence. This is necessary if there is an expectation to use the information in the RI/FS and DCAP or to propose a change or reduction in the scope of work for this site.</p>	<p>Mutual clarification of positions. Ecology will accept previous studies to support the RI/FS if warranted, but it will not accept arguments that no further investigations are needed if it feels the evidence is inadequate or still shows noncompliance.</p> <p><u>12/12/2011</u></p> <ul style="list-style-type: none"> <li>• Legal or proprietary situations – City cannot send these documents to Ecology until ready for release</li> <li>• City explained that certain independent projects are happening close to the site. City will inform Ecology as a courtesy during monthly meetings</li> </ul>
Inventory of Contaminants of Concern , Continuity of investigation to demonstrate final compliance	<p>Previous (pre-Agreed Order) Phase 1 or 2 reports or Environmental Site Assessments (ESAs) have identified contaminants, cleanup exceedances, and contaminated areas and media at the site such as the TPH plume in the area of the former rotunda. Based on this information, Ecology expects that the initially identified contamination and contaminated areas will be adequately covered in subsequent investigations.</p>	<p>Ecology had raised this issue in past communications. HWA Geosciences responded that well locations may be constrained by the roadway and that there will always be opportunity to investigate areas as needed based on future results.</p>	<p>Following the interim remedial action, the same areas of contamination should be sampled as part of the RI/FS and as confirmation for the interim remediation. For example, as part of Phase 2/3 in the work plan, installation of wells in the north end of the Bothell Landing parcel (in the vicinity of the 522/527 intersection) should not skirt the area of known ground water contamination. In other words, subsequent samples should not be situated in areas where no contamination was previously identified. Instead, it should be in the same area where it was identified in past investigations.</p>	<p>While Ecology understands these constraints and the possibility of limited impacts, the nature of such follow-up RI work remains vaguely defined.</p> <p>Ecology will not be able to “sign off” on contamination in these areas unless this is addressed as advised. Ecology can work with Bothell on achieving this if they can initiate active conversation and planning on this. Ecology does not want to see planned development to occur at areas where residual contamination still occurs especially if it is highly likely that concerns can be addressed before more development (roads, buildings, and public areas) occurs.</p> <p><u>12/12/2011</u></p> <ul style="list-style-type: none"> <li>• No action expected. Expectations discussed above</li> </ul>
Apparent extension of petroleum contamination in soil northward from	<p>Ecology has communicated that, based on documented contamination and close proximity, the UST and associated contaminated soil and ground water at the Speedy Auto Glass site (FS # 58179799) may connect with the northern</p>	<p>HWA has responded that it can only excavate soils or sample test pits within construction project limits (current the 522/527 intersection) and</p>	<p>However, Ecology notes that the Bothell may already own a portion of the contaminated zone near Speedy Auto as part of their Right of Way, and that the excavations may not provide sufficient data to indicate that the Speedy Auto Glass site is not part of the Bothell site.</p>	<ul style="list-style-type: none"> <li>• Evaluate results of Phase II excavation</li> <li>• Evaluate literature and compiled data on other sources in areas in question</li> <li>• Identify data gaps in soil (and ground water) and other</li> </ul>

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<p>Bothell Landing in ROW and documented contamination (confirmed and suspected) in ROW and at adjoining properties such as the Speedy Auto site and Grease Monkey.</p>	<p>extension of soil contamination at the Bothell Landing site. Therefore, Ecology has advised Bothell to include this area in the investigation, possibly during the interim cleanup work or in the next phase when that part of SR 527 is reconstructed.</p>	<p>it might recommend this for future investigations only if it is determined that impacts from the property are commingled with contamination on any City of Bothell sites under Agreed Order.</p> <p>The limited RI investigation will rely on chasing soil contamination and using sidewall and pit bottom sampling to complete soil remediation.</p>	<p>Due to preferential pathways associated with utility lines beneath SR527 and the SR 522/527 intersection, and the fact that apparent discontinuities in contaminated soil and ground water may still exist in areas such as former gasoline stations and facility releases, Ecology will likely expect a more thorough investigative treatment of the extent of contamination in this area.</p> <p>Although HWA has responded that further investigation of the Speedy Auto Glass site might be a later phase of the RI/FS, Ecology still advises that it might be considered for part of this next phase of excavation and investigation. At the same time, please be reassured that Ecology will work with the City of Bothell in establishing the limits to their cleanup liability based on quality technical data, site information, and objective regulatory evaluation.</p> <p>From the ECOSS and past Phase I reports, the presence of two former gasoline stations, the Speedy Auto abandoned UST and Petroleum Contaminated Soils (PCS), and ROW borings cannot preclude Ecology from immediately concluding that confirmation samples from the interim (Phase II?) soil remediation will be sufficient to demonstrate compliance. Ecology agrees that an open excavation may reveal much, but due to former facility use common to gasoline stations, the contamination that Bothell is liable for may be discontinuous or even missed.</p>	<p>media following interim action and limited RI work in the area</p> <ul style="list-style-type: none"> <li>• Design supplementary soil investigation in ROW area to establish remaining soil contamination issues in the area</li> </ul> <p>Provide hard data to Ecology so it can determine who is liable for remaining contamination.</p> <p><u>12/12/2011</u></p> <ul style="list-style-type: none"> <li>• No action expected. Expectations discussed above</li> <li>• Ecology understands that City is stopping at the property limits (construction contract limits) _ Ecology will give City closure up to these limits</li> </ul>