STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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August 18, 2009

Steve Fuller, L.E.G, P.G.
Senior Consultant
Parametrix
411 108th avenue NE, Suite 1800
Bellevue, WA 98004

Dear Mr. Fuller:

Re: Amendments to the RI/FS Work Plan for the Bothell Riverside site, Agreed Order No. 6295

Please find attached the Department of Ecology's amendments to the Report of Investigation/Feasibility Study (RI/FS) Work Plan for this site.

Upon the implementation of these amendments to the work plan, this letter constitutes Ecology approval of the RI/FS work plan and notice to proceed according to planned schedule.

If you have any questions, please don't hesitate to contact me at (425) 649-7094.

Sincerely,

Jerome B. Cruz, Ph.D., L.G., L.H.G.
Toxics Cleanup Program

Cc:
Steven Morikawa, City of Bothell Capital Program Manager
Stephen Anderson, City of Bothell, Deputy City Manager
Nduta Mbuthia, City of Bothell, Project Engineer

Amendments to Remedial Investigation and Feasibility Study Work Plan Riverside Property Bothell, Washington, Project No. 2007-098-700, prepared by HWA Geosciences Inc. and compiled by Parametrix, July 8,2009

1. Table 3-1 is missing the continuation of soil analytical results (see continuation of Table 1 on page 12 of report "Phase II Environmental Site Assessment Riverside Property Bothell, Washington HWA Project No. 2007-098-220" dated July 28, 2008 by HWA Geosciences Inc).

2. Page 17, under "Time series groundwater and surface water elevation measurements": Ecology suggests trying to fit in two rounds of groundwater sampling. Although Ecology may consider using previously gathered data to demonstrate seasonal fluctuations in gradient and configuration of water table over time, a full year of continuous quarterly monitoring is still the ideal minimum requirement. The minimum standard would be to have sufficient time series data on water table, gradients and contaminant concentrations needed to develop the site conceptual model and choose the preferred remedial alternative. This same comment applies to page 18, second paragraph, second sentence, under section 5.2.2 on groundwater sampling.

3. Based on the solid waste disposals and range of petroleum hydrocarbon contamination in soil, there is the possibility of associated metals and PAH contamination in soil. This was not analyzed for in these areas in detail in past investigations. Please include total metals (EPA Method #6010/#7471), and SVOC (EPA Method 8270D) in soil at or near the former excavation area at shallow depth (2 to 4 feet). Semi-volatile organic compounds have also been identified from previous studies at the site, yet this has not been included in the analytical suite for the samples. Suggested samples that would screen for these contaminants while providing adequate coverage are at R-12, R-16, R-17, R-19, R-20, R-21, and R-23.

4. A PAH hit (exceedance) is documented for groundwater sample R-9-18 in the 2008 HWA report. The closest proposed well is RMW-4, therefore, Ecology suggests including SVOC analyses in groundwater and in soil at 5 foot depth intervals up to 15 feet (the point of compliance for direct contact) in this location. Further characterization will be necessary for PAHs or any other contaminants encountered if exceedances are found.

5. Page 26, Table 5-2: Include VOC analyses of soil (at 5 feet depth intervals to just above water table) at RMW-6, RMW-7, and RMW-8. The 2008 Phase II report showed PCE and TCE hits in soil at borings R-4 (8 feet) and BC-3 (17.5 feet). Nearby points like R-5 were not analyzed for these analytes. VOC analyses of soil samples taken at RMW-6 to -8 will identify potential HVOC soil contamination and possibly its lateral extent at this portion of the site.

6. Well MW-3A showed a TCE exceedance in the past (see "Report of Preliminary Environmental Site Assessment SR 522 and NE 180th Street Riverside Property Bothell Washington, dated September 18, 1992 by Groundwater Technology, Inc.). The groundwater sampling at R-24, although designed to assess potential impacts from Horse Creek contamination, may pick up similar contamination. In order to understand the nature of groundwater contamination by HVOCs at this portion of the site or the adjoining property to the west (Hertz/AA Rentals), another well at or near MW-3/3A is suggested. This will update the data first collected in 1992 from Well-3A and assist in characterizing the nature of this contamination in groundwater at the site. Presently, there is an insufficient monitoring record and coverage to determine the nature of contamination by TCE (and possibly other HVOCs) at this portion of the site. This can be seen in the following record of analytical results from monitoring well MW-3A (from Table 2 of 1992 report by GTI):

DATE	RESULTS IN PPB
7/15/92	110
2/25/93	<5
10/12/93	Not sampled
8/26/94	Not sampled

7. Based on comment 5) above, on page 16, last paragraph headed by "**Ground Water Monitoring Well Installation",** change sentence from "Seven wells will be installed..." to "Eight wells..."

8. Update Table 6-1 "Proposed RI/FS Schedule" as necessary.

9. Appendix B Sampling and Analysis Plan, Table 2-1, page 16: should not MTCA groundwater cleanup levels be included? MDLs and LDLs should be below cleanup levels and ARARs.

10. Appendix B Sampling and Analysis Plan, **2.1.3 Time Series Ground Water Level Measurements**: Beginning sentence says: "Water level measurements will be collected monthly during the RI." This does not seem consistent with the revised work plan tasks. Will this be implemented, or will water table measurements coincide with sampling events?

11. Appendix B Sampling and Analysis Plan, Section **2.2.2 Soil Analysis**, page 7: is this analytical suite complete and/or consistent with the work plan? Based on Table 5-2 and comments 3 and 5 above, missing analytes include HVOC, E-TPH, metals, VOCs, SVOCs including PAHs. Include sample bottle requirements listed on page 8.

12. Appendix B Sampling and Analysis Plan, Section **2.3.1 Ground Water Analysis**, page 11: Add bullet for SVOCs (PAH) and corresponding description and sample bottle requirement. Please include any analytes mentioned in the work plan and add in this section accordingly.

Proofreading Revisions

1. Table of Contents Chapter 5, and page 16 Chapter 5 headings: correct spelling of "Feasibility"