Parametrix

DRAFT - APPROACHES TO ADDRESS OUTSTANDING RI/FS ISSUES SOLID WOOD INC. SITE - OLYMPIA, WASHINGTON

By: D.Dinkuhn

9/28/10

| Site Area/Medium | Data Gaps/Issues | Approach |
|------------------------------------|--|---|
| Piling sediments | Retesting SD-29 and SD-30 for bioassay and TPH. | Resample SD-29 and SD-30 for bioassay and TPH testing. Sample Area 2 if either SD-29 or SD-30 fail bioassay. Assess need for broad sediment characterization study. |
| Sediments below Area A | SD-23 and SD-24 exceedance of 100 ppm TPH criteria. | No further sampling will be conducted at these locatations due to failure threshold values not being met (see evaluation below). |
| Southern Site Area sediments | SD-19 and SD-20 reporting limits, which exceed 100 ppm TPH criteria. | No further sampling will be conducted at these locatations due to threshold values not being met (see evaluation below). Additional evidence is given by results from other sediments in the area, which met the quantitation limit criteria and did not contain diesel or lube oil range organics. |

| Bioassay Pass/Fail Analysis | | | | | | |
|-----------------------------|---------------------|-----------------------------|-------------------------------|------------------------------|------------------------|--|
| Sample | Area | Diesel Range Organics (ppm) | Lube Oil Range Organics (ppm) | Total TPH ¹ (ppm) | Pass/Fail Bioassay? | |
| SD-18 | | 20U | 80U | 100 | - | |
| SD-19 | Southern | 57U | 110U | 167 | - | |
| SD-20 | Site Area | 66U | 130U | 196 | - | |
| SD-21 | Beach | 15U | 85U | 100 | - | |
| SD-22 | | 15U | 81U | 100 | - | |
| SD-23 ² | Beach | 57U | 160 | 217 | - | |
| SD-24 ² | Below Area A | 53 | 290 | 343 | - | |
| SD-25 | 7110471 | 68U | 490 | 558 | Pass | |
| SD-26 | | 94 | 37 | 131 | - | |
| SD-27 | | 37 | 320 | 357 | - | |
| SD-26/27 ³ | Piling Sediments | 63U (56 ⁴) | 320 (226 ⁴) | 383 | Pass | |
| SD-28 | | 37 | 99 | 136 | Pass | |
| SD-29 | | 87 | 330 | 417 | Fail | |
| SD-30 | | 50 | 320 | 370 | | |
| SD-30 ⁵ | | 77 | 370 | 447 | Fail | |
| SD-30 ⁶ | | 64 | 345 | 409 | | |

Apparent minimum threshold for failure contributed by diesel range = 64 ppm or greater.

Apparent minimum threshold for failure contributed by lube oil range = 330 ppm or greater.

- 1 = Includes quantitation limits for non detected analytes.
- 2 = Highest detected concentration or highest reporting limit from sample station.
- 3 = Sample composited using 1/3 SD-26 and 2/3 SD-27.
- 4 = Predicted concentration using original sample data and ratio given in note 3 above.
- 5 = Duplicate sample.
- 6 = Average of original and duplicate sample results at station SD-30.

| Copper and | Copper and nickel |
|-------------|-----------------------------|
| nickel in | exceedances in wood burner |
| groundwater | area wells (MW-8 through MW |
| | 10) and Seep 5. |
| | |

Continue quarterly monitoring in wells. Assess dissolved organic carbon concentrations and bioavailability of metals. Sample marine v- water to assess potential background conditions.

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| SB04 area groundwater | Groundwater in Boring SB-04 exceeded cleanup levels for lube oil range organics during the Phase II ESA. Note that this sample was collected from a push probe and may have contained suspended sediment. Soil contamination was not found during the Phase II and RI investigations in the area. Groundwater monitoring for 4 quarters showed no exceedances of cleanup levels in any of the three wells installed for this purpose. | Discontinue groundwater monitoring. Establish conditional point of compliance for groundwater at location of the downgradient wells. Establish institutional control disallowing use of groundwater. |
| Area A groundwater | Groundwater contained contamination due to Bunker C spill. Contaminated soils were removed during the Interim Action and ORC was applied to backfill. | Concentrations in upgradient and downgradient wells contained no detectable contamination during 4 quarters of monitoring. The first three quarters were collected prior to the soil removal. The 4th quarter was conducted approximately 2 months following. No additional samples will be collected. Establish conditional point of compliance for groundwater at the location of the downgradient wells. Establish institutional control disallowing use of groundwater. |
| Shallow soils along entire rail spur alignment | cPAHs exceedances in approximately 1/2 of the samples collected to date due to creosote-treated rail ties. | No aditional samples will be collected. Ties will be removed and soil cap will be installed during future trail construction similar to Area C. |