Memo

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To: Steve Teel, LHG (Ecology)

From: Hannah Morse, E.I.T. and Chris Waldron, P.E. (PIONEER)

Cc: Jake Lund, P.E. (City of Olympia), Nicholas Acklam (Ecology)

Date: December 20, 2021

Subject: Meeting Minutes from 12/09/2021 Meeting with Ecology to Discuss the Soil Scope of Work (SOW) to be included in the Data Gaps Investigation Work Plan

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The purpose of this memo is to document the minutes from the meeting with the Washington State Department of Ecology (Ecology) on December 9, 2021. The purpose of this meeting was to summarize the proposed soil samples to address the data gaps identified in Ecology's comments to the Remedial Investigation/Feasibility Study (RI/FS) Report for the City of Olympia's (City's) Solid Wood, Inc. Site dated October 5, 2015.[1] The proposed soil samples will be incorporated into a Data Gaps Investigation Work Plan which will be submitted to Ecology for review and approval. Results of the data gaps investigation will be included in the revised RI/FS Report.

These meeting minutes will be attached to the Response to Comments on October 5, 2015 RI/FS Report for the Solid Wood, Inc. Site tech memo dated September 14, 2021.

Meeting Minutes

Who Attended:

- Jake Lund (City)
- Steve Teel (Ecology)
- Nicholas Acklam (Ecology)
- Hannah Morse (PIONEER Technologies Corporation [PIONEER])

Below is a summary of the Solid Wood, Inc. Site RI/FS Soil Sampling Discussion:

1. Ecology Comment: The vertical extent of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) contamination along the railroad right-of-way (ROW) has not been determined (Ecology Comment #5). In a response to comment letter dated September 11, 2020, the City agreed to collect additional soil samples near the rail spur to delineate the extent of cPAH contamination. Note: The cPAH concentrations only slightly exceeded the MTCA Method A Soil Cleanup Level (CUL) of 0.10 milligram per kilogram (mg/kg). There is no historical information that suggests there was a significant release along the rail spur. The cPAH concentrations at the Site are likely associated with (1) creosote-treated railroad ties, (2) minor leaks associated with routine rail operations, (3) fill material used to construct the rail spur, and (4) urban background sources.

   Summary: The City proposed 12 initial soil sample locations located along the rail spur and in the Oil Stain Area, where three cPAH exceedances occurred in soil. The City proposed a tiered approach. Along the berm area, nine samples would be collected approximately 4 feet below ground surface (bgs). Additional samples would be collected

[1] Original comments on the RI/FS were provided by Ecology on December 19, 2019 and initial response to comments were provided by PIONEER on behalf of the City of Olympia on September 11, 2020. Ecology provided responses to the PIONEER's September 11, 2020 responses on May 19, 2021.

at 6-8 feet bgs and 12-15 feet bgs.[2] These samples would be held by the lab until results of the shallower sample results are available. If cPAH concentrations are non-detect or were detected below the MTCA Method A Soil CUL of 0.10 mg/kg, the deeper samples would not be analyzed. The City proposed three soil samples in the former Oil Stain Area (co-located with SB26 [0.14 mg/kg], SB29 [0.31 mg/kg], and SB30 [0.14 mg/kg]) collected in the top six inches bgs. Ecology agreed with the sample locations; however, recommended revising the sample depths to be collected at 6-8 feet bgs and archiving the 12-15 feet bgs at the lab until the results for the 6-8 feet bgs sample is available. Since exceedances were detected at 4 feet bgs, Ecology recommended the initial samples in this area be collected 6-8 feet bgs, instead of the top 6 inches, to define the vertical extent of cPAH contamination in the Oil Stain Area.

Ecology approved of the City's proposed sampling locations and tiered approach, pending the revision to the soil sample depths in the Oil Stain Area. These sampling activities will be outlined in further detail in the Data Gaps Investigation Work Plan.

Action Items:

- Revise the proposed sample depths in the Oil Stain Area (located near SB26, SB29, and SB30) based on Ecology's feedback.

2. Ecology Comment: Based on the data collected to date, Ecology does not agree that these alternatives adequately protect groundwater. Also, additional data need to be collected to complete the RI for other media also (soil and sediment). Therefore, we suggest that a new set of FS alternatives be prepared and discussed with Ecology following the collection and analysis of the remaining RI data, prior to the preparation of the revised RI/FS Report (Ecology Comment #14, #15, and #16).

   Summary: The City proposes that the Remedial Alternatives be discussed with Ecology following the completion of all field activities and once the City and Ecology have agreed that soil, sediment, and groundwater characterization for the Site is complete. The City has agreed (see Meeting Minutes from 11/02/2021 Meeting with Ecology to Discuss Groundwater Comments on the 2015 Solid Wood RI/FS Report) to classify groundwater at the Site as potable and acknowledges that "hot-spot" excavations may be required in specific areas of the Site (e.g., Oil Stain Area). These components will likely impact and be included in all remedial alternatives developed in the FS. The City acknowledges that the upcoming field activities (i.e., soil and sediment sampling) could impact the assembled alternatives. Ecology agreed with this approach. A meeting will be scheduled once all of the data gaps investigation results are available.

   Action Items:

   - The City will schedule a meeting with Ecology to discuss the Remedial Alternatives that will be evaluated in the FS after all of the data gaps investigation results are available.

Summary of Path Forward

Below is a summary of the action items from the Solid Wood, Inc. Site RI/FS Sediment Sampling Discussion:

1. Revise the proposed sample depths in the Oil Stain Area (located near SB26, SB29, and SB30) based on Ecology's feedback.
2. Develop the Data Gaps Investigation Work Plan for Ecology's review/approval
   a. A initial schedule for the Data Gaps Investigation Work Plan is provided as Attachment #2

[2] Groundwater at the Site has been reported between 4 and 14 feet bgs at the Site. If groundwater is encountered before 15 feet bgs, the bottom sample will be collected at the depth groundwater is encountered.

3. Finalize the 12/02/2021 Sediment Scope of Work (SOW) Meeting Minutes once Ecology has reviewed and provided comment and/or revisions.
4. Discuss the remedial alternatives to be developed and evaluated in the RI/FS with Ecology
    a. This discussion will be scheduled once all field activities have been performed and the sediment, soil and groundwater characterization at the Site is considered complete by Ecology

Enclosures

Attachment #1	Solid Wood, Inc. Data Gaps Investigation Work Plan – Proposed Sediment Sampling Presentation Slides
Attachment #2	Data Gaps Investigation Work Plan Proposed Schedule

West Bay Park RI/FS

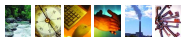
(Solid Wood Inc. Site)

SOIL DISCUSSION

Data Gaps Investigation Work Plan – Proposed Soil Sampling in Response to Ecology's Soil Comments

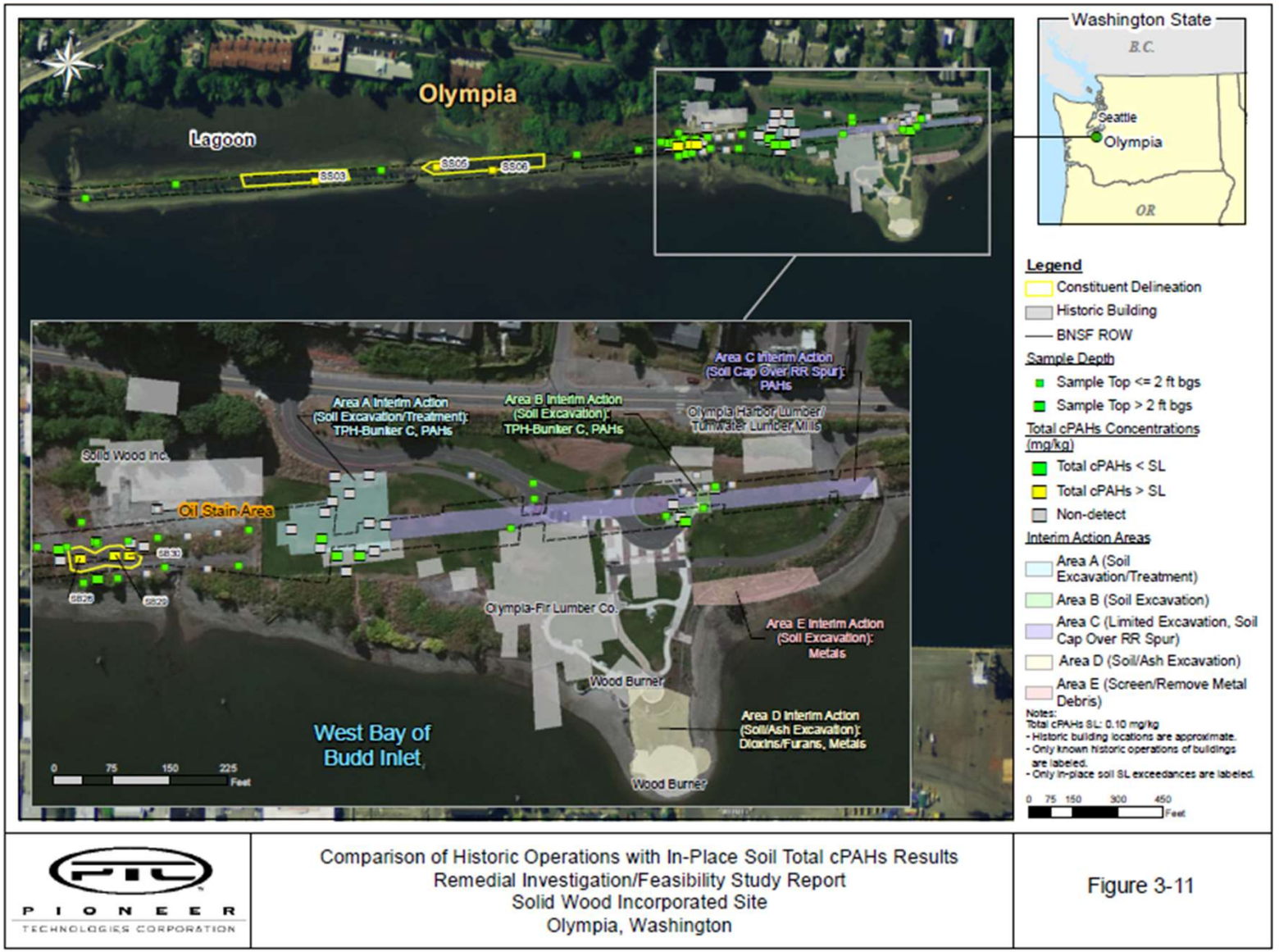
Purpose and Meeting Agenda

- The purpose of this meeting is for the City and Ecology to agree on the Scope of Work (SOW) for soil characterization to be included in the Data Gaps Investigation Work Plan (WP)
  - Based on Ecology comment #5
- Review Ecology's comments
  - Original comments dated 12/19/2019 and additional comments provided by Ecology 5/19/2021
- Present the SOW to be presented in the Data Gaps Investigation WP
  - Proposed sampling locations, analytics (cPAHs)
- Briefly discuss the Remedial Alternatives presented in the FS and Ecology's comments (#14, #15, and #16).



Ecology Comments regarding Soil Characterization

- Ecology Comment #5: The vertical extent of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) contamination along the railroad right-of-way (ROW) has not been determined.
  - For example, samples at locations SB26, SB29, and SB30 were all collected at a depth of 4 feet below ground surface (bgs)
  - cPAH screening level exceedances were found at locations SS03, SS05, SS06, and SS12 (0.5 feet bgs depth) but no deeper samples were collected or analyzed.
- In response to comment letter dated September 11, 2020, the City agreed to collected additional samples near the rail spur to delineate the extent of cPAH contamination
  - The cPAH concentrations only slightly exceeded the MTCA Method A Soil CUL of 0.1 mg/kg. There is no information that suggests that there was a significant release along the rail spur (historical documentation or visual evidence).
  - As such, the conceptual model for the surface soil exceedances is: (1) creosote-treated railroad ties, (2) minor leaks associated with routine rail operations that would have only impacted surface soil proximate to the rail spur, (3) the fill material that was used to construct the rail spur, and (4) urban background sources.
  - The slightly deeper exceedances (approximately 4 feet bgs) might be associated with: (1) the fill material that was used to construct the rail spur and (2) urban background sources.



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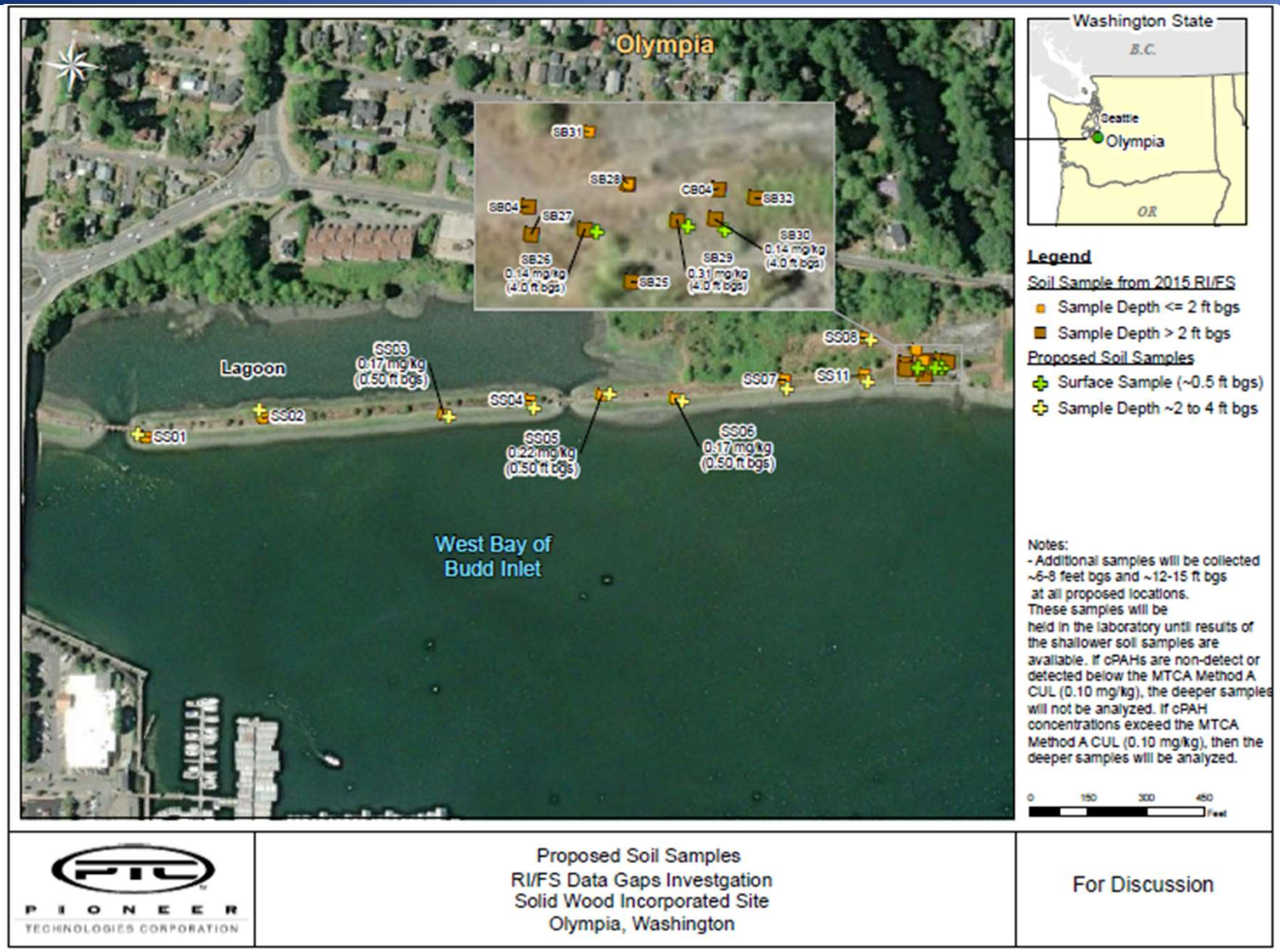
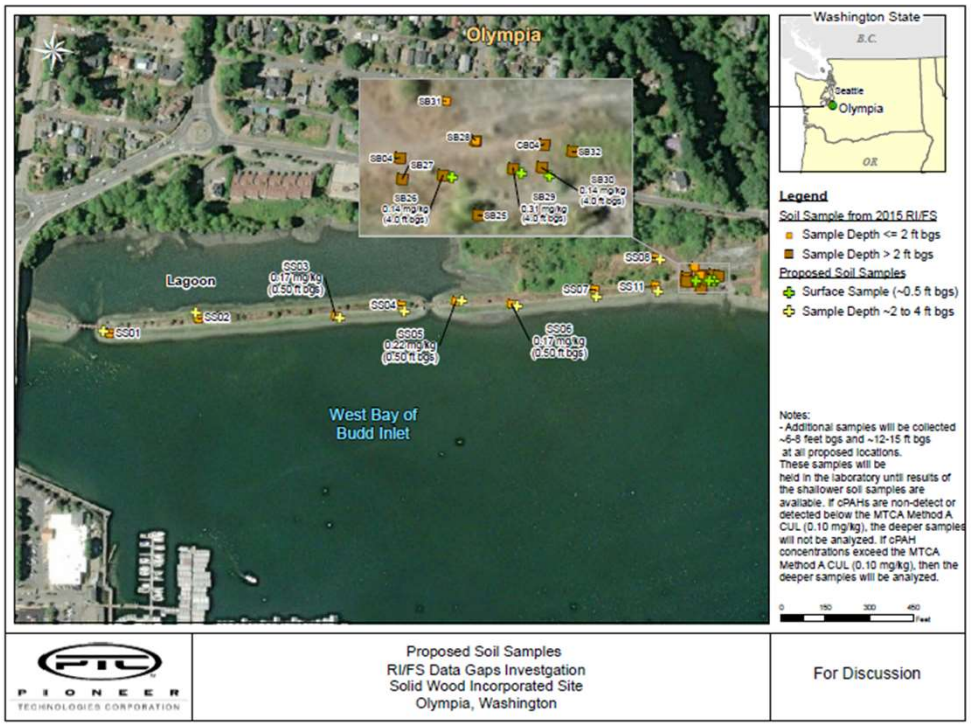
Comparison of Historic Operations with In-Place Soil Total cPAHs Results
Remedial Investigation/Feasibility Study Report
Solid Wood Incorporated Site
Olympia, Washington

Figure 3-11


Olympia
Lagoon
West Bay of
Budd Inlet
SB31
SB28
CB04
SB32
SB04
SB27
SB30
0.14 mg/kg
(4.0 ft bgs)
SB26
0.14 mg/kg
(4.0 ft bgs)
SB29
0.31 mg/kg
(4.0 ft bgs)
SB25
SS08
SS07
SS11
SS03
0.17 mg/kg
(0.50 ft bgs)
SS04
SS02
SS01
SS05
0.22 mg/kg
(0.50 ft bgs)
SS06
0.17 mg/kg
(0.50 ft bgs)
Washington State
B.C.
Seattle
Olympia
OR
Legend
Soil Sample from 2015 RI/FS
Sample Depth <= 2 ft bgs
Sample Depth > 2 ft bgs
Proposed Soil Samples
Surface Sample (~0.5 ft bgs)
Sample Depth ~2 to 4 ft bgs
Notes:
- Additional samples will be collected ~5-8 feet bgs and ~12-15 ft bgs at all proposed locations. These samples will be held in the laboratory until results of the shallower soil samples are available. If cPAHs are non-detect or detected below the MTCA Method A CUL (0.10 mg/kg), the deeper samples will not be analyzed. If cPAH concentrations exceed the MTCA Method A CUL (0.10 mg/kg), then the deeper samples will be analyzed.
0
150
300
450
Feet
PIONEER
TECHNOLOGIES CORPORATION
Proposed Soil Samples
RI/FS Data Gaps Investgation
Solid Wood Incorporated Site
Olympia, Washington
For Discussion

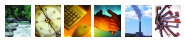
Proposed Soil Samples

- The City proposes a tiered approach for determining the extent of cPAH contamination at the Site
- Propose 12 soil sample locations co-located with cPAH soil samples presented in the 2015 RI/FS
  - Nine samples are located along the Rail Spur Area
    - Collected at a depth of 4 feet bgs.
  - Three samples located in the Oil Stain Area where exceedances occurred at 4 feet bgs
    - SB26 (0.14 mg/kg), SB29 (0.31 mg/kg; maximum detected concentration at the Site), and SB30 (0.14 mg/kg)
    - Collected at the surface (top 6 inches bgs)
- Additional samples will be collected ~6-8 ft bgs and ~12-15 ft bgs at the proposed sample locations
  - If groundwater is encountered before 15 feet bgs, the bottom sample will be collected at the depth groundwater is encountered
  - The maximum depth is based on the soil point of compliance (POC) of 15 feet bgs per WAC 173-340-740(6)(d)
  - The 6-8 feet and 12-15 feet bgs samples will be held at the lab until the shallower samples have been analyzed
    - If cPAHs are non-detect or detected at levels below the MTCA Method A Cleanup Level (CUL) of 0.10 mg/kg, the deeper samples will not be analyzed



Path Forward

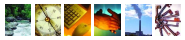
- Develop the Data Gaps Investigation WP
  - The City will develop a schedule for the Data Gaps Investigation WP and send to Ecology for review
  - The City proposes one WP, which will include all the sampling required for sediment (based on 12/02/2021 meeting), soil, and groundwater (currently no additional sampling required for groundwater)
  - Submit to Ecology for review/approval
  - Conduct field activities
  - Schedule a call with Ecology to walk through analytical results and determine the path forward
    - Overall goal is for the City and Ecology to agree that sediment, soil, and groundwater at the Site have been fully characterized
    - Review the Remedial Alternatives in the FS based on the new data set



Remedial Alternatives Evaluated in the FS

- Ecology Comment #14, #15, #16
  - In general, Ecology did not agree that the proposed remedial alternatives were protective of groundwater
  - The City has agreed to evaluate groundwater as potable at the Site and acknowledges that “hot-spot” excavations may be required in specific areas of the Site (e.g., Oil Stain Area)
    - The City proposes to discuss/review the remedial alternatives with Ecology after the characterization of soil, sediment, and groundwater at the Site is considered complete (i.e., after all field activities are complete)
    - Ensures the Remedial Alternatives are reflective of existing Site conditions and are considered protect of human health and the environment
    - The City will present summarizes of all data and evaluations to be included in the RI and the revised alternatives (and rationale) to be included in the FS.

Questions?



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Cc: Chris Lund, P.E. (City of Olympia), Nicholas Acklam (Ecology)

Date: December 20, 2021

Subject: Data Gaps Investigation Work Plan Proposed Schedule
City of Olympia – Solid Wood Inc. Site

The purpose of this memo is to provide an initial schedule for the Data Gaps Investigation Work Plan for the City of Olympia's (City's) Solid Wood, Inc. Site (Site). The scope of work (SOW) presented in the data gaps investigation is based on previous discussion between the City and the Washington State Department of Ecology (Ecology) as summarized below:

- During the 11/02/2021 meeting between the City and Ecology, the City agreed to classify groundwater at the Site as potable and revise the Remedial Investigation/Feasibility Study (RI/FS) Report accordingly. The City also agreed to re-evaluate total petroleum hydrocarbons (TPHs) based on Ecology's combined screening level (SL) of 500 micrograms per liter (µg/L). Ecology agreed that groundwater at the Site had been characterized, but the evaluations presented in the RI/FS needed revisions. No additional groundwater sampling and/or investigations are required at this time.
- Additional sediment investigation was identified during the 12/02/2021 meeting between the City and Ecology. Additional sediment investigation includes collecting intertidal and subtidal sediment samples south of the West Bay Park and performing field sieve tests in the area approximate to historical log storage and handling activities to evaluate wood waste at the Site.
- Additional soil investigation was identified during the 12/09/2021 meeting between the City and Ecology. Additional soil investigation includes collecting soil samples along the rail spur and in the Oil Stain Area to define the vertical extent of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) at the Site.

These sampling activities will be outlined in further detail in the Data Gaps Investigation Work Plan and submitted to Ecology for review, comment, and approval prior to conducting field activities.

Proposed Schedule

Below is the proposed schedule for the Data Gaps Investigation Work Plan.

Task	Date of Completion
City/PIONEER Submit Draft Work Plan to Ecology for Review	Monday, January 31, 2022
Ecology Provide Comments/Revisions to City/PIONEER	Monday, Febrauary 7, 2022
City/PIONEER Revise Work Plan and Submit Revised, Final Draft	Monday, February 21, 2022
Ecology Approve Work Plan	Monday, February 28, 2022
City/PIONEER Conduct Field Activities	Early March 2022