



*REVISED DRAFT*

*Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon*

Prepared for:  
Port of Portland

June 11, 2025  
32-23011207



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### **Abbreviations/Acronyms**

|                    |                                                                       |
|--------------------|-----------------------------------------------------------------------|
| Apex               | Apex Companies, LLC                                                   |
| ARAR               | applicable and relevant or appropriate requirements                   |
| bgs                | below ground surface                                                  |
| BMP                | best management practice                                              |
| BNSF               | Burlington Northern Santa Fe                                          |
| BODR               | Basis of Design Report                                                |
| CERCLA             | Comprehensive Environmental Response, Compensation, and Liability Act |
| COC                | chemical of concern                                                   |
| cPAHs              | carcinogenic polycyclic aromatic hydrocarbons                         |
| D/F                | dioxins/furans                                                        |
| DEQ                | Oregon Department of Environmental Quality                            |
| DU                 | Decision Unit                                                         |
| ECSI               | Environmental Cleanup Site Information                                |
| EPA                | U.S. Environmental Protection Agency                                  |
| ESCP               | erosion and sediment control plan                                     |
| Facility           | Willamette Cove Upland Facility                                       |
| FEMA               | Federal Emergency Management Agency                                   |
| FFA                | fill material, fine-grained flood deposits, and recent alluvium       |
| FS                 | feasibility study                                                     |
| GIS                | Geographic Information System                                         |
| HI                 | hazard index                                                          |
| HPAHs              | high molecular weight polycyclic aromatic hydrocarbons                |
| HQ                 | hazard quotient                                                       |
| ISM                | incremental sampling methodology                                      |
| LPAHs              | low molecular weight polycyclic aromatic hydrocarbons                 |
| McCormick & Baxter | McCormick & Baxter Creosoting Company Superfund Site                  |
| mg/kg              | milligrams per kilogram                                               |
| MHW                | mean high water                                                       |
| MOU                | Memorandum of Understanding                                           |
| NAVD88             | North American Vertical Datum 88                                      |
| NOAA               | National Oceanic and Atmospheric Administration                       |
| NPL                | National Priorities List                                              |
| ODFW               | Oregon Department of Fish and Wildlife                                |
| OLWL               | ordinary low water line                                               |
| PAHs               | polycyclic aromatic hydrocarbons                                      |
| PCBs               | polychlorinated biphenyls                                             |
| PHSS               | Portland Harbor Superfund Site                                        |
| Port               | Port of Portland                                                      |
| PRG                | preliminary remediation goal                                          |
| RA                 | remedial action                                                       |
| RAO                | remedial action objective                                             |
| RBC                | risk-based concentration                                              |
| RD                 | remedial design                                                       |
| RDI                | Remedial Design Investigation                                         |
| RG                 | remediation goal                                                      |
| RI                 | remedial investigation                                                |
| RM                 | river mile                                                            |

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|                |                                            |
|----------------|--------------------------------------------|
| ROD            | Record of Decision                         |
| SCP            | Site Conservation Plan                     |
| TCLP           | Toxicity Characteristic Leaching Procedure |
| TEQ            | toxic equivalency                          |
| TOB            | top of bank                                |
| TPH            | total petroleum hydrocarbons               |
| UPRR           | Union Pacific Railroad                     |
| VCP            | Voluntary Cleanup Program                  |
| Willamette CRA | Willamette Cultural Resources Associates   |



## **1.0 Introduction**

Apex Companies, LLC (Apex) prepared this Basis of Design Report (BODR) for the Willamette Cove Upland Facility (the Facility) as part of Voluntary Cleanup Program (VCP) Agreement EC-NWR-00-26 between the Port of Portland (Port), Metro, and the Oregon Department of Environmental Quality (DEQ). The Facility is defined in the DEQ Environmental Cleanup Site Information (ECSI) database as ECSI No. 2066. For the BODR, the site consists of that portion of the upland Facility landward of the top of the riverbank (referred to as the Site). Investigation and cleanup of the riverbank, beach, and in-water contamination are being conducted separately under the Portland Harbor Superfund Site (PHSS) in-water actions overseen by the U.S. Environmental Protection Agency (EPA).

### **1.1 Purpose and Objectives**

The purpose of this BODR is to build on the Remedial Design Investigation (RDI) Evaluation (Apex, 2023a) by refining the scope of the selected remedial alternative and to describe the objectives, overall approach, schedule, milestone check in points, and specific project elements of the final remedy.

The objectives of the BODR include:

1. Summarize the results of the RDI and discuss if identified data gaps have been adequately investigated such that the remedial design (RD) and remedial action (RA) can proceed;
2. Summarize existing site conditions and site factors which affect technology assignments in the record of decision (ROD), including detailed reasonably anticipated future land use information and other data;
3. Summarize design criteria applicable to the Site;
4. Identify a preferred remedial approach based on consistency with the ROD;
5. Identify long-term monitoring and maintenance considerations for the Site;
6. Identify needed design studies for RD, if any; and
7. Describe a sequencing plan as well as an overall schedule to complete the design studies, RD, and RA for the Site.

### **1.2 Regulatory Framework**

Since 1988, a succession of site-specific investigations and removal actions have been implemented at the Facility. The Facility is defined within the DEQ ECSI database as No. 2066. In November 2000, the Port and Metro entered into a voluntary agreement (ECVC-NWR-00-26) with DEQ to perform a remedial investigation/feasibility study (RI/FS) and implement any needed source control measures to prevent releases to Portland Harbor. In December 2000, the EPA identified the Portland Harbor area of the lower Willamette

River as a Superfund Site (ID No. ORSFN1002155) and placed it on the National Priorities List (NPL) due to concerns regarding contamination in Willamette River sediments posing risks to human health and the environment. The EPA selected a final action for Portland Harbor in their January 2017 ROD.

In 2001, the EPA entered into a Memorandum of Understanding (MOU) with the DEQ, six federally recognized Native American Tribes, the National Oceanic and Atmospheric Administration (NOAA), the U.S. Department of the Interior, and the Oregon Department of Fish and Wildlife (ODFW). Under this MOU, the DEQ is the lead agency for addressing sources of contamination in the upland portions of the Superfund Site (i.e., source control), and the EPA is the support agency.

Prior to 2000, environmental assessments were conducted at the Facility related to property transfers. The Facility is located within Portland Harbor, so following designation of the Portland Harbor Superfund Site, the DEQ determined that the Facility could pose a threat as a source of contamination to the harbor and that further upland assessment was required.

The Port and Metro conducted the RI of the Facility between April 2001 and September 2002. The RI combined historical information (prior to 2001) and results of the investigation to develop a conceptual site model and a list of contaminants of interest. Multiple subsequent investigations were conducted between 2002 and 2017 to further investigate areas identified in the RI and resolve data gaps. Interim removal actions were completed in 2004 to address liquid phase petroleum at the inner cove (Ash Creek, 2005), in 2008 to remove metals hot spots on the eastern Central Parcel (Ash Creek/Newfields, 2008), and in 2015/2016 to remove human health hot spots, primarily on the Central Parcel (Apex, 2016). These removal actions included off-site disposal of approximately 20, 1,000, and 5,000 tons of soil, respectively. An FS and a source control evaluation were conducted in 2019 (Apex, 2019).

Based on the FS, the DEQ defined the remedial action objectives (RAOs) and selected a final remedial action for the Site in the March 2021 ROD (DEQ, 2021). The ROD and this BODR address soil only. Groundwater is being further assessed through ongoing source control evaluation, and if needed, groundwater cleanup will be addressed in a separate action. In summary, the selected soil remedial action in the ROD consists of the following elements:

- Excavation and off-site disposal of soil exceeding hot spot levels for human health;
- Excavation and off-site disposal of soil exceeding non-dioxin/furan (e.g., metals including mercury) hot spot levels for ecological health;
- Consolidation and on-site capping<sup>1</sup> (using a demarcation layer and minimum 3 feet of clean material) of a) soil posing an excess risk to humans but below hot spot levels; and b) soil with higher risk levels relative to plants and animals, including hot spots;

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<sup>1</sup> In 2022, the Metro Council elected to implement the contingency remedy in the ROD whereby soil designated for excavation and on-site capping in a consolidation cell will instead be disposed of off-site in a regulated landfill.

- Allowance for alternative techniques to save native trees during excavations;
- In-place covering of residual soil contamination posing a lower-level risk to plants and animals following off-site disposal and on-site consolidation<sup>1</sup> and capping. Cover thickness would be determined based on the level of residual risk; however, a minimum of 1 foot of clean topsoil will be necessary with 3 feet of clean soil cap in areas with remaining ecological hot spots;
- Long-term monitoring and maintenance of all engineering controls, including consolidation area<sup>1</sup> caps and soil covers. A cap inspection and maintenance plan, a contaminated media management plan, and a community and outreach plan will be developed;
- Institutional controls, including recording of a deed restriction or equivalent, with the property identifying the nature of contamination, use restrictions (e.g., no residential usage), and necessary long-term controls; and
- A contingency remedy incorporated by DEQ that allows for Metro to elect to perform additional measures during remedial design and in consultation with DEQ to align with final plans for use of the Site.<sup>2</sup> Under this framework, Metro can eliminate or greatly reduce the volume of soil to be consolidated on-site and instead transport the excavated soil off-site for disposal at a regulated waste facility.

Implementation of the selected remedy (including the contingency remedy that Metro has elected to perform) will allow for full access to the Site, on and off trails, in accordance with Metro's intended future use as a nature park.

### 1.3 Coordination with In-Water Remedial Design Processes

The Site is located upland of the Willamette Cove In-Water Project Area that is the portion of the Portland Harbor Superfund Site between approximately river miles (RMs) 6.1 and 6.9 along the east bank of the Willamette River. The Site remedial design process will require ongoing coordination with the In-Water Remedial Design Group (In-Water Group) to check that the selected remedy satisfies the remedial action objectives of the Site and the in-water project within the transition area, primarily the riverbank. To achieve this, both parties are engaged in ongoing regularly scheduled coordination meetings and shared design document review, and opportunities for realizing efficiencies in remedial actions are being discussed. In addition, Metro property ownership extends from the upland area to the ordinary low water line (OLWL) on the riverbank, and Metro and the Port will coordinate with the In-Water Group on future land-use planning goals, long term maintenance requirements and community priorities.

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<sup>2</sup> As indicated in the prior footnote, the Metro Council has elected to implement this contingency remedy.

## **1.4 Report Organization**

This document is organized in the following manner:

- Section 2 provides a description of the Facility and the Site and refinement of the conceptual site model (Objectives 1 and 2);
- Section 3 presents design criteria and performance standards (Objectives 3 and 4);
- Section 4 summarizes general monitoring and maintenance requirements (Objective 5);
- Section 5 describes design studies (Objective 6);
- Section 6 presents remedial design stages, the conceptual sequencing plan, and scheduling (Objective 7); and
- Section 7 is a list of references.

## **2.0 Site Description and Conceptual Site Model Refinement**

### **2.1 Site Description and Physical Setting**

The Site is located along the east bank of the Willamette River in the St. Johns area of Portland, Oregon. Figure 1 shows the location of the Site between River Miles 6 and 7 on the Willamette River and is mostly in Section 12 of Township 1 North, Range 1 West, Willamette Meridian. The Facility has been owned by Metro since 1996. Figure 2 provides a current plan of the Site, Facility, and the surrounding area. For the purposes of describing the Site, it has been divided into West, Central, and East Parcels as shown on Figure 2.

#### **2.1.1 Extent of the Site**

The Site is approximately 3,000 feet long and varies from 80 to 650 feet in width. The edge of the cove is up to 800 feet from the main river channel; it was created primarily as a result of the placement of the embankment leading up to the Burlington Northern Santa Fe (BNSF) railroad bridge. The Facility as defined in the VCP Agreement covers approximately 24 acres that are inland from the OLWL. However, the scope of work for the VCP Agreement limits the work to areas inland from the mean high water (MHW) line (defined as 13.3 feet, North American vertical datum 88 [NAVD88]) to the property line with the Union Pacific Railroad (UPRR). DEQ and EPA have agreed that the riverbank portion of the Facility (defined as the area from the waterline to the top of bank [TOB]) will be addressed as part of in-water activity. Although the FS included the upper portion of the riverbank, the ROD and upland RA work does not include any portion of the Facility below the TOB. Therefore, as stated in Section 1.0, the Site for the RA is that portion of the Facility from the TOB to the inland property line and covers an area of approximately 18.63 acres, divided as follows: West Parcel (4.28 acres); Central Parcel (7.76 acres); and East Parcel (6.59 acres).

However, PHSS cleanup levels differ from upland remediation goals. Riverbank soil data collected by the In-Water Group between the top of bank and MHW will be screened against upland remediation goals. If there are exceedances, the upland design team will work with the In-Water Group to assure that the riverbank restoration is protective of upland receptors.

### **2.1.2 Structures and Improvements**

There are no buildings on the Site. Indications of previous structures include remnant debris, a large concrete slab foundation, a paved roadway in the eastern portion of the Site, and several smaller concrete slabs, vaults, and foundations.

Nine groundwater monitoring wells are present on the Site, generally located along the top of bank (see Figure 2).

Per the City of Portland Geographic Information System (GIS, [www.portlandmaps.com](http://www.portlandmaps.com)), a buried City of Portland stormwater line crosses the Site near the west end of the Central Parcel. Associated with the stormwater line are three concrete manholes. The stormwater line consists of 18-inch concrete pipe between the manholes. From the last manhole to the outfall on the riverbank, the line is constructed of 30-inch concrete pipe.

### **2.1.3 Topography**

The Site is situated on a terrace created by historical filling. Overall, the topography of this terrace is relatively flat, with an elevation ranging between 30 and 45 feet (all elevations in the report refer to NAVD88 unless otherwise noted). The surface elevations generally decrease from the West Parcel (35 to 45 feet) to the Central Parcel (30 to 40 feet) and to the East Parcel (30 to 35 feet). Berms and hummocks are occasionally present on the West Parcel and the edges of the East Parcel.

Adjacent to the Site, the riverbank is generally a steep slope down to the river. The BNSF railroad embankment along the southeast perimeter of the cove rises steeply approximately 30 feet higher than the East Parcel. North of the Site, across the UPRR tracks, is a naturally formed bluff rising 50 to 60 feet above the West Parcel, 60 to 120 feet above the Central Parcel, and 120 feet above the East Parcel. This bluff rises at approximately 5H:4V adjacent to the East and Central Parcels. Near the West Parcel, the slope is approximately 10H:3V.

### **2.1.4 Vegetation and Habitat Types**

In 2015, Metro conducted a vegetation survey of the Facility that identified approximately 1,000 native trees on the Site. Figure 3 shows the general extent of native trees on the Site. Native species identified on the Site include:

- Pacific Madrone;
- Bigleaf Maple;
- Oregon Ash;
- Black Cottonwood;
- Oregon White Oak;
- Pacific Willow; and
- Scouler's Willow.

There are four major habitat types at or adjacent to the Site: shallow water, riparian forest, oak–madrone woodland, and mixed woodland.

### ***2.1.5 Surrounding Properties***

The Site is bordered on the northeast by the UPRR tracks. Farther to the northeast is a vegetated bluff. A residential area is present on top of the bluff and farther inland. Bordering the northwest side of the Site is a vacated portion of North Richmond Avenue with industrial property beyond. Toward the river, the Site is bordered by the riverbank and the surface water of the cove and Willamette River. To the southeast is an embankment for the BNSF railroad bridge over the Willamette River. On the opposite side of this embankment is the former McCormick & Baxter Creosoting Company, a federal Superfund Site (McCormick & Baxter). There is a sediment cap made of a concrete block mat and layers of sand and gravel adjacent to McCormick and Baxter that extends into Willamette Cove (see Figure 2).

### ***2.1.6 Cultural Resources***

A cultural resource survey of the Facility was conducted in 2003 (Archaeological Investigations Northwest, Inc., 2003) with the conclusion that there are no significant archaeological or historical resources identified. However, it is possible that significant resources may be encountered if future activity were to disturb the original floodplain surface and underlying native soils north and east of the 1910 shoreline. In addition, during part of the 2016 removal action, an archaeologist was on site to observe the debris encountered in one area of the Central Parcel. The archaeologist concluded that the brick and other debris encountered should not be recorded as an archaeological site.

Willamette Cultural Resources Associates (Willamette CRA) conducted a review of selected previous cultural resource works for the Site. An updated Willamette CRA review was drafted for Metro to deepen the agency's understanding of historic and cultural resources across the site to support Metro's planning process and inform site decision making. Recommendations originating from the updated study that may be applicable to the upland remedial action will be considered and addressed in RD.

### **2.1.7 Geology**

**Regional Geology.** The Site is in the southwestern portion of the Portland Basin, which consists of an elongated structural trough bounded by the Tualatin Mountains to the west, the Lewis River to the north, the foothills of the Cascade Range to the east, and the Clackamas River to the south (McFarland and Morgan, 1996 [United States Geological Survey 2470-A]). In the Portland area, the Columbia River Basalt forms the basement unit of the basin. Sediments filling the basin consist of the Troutdale Formation overlain by quaternary alluvial and catastrophic flood deposits. In localized areas, surface soils include fill placed by human activity.

The banks of the Willamette River within Portland Harbor are characterized by fill material, fine-grained flood deposits, and recent alluvium (collectively referred to as FFA) and encompass a broad range of soil textures and hydraulic properties. The FFA unit is the primary unit of importance in characterizing the interactions between upland groundwater and the river because it forms most of the river channel as well as the adjacent uplands, and most of the upland impacted soil and groundwater occurs within this unit (EPA, 2016).

**Site Geology.** The geology beneath the Site consists of fill and alluvial deposits overlying the Troutdale Formation. Early maps of the area indicate the current upland portion of the Site consisted of a strip of lowland adjacent to the current UPRR railroad tracks. Based on historical maps and photographs, fill was placed on this lowland and outward into the Willamette River prior to and concurrent with development. The thickness of the fill across the Site is generally in the range of 20 to 30 feet; however, in places, it could be up to 60 feet (such as in a former log pond on the West Parcel filled in the early 1970s).

The West Parcel consists of a mixture of roughly equal amounts of silty sand, sandy silt, and silt with some clean sand. The Central and East Parcels consist mostly of sand or silty sand. The observed soil types are consistent with the known fill history where much of the Central and East Parcels were filled in a few large events, but the West Parcel was filled in multiple small events from a variety of sources (Apex, 2019).

### **2.1.8 Existing Conditions and Site Use**

The Site is currently vacant, covered with invasive and native vegetation, and it provides habitat for opportunistic use by wildlife. The Site is not managed for any human use and is posted to prohibit trespassing. However, trespassers do come on the Site (e.g., persons experiencing houselessness, joggers/walkers, people seeking casual recreation, and anchored boaters coming ashore for various reasons).

The Site is currently zoned under the City of Portland Zoning Title 33 as an open space (OS) zone with “g” (River General) and “q” (River Water Quality) greenway overlay zones (City of Portland, 2023a). The open space zone is intended to preserve and enhance public and private open, natural, and improved park and recreational areas. Greenway regulations are also intended to protect, conserve, enhance, and maintain the natural, scenic, historical, economic, and recreational qualities of lands along Portland’s rivers. Specifically,

the “g” overlay is intended to allow public use and enjoyment of the waterfront, to enhance the river’s scenic and natural qualities, and to implement the City of Portland’s Willamette Greenway responsibilities, including a regional trail. The “q” overlay is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the 50- to 200-foot setback from the top of bank. Nearby zoning includes commercial (EG2), residential (R2 and R5), open space (OS), and industrial (IH and IG2).

The Site is included in a citywide inventory that identified scenic resources (City of Portland, 2023b) and is identified as a scenic viewpoint. The zoning map shows a public-use trail through the Site (City of Portland, 2023a). This trail is proposed as part of the North Portland Greenway Trail Alignment Plan adopted in 2013. The trail alignment was originally adopted in 1987 as part of the Willamette Greenway Trail. The segment traversing Willamette Cove is a gap in the alignment identified in the Regional Trail Strategy, which makes eliminating gaps a priority (City of Portland, 2016).

Metro is planning to develop a nature park at Willamette Cove that will provide fish and wildlife habitat, offer low-impact recreation activities, and incorporate nature-friendly amenities. The Site’s habitat and conservation objectives will be balanced with human access. Recreational opportunities will be determined after extensive Tribal and community conversations and would likely incorporate the North Portland Greenway Trail. Consistent with the ROD, a broad range of passive recreational activities, including beach access, walking, bicycling, wildlife viewing, picnicking, child play and education, swimming, fishing, non-motorized boating, and cultural interpretation may eventually be considered at the site. In addition, environmental education programs, cultural elements and interpretation, art, and information signs will be considered.

## 2.2 Remedial Design Dataset

The Port and Metro conducted an RDI in 2022 in accordance with the DEQ-approved *RDI Work Plan* (Apex, 2022). The results of the RDI were presented in the *Draft RDI Evaluation Report* (Apex, 2023a). The DEQ provided written comments on the *Draft RDI Evaluation Report* in a letter dated July 31, 2023 (DEQ, 2023), which requested a response from the Port and Metro to DEQ’s comments in lieu of a revised report. The Port and Metro provided responses to DEQ’s July 2023 comments in a letter dated October 4, 2023 (Apex, 2023b).

Two primary data types were collected during the RDI: incremental sampling methodology (ISM) samples and 5-point composite samples. The decision units (DUs) sampled during the RDI are shown on Figure 4. The RDI data will be used to prepare the remedial design. The data are presented in Tables 2a through 5b in the RDI report (Apex, 2023a). Copies of these tables are included in Appendix A (edited to account for changes in the arsenic remediation goal).

There is inherent uncertainty in environmental data. Uncertainty in the RDI data was evaluated using replicate sampling for approximately 20 percent of the DUs. Replicate data were evaluated in Appendix I of the RDI report (Apex 2023a). Data variability was determined to be “good” or “very good” (i.e., variability was sufficiently low that a data adjustment was not recommended) except for the following:

West Parcel: mercury, total PCBs  
Central Parcel: dibenzofuran, HPAHs, LPAHs, cPAHs, and total PCBs  
East Parcel: antimony, copper, lead,

Uncertainty in the data will be addressed during design as follows. For DUs where replicate data are available, the maximum value of the replicates in the DU will be used for all chemicals of concern (COCs) to evaluate that DU. For the remaining DUs, uncertainty will be evaluated for the COCs listed above using adjusted concentrations. The adjusted concentrations will be calculated by adjusting the measured concentration upward by the amount of the greatest relative standard deviation for the corresponding COC for any replicate within the corresponding parcel. These adjusted concentrations will be used as one of several lines of evidence (to also include relative exceedance, exceedances in adjacent DUs, location relative to proposed riverbank layback, relative risk reduction, planned cap thickness) to supplement the excavation evaluation.

## **2.3 Nature and Extent of Constituents of Concern**

### **2.3.1 Nature and Extent Summary**

The goal of the RD investigation was to laterally and vertically (to a depth of 3 feet) delineate COCs exceeding relevant screening levels. Figures summarized the screening of the RDI data for each sample and receptor were presented in Appendix G of the RDI report (Apex, 2023a). Copies of these figures are included in Appendix A (edited to account for changes in the arsenic remediation goal and correct minor errors). The results of the sampling described above demonstrated the following:

- COCs exceeding preliminary remediation goals (PRGs) in soil extend laterally throughout the Site;
- In most DUs, COCs exceeding PRGs in soil extend at least to the depth of sampling during this investigation (3 feet below ground surface [bgs]);
- Except for low detections in a few samples (maximum exceedance ratio of less than 1.2), COC concentrations in soil beneath the concrete slabs on the East Parcel are below PRGs;
- Primary ecological risk drivers are total dioxins/furans toxic equivalent (D/F TEQ), mercury, and lead on all parcels and polychlorinated biphenyls (PCBs) on the West Parcel. Total D/F TEQ and mercury ecological hot spots are present on the Central and East Parcels, and PCBs, mercury, and chromium ecological hot spots are present on the West Parcel. One replicate sample on the Central Parcel was found to be at the lead ecological hot spot level; and
- Primary human health risk drivers are total D/F TEQ (all parcels) and carcinogenic polycyclic aromatic hydrocarbons (cPAHs; Central Parcel). Based on the RDI data, there are no human health hot spots remaining on the Site.

### 2.3.2 Vertical Concentration Trends

Based on historical development and site use presented in the remedial investigation (Hart Crowser, 2003), a general model for vertical contaminant trends was developed and summarized as follows:

- The East Parcel and much of the Central Parcel were filled early in the 20th century, prior to significant industrial development in Portland Harbor. These fills were sourced from dredge sands and possibly fill from development of the adjacent BNSF cut/embankment. Because these fills were placed prior to industrial development, it is expected that the fill materials were not contaminated at the time of placement;
- The west end of the Central Parcel was only partially filled in the original site development. The timing of filling to present grade is uncertain, but the upper portions of this area were likely filled after industrial operations began;
- Some portions of the central area of the Central Parcel were disturbed after filling as evidenced by a small area of brick debris containing dioxins/furans to depths of about 5 feet (excavated during the 2015/2016 removal action);
- Much of the West Parcel was filled in the 1970s using fill sourced from multiple industrial facilities that included impacts from COCs; and
- Releases during historical site use would likely be associated with surface spills or surface deposition, and the COCs (metals, semi-volatile organic compounds, PCBs, and dioxins/furans) are relatively immobile.

Based on this historical summary, roughly the eastern half of the Site likely has COC concentrations that decrease with depth. Expected concentration trends in the west portion of the Central Parcel are uncertain, and the West Parcel likely does not have clear concentration trends within the upper 20 to 30 feet.

The RDI data were reviewed to evaluate vertical concentration trends. The analysis focused on locations with relatively higher concentrations, so the data set was selected as follows.

- Each DU has a data set consisting of three data points (corresponding to the three depths sampled) for each COC. There are 15 COCs, but high molecular weight polycyclic aromatic hydrocarbons (HPAHs), low molecular weight PAHs (LPAHs), and cPAHs were evaluated together, for a total of 13 COCs assessed. Each DU except DU-41 (East Parcel soil berm) was evaluated for a total of 43 DUs. This gives a total of 559 potential data sets to evaluate (13 COCs at each of 43 DUs).
- Data sets where all three depths had a COC concentration that was either less than twice the detection limit or below the DEQ default background concentration were excluded from the evaluation. Just over half of the data sets met those criteria, leaving 277 data sets to be evaluated.

Each data set was plotted (concentration versus depth) and visually assessed for a vertical concentration trend (each data set consists of three data points, insufficient for a more rigorous statistical analysis) with results summarized below by Parcel and COC.

| Parcel  | Portion of Data Sets Showing Decreasing Concentration with Depth |                      |      |         |      |      |      |
|---------|------------------------------------------------------------------|----------------------|------|---------|------|------|------|
|         | All COCs                                                         | All Risk Driver COCs | Lead | Mercury | D/F  | PAHs | PCBs |
| West    | 59%                                                              | 52%                  | 33%  | 100%    | 67%  | --   | 33%  |
| Central | 92%                                                              | 95%                  | 93%  | 94%     | 100% | 94%  | --   |
| East    | 71%                                                              | 86%                  | 40%  | 100%    | 100% | --   | --   |

Overall, 80 percent of the data sets show a decreasing concentration with depth, strongly supporting that COC concentrations decrease with depth. The Parcel results are consistent with the Site history discussion above where it was concluded that the Central and East Parcels are likely to show decreasing contamination with depth whereas the West Parcel may not. The relationship is even stronger when focusing on the primary risk drivers on the Central and East Parcels where (excluding lead on the East Parcel that has a limited data set) 94 to 100 percent of the data sets show decreasing concentrations with depth. Additionally, DU-14 is entirely within the area of the 2015 removal action (where surface soils were removed and replaced with clean topsoil). Excluding DU-14 from the analysis, 100 percent of risk driver COCs on the Central Parcel demonstrate a decreasing concentration with depth.

### ***2.3.3 Preliminary Assessment of On-Site Borrow Potential***

As discussed in Section 3, the site will be capped on average with between 2 and 3 feet of clean soil, therefore approximately 60,000 to 90,000 cubic yards of clean soil will be needed (2 to 3 feet covering 18.6 acres). This clean soil will be obtained by importing from an off-site source (imported fill) and/or from an on-site source (on-site borrow) if possible. For this project, “clean” is defined as concentrations below remediation goals (RGs; see Section 3.2.2) for Site COCs and concentrations below DEQ default Clean Fill Levels (DEQ, 2019) for other chemicals.

The discussion in Section 2.3.2 indicates that cleaner soil may be found at depth on the eastern half of the Site, suggesting that soil suitable for use as fill may be present on the Site. Two areas are being considered for significant excavation: layback of the riverbanks and beneath the concrete slabs on the East Parcel. Below is a preliminary assessment of the potential volume of on-site borrow available for use as fill conducted by comparing the RDI soil data in these areas to RGs (see Section 3.2.2). This preliminary assessment suggests that there is a significant volume of on-site borrow potentially suitable for re-use. Additional sampling is being evaluated to characterize potential on-site borrow.

**Riverbank Layback.** Bank layback is being evaluated by the In-Water Group and has not yet been established. However, where there is sufficient room for layback, target slopes would likely be on the order of 5:1 (horizontal:vertical) for the lower slopes and 3:1 for the upper slopes. The eastern 700 feet of the

Central Parcel has sufficient widths for this type of layback and would result in moving the top of slope landward on the order of 70 feet. That area would generally correspond to DU-16, DU-19, and DU-26. The data for the 2- to 3-foot depth from these DUs were compared to RGs (Tables 1, 2 and 3), and mercury, lead, zinc, PCBs, and dioxin/furans exceeded RGs at least once. The data for these COCs were used to extrapolate concentrations with depth, and concentrations are predicted to be less than RGs below a depth of less than 4 feet. Excluding the top 4 feet of soil, a 70-foot bank layback over a distance of 700 feet could generate 18,000 cubic yards of clean soil potentially suitable for re-use.

**East Parcel Concrete Slabs.** The concrete slabs on the East Parcel are represented primarily by DU-39 and DU-40. In these DUs, only one sample exceeds RGs (selenium exceeds the RG by a factor of 1.2 in sample DU-39 [1-2].) In general, all of the soil in these DUs would be potentially suitable for re-use. Using assumptions for cut slopes similar to above for bank layback, excavation in the area of the concrete slabs could generate on the order of 20,000 cubic yards of clean soil potentially suitable for re-use.

## **2.4 Data Gap Identification**

Based on the evaluation of the RDI data discussed above, the remaining data gaps include:

- Vertical delineation of COCs beyond 3 feet in areas proposed for 3 feet of excavation;
- Vertical delineation of COCs beneath the soil berms on the East Parcel (DU-41); and
- Vertical delineation of COCs in potential borrow areas beneath concrete slabs and along the riverbank.

## **3.0 Performance Standards and Design Elements**

### **3.1 Preliminary Remedial Design**

The planned remedy is consistent with the ROD and generally consists of removal and off-site disposal of soil with COCs above hot spot levels or posing an excess risk to humans followed by installation of a cap over remaining soil exceeding ecological risk levels. The ROD does not require off-site disposal of excavated dioxin/furan ecological hot spots, but to the extent practicable, those hot spots were to be excavated and placed into a consolidation cell. With Metro exercising the contingency remedy, materials that were planned for the consolidation cell will be disposed of off-site. However, based on the RDI data, a majority of the excavation is being driven by ecological hot spots for mercury.

Based on evaluation of the data collected during the RDI, excavation depths (where needed) are anticipated to range from 1 to 3 feet bgs. The thickness and composition of the soil cap will vary depending on the residual contamination. Site restoration will be conducted in coordination with the Metro master plan currently under development and the in-water remedial action.

## **3.2 Performance Standards**

### **3.2.1 Remedial Action Objectives**

RAOs are the objectives or goals for the RA established in the ROD (DEQ, 2021) to achieve protection for human and ecological receptors. The ROD identified the following RAOs:

1. Prevent exposure of human receptors (recreational/park user, transient trespasser, construction worker) to soil containing COCs at concentrations exceeding individual and cumulative acceptable risk;
2. Prevent exposure of ecological receptors (mammals, birds, invertebrates, plants) to soil containing COCs at concentrations exceeding individual and cumulative acceptable risk levels;
3. Remove or treat soil hot spots of contamination to the extent feasible and practicable; and
4. Prevent further migration of contaminated upland soil to the river, to the extent practicable.

### **3.2.2 Remediation Goals (RGs)**

The RG<sup>3</sup> is defined as the soil concentration corresponding to the acceptable risk level (or the background concentration if the acceptable risk level is less than background) for the corresponding COC, receptor, and exposure area. The RG values and the use of RGs in RD are discussed below.

Receptor-specific risk-based concentrations (RBCs) were developed in the baseline risk assessments (Formation Environmental, 2013 and 2014) and the feasibility study (Apex, 2019). The lowest RBC (or the background concentration, whichever is greater) for each COC was selected as the PRG for that COC. PRGs are conservative screening levels used during the remedial design investigation to ensure that data collected will adequately characterize the nature and extent of contamination for use in RD. The PRGs correspond to the lowest RBC for ecological receptors and the lowest RBC for human receptors. The RBCs and PRGs are presented in Tables 1 and 2 (adopted from Tables 3 and 6 of the ROD with arsenic and chromium revised to default background per direction of DEQ)<sup>4</sup> for human and ecological receptors, respectively. Table 3 presents the RGs.<sup>5</sup> RGs will be used in RD as follows:

- Immobile receptors (plants, invertebrates): For immobile receptors, soil concentrations representing DUs of approximately 0.5 acres will be compared to RGs. RD will define removal or risk management

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<sup>3</sup> At the request of DEQ, the term Cleanup Level or CUL, as used in previous documents and correspondence, has been changed to Remediation Goal and the two terms are interchangeable.

<sup>4</sup> DEQ comment letter on the Remedial Design Investigation Evaluation Report (RDI Report, Apex March 22, 2023) dated July 31, 2023, General Comment number 4. DEQ comment letter on the Draft Basis of Design Report (draft BODR, Apex September 27, 2024) dated February 18, 2025.

<sup>5</sup> RBCs that are the basis for the RGs were developed prior to EPA's most recent updates to evaluation of lead risk for human health (based on acceptable blood lead concentrations in children). The RD will demonstrate that the remedial action will adequately address lead to meet EPA protective levels.

actions in each DU where a COC concentration equals or exceeds a RG for immobile receptors. The RG for each COC for immobile receptors is the lower of the plant or invertebrate RBC (or the background concentration, whichever is greater) for that COC.

- Mobile receptors (birds, mammals, humans): For mobile receptors, soil concentrations representing DUs of approximately 0.5 acres will be screened against RGs. If concentrations are lower than RGs then the risks are acceptable. If any concentrations exceed RGs, soil concentrations representing exposure areas (exposure point concentrations) will be compared to RGs for the receptor(s) with screening exceedances. The exposure areas evaluated will be the West, Central, and East Parcels, corresponding to the primary exposure areas used in the baseline risk calculations (Formation Environmental, 2013 and 2014). The exposure point concentration for a parcel will be calculated as the 90 percent upper confidence limit of the mean (90 UCL) of the applicable data from the DUs within that parcel. As a result, for mobile receptors, it is possible for an individual DU COC concentration to exceed the RG but the exposure point concentration for the parcel to be less than the RG. In that event, no risk management would be required for that COC/receptor on that parcel. RD will address removal or risk management actions on each parcel where a COC exposure point concentration equals or exceeds a RG for mobile receptors (generally focusing on addressing the DUs with higher COC concentrations until the risk at the parcel is acceptable). The RG for each COC for mobile ecological receptors is the lesser of the bird or mammal RBC (or the background concentration, whichever is greater) for that COC. For human health, the RG for each COC is the lowest of the human receptor RBCs (or the background concentration, whichever is greater) for that COC (i.e., the RBCs for the park user receptor).

### **3.2.3 Hot Spots**

For soil, a hot spot exists if the Site presents an unacceptable risk and if the contamination is highly concentrated, highly mobile, or cannot be reliably contained. Hot spots were evaluated in the feasibility study (Apex, 2019), and only high-concentration hot spots were identified. For all receptors, hot spots are evaluated on a point-by-point basis. Therefore, soil concentrations representing DUs of approximately 0.5 acres will be compared to hot spot levels. The RD will define removal of all human health hot spots and ecological non-dioxin/furan hot spots. Dioxin/furan hot spots for ecological receptors may be managed with a minimum 3-foot cap if removal is not practicable. The hot spot level used in the RD is the lowest of the hot spot levels for any receptor. Table 3 lists the hot spot levels and corresponding receptors that define the hot spot levels.

## **3.3 Design Elements**

Remedial design elements are described in the following sections. Each of these elements will be defined in detail in the drawings and specifications that will be prepared during RD (see Section 6).

### **3.3.1 Site Clearing**

Except in locations where native trees may be preserved (discussed below), areas targeted for excavation or capping will be cleared of vegetation and debris. This section discusses design requirements for site clearing.

**Debris Removal.** Debris on the Site consists primarily of concrete foundations (including metal reinforcing bars) associated with historical buildings but may also include wood pilings and smaller debris such as brick or wood, metal, glass, and ceramic fragments. Debris will be removed to the depth of the proposed excavation. Debris extending below the excavation depth may be removed or cut off at the limits of the excavation. Smaller debris (on the order of 2 feet in the longest dimension) may be removed with excavated soil. Larger debris will be removed separately and recycled if it can be adequately decontaminated. Otherwise, debris will be disposed of with the contaminated soil. During debris removal, protocols described in the Oregon SHPO Archaeological Inadvertent Discovery Plan template will be followed.

**Invasive Species Removal.** Invasive species, including roots, will be cleared from the entire Site and disposed of in an off-site landfill. In areas targeted for excavation, root removal may be conducted in conjunction with excavation.

**Native Tree Preservation.** During the ROD comment period, DEQ received substantial support from the public to preserve native trees. In the 2015 removal action, special techniques were used to preserve native trees within the removal action area. These special techniques, implemented within the driplines of the trees and intended to preserve tree roots, limit excavation depths and residual soil cover thicknesses to approximately 6 inches. Therefore, given the widespread presence of COCs exceeding RGs and/or hot spot levels to depths greater than 6 inches, tree preservation would have a corresponding increase in residual risk. During RD, native tree preservation will be evaluated on a case-by-case basis in DUs where the ecological hazard index is less than 10. Following this guideline will result in very limited (if any) preservation of native trees.

**Woody Debris Salvage.** The design will evaluate potential for salvage of large trees cleared from the Site for re-use in habitat enhancement or other site features, if deemed safe. At a minimum, some or all the native trees cleared from the Site without root balls will be stockpiled for reuse in upland restoration or as in-water large woody debris. (The number needed for salvage will be determined during design, including consultation with the In-Water Group.) If it is desired to salvage trees with intact root balls, all contaminated soil must be removed from the root ball. The design will evaluate potential for salvage of large trees that include root balls.

**Cleared Vegetation Disposal.** Disposal of the cleared vegetation that does not contain invasive species or contaminated soil will be at the discretion of the contractor but may include chipping for on-site use as mulch or disposal at a composting facility. Vegetation containing soil (e.g., grubbed roots) or invasive species will be disposed of in an off-site landfill.

### **3.3.2 Soil Excavation**

The lateral and vertical excavation of soil will be designed to remove soil exceeding hot spots or human health RGs as described in this section. The input data for the excavation design will be the RDI data for Layers 1, 2, and 3 in each DU. Layers 1 through 3 correspond to the 1-foot-thick layers sampled as part of the RDI: Layer 1 is the 0- to 1-foot depth; Layer 2 is the 1- to 2-foot depth; and Layer 3 is the 2- to 3-foot depth.

#### **3.3.2.1 Human Health<sup>6</sup> and Ecological Hot Spot Excavation**

Except for the special cases discussed further below, each layer that has a soil concentration that exceeds a hot spot level will be targeted for excavation over the full lateral extent of the DU and the full 1-foot thickness of the layer. Table 4 presents the preliminary hot spot excavation evaluation using the approach described in this section.

**Dioxin/Furan Ecological Hot Spots.** For any layer where the only hot spot exceedance is dioxin/furans for ecological receptors, removal of the hot spot will be evaluated considering multiple lines of evidence such as relative exceedance, exceedances in adjacent DUs, location relative to proposed riverbank layback, and relative risk reduction. If removal is not practicable, the DU will be capped with at least 3 feet of soil.

**Removal of Soil Piles.** Soil piles are present on several DUs, primarily on the East Parcel. Depending on where individual increments were located relative to the soil piles, these soil piles may or may not have been part of the incremental sample collected on these DUs during the RDI. Unless otherwise demonstrated to be acceptable by future sampling, above-grade piles will be removed in their entirety. Excavation depths for the DUs beneath soil piles will begin at the level of the adjacent surrounding grade.

At least half of DU-41 is covered by soil piles, so the RDI data for DU-41 is not considered to be representative of the underlying soil. Following removal of the soil pile on DU-41, soil will be excavated to the planned excavation of the adjacent DU, followed by verification sampling.

**Partial Layer Excavation.** Although the ISM samples collected in the RDI are representative of each 1-foot layer across the entire DU, there may be some locations where contamination levels do not extend through the full layer depth. As discussed in Section 2.3.3, concentrations for COCs generally decrease with depth on the Central and East Parcels. In these areas, vertical concentration trends will be used to interpolate depths of hot spots that are intermediate between the 1-foot layers. DUs that are candidates for partial excavation are summarized below and will be refined in the 30% design. If partial layer removal is carried beyond 30% design, supplemental RDI sampling will be conducted prior to final design to confirm locations

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<sup>6</sup> Based on the RDI data, there are no human health hot spots remaining on the Site. However, if subsequent data collection (e.g., verification sampling) identifies a human health hot spot, this process will be used to address that hot spot.

for partial excavation. Based on an evaluation of the soil data, the following layers are target candidates for partial excavation:

- DU-16, Layer 3
- DU-19, Layer 3
- DU-21, Layer 3
- DU-24, Layer 2
- DU-28, Layer 3

These layers are in the Central Parcel and excavation depths in these layers are driven by mercury concentrations. As noted in Section 2.2, based on the replicate data, the variability of mercury data is acceptable in the Central Parcel, so no adjustment of mercury data is warranted to be evaluated for partial layer excavation.

**Buried Hot Spots.** Table 4 shows that there are three DUs (DU-1, DU-6, and DU-30) with hot spots that are overlain by soil that does not exceed hot spot levels. Consistent with the ROD, these non-dioxin hot spots will be removed, but overlying soil that does not exceed hot spot levels will be replaced as fill within the DU following hot spot removal.

### *3.3.2.2 Additional Excavation to Address Excess Human Health Risk*

Additional excavation will be conducted beyond hot spot removals if necessary to achieve acceptable risk levels for human health. The risk remaining after hot spot removals (i.e., the residual risk) will be evaluated using the data corresponding to soil that will remain on Site after the hot spot removals. Human health risk (and therefore the need for additional excavation) will be evaluated separately for the West, Central, and East Parcels. Additional excavation to address human health risk will be evaluated as follows.

- **Step 1: Determine if There Are Any Residual Human Health RG Exceedances.** The residual COC concentrations for each DU are compared to the human health RGs. If there are no exceedances, then no additional excavation is needed.
- **Step 2: Evaluate the Residual Parcel Exposure Point Concentrations.** If there is at least one RG exceedance on a parcel, the residual human health risk for that parcel will be estimated for that COC using procedures consistent with the baseline risk assessment and DEQ guidance considering ISM data evaluation guidance, as follows:
  - o Human health risks will be calculated separately for each parcel that has an RG exceedance.

- o The composite data will be used as if the composite concentrations are representative of the conditions beneath the concrete slabs. Verification sampling using ISM methods will be conducted during remedial action to verify that human health risks are acceptable.
- o For DUs where the planned hot spot excavation is 3 feet, the Layer 3 data will be used as a surrogate for the residual concentration.
- o For partial excavation layers, the concentration for the partial excavation layer will be used as a surrogate for the residual concentration for the remaining portion of the layer.

If the resulting risks are less than or equal to the acceptable risk levels (hazard quotient of 1.0 for non-carcinogens or excess cancer risk of  $1 \text{ E-}06$  for carcinogens), no further excavation is needed to address human health risk. The risk evaluation will consider multiple lines of evidence including location of risk drivers relative to planned bank layback and if data driving excess risk is from remaining soil or Layer 3 surrogate data. For those COCs/parcels that exceed acceptable risk levels, the evaluation will proceed to Step 3.

- **Step 3: Assess Additional Excavation Needed to Address Excess Human Health Risk.** For those COCs that result in exceedances of acceptable risk levels, additional excavation will be proposed, and the residual risk evaluation will be refined using the following procedure:
  - o The DU/layer with the greatest exposed leave surface residual COC concentration will be targeted for removal.
  - o Residual risk estimates will be updated using the same procedure as Step 2.
  - o This process of removing the next greatest COC concentration and updating the residual risk calculation will be repeated as needed until the residual risk is acceptable.
- **Step 4: Assess Additional Excavation Needed to Address Localized Excess Human Health Risk.** The risk evaluations conducted in Steps 2 and 3 will be conducted consistent with the baseline risk assessment (Formation 2013), evaluating the risk for exposure areas corresponding to the West, Central, and East Parcels. While these Parcels generally correspond to the historical site uses, in some cases (e.g., the former coal dock near the West/Central Parcel boundary), historical activities may have been focused in smaller areas or crossed over parcel boundaries. Additionally, future park activities could be focused in smaller areas. Risks calculated solely based on exposure areas corresponding to the parcels could obscure potential risks associated with these smaller areas or areas that overlap parcel boundaries. To assess these potential localized risks, residual COC concentrations (concentrations remaining after hot spot excavations and excavations to address human health risk described above) will be screened against human health RGs. Multiple lines of evidence (to include at a minimum the relative exceedances, locations of exceedances compared to proposed future park uses, and cap thicknesses needed to address ecological residual risk) will be evaluated to identify if further excavation is warranted.

- Step 5: Assess Uncertainty Related to Shallow Surface Soil (0 to 1 foot) Excess Risk. The risk evaluations in Steps 2 and 3 will be conducted consistent with the baseline risk assessment, evaluating the risk for exposure to surface soil defined as a depth range of 0 to 3 feet bgs. As discussed in Section 2.3.2, COC concentrations in soil generally decrease with depth on the Central and East Parcels. To assess potential uncertainty in residual risks, the residual data associated with the top 1 foot (from the bottom of the proposed excavation) will be estimated. A practicability evaluation, comparing the marginal risk reduction to the effort associated with additional excavation, will be conducted to identify if further excavation of surface soil is warranted.

Using the procedure described in this section, Tables 5 and 6 present the preliminary evaluation of residual human health risk. As summarized below, the evaluation concluded that residual human health risk is acceptable and no additional excavation is needed.

- West Parcel – D/F TEQ and cPAHs each exceeded human health RGs at least once on the West Parcel. Estimated excess cancer risks for D/F TEQ were 1 E-06 for both the 0-3 feet and 0-1 foot depth ranges. Estimated excess cancer risks for cPAHs were 8 E-07 for the 0-3 feet depth range and 6 E-07 for the 0-1 foot depth range. Because risks are equal to or less than the 1 E-06 acceptable risk level, no additional excavation is needed to address human health risk on the West Parcel.
- Central Parcel – D/F TEQ and cPAHs each exceeded human health RGs at least once on the Central Parcel. Estimated excess cancer risks for D/F TEQ were 2 E-06 for the 0-3 feet depth range and 3 E-06 for the 0-1 foot depth range. Estimated excess cancer risks for cPAHs were 2 E-06 for both the 0-3 feet and 0-1 foot depth ranges. For both COCs and both depth ranges, cancer risk in excess of 1 E-06 results from a single DU (DU-15 for D/F TEQ and DU-11 for cPAHs). In both cases, the planned hot spot excavation is 3 feet and there is no residual soil data. The risk calculations used Layer 3 data as surrogates for the residual concentrations in these DUs. In addition, DU-15 is adjacent to the riverbank and approximately 80 percent of the DU is within the planned bank layback. Given that the driver of the excess cancer risk is in locations where the planned excavation is 3 feet (and some is within the bank layback area), no additional excavation is planned to address human health risk on the Central Parcel. Verification sampling during construction will be conducted in areas where the excavation is 3 feet deep. Those results will be used to update the residual risk estimates.
- East Parcel – Arsenic, D/F TEQ, and cPAHs each exceeded human health RGs at least once on the East Parcel. Exposure point concentrations for arsenic are less than the default background for both depth ranges, so no additional excavation is needed to address arsenic. Estimated excess cancer risks for D/F TEQ were 1 E-06 for the 0-3 feet depth range and 2 E-06 for the 0-1 foot depth range. Estimated excess cancer risks for cPAHs were 2 E-07 for the 0-3 feet depth range and 3 E-07 for the 0-1 foot depth range. The exposure area excess cancer risks (1 E-06 for D/F TEQ and 2 E-07 for cPAHs) are equal to or less than the 1 E-06 acceptable risk level, so no additional

excavation is needed to address human health risk. Considering the uncertainty associated with COCs in the top 1 foot, D/F TEQ exceeds the acceptable risk level by a factor of two resulting from low exceedances of the RG over much of the East Parcel. Approximately 4,600 cubic yards of additional excavation would be needed to reduce the excess risk associated with the top 1 foot of the East Parcel from 2 E-06 to 1 E-06. Given that the overall exposure area residual risk is acceptable, this significant additional effort (nearly 10 percent increase in the total Site excavation volume) is not warranted for this small marginal risk reduction.

To assess potential localized excess human health risk, Table 7 presents human health hazard quotients for each DU with residual soil data (data representing soil layers remaining after excavation). The hazard quotients are summarized on Figure 5. Hazard quotients of one or greater ranged from 1.0 to 4.0.

### *3.3.2.3 Additional Excavation to Address Higher Relative Ecological Risk*

The ROD requires that “soil with higher risk levels relative to plants and animals” be excavated. To evaluate potential additional excavation to address this requirement, rank-order curves of hazard quotients (HQs) and hazard indexes (HIs) were prepared for plants, invertebrates, birds, and mammals. Figures 6A and 6B show the HQs and HIs, respectively. On the figures, different symbols are used for layers targeted for no excavation, partial excavation, or full excavation. These figures illustrate that all layers with higher relative HQs or HIs (i.e., layers that fall above the knee of the rank-order curve) are targeted for full excavation. In fact, the first layer that is not targeted for full removal falls well below the knee of the curve for all receptors. Therefore, no additional excavation is needed to address higher relative/cumulative risks for ecological receptors. These figures will be updated as needed during RD.

### *3.3.2.4 Consideration of Data Uncertainty in Excavation Design*

Section 2.2 identified COCs with unacceptable variability in replicate data. In Table 8, COCs with high variability were initially screened by comparing the maximum adjusted concentration to human health and ecological hot spot levels and human health RGs. Data representing layers already targeted for removal and replicate samples that were already adjusted to the greatest replicate value were not included. The following COCs exceeded screening levels and are further evaluated below:

Human Health and Ecological Hot Spots: mercury (West Parcel)

Human Health RGs: total PCBs (West Parcel); cPAHs (Central Parcel)

**Hot Spot Uncertainty Assessment.** Seven layers on the West Parcel have adjusted mercury concentrations that exceed the mercury hot spot level: DU-2 (1-2), DU-6 (0-1, 2-3), DU-7 (1-2, 2-3), and DU-9 (1-2, 2-3). The hot spot exceedance factors range from 1.0 to 1.6. Residual concentrations in adjacent DUs have hot spot exceedance factors ranging from 0.5 to 0.9, and in adjacent DUs that will be excavated to 3 feet, hot spot

exceedance factors in Layer 3 range from 1.7 to 4.0. DU-6, DU-7, and DU-9 are adjacent to the riverbank; bank layback will remove 50 to 70 percent of these DUs. All the DUs with adjusted mercury concentrations above the hot spot level are targeted for a 3-foot cap. Given that the adjusted residual risks in these DUs are within the likely range of residual risks in surrounding DUs, much of the potential hot spot areas will be removed by the bank layback, and that the risk management cap will be 3 feet thick, no additional hot spot excavation is planned as a result of data variability.

**Human Health Risk Uncertainty Assessment.** Total PCBs on the West Parcel and cPAHs on the Central Parcel exceeded human health screening levels for adjusted concentrations. In Table 9, residual risks are calculated for these two COCs using adjusted concentrations. Residual risk for PCBs on the West Parcel is 4 E-07, less than 1 E-06 so no additional excavation is proposed. On the Central Parcel, the residual cPAH risk is 2 E-06, slightly above 1 E-06. However, the acceptable risk exceedance is driven by higher concentrations in Layer 3 data that is targeted for removal. No additional excavation is planned based on this data uncertainty. Verification data will be used during construction to confirm that residual human health risks are acceptable prior to capping.

#### *3.3.2.5 Preliminary Excavation Plan*

Using the excavation design processes described in Sections 3.3.2.1 through 3.3.2.4, Figure 7 presents the preliminary excavation plan. This excavation plan will be refined in RD, including potential adjustments for constructability and park planning. Regardless, the excavation planning for the BODR or RD is the initial targeted excavation only; verification sampling and additional excavation will be conducted as needed to achieve the performance standards defined in Section 3.2. Verification sampling is discussed in Section 4.2.

Preservation of native trees will be evaluated in RD.

Based on the preliminary excavation depths presented in Tables 4 through 9 and shown on Figure 7, Table 10 presents excavation volume calculations. The estimated soil removal volume is 47,700 cubic yards.

#### *3.3.2.6 Post-Excavation Residual Risk Screening*

Based on the preliminary excavation depths presented above, this section summarizes the residual risks remaining following excavation and prior to capping. Final residual risks will be lower resulting from the risk management provided by the cap.

**Human Health.** Residual human health exposure point concentrations are evaluated in Tables 5 and 6. Those concentrations and the corresponding residual excess cancer risks are summarized below.

## REVISED DRAFT

| COC     | Human Health RG (mg/kg) | Post-Excavation Exposure Point Concentrations in mg/kg |                |             | Post-Excavation Residual Human Health Excess Cancer Risk |                |              |
|---------|-------------------------|--------------------------------------------------------|----------------|-------------|----------------------------------------------------------|----------------|--------------|
|         |                         | West Parcel                                            | Central Parcel | East Parcel | West Parcel                                              | Central Parcel | East Parcel  |
| Arsenic | 8.8                     | NA <sup>7</sup>                                        | NA             | 5.4         | NA                                                       | NA             | < Background |
| D/F TEQ | 1.5E-05                 | 1.6E-05                                                | 3.3E-05        | 2.2E-05     | 1E-06                                                    | 2E-06          | 1E-06        |
| cPAHs   | 0.55                    | 0.45                                                   | 0.88           | 0.12        | 8E-07                                                    | 2E-06          | 2E-07        |

The acceptable excess risk level for individual COCs for human health is 1 E-06. The excess risk levels summarized above are equal to or less than the acceptable risk level except for D/F TEQ and cPAHs on the Central Parcel. However, as discussed in Section 3.3.2.2, excess risk greater than 1 E-06 is driven by one DU where Layer 3 data (representing soil that will be excavated) was used as a surrogate because there is no residual data. The acceptable risk level for cumulative risk is 1 E-05. Summing the risks for individual COCs results in cumulative risk levels of less than 1 E-05. The overall conclusion is that residual human health risk will be acceptable, but verification data collected during remedial action will be collected to verify this conclusion.

**Ecological Risk.** Residual ecological risk following excavation (and prior to capping) is evaluated in terms of HQs and HIs for each ecological receptor in Tables 11 through 14. Appendix B presents figures showing residual HQs and HIs by depth interval for each ecological receptor. These results are summarized on Figures 8 through 17. Figures 8 through 15 show maximum residual HQs and HIs in each DU for each ecological receptor. Figures 16 and 17 summarize the maximum HQ and HI for any ecological receptor. Residual ecological risk is summarized below for each receptor.

- Plants (Figures 8 and 9) – Residual risks for plants are acceptable for most of the Site. On the west end of the West Parcel and the east end of the East Parcel HQs range from 1.0 to 3.3 (data are limited on the Central Parcel). HIs are less than 10. The primary residual risk drivers for plants are copper and zinc with contributions from lead and mercury, and antimony.
- Invertebrates (Figures 10 and 11) – HQs for invertebrates range from 1.0 to 4.3 throughout most of the Site (data are limited on the Central Parcel). HIs are less than 10. The primary residual risk drivers for invertebrates are metals (mercury, zinc, and copper).

<sup>7</sup> NA = Not applicable. The maximum detected concentration on the parcel is less than the background concentration so an exposure point concentration was not calculated.

- Birds (Figures 12 and 13) – HQs for birds range from 1.0 to 9.9 throughout most of the Site (data are limited on the Central Parcel). HIs in most areas range from 1.1 to 17. The primary residual risk driver for birds is mercury on the West and Central Parcels and lead on the East Parcel.
- Mammals (Figures 14 and 15) – HQs for mammals range from 1.2 to 10 throughout most of the Site (data are limited on the Central Parcel). HIs in most areas range from 1.3 to 14. The primary residual risk driver for mammals is D/F TEQ with contributions from PCBs and PAHs (West Parcel), dibenzofuran, and metals (copper, zinc, nickel, lead, and antimony).

Figures 16 and 17 summarize overall residual ecological risk, showing the maximum HQ and HI (respectively) on each DU for any ecological receptor.

These excess ecological risks will be managed by caps as discussed in the next section.

### **3.3.3 Capping**

After soil removal is completed as described in Section 3.3.2, soil caps will be installed at locations that have unacceptable ecological residual risk. Figure 18 presents typical sections showing the site restoration and cap types to be used. In general, caps will consist of soil with a thickness of 1 or 3 feet (inclusive of the surface layer that will consist of a minimum of 1 foot of topsoil planted with native grasses, shrubs, and trees). Cap thickness will be established as follows:

- Hazard index less than 1: No cap. These areas will be restored with 1 foot of topsoil planted with native grasses, shrubs, and trees (see Detail A, Figure 18).
- Hazard quotient equal to or less than 5 and hazard index equal to or less than 10: 1-foot-thick cap (see Figure 18, Detail B).
- Hazard quotient greater than 5 or hazard index greater than 10: 3-foot-thick cap with demarcation layer defining the boundary between residual soil and the cap (see Figure 18, Detail C). The demarcation layer will likely consist of highly visible geogrid plastic product (to be refined during 60% design). It is imperative that the future underlying contaminated soil left in place is easily identifiable in perpetuity.

Using the cap design criteria described above, Table 15 presents the preliminary evaluation of caps needed to address residual ecological risk. Figure 19 presents the preliminary capping thicknesses. This capping plan will be refined in the RD, including potential adjustments for constructability, preservation of native trees, or habitat considerations. Within the drip line of preserved native trees, if any, the cap will consist of topsoil with a thickness corresponding to the depth of excavation within the tree drip line. That thickness is anticipated to be on the order of 6 inches.

Based on the preliminary cap design in Table 15, the estimated cap/restoration soil volume is 70,000 cubic yards (44,000 cubic yards of general fill and 26,000 cubic yards of topsoil).

Verification sampling will be conducted during site excavation. These data, together with RDI data representing soil remaining after excavation, will be used to confirm or adjust cap thicknesses using the procedure above. Verification sampling is discussed in Section 4.2.

The caps will be managed through periodic monitoring and maintenance in accordance with a Cap Inspection and Maintenance Plan and a contaminated media management plan that will be developed as part of the intermediate (60%) RD (see Section 4.4).

### **3.3.4 Imported Fill and On-Site Borrow**

Soil used for site restoration (capping materials and topsoil) will be obtained from on-site materials or imported from off-site sources. In either case, unless otherwise approved by the DEQ, these soils will have concentrations of Site COCs below the RGs or below DEQ Clean Fill Levels for other chemicals. Prior to use, the soil will be evaluated for compliance with these criteria. Samples of borrow soil collected for laboratory analysis will be analyzed for dioxin/furans, metals (antimony, arsenic, chromium, copper, lead, mercury, nickel, selenium, and zinc), PCBs, and PAHs (including dibenzofurans).

**Imported Fill.** Soil may be imported from off-site for use as temporary roadways and staging pads, general fill, or topsoil. Gravel (soil with particle sizes greater than No. 4 sieve size) from a virgin commercial source will be sampled for metals analysis only. The method and frequency of sampling imported fill and topsoil will be submitted to the DEQ for approval and will be determined based on the source of the material. In general, materials imported from a virgin, commercial source would have a lower sampling frequency. Recycled materials or soil imported from private sources would have a greater sampling frequency.

**On-Site Borrow.** Potential sources of on-site borrow are discussed in Section 2.3.3. The method and frequency of sampling borrow materials will be submitted to the DEQ for approval.

### **3.3.5 Finish Grades**

Currently, the Site is relatively flat with no clear drainage channels. Most rainfall infiltrates into the ground surface. The intent with post-remediation finish grades (after excavation/capping) is to maintain these characteristics, emphasizing infiltration of rainfall. Finish grades may vary by several feet from current grades, but overall drainage will be maintained. Areas where there could be greater change between current and finish grades include where the riverbank is laid back, areas used for on-site borrow, or future park features. The In-Water Group is evaluating layback of portions of the riverbank. The park design team is collaborating with the In-Water Group and the upland remediation design team to minimize grade changes. Areas between the current top of bank and the new top of bank may have larger grade changes, and surface runoff on the

riverbank will be directed toward the river (again, riverbank layback, including erosion protection, will be addressed by the In-Water Group). If borrow materials are obtained from an on-site area, finish grade likely will be much lower in that area. Restoration of that area will account for the grade change and include habitat restoration consistent with the final elevations. The future park may include additional excavation for in-water habitat (in collaboration with the In-Water Group) or mounded areas to accommodate variable habitats and/or program elements within the park.

Based on the preliminary excavation depths and capping thicknesses shown on Figures 7 and 19, respectively, Figure 20 shows the approximate change in grade relative to current existing grade. The grades shown on Figure 20 include 1 foot of topsoil on DUs with no planned capping and do not account for final grades associated with removal of soil piles, preserved native trees, bank layback, potential on-site borrow areas, or park features. The grading plan will be refined in RD, including potential refinements associated with constructability, habitat, or drainage considerations and coordination with the in-water design or future park features.

### **3.3.6 Site Restoration**

Site restoration will consist of planting finish grade with native grasses, shrubs, and trees to establish native vegetation that will prevent surface erosion and support native species. Metro is planning for final site use as a nature park (Metro's preliminary concepts are summarized below), and site restoration for the remedial action will be consistent with that planned final use (the upland areas will not include aquatic or off-channel habitat).

Metro has developed a Site Conservation Plan (SCP) and is currently developing a Site Master Plan. Based on the SCP, the conservation targets for the Facility include shallow water habitat along the Willamette River migratory fish pathway, riparian forest, and oak-madrone woodland. Metro is not a partner in the in-water RD; however, Metro is collaborating with the In-Water Group to discuss opportunities for improving water quality and restoring fish habitat for salmon and lamprey. Pertinent recommended restoration actions which could apply to the Facility include work to:

- Protect, restore, and create shallow water and off-channel habitats;
- Improve aquatic habitat complexity and diversity;
- Improve riparian buffer density, health, and width and establish high species diversity;
- Maintain and expand Oregon white oak-madrone habitat;
- Restore floodplain function and connectivity; and
- Remove invasive species to reduce habitat stress and create more resilient habitats.

### 3.3.7 Use of Green Remediation Practices

Some of the work activities will impose negative environmental impacts that are anticipated and necessary in exchange for the reduction in risk associated with hazardous substances at the Site. Work will be conducted consistent with *Green Remediation Best Management Practices: Excavation and Surface Restoration* (EPA, 2008) and DEQ's Green Remediation Policy to promote, support, and implement sustainable practices that lessen the overall environmental impact of the cleanup. Green remediation approaches will be incorporated in deliverables throughout the design process. Some of the green remediation strategies to be evaluated in RD include, but are not limited to:

- Use of alternative fuels (e.g. biodiesel) to operate heavy machinery;
- Conserve raw materials such as borrowing clean soil from on-site sources rather than importing soil to the extent practicable;
- Minimize use of potable water;
- Recycle/reuse (e.g., composting, reuse of woody debris) cleared vegetation;
- Replant with native vegetation;
- Minimize disturbance of mature native vegetation where possible;
- Control/remove invasive species;
- Sequence work to improve efficiency;
- Consider the carbon footprint associated with travel routes and modes of material transportation for both import and export;
- Use alternative routes and modes of travel where practicable to reduce the impact on the local community;
- Restrict the idling times for heavy equipment and trucks when not being actively operated;
- Perform routine and on-time maintenance on heavy machinery and trucks to assure fuel efficiency;
- Control and mitigate dust, odors, noise, and light impacts; and
- Identify waste minimization measures and uses of recycled materials.

### 3.4 Institutional and Engineering Controls

Institutional and engineering controls will include a contaminated media management plan, signs, and designated pathways to be used indefinitely where capping is installed. A deed restriction identifying the presence of capped areas and residual contamination will be required. Metro will agree to place restrictions on property deeds that limit site uses to passive recreation activities (trails, nature viewing points, beach access, water access, environmental education programs, cultural elements and interpretation, art, and

information signs). There will be restrictions on park maintenance associated with the cap (e.g., restrictions on alterations of the cap, excavations).

Outside capped areas, site use would be unrestricted and determined based on Metro's site master plan.

### **3.5 Permits/Permit Exemptions**

Remedial actions conducted under Oregon cleanup rules must comply with federal, state, and local laws, including obtaining required permits except to the extent that state and local permits may be exempted pursuant to ORS 465.315(3) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This section identifies applicable or relevant and appropriate requirements (ARARs), permitting needs, and the permit requirements that could be exempted. For permits where exemptions may be proposed, the applicable substantive requirements of those permits are identified.

#### **3.5.1 Site Development Permit**

The selected upland RA consists primarily of earthwork activities. The work will include tree removal, where necessary, and excavation and/or filling. Earthwork activities will impact an area of greater than one acre. Permits (or permit exemptions associated with earthwork activities) include a site development permit from the City of Portland and a construction stormwater permit (1200-C) to address runoff of stormwater during implementation of the RA in accordance with Portland City Code Title 10. The 1200-C permit requires an erosion and sediment control plan (ESCP) and a contaminated media management plan. No other permits are anticipated associated with the earthwork activities. Requirements for tree preservation and/or replacement under city code Title 11 may also be applicable.

#### **3.5.2 Greenway Review**

Because a portion of the work will be conducted adjacent to the top of bank, city permitting includes requirements associated with Greenway review in accordance with Chapter 33.440 of the Portland Zoning Code. The Greenway review addresses issues of public access, flood protection, transportation connections, and potential impacts to recreational users. These requirements may include tree/shrub preservation or replacement as part of a mitigation plan.

#### **3.5.3 Waste Designation**

Federal and state waste designation laws and rules (e.g., the Resource Conservation and Recovery Act, Land Disposal Restrictions, and the Toxic Substances Control Act) define the requirements for disposal of soil removed from the Site.

For the 2015/16 removal action, the removed soil was evaluated (including testing for leachability of metals), and it was determined that the excavated soil is not a hazardous waste (Apex, 2014). Additionally, selected archived samples from the RDI with higher total metals concentrations were submitted for Toxicity Characteristic Leaching Procedure (TCLP) analysis, and results were below hazardous waste limits. An updated waste designation will be prepared as part of RD.

#### **3.5.4 Federal Emergency Management Agency Floodplain Regulations**

A portion of the Site in the East and Central Parcels is located within the Federal Emergency Management Agency (FEMA) mapped Special Flood Hazard Area of the Willamette River. FEMA regulations 44 CFR § 60.3(d)(2) and (3) prohibit encroachments that would result in any increase in flood levels during occurrence of base flood discharge. A site-specific analysis will be performed during RD to evaluate potential flood impacts.

#### **3.5.5 Cultural Resources**

Recommendations resulting from the studies discussed in Section 2.1.6 will be addressed during RD.

### **3.6 Future Land Use**

The Site is zoned as open space. In alignment with the ROD, future land use at the Site will include the development of passive recreation opportunities within a natural area context including a regional trail, water access, nature viewing points, beach access, environmental education programs, cultural elements and interpretation, art, and information signs (see Section 2.1.8). Master planning for future development is underway by Metro with the intent to facilitate increased public access, recreational activities, and beneficial use of the Site and the adjacent riverbank and river. Development of the Site will be coordinated with the In-Water Group to ensure compatibility with the Site design.

### **3.7 Easement and Access Requirements**

The Site is not currently managed for any human use and is officially restricted with limited controls to discourage foot traffic access (locked gates, concrete barriers, and signs). However, trespassers frequently bypass the restrictions and traverse the Site. The Site is accessible by vehicle from North Edgewater Street to the east and North Richmond Avenue to the west. A locked gate is present at the north end of North Edgewater Street one block south of its intersection with North Willamette Boulevard. A gravel roadway is present on the Central and East Parcels, but vehicle access is limited by concrete blocks/rubble at the North Edgewater Street entrance. Access to the Site from the river is restricted by use of signs but not physical barriers.

The Site and the riverbank down to the OLWL are owned by Metro, and the submerged lands below the OLWL are owned by the State of Oregon and managed by the Department of State Lands. An access agreement is in place between Metro and the Port to provide access to the Site for RA activities. To the extent that access to the Site is needed from the river, access will be coordinated with the State of Oregon.

### **3.8 Community Impacts**

Best management practices (BMPs) and mitigation measures will be developed in the RD to address the community impacts including concerns about air quality, noise, odor, and light. Exceedances of health-based standards may result in additional controls being put in place so that construction impacts are mitigated to the extent practicable.

### **3.9 Constructability Considerations**

This section considers the ease of construction of the remedial action. These considerations will be evaluated and addressed to the extent practicable during RD to reduce or prevent errors, delays, cost overruns, and health and safety issues during the RA. The following constructability considerations will be accounted for during development of the RD:

- Quantity and size of debris to be removed. Surface and subsurface debris will impact the ability to perform excavation and place capping effectively. Debris will be removed wherever practicable.
- Potential utilities. These obstructions will be identified, and the design will be adapted as needed. Based on prior site work, there are no utilities expected within the proposed excavation.
- Access issues as discussed in Section 3.7.
- Impacts of excavation/capping on adjacent riverbank slopes.
- Construction materials. The project will require imported fill materials as discussed in Section 3.3.4. The RA will be conducted at the same time as other remedial actions throughout Portland Harbor. These simultaneous activities may place stress on available materials from vendors who will be supplying other remediation projects in the area. Materials in high demand may include sand and gravel. To mitigate some of those risks, acquiring materials early and outside of potential seasonal price increases should be considered. This could include negotiating a preferred pricing structure or considering an early downpayment for securing minimum volumes of material. Materials could be acquired directly from the supplier or suppliers, perhaps through a separate procurement process. The suppliers could potentially be charged with generating, storing, and maintaining materials for contractor use at appropriate times during construction.
- Material Transport. Based on preliminary excavation depths and cap thicknesses, approximately 50,000 cubic yards of soil will be exported from the Site, and approximately 30,000 to 90,000 cubic yards of soil could be imported to the Site (the range of potential import volumes depends on such factors as the final cap thicknesses, the amount of bank layback conducted for the in-water work,

and the amount of on-site soil that can be used for fill). Material transportation options include truck, rail, and barge. Each of these options will be evaluated during RD considering such factors as availability, impacts to community, coordination with in-water work, and costs.

- Sequencing of construction and coordination with in-water/riverbank construction. The in-water construction intends to use the upland facility for staging and water treatment, and the in-water construction will likely include layback of the riverbank. The upland construction may include material transport via barge. These activities require careful coordination between the upland team and the In-Water Group to avoid delays and additional costs.

## **4.0 Monitoring and Maintenance**

### **4.1 Construction Monitoring**

Monitoring will be performed during RA activities to confirm that the construction engineering controls are maintained and in working order. Construction engineering controls will include but not be limited to dust control, stormwater best management practices, and activities designed to limit off-site discharge of contaminated soil (e.g., brushing off trucks, containment of material conveyance to barge, etc.). Management of excavation depths and lateral extent will be monitored through global positioning system instrumentation either attached to construction equipment or with periodic surveys.

### **4.2 Verification Sampling of Soil Concentrations**

Soil sampling and chemical analysis will be conducted during RA to verify removal of soil to the extent required by the remedial action objectives and design standards. The type and frequency of verification sampling will be detailed in the RD/RA work plan but will generally follow the same protocol that was used for the RDI sampling including the same DU boundaries, 30-point ISM samples (including DUs that were previously sampled with composite samples), 1-foot depth intervals, and the same analyte list as used in the RDI. The verification sampling data will be used to update residual concentrations and residual risk estimates. The updated data will be used together with the processes described in Sections 3.3.2 and 3.3.3 to conduct additional excavation or adjust cap thicknesses, as appropriate.

### **4.3 Long-Term Remedy Performance Monitoring**

There are several uncertainties at the Site that make it difficult to predict the long-term reliability of the remedial action described above, including:

- Heterogeneity in the subsurface;
- Potential changes in future groundwater or surface water use patterns (i.e., beneficial uses);
- Potential changes in future land use and zoning;

- Changes in community concerns regarding remedial actions; and
- Long-term performance of remedial cap areas.

Because of these uncertainties, a periodic monitoring, review, and contingency plan will be developed that will evaluate the performance of the remedy and any changes that may affect the ability of the remedy to meet the RAOs. The objective of the periodic monitoring, review, and contingency plan will be to maintain the overall protectiveness of the selected remedy by establishing a series of decision criteria and related response actions for each potential area of uncertainty identified above and in the RAOs.

The first component of the contingency plan will be a review of both remedy performance and local land and water uses. If supplemental monitoring is necessary and indicates that the RAOs are not being met, additional remedial actions will be evaluated to ensure that human health and the environment are protected.

#### **4.4 Remedy Maintenance**

Three separate plans will be prepared to evaluate the effectiveness of source removals and long-term monitoring and maintenance of engineering controls, including caps and soil covers. A cap inspection and maintenance plan, a contaminated media management plan, and a community and outreach plan will be developed. In addition to regular inspection, the cleanup action will be subject to periodic reviews, which provide an opportunity to evaluate the implementation and performance of the remedy to determine if it remains protective of human health and the environment. A draft of each plan will be submitted with the draft Intermediate (60%) RD for DEQ review and comment. Final plans shall be submitted for DEQ approval addressing DEQ's comments on the draft plans. The draft and final plans will be submitted according to the schedule of deliverables in the approved RD/RA work plan and shall include, at a minimum:

- Details regarding on-site impacts and remedy selection;
- Description of inspection requirements and schedule;
- Proposed inspection locations;
- Documentation and data reporting, including a proposed schedule for data report submittals;
- Description of institutional controls to be implemented for subsurface construction or maintenance activities under the cap, to include health and safety training and procedures, contaminated media characterization and management, and excavation closure;
- Notification requirements for cap disturbance;
- Proposed trigger mechanisms and assessment criteria that would warrant evaluation of contingency measures;
- A contingency plan to include identification of potential response actions and a description of the procedures and process for evaluating and implementing potential response actions;

- A description of assessment criteria for modifications to the long-term inspection program; and
- A description of periodic reviews of local land uses and beneficial water uses to be conducted, including procedures, reporting, and schedule.

## **5.0 Design Studies**

### **5.1 Supplemental Remedial Design Investigation**

At present, there is sufficient data to complete remedial design. The data gaps identified in Section 2.4 will be addressed as follows:

- Vertical delineation of COCs beyond depths of 3 feet or beneath soil berms on the East Parcel will be addressed with verification sampling during RA;
- Vertical delineation of COCs in potential borrow areas along the riverbank will be conducted as part of supplemental riverbank sampling being conducted by the In-Water Group; and
- Vertical delineation of COCs in potential borrow areas beneath concrete slabs will be conducted in supplemental sampling if it is determined that borrow from these areas is feasible for the planned site restoration.

If supplemental sampling is needed and requested by DEQ, a supplemental RDI work plan will be prepared and submitted to DEQ for review and approval. Following the supplemental RDI field investigations, a Supplemental RDI Evaluation Report will be prepared to summarize the results. The Supplemental RDI Evaluation Report will be submitted to DEQ for approval.

### **5.2 Remnant Structures Evaluation**

As described in Section 2.1.2, a large concrete slab foundation, several smaller concrete slabs, a portion of paved roadway, and other remnant debris are present. These remaining structures were generally characterized during the pre-remedial design investigation. However, there may be additional buried debris present, which will be evaluated and managed during RA.

### **5.3 Borrow Source Identification**

As described in Section 2.3.3, there are two potential opportunities for obtaining clean soil from on-site borrow material: the bank layback area and the soil beneath the large concrete slab in the East Parcel. Further evaluation will be required to determine the suitability of this material for reuse on site.

## 5.4 Erosion Protection Evaluation

An erosion and sedimentation control plan is a required element of the 1200-C construction stormwater permit as described in Section 3.5.1. That plan will include best management practices that will be implemented during construction to control sediment runoff.

## 5.5 Seismic Design Evaluation

RD will evaluate seismic hazards resulting from the recommended design earthquake for Portland Harbor (ground motion with a 10% probability of exceedance in 50 years). Associated seismic damage from this hazard level includes liquefaction of riverbanks or destabilization and displacement of riverbanks. These evaluations are being conducted primarily by the In-Water Group. If needed, further evaluation will be conducted for the upland design.

The primary risk associated with seismic hazards is exposure of contaminated soil resulting from failures related to liquefaction or the riverbank slope. The results of the seismic design evaluation will be used to determine mitigating measures against the exposure of contaminated soil. If these measures are impractical or ineffective, appropriate maintenance and repair measures will be included in the operations and maintenance plan.

## 5.6 Climate Change

Climate change is expected to result in changes to hydrology (both in seasonal patterns of river flow and peak storm event flows) in the Willamette and Columbia Rivers, as well as sea level rise, and thus impact remedy design (EPA, 2021). The effects of climate change on peak flows, dam operations, typical base flow river stages, and sea level rise on river hydrodynamics in the in-water project area will be considered as part of the flood rise impact evaluation being conducted as part of the in-water 30% design and will be used to inform the upland RD.

## 5.7 Additional RD Investigations

Addressing current data gaps is discussed in Section 5.1. If additional data gaps are identified during the 30% Design, they will be evaluated and addressed during the 60% Design.

## **6.0 Remedial Design Stages, Conceptual Sequencing Plan, and Scheduling**

Development of the RD/RA work plan is the initial stage of the design. The 30% RD documents and supporting deliverables follow the RD/RA work plan. The 60%, 95%, and 100% final (if necessary) RD stages present progressive refinements of the remedial design. Construction bidding and selection will be based on the DEQ-

approved 95% or 100% RD plans and specifications package. RA scheduling and implementation will proceed following selection of the remediation contractor. A summary of the design stages, sequencing, and schedule is provided in the following sections.

## **6.1 Remedial Design/Remedial Action Work Plan**

The RD/RA work plan will be submitted following completion of the BODR and will include the scope of work and schedule for the RD activities and submittal requirements. The draft RD/RA work plan will be submitted within 90 days of DEQ's approval of the BODR.

## **6.2 30% Design**

Upon completion of approximately 30% of the RD effort and prior to submitting the 60% RD report, a presentation will be prepared and presented to the DEQ. The general 30% (preliminary) RD presentation contents will consist of the following:

- Design objectives, criteria, and standards;
- Description of design elements;
- Preliminary drawings and schematics;
- Description of problems encountered or anticipated that may delay the project schedule; and
- Preliminary construction schedule.

## **6.3 60%, 95% and 100% Design**

An intermediate (60% RD) report will be prepared and submitted to DEQ for review and comment and will:

- Include the same elements as the 30% RD;
- Be a continuation and expansion of the 30% RD; and
- Address DEQ comments on the 30% RD.

The pre-final (95% RD) report will be prepared with a compilation of the major design items reflecting approximately 95% completion. The pre-final report will serve as the draft design report and may constitute construction-ready drawings. The pre-final report will include the following as applicable:

- Design criteria/standards;
- Final design/analysis calculations;
- Drawing index and final stamped drawings suitable for bidding and construction;
- Final stamped specifications suitable for bidding and construction;

- Final construction schedule;
- Description of RA activities;
- Description of construction quality assurance/quality control; and
- Equipment startup and operator training requirements.

If necessary, a final (100% RD) report will be prepared to incorporate revisions required by DEQ based on review of the pre-final design and will provide the basis for the RA activities.

### **6.4 Remedial Action Implementation**

Implementation of the remedial action will be initiated following approval of the final design (95% or 100% RD) by the DEQ and selection of the remediation contractor. The RD/RA work plan will include an anticipated implementation schedule, which will be refined as necessary in the subsequent 30%, 60%, and 95% RD deliverables. As the site remediation and in-water remediation will be coordinated to the extent feasible, scheduling changes may occur as the implementation planning progresses.

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Table 1

## Receptor Specific Risk-Based Concentrations, Remediation Goals, and Hot Spot Values for Soil – Human Health

## Basis of Design Report

## Willamette Cove Upland Facility

| Analyte                | Regional Background Concentrations - Portland Basin |         | Receptor Specific RBCs            |          |            |          |                      |          |            |          |                     |          |            |          | Human Health PRGs |          |
|------------------------|-----------------------------------------------------|---------|-----------------------------------|----------|------------|----------|----------------------|----------|------------|----------|---------------------|----------|------------|----------|-------------------|----------|
|                        |                                                     |         | Recreational Trespasser/Park User |          |            |          | Transient Trespasser |          |            |          | Construction Worker |          |            |          |                   |          |
|                        |                                                     |         | Cancer                            |          | Non-Cancer |          | Cancer               |          | Non-Cancer |          | Cancer              |          | Non-Cancer |          | Remediation Goal  | Hot Spot |
|                        | Mean                                                | 95% UPL | RBC                               | Hot Spot | RBC        | Hot Spot | RBC                  | Hot Spot | RBC        | Hot Spot | RBC                 | Hot Spot | RBC        | Hot Spot |                   |          |
| Concentration in mg/kg |                                                     |         |                                   |          |            |          |                      |          |            |          |                     |          |            |          |                   |          |
| Antimony               | 0.29                                                | 0.56    | --                                | --       | 24         | 243      | --                   | --       | 98         | 980      | --                  | --       | 31         | 310      | 24                | 240      |
| Arsenic                | 4.4                                                 | 8.8     | 1.4                               | 140      | 74         | 740      | 29                   | 2,900    | 370        | 3,700    | 15                  | 1,500    | 97         | 970      | 8.8               | 140      |
| Chromium               | 39                                                  | 76      | --                                | --       | --         | --       | --                   | --       | --         | --       | --                  | --       | --         | --       | --                | --       |
| Copper                 | 24                                                  | 34      | --                                | --       | 11,000     | 110,000  | --                   | --       | 56,000     | 560,000  | --                  | --       | 14,000     | 140,000  | 11,000            | 110,000  |
| Lead                   | 27                                                  | 79      | --                                | --       | 400        | 4,000    | --                   | --       | 800        | 8,000    | --                  | --       | 800        | 8,000    | 400               | 4,000    |
| Mercury                | 0.073                                               | 0.23    | --                                | --       | --         | --       | --                   | --       | --         | --       | --                  | --       | --         | --       | --                | --       |
| Nickel                 | 23                                                  | 47      | --                                | --       | --         | --       | --                   | --       | --         | --       | --                  | --       | --         | --       | --                | --       |
| Selenium               | 0.33                                                | 0.71    | --                                | --       | --         | --       | --                   | --       | --         | --       | --                  | --       | --         | --       | --                | --       |
| Zinc                   | 105                                                 | 180     | --                                | --       | --         | --       | --                   | --       | --         | --       | --                  | --       | --         | --       | --                | --       |
| cPAHs                  | --                                                  | --      | 0.55                              | 55       | 60         | 600      | 32                   | 3,200    | 270        | 2,700    | 17                  | 1,700    | 74         | 740      | 0.55              | 55       |
| Total PCBs             | --                                                  | --      | 0.74                              | 74       | 4          | 40       | 14                   | 1,400    | 18         | 180      | 8.4                 | 840      | 4.9        | 49       | 0.74              | 40       |
| Dioxin/Furan TEQ       | --                                                  | --      | 1.50E-05                          | 1.50E-03 | 1.70E-04   | 1.70E-03 | 3.20E-04             | 3.20E-02 | 1.10E-02   | 1.10E-01 | 1.70E-04            | 1.70E-02 | 2.30E-04   | 2.30E-03 | 1.50E-05          | 1.50E-03 |

## Notes:

Background concentrations from *Development of Oregon Background Metals Concentrations in Soil*, Oregon DEQ, March 2013

95% UPL = Upper Prediction Limit (95% confidence)

RBC = Risk Based Concentration

mg/kg = milligrams per kilogram

cPAHs= carcinogenic polycyclic aromatic hydrocarbons

HPAH = high molecular weight polycyclic aromatic hydrocarbons

LPAH = low molecular weight polycyclic aromatic hydrocarbons

PCBs = polychlorinated biphenyls

Dioxin/Furan TEQ = 2,3,7,8-TCDD toxicity equivalent

Receptor Specific RBC Concentrations from the Record of Decision for Willamette Cove Upland Site, Oregon Department of Environmental Quality, March 2021 with the exception of arsenic:

arsenic concentration is from the Residual Human Health Risk Assessment Willamette Cove Upland Facility, December 2013

Table 2

## Receptor Specific Risk-Based Concentrations, Remediation Goals, and Hot Spot Values for Soil – Ecological Receptors

## Basis of Design Report

## Willamette Cove Upland Facility

| Analyte                | Regional Background Concentrations - Portland Basin |         | Receptor Specific Cleanup Levels and RBCs |          |              |          |          |          |          |          | Ecological Remediation Goals (RGs) and Hot Spots |          |          |          |
|------------------------|-----------------------------------------------------|---------|-------------------------------------------|----------|--------------|----------|----------|----------|----------|----------|--------------------------------------------------|----------|----------|----------|
|                        |                                                     |         | Plant                                     |          | Invertebrate |          | Birds    |          | Mammal   |          | Sample Type                                      |          |          |          |
|                        |                                                     |         |                                           |          |              |          |          |          |          |          | Discrete/Composite                               |          | ISM      |          |
|                        | Mean                                                | 95% UPL | RBC                                       | Hot Spot | RBC          | Hot Spot | RBC      | Hot Spot | RBC      | Hot Spot | RG                                               | Hot Spot | RG       | Hot Spot |
| Concentration in mg/kg |                                                     |         |                                           |          |              |          |          |          |          |          |                                                  |          |          |          |
| Antimony               | 0.29                                                | 0.56    | 5                                         | 50       | 78           | 780      | --       | --       | 2.7      | 27       | 2.7                                              | 27       | 2.7      | 27       |
| Arsenic                | 4.4                                                 | 8.8     | 18                                        | 180      | --           | --       | 575      | 5,750    | 83       | 830      | 18                                               | 180      | 18       | 180      |
| Chromium               | 39                                                  | 76      | 39                                        | 39       | 39           | 39       | 87       | 870      | 342      | 3,420    | 76                                               | 76       | 39       | 39       |
| Copper                 | 24                                                  | 34      | 70                                        | 700      | 80           | 800      | 87.7     | 877      | 82       | 820      | 70                                               | 700      | 70       | 700      |
| Lead                   | 27                                                  | 79      | 120                                       | 1,200    | 1,700        | 17,000   | 33       | 330      | 122      | 1,220    | 79                                               | 330      | 33       | 330      |
| Mercury                | 0.073                                               | 0.23    | 0.3                                       | 3        | 0.1          | 1        | 0.015    | 0.15     | 3.53     | 35.3     | 0.23                                             | 0.23     | 0.073    | 0.15     |
| Nickel                 | 23                                                  | 47      | 38                                        | 380      | 280          | 2,800    | 139      | 1,390    | 20       | 200      | 47                                               | 200      | 23       | 200      |
| Selenium               | 0.33                                                | 0.71    | 0.52                                      | 5.2      | 4.1          | 41       | 3.42     | 34.2     | 1.1      | 11       | 0.71                                             | 5.2      | 0.52     | 5.2      |
| Zinc                   | 105                                                 | 180     | 160                                       | 1,600    | 120          | 1,200    | 673      | 6,730    | 201      | 2,010    | 180                                              | 1,200    | 120      | 1,200    |
| Dibenzofuran           | --                                                  | --      | --                                        | --       | --           | --       | --       | --       | 0.01     | 0.10     | 0.01                                             | 0.1      | 0.01     | 0.1      |
| Total HPAH             | --                                                  | --      | --                                        | --       | 18           | 180      | --       | --       | 5.6      | 56       | 5.6                                              | 56       | 5.6      | 56       |
| Total LPAH             | --                                                  | --      | --                                        | --       | 29           | 290      | --       | --       | 100      | 1,000    | 29                                               | 290      | 29       | 290      |
| Total PCBs             | --                                                  | --      | 40                                        | 400      | --           | --       | 0.734    | 7.34     | 0.098    | 0.98     | 0.098                                            | 0.98     | 0.098    | 0.98     |
| Dioxin/Furan TEQ       | --                                                  | --      | --                                        | --       | --           | --       | 8.90E-05 | 8.90E-04 | 6.10E-06 | 6.10E-05 | 6.10E-06                                         | 6.10E-05 | 6.10E-06 | 6.10E-05 |

## Notes:

Background concentrations from *Development of Oregon Background Metals Concentrations in Soil*, Oregon DEQ, March 2013

95% UPL = Upper Prediction Limit (95% confidence)

RBC = Risk Based Concentration

mg/kg = milligrams per kilogram

HPAH = high molecular weight polycyclic aromatic hydrocarbons

LPAH = low molecular weight polycyclic aromatic hydrocarbons

PCBs = polychlorinated biphenyls

Dioxin/Furan TEQ = 2,3,7,8-TCDD toxicity equivalent

Receptor Specific Screening Level and RBC Concentrations from the Record of Decision for Willamette Cove Upland Site, Oregon Department of Environmental Quality, March 2021 except chromium:

chromium RBC and Hot Spot levels are set to mean regional background levels per DEQ comments on draft BODR (Letter to Port of Portland, February 18, 2025).

Table 3  
Remediation Goals and Hot Spot Values for Soil  
Basis of Design Report  
Willamette Cove Upland Facility

| Analyte          | Human Health           |          | Ecological       |          |        |                  |          |           |
|------------------|------------------------|----------|------------------|----------|--------|------------------|----------|-----------|
|                  | Remediation Goal       | Hot Spot | Immobile         |          |        | Mobile           |          |           |
|                  |                        |          | Remediation Goal | Hot Spot | Basis  | Remediation Goal | Hot Spot | Basis     |
|                  | Concentration in mg/kg |          |                  |          |        |                  |          |           |
| Antimony         | 24                     | 240      | 5                | 50       | Plant  | 2.7              | 27       | Mamm      |
| Arsenic          | 8.8                    | 140      | 18               | 180      | Plant  | 83               | 830      | Mamm      |
| Chromium         | --                     | --       | 39               | 39       | Bkgd   | 87               | 870      | Bird      |
| Copper           | 11,000                 | 110,000  | 70               | 700      | Plant  | 82               | 820      | Mamm      |
| Lead             | 400                    | 4,000    | 120              | 1200     | Plant  | 33               | 330      | Bird      |
| Mercury          | --                     | --       | 0.1              | 1        | Invert | 0.073            | 0.15     | Bird      |
| Nickel           | --                     | --       | 38               | 380      | Plant  | 23               | 200      | Bkgd/Mamm |
| Selenium         | --                     | --       | 0.52             | 5.2      | Plant  | 1.1              | 11       | Mamm      |
| Zinc             | --                     | --       | 120              | 1,200    | Invert | 201              | 2,010    | Mamm      |
| cPAHs            | 0.55                   | 55       | --               | --       | --     | --               | --       | --        |
| Dibenzofuran     | --                     | --       | --               | --       | --     | 0.01             | 0.1      | Mamm      |
| Total HPAH       | --                     | --       | 18               | 180      | Invert | 5.6              | 56       | Mamm      |
| Total LPAH       | --                     | --       | 29               | 290      | Invert | 100              | 1,000    | Mamm      |
| Total PCBs       | 0.74                   | 40       | 40               | 400      | Plant  | 0.098            | 0.98     | Mamm      |
| Dioxin/Furan TEQ | 1.50E-05               | 1.50E-03 | --               | --       | --     | 6.10E-06         | 6.10E-05 | Mamm      |

Notes:

mg/kg = milligrams per kilogram

cPAHs= carcinogenic polycyclic aromatic hydrocarbons

PCBs = polychlorinated biphenyls

Dioxin/Furan TEQ = 2,3,7,8-TCDD toxicity equivalent

Receptor Specific Remediation Goals from the Record of Decision for Willamette Cove Upland Site, Oregon Department of

Environmental Quality, March 2021 with the exception of arsenic: arsenic concentration is from the Residual Human

Health Risk Assessment Willamette Cove Upland Facility, December 2013.

Immobile ecological endpoints include plants and invertebrates

Mobile ecological endpoints include birds and mammals

Table 4  
Hot Spot Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Concentration in mg/kg |         |          |        |       |         |        |          |          |                  |              |            |            |        |            |                                                  | Nominal Excavation Depth in Feet                                                                                          | Comments |
|--------------------------------------------------------------|---------------|-------------|-------------------------|-------------|------------------------|---------|----------|--------|-------|---------|--------|----------|----------|------------------|--------------|------------|------------|--------|------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------|
|                                                              |               |             |                         |             | Antimony               | Arsenic | Chromium | Copper | Lead  | Mercury | Nickel | Selenium | Zinc     | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  | Total PCBs |                                                  |                                                                                                                           |          |
| Minimum Hot Spot Level for All Receptors (ISM Samples)       |               |             |                         |             | 27                     | 140     | 39       | 700    | 330   | 0.15    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98       |                                                  |                                                                                                                           |          |
| Minimum Hot Spot Level for All Receptors (Composite Samples) |               |             |                         |             | 27                     | 140     | 76       | 700    | 330   | 0.23    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98       |                                                  |                                                                                                                           |          |
| West Parcel                                                  | DU-1          | ISM         | 0-1                     | DU-1 (0-1)  | 0.801                  | 6.24    | 37.4     | 180    | 74.8  | 0.0696  | 27.1   | 0.514    | 151      | 2.21E-05         | 0.0078       | 2.6600     | 0.3370     | 0.4460 | 0.4270     | 2.0                                              | Buried hot spot. Stockpile Layer 1. Remove Layer 2 for off-site disposal. Replace Layer 1 in excavation prior to capping. |          |
|                                                              |               |             | 1-2                     | DU-1 (1-2)  | 0.712                  | 5.41    | 41.3     | 64.6   | 321   | 0.0863  | 30.9   | 0.516    | 140      | 2.56E-05         | 0.0102       | 2.6200     | 0.4240     | 0.4000 | 2.7500     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-1 (2-3)  | 0.529                  | 5.79    | 29.5     | 69.5   | 57.5  | 0.0813  | 25.0   | 0.529    | 179      | 1.07E-05         | 0.0048       | 2.1100     | 0.2860     | 0.3280 | 0.1100     |                                                  |                                                                                                                           |          |
|                                                              | DU-2          | ISM         | 0-1                     | DU-2 (0-1)  | 0.603                  | 5.41    | 21.5     | 119    | 96.2  | 0.0731  | 18.9   | 0.505    | 99.4     | 6.95E-06         | 0.0051       | 1.0200     | 0.1270     | 0.1650 | 0.1860     | 0.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-2 (1-2)  | 0.515                  | 5.36    | 22       | 170    | 118   | 0.124   | 16.4   | 0.515    | 88.8     | 3.44E-06         | 0.0047       | 0.7920     | 0.1230     | 0.1080 | 0.5580     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-2 (2-3)  | 0.495                  | 5.21    | 15.5     | 41.9   | 24.4  | 0.0607  | 14.7   | 0.495    | 78       | 2.42E-06         | 0.0050       | 0.2230     | 0.0275     | 0.0319 | 0.0299     |                                                  |                                                                                                                           |          |
|                                                              | DU-3          | ISM         | 0-1                     | DU-3 (0-1)  | 0.547                  | 6.87    | 16.2     | 26.8   | 20.1  | 0.0438  | 16.3   | 0.547    | 80.4     | 2.63E-05         | 0.0048       | 0.9760     | 0.1210     | 0.1530 | 0.0250     | 0.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-3 (1-2)  | 0.497                  | 6.65    | 16.5     | 25.8   | 15.8  | 0.0455  | 17.1   | 0.497    | 72.2     | 7.82E-06         | 0.0051       | 0.9840     | 0.1210     | 0.1290 | 0.0050     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-3 (2-3)  | 0.536                  | 6.65    | 15.7     | 21.6   | 13.5  | 0.0497  | 16.0   | 0.536    | 64.7     | 4.57E-06         | 0.0050       | 0.7450     | 0.1140     | 0.1030 | 0.0048     |                                                  |                                                                                                                           |          |
|                                                              | DU-4          | ISM         | 0-1                     | DU-4 (0-1)  | 0.565                  | 6.57    | 16.3     | 29.1   | 23.7  | 0.0746  | 23.9   | 0.565    | 89.4     | 2.09E-05         | 0.0057       | 2.5200     | 0.3290     | 0.4280 | 0.0317     | 0.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-4 (1-2)  | 0.515                  | 6.87    | 16.3     | 26.6   | 23.9  | 0.0596  | 24.6   | 0.515    | 79.4     | 1.66E-05         | 0.0334       | 11.9000    | 3.5400     | 1.7500 | 0.0245     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-4 (2-3)  | 0.502                  | 7.63    | 18.4     | 34     | 45.1  | 0.076   | 22.4   | 0.502    | 115      | 1.47E-05         | 0.0094       | 4.6500     | 0.6340     | 0.7670 | 0.0351     |                                                  |                                                                                                                           |          |
|                                                              | DU-5          | ISM         | 0-1                     | DU-5 (0-1)  | 0.992                  | 8.98    | 52.3     | 344    | 62.1  | 0.352   | 32.6   | 0.369    | 211      | 1.71E-05         | 0.0073       | 1.4000     | 0.1860     | 0.2420 | 0.1770     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-5 (1-2)  | 0.832                  | 8.09    | 42.9     | 237    | 70.5  | 0.369   | 58.9   | 0.335    | 179      | 1.53E-05         | 0.0061       | 1.1600     | 0.1550     | 0.1990 | 0.1430     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-5 (2-3)  | 0.596                  | 6.73    | 47.1     | 214    | 118   | 0.273   | 31.3   | 0.309    | 224      | 2.33E-05         | 0.0099       | 2.8800     | 0.5470     | 0.4080 | 0.3870     |                                                  |                                                                                                                           |          |
|                                                              | DU-6          | ISM         | 0-1                     | DU-6 (0-1)  | 0.539                  | 4.93    | 22.1     | 67.6   | 28.2  | 0.128   | 19.6   | 0.539    | 135      | 1.04E-05         | 0.0052       | 1.1000     | 0.1200     | 0.1880 | 0.0625     | 2.0                                              | Buried hot spot. Stockpile Layer 1. Remove Layer 2 for off-site disposal. Replace Layer 1 in excavation prior to capping. |          |
|                                                              |               |             | 1-2                     | DU-6 (1-2)  | 0.56                   | 4.89    | 25.2     | 91.6   | 40    | 0.156   | 21.8   | 0.56     | 124      | 2.51E-05         | 0.0090       | 1.2900     | 0.1910     | 0.2040 | 0.1110     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-6 (2-3)  | 0.526                  | 4.67    | 23.2     | 100    | 37.8  | 0.141   | 22.0   | 0.526    | 112      | 1.14E-05         | 0.0110       | 1.4300     | 0.2160     | 0.2260 | 0.1670     |                                                  |                                                                                                                           |          |
|                                                              | DU-7          | ISM         | 0-1                     | DU-7 (0-1)  | 0.537                  | 4.37    | 19.2     | 36     | 23.3  | 0.304   | 19.3   | 0.537    | 126      | 1.74E-05         | 0.0051       | 0.7510     | 0.0885     | 0.1270 | 0.0527     | 1.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-7 (1-2)  | 0.547                  | 3.98    | 18.6     | 30.1   | 18.7  | 0.13    | 19.7   | 0.547    | 92.7     | 1.24E-05         | 0.0050       | 0.4400     | 0.0705     | 0.0711 | 0.0567     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-7 (2-3)  | 0.536                  | 3.07    | 16.2     | 24.2   | 14.9  | 0.0927  | 19.1   | 0.536    | 75.1     | 8.17E-06         | 0.0050       | 0.3160     | 0.0497     | 0.0478 | 0.0502     |                                                  |                                                                                                                           |          |
|                                                              | DU-8          | ISM         | 0-1                     | DU-8 (0-1)  | 0.56                   | 4.33    | 21.7     | 32.5   | 39.1  | 0.154   | 19.6   | 0.56     | 144      | 2.36E-05         | 0.0055       | 0.7550     | 0.1140     | 0.1210 | 0.0989     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-8 (1-2)  | 0.501                  | 4.13    | 24.6     | 32.9   | 31.4  | 0.164   | 19.7   | 0.501    | 130      | 2.46E-05         | 0.0055       | 0.4940     | 0.1010     | 0.0731 | 0.0678     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-8 (2-3)  | 0.545                  | 4.13    | 21.9     | 32     | 31    | 0.156   | 20.7   | 0.545    | 126      | 2.34E-05         | 0.0062       | 0.5890     | 0.1200     | 0.0847 | 0.0984     |                                                  |                                                                                                                           |          |
|                                                              | DU-9          | ISM         | 0-1                     | DU-9 (0-1)  | 0.623                  | 5.25    | 30.6     | 40.6   | 28.2  | 0.16    | 26.5   | 0.506    | 154      | 1.78E-05         | 0.0057       | 1.1200     | 0.1600     | 0.1890 | 0.0640     | 1.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-9 (1-2)  | 0.555                  | 4.81    | 27.8     | 34.6   | 40.7  | 0.141   | 24.4   | 0.555    | 115      | 1.28E-05         | 0.0048       | 0.4770     | 0.0753     | 0.0771 | 0.0353     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-9 (2-3)  | 0.512                  | 5.12    | 31       | 37.4   | 21.5  | 0.141   | 26.2   | 0.512    | 122      | 1.23E-05         | 0.0080       | 1.1600     | 0.1990     | 0.1800 | 0.0478     |                                                  |                                                                                                                           |          |
| Central Parcel                                               | DU-10         | ISM         | 0-1                     | DU-10 (0-1) | 0.541                  | 4.5     | 14.8     | 33.3   | 86.5  | 1.07    | 29.9   | 0.541    | 106      | 1.73E-05         | 0.0235       | 29.4000    | 3.8500     | 5.1900 | 0.0337     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-10 (1-2) | 0.531                  | 5.56    | 15.3     | 33.6   | 54.8  | 0.829   | 27.5   | 0.513    | 94.9     | 5.46E-06         | 0.0494       | 28.3000    | 6.5900     | 4.7000 | 0.0262     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-10 (2-3) | 0.514                  | 5.16    | 14.5     | 32.2   | 73.3  | 0.609   | 22.6   | 0.491    | 117      | 4.52E-06         | 0.0244       | 16.9000    | 3.3700     | 2.6000 | 0.0051     |                                                  |                                                                                                                           |          |
|                                                              | DU-11         | ISM         | 0-1                     | DU-11 (0-1) | 0.545                  | 4.6     | 23.6     | 38.5   | 56.1  | 0.726   | 29.3   | 0.545    | 116      | 1.17E-05         | 0.0819       | 31.3000    | 9.3600     | 5.4000 | 0.0369     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-11 (1-2) | 0.535                  | 4.15    | 22       | 37.3   | 49    | 0.633   | 28.2   | 0.535    | 99.5     | 5.21E-06         | 0.0486       | 15.1000    | 2.9800     | 2.6500 | 0.0372     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-11 (2-3) | 0.526                  | 4.23    | 22       | 35.2   | 43.3  | 0.604   | 26.4   | 0.526    | 95       | 5.89E-06         | 0.0613       | 30.2000    | 7.3500     | 5.1300 | 0.0389     |                                                  |                                                                                                                           |          |
|                                                              | DU-12         | ISM         | 0-1                     | DU-12 (0-1) | 0.83                   | 4.95    | 14.8     | 78.9   | 165   | 0.292   | 19.8   | 0.504    | 166      | 2.54E-05         | 0.0070       | 2.4700     | 0.3520     | 0.3930 | 0.0532     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-12 (1-2) | 0.493                  | 4.26    | 14       | 55.7   | 131   | 0.275   | 19     | 0.493    | 104      | 4.21E-06         | 0.0059       | 0.9970     | 0.1900     | 0.1430 | 0.0317     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-12 (2-3) | 0.551                  | 3.62    | 13.7     | 41     | 70.8  | 0.207   | 17.8   | 0.551    | 79.7     | 2.60E-06         | 0.0050       | 0.5840     | 0.1030     | 0.0900 | 0.0050     |                                                  |                                                                                                                           |          |
|                                                              | DU-13         | ISM         | 0-1                     | DU-13 (0-1) | 0.923                  | 6.04    | 14.2     | 94.3   | 241   | 1.15    | 21.4   | 0.563    | 204      | 2.77E-04         | 0.0084       | 7.9300     | 0.4760     | 1.1700 | 0.0701     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-13 (1-2) | 0.54                   | 4.79    | 13.8     | 53     | 154   | 0.785   | 18.6   | 0.54     | 128      | 3.62E-05         | 0.0155       | 3.0600     | 0.6760     | 0.4500 | 0.0272     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-13 (2-3) | 0.562                  | 4.04    | 12.6     | 54.2   | 175   | 0.769   | 18.4   | 0.562    | 127      | 2.66E-05         | 0.0052       | 1.6700     | 0.2480     | 0.2630 | 0.0330     |                                                  |                                                                                                                           |          |
|                                                              | DU-14         | ISM         | 0-1                     | DU-14 (0-1) | 2.81                   | 6.14    | 22.9     | 73.5   | 134   | 1.33    | 24.3   | 0.514    | 147      | 7.87E-05         | 0.0229       | 0.9920     | 0.3010     | 0.1490 | 0.0283     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-14 (1-2) | 7.38                   | 6.87    | 21.6     | 122    | 240   | 3.1     | 23.7   | 0.519    | 204      | 3.43E-05         | 0.0224       | 1.7000     | 0.4070     | 0.2570 | 0.0048     |                                                  |                                                                                                                           |          |
|                                                              |               |             | 2-3                     | DU-14 (2-3) | 3.04                   | 5.66    | 20.6     | 185    | 162   | 2.5     | 24.8   | 0.493    | 164      | 1.43E-05         | 0.0143       | 1.3200     | 0.2860     | 0.1950 | 0.0048     |                                                  |                                                                                                                           |          |
|                                                              | DU-15         | ISM         | 0-1                     | DU-15 (0-1) | 2.81                   | 5.04    | 16       | 95.4   | 131   | 0.75    | 21.7   | 0.506    | 131      | 3.96E-04         | 0.0081       | 0.9590     | 0.1440     | 0.1380 | 0.0268     | 3.0                                              |                                                                                                                           |          |
|                                                              |               |             | 1-2                     | DU-15 (1-2) | 0.576                  | 3.75    | 14       | 57.7   | 68.6  | 1.28    | 19.3   | 0.517    | 120      | 2.00E-04         | 0.0049       | 0.3280     | 0.0668     | 0.0499 | 0.0048     |                                                  |                                                                                                                           |          |
| 2-3                                                          |               |             | DU-15 (2-3)             | 0.492       | 2.91                   | 11.2    | 36.2     | 63.6   | 0.563 | 17.6    | 0.492  | 76.8     | 1.50E-04 | 0.0049           | 0.6910       | 0.0868     | 0.1010     | 0.0048 |            |                                                  |                                                                                                                           |          |
| DU-16                                                        | ISM           | 0-1         | DU-16 (0-1)             | 4.29        | 8.31                   | 26.6    | 131      | 306    | 5.12  | 28.1    | 0.543  | 371      | 2.44E-04 | 0.0776           | 3.2200       | 0.9680     | 0.4960     | 0.0346 | 2.6        | Predicted depth below hot spot level is 2.5 feet |                                                                                                                           |          |
|                                                              |               | 1-2         | DU-16 (1-2)             | 2.29        | 6.92                   | 13.6    | 71.8     | 151    | 1.69  | 18.5    | 0.521  | 139      | 1.75E-05 | 0.0075           | 1.6300       | 0.2070     | 0.2460     | 0.0049 |            |                                                  |                                                                                                                           |          |
|                                                              |               | 2-3         | DU-16 (2-3)             | 0.499       | 3.72                   | 12.9    | 29.1     | 37.5   | 0.429 | 16.8    | 0.539  | 71.3     | 7.62E-06 | 0.0050           | 0.4170       | 0.0624     | 0.0569     | 0.0050 |            |                                                  |                                                                                                                           |          |
| DU-17                                                        | #SPILL!       | 0-1         | DU-17 (0-1)             | 1.06        | 4.95                   | 12.4    | 59.2     | 81.4   | 0.575 | 16.4    | 0.499  | 156      | 4.04E-05 | 0.0050           | 0.4280       | 0.0851     | 0.0634     | 0.0257 | 2.0        |                                                  |                                                                                                                           |          |
|                                                              |               | 1-2         | DU-17 (1-2)             | 0.511       | 3.72                   | 11.8    | 34.3     | 62.5   | 0.356 | 16.3    | 0.511  | 70.6     | 3.43E-06 | 0.0050           | 0.3630       | 0.0859     | 0.0513     | 0.0050 |            |                                                  |                                                                                                                           |          |
|                                                              |               | 2-3         | DU-17 (2-3)             | 0.504       | 3.16                   | 11.1    | 26.8     | 35.1   | 0.121 | 14.6    | 0.504  | 58.4     | 7.81E-06 | 0.0050           | 0.2220       | 0.0348     | 0.0309     | 0.0049 |            |                                                  |                                                                                                                           |          |

Table 4  
Hot Spot Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Concentration in mg/kg |         |          |        |        |         |        |          |          |                  |              |            |            |        | Nominal Excavation Depth in Feet | Comments          |                                                                                                                                                                                                                                      |
|--------------------------------------------------------------|---------------|-------------|-------------------------|-------------|------------------------|---------|----------|--------|--------|---------|--------|----------|----------|------------------|--------------|------------|------------|--------|----------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              |               |             |                         |             | Antimony               | Arsenic | Chromium | Copper | Lead   | Mercury | Nickel | Selenium | Zinc     | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  |                                  |                   | Total PCBs                                                                                                                                                                                                                           |
| Minimum Hot Spot Level for All Receptors (ISM Samples)       |               |             |                         |             | 27                     | 140     | 39       | 700    | 330    | 0.15    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                             |                   |                                                                                                                                                                                                                                      |
| Minimum Hot Spot Level for All Receptors (Composite Samples) |               |             |                         |             | 27                     | 140     | 76       | 700    | 330    | 0.23    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                             |                   |                                                                                                                                                                                                                                      |
| Central Parcel (Cont.)                                       | DU-18         | ISM         | 0-1                     | DU-18 (0-1) | 1.41                   | 10.9    | 22.8     | 111    | 280    | 1.72    | 23.5   | 0.531    | 204      | 6.68E-05         | 0.0069       | 1.8100     | 0.2630     | 0.2710 | 0.0435                           | 3.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-18 (1-2) | 0.495                  | 6.22    | 15.3     | 79.5   | 179    | 1.06    | 21.8   | 0.495    | 158      | 2.16E-05         | 0.0050       | 0.8940     | 0.1380     | 0.1380 | 0.0217                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-18 (2-3) | 0.502                  | 5.63    | 13.9     | 59.9   | 92.3   | 0.681   | 18.3   | 0.497    | 118      | 1.29E-05         | 0.0051       | 0.5870     | 0.0841     | 0.0862 | 0.0290                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-19         | ISM         | 0-1                     | DU-19 (0-1) | 1.39                   | 7.67    | 13.2     | 107    | 257    | 0.666   | 16.5   | 0.541    | 215      | 1.34E-04         | 0.0121       | 2.3700     | 0.3430     | 0.4030 | 0.1440                           | 2.6               | Predicted depth below hot spot level is 2.5 feet                                                                                                                                                                                     |
|                                                              |               |             | 1-2                     | DU-19 (1-2) | 0.957                  | 11.2    | 12       | 110    | 161    | 1.08    | 15.5   | 0.555    | 198      | 8.48E-05         | 0.0174       | 1.8200     | 0.3840     | 0.2700 | 0.0311                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-19 (2-3) | 0.926                  | 5.68    | 11.2     | 44.9   | 70.8   | 0.327   | 15.5   | 0.522    | 113      | 4.66E-05         | 0.0051       | 0.5140     | 0.0627     | 0.0790 | 0.0568                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-20         | ISM         | 0-1                     | DU-20 (0-1) | 1.69                   | 5.69    | 19.6     | 58.4   | 76.2   | 0.314   | 22.7   | 0.517    | 117      | 3.49E-05         | 0.0048       | 0.8920     | 0.0970     | 0.1450 | 0.0390                           | 1.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-20 (1-2) | 0.536                  | 4.08    | 19.5     | 25.8   | 17.7   | 0.136   | 28.4   | 0.536    | 87.3     | 4.30E-06         | 0.0049       | 0.0881     | 0.0236     | 0.0132 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-20 (2-3) | 0.511                  | 3.68    | 16.7     | 23     | 14.3   | 0.101   | 21.1   | 0.511    | 90.4     | 3.97E-06         | 0.0047       | 0.1350     | 0.0247     | 0.0193 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-21         | ISM         | 0-1                     | DU-21 (0-1) | 2.73                   | 10.5    | 14.8     | 128    | 295    | 0.776   | 20.3   | 0.493    | 242      | 7.03E-05         | 0.0187       | 2.0900     | 0.4640     | 0.3140 | 0.0492                           | 2.4               | Predicted depth below hot spot level is 2.3 feet                                                                                                                                                                                     |
|                                                              |               |             | 1-2                     | DU-21 (1-2) | 1.01                   | 4.93    | 11.8     | 56.2   | 116    | 0.276   | 17.7   | 0.5      | 180      | 2.06E-05         | 0.0074       | 1.0500     | 0.1510     | 0.1640 | 0.0364                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-21 (2-3) | 0.497                  | 4.48    | 11.6     | 45.9   | 89.7   | 0.154   | 18     | 0.5      | 109      | 1.01E-05         | 0.0052       | 0.6240     | 0.1480     | 0.0879 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-22         | ISM         | 0-1                     | DU-22 (0-1) | 2.89                   | 6.48    | 19.6     | 96.6   | 190    | 0.602   | 23.2   | 0.538    | 178      | 3.25E-05         | 0.1120       | 2.6500     | 1.9500     | 0.1310 | 0.0438                           | 3.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-22 (1-2) | 2.63                   | 4.53    | 18.8     | 47.4   | 72.3   | 0.349   | 22.6   | 0.512    | 164      | 1.23E-05         | 0.0051       | 0.2350     | 0.0463     | 0.0289 | 0.0258                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-22 (2-3) | 1.09                   | 4.45    | 18       | 54     | 57.5   | 0.376   | 21.4   | 0.557    | 123      | 7.93E-06         | 0.0051       | 0.2250     | 0.0652     | 0.0292 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-23         | ISM         | 0-1                     | DU-23 (0-1) | 1.62                   | 5.99    | 22.1     | 150    | 276    | 1.02    | 22.9   | 0.497    | 184      | 4.00E-05         | 0.0061       | 0.7550     | 0.1410     | 0.1060 | 0.0591                           | 3.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-23 (1-2) | 0.61                   | 4.63    | 18.4     | 69.5   | 70.9   | 0.545   | 20.5   | 0.518    | 127      | 1.05E-05         | 0.0050       | 0.5370     | 0.0638     | 0.1040 | 0.0265                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-23 (2-3) | 0.498                  | 3.82    | 15.6     | 41.9   | 82.2   | 0.426   | 18.8   | 0.488    | 99       | 5.92E-06         | 0.0051       | 0.2310     | 0.0313     | 0.0362 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-24         | ISM         | 0-1                     | DU-24 (0-1) | 0.546                  | 4.16    | 15.5     | 39.9   | 48.8   | 0.276   | 19.2   | 0.546    | 117      | 2.33E-05         | 0.0050       | 0.6300     | 0.0812     | 0.0907 | 0.0326                           | 1.6               | Predicted depth below hot spot level is 1.5 feet                                                                                                                                                                                     |
|                                                              |               |             | 1-2                     | DU-24 (1-2) | 0.496                  | 3.56    | 15       | 31.1   | 23.2   | 0.175   | 20.6   | 0.496    | 124      | 6.44E-06         | 0.0050       | 0.5000     | 0.0548     | 0.0740 | 0.0049                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-24 (2-3) | 0.501                  | 2.84    | 10.9     | 17.6   | 13.8   | 0.0928  | 18.5   | 0.501    | 83.1     | 8.88E-06         | 0.0050       | 0.0883     | 0.0202     | 0.0145 | 0.0048                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-25         | ISM         | 0-1                     | DU-25 (0-1) | 0.822                  | 5.24    | 20.2     | 226    | 144    | 0.762   | 21.3   | 0.491    | 242      | 4.69E-05         | 0.0123       | 2.7700     | 0.4270     | 0.3860 | 0.0653                           | 2.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-25 (1-2) | 0.493                  | 3.29    | 14.5     | 48.5   | 113    | 0.213   | 19.6   | 0.493    | 202      | 2.60E-06         | 0.0050       | 0.6430     | 0.1010     | 0.0905 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-25 (2-3) | 0.496                  | 3.17    | 12.6     | 30     | 43.2   | 0.116   | 18.7   | 0.496    | 138      | 1.94E-06         | 0.0048       | 0.6130     | 0.0873     | 0.0873 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
| DU-26                                                        | ISM           | 0-1         | DU-26 (0-1)             | 4.79        | 9.5                    | 19.1    | 152      | 330    | 1.95   | 20.7    | 0.605  | 260      | 9.33E-05 | 0.0246           | 4.8900       | 0.7790     | 0.7230     | 0.1850 | 3.0                              |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 1-2         | DU-26 (1-2)             | 1.4         | 11.6                   | 15.5    | 80.7     | 151    | 1.25   | 19.9    | 0.558  | 206      | 4.27E-05 | 0.0050           | 1.6600       | 0.1580     | 0.2810     | 0.0705 |                                  |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 2-3         | DU-26 (2-3)             | 0.529       | 4.75                   | 14.6    | 41.6     | 76.1   | 0.82   | 18.3    | 0.521  | 138      | 2.36E-05 | 0.0050           | 0.9930       | 0.1240     | 0.1480     | 0.1890 |                                  |                   |                                                                                                                                                                                                                                      |
| DU-42                                                        | Composite     | 0-1         | DU-42 (0-1)             | 0.512       | 4.38                   | 17.8    | 36.3     | 53.3   | 0.226  | 23.3    | 0.531  | 126      | 6.07E-05 | 0.0050           | 0.3470       | 0.0678     | 0.0507     | 0.0050 | 0.0                              |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 1-2         | DU-42 (1-2)             | 0.667       | 4.11                   | 18.4    | 25.4     | 30.3   | 0.186  | 22.6    | 0.549  | 109      | 2.27E-05 | 0.0048           | 0.2200       | 0.0429     | 0.0309     | 0.0050 |                                  |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 2-3         | DU-42 (2-3)             | 0.531       | 3.76                   | 17.4    | 21.1     | 20.1   | 0.125  | 20.7    | 0.531  | 87       | 8.27E-06 | 0.0050           | 0.1580       | 0.0297     | 0.0229     | 0.0049 |                                  |                   |                                                                                                                                                                                                                                      |
| East Parcel                                                  | DU-27         | ISM         | 0-1                     | DU-27 (0-1) | 1.3                    | 14.5    | 19.8     | 204    | 46.1   | 0.184   | 21.1   | 0.583    | 173      | 1.03E-04         | 0.0050       | 1.4000     | 0.1590     | 0.2130 | 0.1860                           | 2.0               | Layer 2 has only dioxin/furan hot spot at exceedance of 1.1. However, the human health RG exceedance factor is 4.7 and the RG is exceeded in 50 percent of the East Parcel samples. Therefore, the Layer 2 hot spot will be removed. |
|                                                              |               |             | 1-2                     | DU-27 (1-2) | 0.488                  | 8.72    | 16.9     | 81.2   | 39.1   | 0.0555  | 21.3   | 0.488    | 130      | 6.99E-05         | 0.0101       | 1.7800     | 0.3630     | 0.2420 | 0.1680                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-27 (2-3) | 1.15                   | 15.8    | 15.5     | 45.6   | 55.4   | 0.0643  | 18.4   | 0.512    | 139      | 2.40E-05         | 0.0050       | 0.6570     | 0.1030     | 0.0973 | 0.1780                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-28         | ISM         | 0-1                     | DU-28 (0-1) | 2.32                   | 10.5    | 16.4     | 184    | 78.1   | 0.649   | 17.9   | 0.513    | 267      | 1.91E-05         | 0.0070       | 2.3600     | 0.2610     | 0.4330 | 0.1000                           | 2.5               | Predicted depth below hot spot level is 2.4 feet                                                                                                                                                                                     |
|                                                              |               |             | 1-2                     | DU-28 (1-2) | 2.87                   | 13.3    | 17.3     | 327    | 74.1   | 0.706   | 17.2   | 0.493    | 231      | 3.27E-05         | 0.0085       | 3.1400     | 0.3090     | 0.5280 | 0.0718                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-28 (2-3) | 4.79                   | 7.4     | 16.9     | 229    | 113    | 0.207   | 19.6   | 0.522    | 275      | 1.49E-05         | 0.0084       | 1.8900     | 0.2380     | 0.3530 | 0.0370                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-29         | ISM         | 0-1                     | DU-29 (0-1) | 1.08                   | 6.95    | 12.1     | 69.3   | 103    | 0.0595  | 18.1   | 0.518    | 164      | 4.97E-05         | 0.0085       | 0.9880     | 0.1570     | 0.1540 | 0.0250                           | 0.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-29 (1-2) | 1.02                   | 5.08    | 10.4     | 44.3   | 41.1   | 0.0436  | 15.3   | 0.545    | 100      | 1.53E-05         | 0.0051       | 0.4780     | 0.0641     | 0.0697 | 0.0047                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-29 (2-3) | 0.511                  | 3.6     | 10       | 27.8   | 45.7   | 0.0409  | 15.2   | 0.511    | 92.7     | 1.53E-05         | 0.0050       | 0.3800     | 0.0562     | 0.0588 | 0.0049                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-30         | ISM         | 0-1                     | DU-30 (0-1) | 1.66                   | 4.22    | 14.5     | 63.4   | 131    | 0.0829  | 18.3   | 0.5      | 179      | 5.05E-05         | 0.0072       | 2.1500     | 0.2030     | 0.3980 | 0.0325                           | 3.0               | Remove soil pile prior to hot spot excavation. Buried hot spot. Stockpile Layers 1 and 2. Remove Layer 3 for off-site disposal. Replace Layers 1 and 2 in excavation prior to capping.                                               |
|                                                              |               |             | 1-2                     | DU-30 (1-2) | 2.09                   | 3.72    | 13.9     | 79.8   | 202    | 0.05    | 17.7   | 0.512    | 228      | 2.24E-05         | 0.0050       | 1.0000     | 0.1200     | 0.1690 | 0.0050                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-30 (2-3) | 6.81                   | 4.14    | 11.6     | 86.6   | 220    | 0.159   | 15.7   | 0.501    | 152      | 1.44E-05         | 0.0050       | 0.4650     | 0.0681     | 0.0709 | 0.0456                           |                   |                                                                                                                                                                                                                                      |
|                                                              | DU-31         | ISM         | 0-1                     | DU-31 (0-1) | 1.85                   | 6.09    | 14.5     | 35.4   | 44.8   | 0.0479  | 16.5   | 0.491    | 116      | 5.84E-05         | 0.0050       | 0.8540     | 0.1160     | 0.1240 | 0.0257                           | 0.0               |                                                                                                                                                                                                                                      |
|                                                              |               |             | 1-2                     | DU-31 (1-2) | 0.743                  | 4.98    | 12.6     | 49.2   | 34.1   | 0.067   | 17     | 0.516    | 140      | 1.90E-05         | 0.0054       | 0.7680     | 0.1270     | 0.1190 | 0.0298                           |                   |                                                                                                                                                                                                                                      |
|                                                              |               |             | 2-3                     | DU-31 (2-3) | 0.735                  | 5.96    | 12.9     | 68.2   | 25     | 0.0415  | 16.7   | 0.519    | 109      | 1.09E-05         | 0.0050       | 0.6490     | 0.1100     | 0.0919 | 0.0270                           |                   |                                                                                                                                                                                                                                      |
| DU-32                                                        | ISM           | 0-1         | DU-32 (0-1)             | 0.879       | 8.99                   | 12.4    | 31.6     | 28.9   | 0.0428 | 15.7    | 0.535  | 118      | 3.48E-05 | 0.0063           | 0.7760       | 0.1220     | 0.1150     | 0.0048 | 0.0                              |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 1-2         | DU-32 (1-2)             | 0.535       | 7.1                    | 11.1    | 23.4     | 20.9   | 0.0428 | 15.3    | 0.535  | 104      | 7.54E-06 | 0.0047           | 0.4910       | 0.0684     | 0.0754     | 0.0048 |                                  |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 2-3         | DU-32 (2-3)             | 0.492       | 3.56                   | 9.91    | 20.1     | 34.1   | 0.0394 | 14.2    | 0.492  | 90.2     | 7.59E-06 | 0.0405           | 3.5300       | 0.7460     | 0.5660     | 0.0047 |                                  |                   |                                                                                                                                                                                                                                      |
| DU-33                                                        | ISM           | 0-1         | DU-33 (0-1)             | 2.31        | 6.62                   | 9.85    | 79.8     | 88.8   | 0.0435 | 14.9    | 0.491  | 290      | 3.69E-05 | 0.0081           | 0.4140       | 0.1040     | 0.0542     | 0.0852 | 0.0                              | Remove soil pile. |                                                                                                                                                                                                                                      |
|                                                              |               | 1-2         | DU-33 (1-2)             | 1.84        | 9.6                    | 12.3    | 96.6     | 66.2   | 0.0413 | 17.8    | 0.516  | 354      | 1.67E-05 | 0.0066           | 0.4510       | 0.1280     | 0.0519     | 0.0501 |                                  |                   |                                                                                                                                                                                                                                      |
|                                                              |               | 2-3         | DU-33 (2-3)             | 0.666       | 5.35                   | 10.3    | 52.6     | 42.8   | 0.0423 | 16.4    | 0.529  | 234      | 1.21E-05 | 0.0049           | 0.4010       | 0.0650     | 0.0555     | 0.0579 |                                  |                   |                                                                                                                                                                                                                                      |

Table 4  
Hot Spot Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                              | Decision Unit     | Sample Type | Sample Depth (feet bgs) | Sample ID   | Concentration in mg/kg |         |          |        |        |         |        |          |          |                  |              |            |            |        | Nominal Excavation Depth in Feet | Comments                                                               |                   |
|--------------------------------------------------------------|-------------------|-------------|-------------------------|-------------|------------------------|---------|----------|--------|--------|---------|--------|----------|----------|------------------|--------------|------------|------------|--------|----------------------------------|------------------------------------------------------------------------|-------------------|
|                                                              |                   |             |                         |             | Antimony               | Arsenic | Chromium | Copper | Lead   | Mercury | Nickel | Selenium | Zinc     | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  |                                  |                                                                        | Total PCBs        |
| Minimum Hot Spot Level for All Receptors (ISM Samples)       |                   |             |                         |             | 27                     | 140     | 39       | 700    | 330    | 0.15    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                             |                                                                        |                   |
| Minimum Hot Spot Level for All Receptors (Composite Samples) |                   |             |                         |             | 27                     | 140     | 76       | 700    | 330    | 0.23    | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                             |                                                                        |                   |
| East Parcel (Cont.)                                          | DU-34             | ISM         | 0-1                     | DU-34 (0-1) | 1.05                   | 5.13    | 14       | 32.6   | 41.4   | 0.044   | 22     | 0.523    | 182      | 6.03E-05         | 0.0178       | 1.7200     | 0.3960     | 0.2530 | 0.0330                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-34 (1-2) | 0.557                  | 4.95    | 14.6     | 33.2   | 31.9   | 0.0447  | 24.3   | 0.498    | 177      | 2.82E-05         | 0.0098       | 1.1900     | 0.2100     | 0.1840 | 0.0476                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-34 (2-3) | 0.537                  | 3.69    | 12.1     | 33.1   | 25.9   | 0.043   | 20.1   | 0.537    | 222      | 3.02E-05         | 0.0051       | 0.6510     | 0.1160     | 0.0973 | 0.0050                           |                                                                        |                   |
|                                                              | DU-35             | ISM         | 0-1                     | DU-35 (0-1) | 0.512                  | 4.4     | 14.5     | 52.9   | 22.6   | 0.0415  | 17.8   | 0.512    | 174      | 4.05E-05         | 0.0053       | 0.6160     | 0.1040     | 0.0931 | 0.0284                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-35 (1-2) | 0.531                  | 3.81    | 12.3     | 29.1   | 19     | 0.0425  | 15.3   | 0.531    | 168      | 1.31E-05         | 0.0050       | 0.7040     | 0.1060     | 0.1190 | 0.0396                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-35 (2-3) | 0.524                  | 3.37    | 9.45     | 27.8   | 12.4   | 0.042   | 14.2   | 0.524    | 141      | 1.02E-05         | 0.0049       | 0.2500     | 0.0334     | 0.0355 | 0.0050                           |                                                                        |                   |
|                                                              | DU-36             | ISM         | 0-1                     | DU-36 (0-1) | 3.77                   | 5.03    | 20.1     | 57.9   | 73.2   | 0.0398  | 22.6   | 0.498    | 266      | 4.21E-05         | 0.0060       | 0.6170     | 0.0892     | 0.0823 | 0.0279                           | 0.0                                                                    | Remove soil pile. |
|                                                              |                   |             | 1-2                     | DU-36 (1-2) | 3.44                   | 4.23    | 17.3     | 56.7   | 130    | 0.0606  | 19     | 0.52     | 222      | 3.70E-05         | 0.0082       | 0.7770     | 0.1290     | 0.1030 | 0.0050                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-36 (2-3) | 3.62                   | 4.12    | 14.4     | 46.3   | 63.3   | 0.0449  | 18.3   | 0.526    | 190      | 2.80E-05         | 0.0050       | 0.2950     | 0.0564     | 0.0379 | 0.0284                           |                                                                        |                   |
|                                                              | DU-38             | ISM         | 0-1                     | DU-38 (0-1) | 1.31                   | 3.71    | 13.1     | 27.7   | 30.5   | 0.0454  | 16.5   | 0.536    | 110      | 2.94E-05         | 0.0056       | 0.5940     | 0.0920     | 0.0828 | 0.0412                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-38 (1-2) | 4.88                   | 3.76    | 12.3     | 56     | 76.7   | 0.0415  | 16     | 0.519    | 102      | 1.90E-05         | 0.0051       | 0.4550     | 0.0853     | 0.0635 | 0.0444                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-38 (2-3) | 3.71                   | 4.06    | 13.6     | 51.4   | 51.3   | 0.0421  | 17.1   | 0.527    | 108      | 1.05E-05         | 0.0051       | 0.5190     | 0.0738     | 0.0442 | 0.0300                           |                                                                        |                   |
|                                                              | DU-37             | Composite   | 0-1                     | DU-37 (0-1) | 0.495                  | 3.72    | 17.4     | 26.1   | 39.3   | 0.0396  | 18.6   | 0.572    | 74.4     | 6.78E-07         | 0.0050       | 0.0834     | 0.0210     | 0.0124 | 0.0049                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-37 (1-2) | 0.495                  | 3.00    | 14.9     | 21.4   | 12.6   | 0.043   | 18.8   | 0.537    | 61.5     | 6.32E-07         | 0.0050       | 0.1050     | 0.0213     | 0.0114 | 0.0050                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-37 (2-3) | 0.513                  | 2.85    | 13.4     | 16.9   | 8.96   | 0.0411  | 17.1   | 0.513    | 52.2     | 5.69E-07         | 0.0115       | 0.8510     | 0.2540     | 0.0970 | 0.0051                           |                                                                        |                   |
|                                                              | DU-39             | Composite   | 0-1                     | DU-39 (0-1) | 0.534                  | 2.69    | 13.4     | 21.3   | 6.09   | 0.0427  | 16     | 0.534    | 62.8     | 3.68E-06         | 0.0049       | 0.0270     | 0.0172     | 0.0057 | 0.0049                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-39 (1-2) | 0.56                   | 3.24    | 15.1     | 17.9   | 5.11   | 0.0448  | 18.3   | 0.615    | 57.4     | 1.38E-06         | 0.0049       | 0.0247     | 0.1750     | 0.0057 | 0.0049                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-39 (2-3) | 0.525                  | 3.44    | 16       | 18.4   | 6.88   | 0.042   | 19.2   | 0.525    | 54.3     | 1.36E-06         | 0.0049       | 0.0955     | 0.1290     | 0.0124 | 0.0049                           |                                                                        |                   |
|                                                              | DU-40             | Composite   | 0-1                     | DU-40 (0-1) | 0.509                  | 2.88    | 12.9     | 16.2   | 3.75   | 0.0407  | 16.3   | 0.509    | 44.3     | 7.34E-07         | 0.0050       | 0.0249     | 0.0174     | 0.0057 | 0.0049                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-40 (1-2) | 0.513                  | 3.4     | 13.4     | 15.4   | 3.47   | 0.0411  | 17.7   | 0.513    | 44.7     | 5.18E-07         | 0.0050       | 0.0281     | 0.0175     | 0.0061 | 0.0050                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-40 (2-3) | 0.525                  | 3.13    | 13.7     | 16.6   | 3.1    | 0.042   | 18.2   | 0.525    | 45.1     | 5.52E-07         | 0.0051       | 0.0279     | 0.0177     | 0.0061 | 0.0050                           |                                                                        |                   |
|                                                              | DU-43             | Composite   | 0-1                     | DU-43 (0-1) | 0.503                  | 2.92    | 13.8     | 18.8   | 5.42   | 0.0402  | 16.9   | 0.522    | 53.9     | 3.00E-06         | 0.0049       | 0.1200     | 0.0236     | 0.0163 | 0.0051                           | 0.0                                                                    |                   |
|                                                              |                   |             | 1-2                     | DU-43 (1-2) | 0.536                  | 2.89    | 14       | 18.7   | 9.65   | 0.0429  | 18.5   | 0.536    | 56.4     | 1.26E-06         | 0.0051       | 0.1220     | 0.0813     | 0.0106 | 0.0051                           |                                                                        |                   |
|                                                              |                   |             | 2-3                     | DU-43 (2-3) | 0.523                  | 3.06    | 13.8     | 16.3   | 4.35   | 0.0418  | 18.4   | 0.523    | 46       | 6.63E-07         | 0.0050       | 0.0616     | 0.0174     | 0.0097 | 0.0050                           |                                                                        |                   |
| DU-44                                                        | Composite         | 0-1         | DU-44 (0-1)             | 0.619       | 3.12                   | 14      | 17.9     | 13     | 0.0394 | 17.7    | 0.492  | 83.7     | 1.38E-06 | 0.0050           | 0.1430       | 0.0294     | 0.0180     | 0.0049 | 0.0                              |                                                                        |                   |
|                                                              |                   | 1-2         | DU-44 (1-2)             | 0.486       | 3.24                   | 14.3    | 15.7     | 6.23   | 0.0389 | 17.2    | 0.486  | 51.3     | 8.37E-07 | 0.0050           | 0.0910       | 0.0206     | 0.0127     | 0.0049 |                                  |                                                                        |                   |
|                                                              |                   | 2-3         | DU-44 (2-3)             | 0.505       | 3.06                   | 13.2    | 15       | 5.94   | 0.0404 | 16.0    | 0.505  | 45.9     | 7.25E-07 | 0.0049           | 0.0840       | 0.0171     | 0.0129     | 0.0048 |                                  |                                                                        |                   |
| DU-41                                                        | ISM (Berm Sample) | 0-1         | DU-41 (0-1)             | 2.81        | 50.1                   | 16.9    | 78.6     | 83.8   | 0.262  | 16.5    | 0.531  | 139      | 2.55E-04 | 0.0184           | 2.1100       | 0.3120     | 0.3360     | 0.0691 | See Comment                      | Remove entire berm; excavate below berm to same depth as adjacent DUs. |                   |
|                                                              |                   | 1-2         | DU-41 (1-2)             | 2.39        | 14.1                   | 20.7    | 71.1     | 129    | 0.108  | 18.4    | 0.514  | 165      | 2.42E-04 | 0.0427           | 1.9400       | 0.5590     | 0.2760     | 0.0926 |                                  |                                                                        |                   |
|                                                              |                   | 2-3         | DU-41 (2-3)             | 1.69        | 19.6                   | 21.7    | 45.2     | 109    | 0.0732 | 21.7    | 0.511  | 182      | 1.55E-04 | 0.0129           | 1.0800       | 0.2310     | 0.1490     | 0.0438 |                                  |                                                                        |                   |

Notes:

1. Definition of table shading:

- Exceeds Hot Spot Level.
- COC was not detected. Value shown is the detection limit.

Table 5  
Human Health Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                            | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID  | Concentration in mg/kg |         |          |        |       |             |        |          |          |                  |              |            |            |        |            | Nominal Hot Spot Excavation Depth in Feet | COC Exceeding Human Health RG Post Hot Spot Removal | Nominal Exposure Point Concentrations <sup>2</sup> (mg/kg)  |                                                                  |                                                          | Nominal Excess Cancer Risk <sup>2</sup> |                                                              |                                                              | Comments                                                                                                                                                                 |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------|---------------|-------------|-------------------------|------------|------------------------|---------|----------|--------|-------|-------------|--------|----------|----------|------------------|--------------|------------|------------|--------|------------|-------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
|                                                                            |               |             |                         |            | Antimony               | Arsenic | Chromium | Copper | Lead  | Mercury     | Nickel | Selenium | Zinc     | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  | Total PCBs |                                           |                                                     | Arsenic                                                     | Dioxin/ Furan TEQ                                                | cPAHs                                                    | Arsenic                                 | Dioxin/ Furan TEQ                                            | cPAHs                                                        |                                                                                                                                                                          |  |  |  |  |  |  |  |
| Minimum Hot Spot Level for All Receptors - ISM Samples (Composite Samples) |               |             |                         |            | 27                     | 140     | 39 (76)  | 700    | 330   | 0.15 (0.23) | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98       |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| Human Health RG                                                            |               |             |                         |            | 24                     | 8.8     | --       | 11,000 | 400   | --          | --     | --       | 1.5E-05  | --               | --           | --         | 0.55       | 0.74   |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| West Parcel                                                                | DU-1          | ISM         | 0-1                     | DU-1 (0-1) | 0.801                  | 6.24    | 37.4     | 180    | 74.8  | 0.0696      | 27.1   | 0.514    | 151      | 2,215-05         | 0.0078       | 2.6600     | 0.3370     | 0.4460 | 0.4270     | 2.0                                       | D/F TEQ                                             | Maximum post-hot spot excavation concentration less than RG | Depth Range 0-3 Feet: 1.6 E-05<br>Depth Range 0-1 Foot: 2.2 E-05 | Depth Range 0-3 Feet: 0.45<br>Depth Range 0-1 Foot: 0.32 | N/A                                     | Depth Range 0-3 Feet: 1 E-06<br>Depth Range 0-1 Foot: 1 E-06 | Depth Range 0-3 Feet: 8 E-07<br>Depth Range 0-1 Foot: 6 E-07 | The estimated pre-cap residual human health risk is equal to or less than 1 E-06 for individual COCs. No additional excavation is proposed to address human health risk. |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-1 (1-2) | 0.712                  | 5.41    | 41.3     | 64.6   | 321   | 0.0863      | 30.9   | 0.516    | 140      | 2,565-05         | 0.0102       | 2.6200     | 0.4240     | 0.4000 | 2,7500     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-1 (2-3) | 0.529                  | 5.79    | 29.5     | 69.5   | 57.5  | 0.0813      | 25.0   | 0.529    | 179      | 1,075-05         | 0.0048       | 2.1100     | 0.2860     | 0.3280 | 0.1100     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-2          | ISM         | 0-1                     | DU-2 (0-1) | 0.603                  | 5.41    | 21.5     | 119    | 96.2  | 0.0731      | 18.9   | 0.505    | 99.4     | 6.95E-06         | 0.0051       | 1.0200     | 0.1270     | 0.1650 | 0.1860     | 0.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-2 (1-2) | 0.515                  | 5.36    | 22       | 170    | 118   | 0.124       | 16.4   | 0.515    | 88.8     | 3.44E-06         | 0.0047       | 0.7920     | 0.1230     | 0.1080 | 0.5580     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-2 (2-3) | 0.495                  | 5.21    | 15.5     | 41.9   | 24.4  | 0.0607      | 14.7   | 0.495    | 78       | 2.42E-06         | 0.0050       | 0.2230     | 0.0275     | 0.0319 | 0.0299     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-3          | ISM         | 0-1                     | DU-3 (0-1) | 0.547                  | 6.87    | 16.2     | 26.8   | 20.1  | 0.0438      | 16.3   | 0.547    | 80.4     | 2,635-05         | 0.0048       | 0.9760     | 0.1210     | 0.1530 | 0.0250     | 0.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-3 (1-2) | 0.497                  | 6.65    | 16.5     | 25.8   | 15.8  | 0.0455      | 17.1   | 0.497    | 72.2     | 7.82E-06         | 0.0051       | 0.9840     | 0.1210     | 0.1290 | 0.0050     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-3 (2-3) | 0.536                  | 6.65    | 15.7     | 21.6   | 13.5  | 0.0497      | 16.0   | 0.536    | 64.7     | 4.57E-06         | 0.0050       | 0.7450     | 0.1140     | 0.1030 | 0.0048     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-4          | ISM         | 0-1                     | DU-4 (0-1) | 0.565                  | 6.57    | 16.3     | 29.1   | 23.7  | 0.0746      | 23.9   | 0.565    | 89.4     | 2,095-05         | 0.0057       | 2.5200     | 0.3290     | 0.4280 | 0.0317     | 0.0                                       | D/F TEQ cPAHs                                       |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-4 (1-2) | 0.515                  | 6.87    | 16.3     | 26.6   | 23.9  | 0.0596      | 24.6   | 0.515    | 79.4     | 1,665-05         | 0.0034       | 11.9000    | 3.5400     | 1,7500 | 0.0245     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-4 (2-3) | 0.502                  | 7.63    | 18.4     | 34     | 45.1  | 0.076       | 22.4   | 0.502    | 115      | 1,475-05         | 0.0094       | 4.6500     | 0.6340     | 0,7670 | 0.0351     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-5          | ISM         | 0-1                     | DU-5 (0-1) | 0.992                  | 8.98    | 52.3     | 344    | 62.1  | 0.352       | 32.6   | 0.369    | 211      | 1,715-05         | 0.0073       | 1.4000     | 0.1960     | 0.2420 | 0.1770     | 3.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-5 (1-2) | 0.832                  | 8.09    | 42.9     | 237    | 70.5  | 0.369       | 58.9   | 0.335    | 179      | 1,535-05         | 0.0061       | 1.1600     | 0.1550     | 0.1990 | 0.1430     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-5 (2-3) | 0.596                  | 6.73    | 47.1     | 214    | 118   | 0.273       | 31.3   | 0.309    | 224      | 2,335-05         | 0.0099       | 2.8800     | 0.5470     | 0.4080 | 0.3870     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-6          | ISM         | 0-1                     | DU-6 (0-1) | 0.539                  | 4.93    | 22.1     | 67.6   | 28.2  | 0.128       | 19.6   | 0.539    | 135      | 1,045-05         | 0.0052       | 1.1000     | 0.1200     | 0.1880 | 0.0625     | 2.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-6 (1-2) | 0.56                   | 4.89    | 25.2     | 91.6   | 40    | 0.156       | 21.8   | 0.56     | 124      | 2,515-05         | 0.0090       | 1.2900     | 0.1910     | 0.2040 | 0.1110     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-6 (2-3) | 0.526                  | 4.67    | 23.2     | 100    | 37.8  | 0.141       | 22.0   | 0.526    | 112      | 1,145-05         | 0.0110       | 1.4300     | 0.2160     | 0.2260 | 0.1670     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-7          | ISM         | 0-1                     | DU-7 (0-1) | 0.537                  | 4.37    | 19.2     | 36     | 23.3  | 0.304       | 19.3   | 0.537    | 126      | 1,745-05         | 0.0051       | 0.7510     | 0.0885     | 0.1270 | 0.0527     | 1.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-7 (1-2) | 0.547                  | 3.98    | 18.6     | 30.1   | 18.7  | 0.13        | 19.7   | 0.547    | 92.7     | 1,245-05         | 0.0050       | 0.4400     | 0.0705     | 0.0711 | 0.0567     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-7 (2-3) | 0.536                  | 3.07    | 16.2     | 24.2   | 14.9  | 0.0927      | 19.1   | 0.536    | 75.1     | 8.17E-06         | 0.0050       | 0.3160     | 0.0497     | 0.0478 | 0.0502     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-8          | ISM         | 0-1                     | DU-8 (0-1) | 0.56                   | 4.33    | 21.7     | 32.5   | 39.1  | 0.154       | 19.6   | 0.56     | 144      | 2,365-05         | 0.0055       | 0.7550     | 0.1140     | 0.1210 | 0.0989     | 3.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-8 (1-2) | 0.501                  | 4.13    | 24.6     | 32.9   | 31.4  | 0.164       | 19.7   | 0.501    | 130      | 2,465-05         | 0.0055       | 0.4940     | 0.1010     | 0.0731 | 0.0678     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-8 (2-3) | 0.545                  | 4.13    | 21.9     | 32     | 31    | 0.156       | 20.7   | 0.545    | 126      | 2,345-05         | 0.0062       | 0.5890     | 0.1200     | 0.0847 | 0.0984     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            | DU-9          | ISM         | 0-1                     | DU-9 (0-1) | 0.623                  | 5.25    | 30.6     | 40.6   | 28.2  | 0.16        | 26.5   | 0.506    | 154      | 1,785-05         | 0.0057       | 1.1200     | 0.1600     | 0.1890 | 0.0640     | 1.0                                       | D/F TEQ                                             |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 1-2                     | DU-9 (1-2) | 0.555                  | 4.81    | 27.8     | 34.6   | 40.7  | 0.141       | 24.4   | 0.555    | 115      | 1,285-05         | 0.0048       | 0.4770     | 0.0753     | 0.0771 | 0.0353     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               |             | 2-3                     | DU-9 (2-3) | 0.512                  | 5.12    | 31       | 37.4   | 21.5  | 0.141       | 26.2   | 0.512    | 122      | 1,235-05         | 0.0080       | 1.1600     | 0.1990     | 0.1800 | 0.0478     |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-10                                                                      | ISM           | 0-1         | DU-10 (0-1)             | 0.541      | 4.5                    | 14.8    | 33.3     | 86.5   | 1.07  | 29.9        | 0.541  | 106      | 1,735-05 | 0.0235           | 29.4000      | 3.8500     | 5,1900     | 0.0337 | 3.0        | cPAHs                                     |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-10 (1-2)             | 0.531      | 5.56                   | 15.3    | 33.6     | 54.8   | 0.829 | 27.5        | 0.513  | 94.9     | 5,46E-06 | 0.0494           | 28.3000      | 6.5900     | 4,7000     | 0.0262 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-10 (2-3)             | 0.514      | 5.16                   | 14.5    | 32.2     | 73.3   | 0.609 | 22.6        | 0.491  | 117      | 4,52E-06 | 0.0244           | 16.9000      | 3.7700     | 2,6000     | 0.0051 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-11                                                                      | ISM           | 0-1         | DU-11 (0-1)             | 0.545      | 4.6                    | 23.6    | 38.5     | 56.1   | 0.726 | 29.3        | 0.545  | 116      | 1,175-05 | 0.0819           | 31.3000      | 9.3600     | 5,4000     | 0.0369 | 3.0        | cPAHs                                     |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-11 (1-2)             | 0.535      | 4.15                   | 22      | 37.3     | 49     | 0.633 | 28.2        | 0.535  | 99.5     | 5,21E-06 | 0.0486           | 15.1000      | 2.9800     | 2,6500     | 0.0372 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-11 (2-3)             | 0.526      | 4.23                   | 22      | 35.2     | 43.3   | 0.604 | 26.4        | 0.526  | 95       | 5,89E-06 | 0.0613           | 30.2000      | 7.3500     | 5,1300     | 0.0389 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-12                                                                      | ISM           | 0-1         | DU-12 (0-1)             | 0.83       | 4.95                   | 14.8    | 78.9     | 165    | 0.292 | 19.8        | 0.504  | 166      | 2,545-05 | 0.0070           | 2.4700       | 0.3520     | 0.3930     | 0.0532 | 3.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-12 (1-2)             | 0.493      | 4.26                   | 14      | 55.7     | 131    | 0.275 | 19          | 0.493  | 104      | 4,21E-06 | 0.0059           | 0.9970       | 0.1900     | 0.1430     | 0.0317 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-12 (2-3)             | 0.551      | 3.62                   | 13.7    | 41       | 70.8   | 0.207 | 17.8        | 0.551  | 79.7     | 2,60E-06 | 0.0050           | 0.5840       | 0.1030     | 0.0900     | 0.0050 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-13                                                                      | ISM           | 0-1         | DU-13 (0-1)             | 0.923      | 6.04                   | 14.2    | 94.3     | 241    | 1.15  | 21.4        | 0.563  | 204      | 2,77E-04 | 0.0084           | 7.9300       | 0.4760     | 1,1700     | 0.0701 | 3.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-13 (1-2)             | 0.54       | 4.79                   | 13.8    | 53       | 154    | 0.785 | 18.6        | 0.54   | 128      | 3,62E-05 | 0.0155           | 3.0600       | 0.6760     | 0.4500     | 0.0272 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-13 (2-3)             | 0.562      | 4.04                   | 12.6    | 54.2     | 175    | 0.769 | 18.4        | 0.562  | 127      | 2,66E-05 | 0.0052           | 1.6700       | 0.2480     | 0.2630     | 0.0330 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-14                                                                      | ISM           | 0-1         | DU-14 (0-1)             | 2.81       | 6.14                   | 22.9    | 73.5     | 134    | 1.33  | 24.3        | 0.514  | 147      | 7,87E-05 | 0.0229           | 0.9920       | 0.3010     | 0.1490     | 0.0283 | 3.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-14 (1-2)             | 7.38       | 6.87                   | 21.6    | 122      | 240    | 3.1   | 23.7        | 0.519  | 204      | 3,43E-05 | 0.0224           | 1.7000       | 0.4070     | 0.2570     | 0.0048 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-14 (2-3)             | 3.04       | 5.66                   | 20.6    | 185      | 162    | 2.5   | 24.8        | 0.493  | 164      | 1,43E-05 | 0.0143           | 1.3200       | 0.2860     | 0.1950     | 0.0048 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-15                                                                      | ISM           | 0-1         | DU-15 (0-1)             | 2.81       | 5.04                   | 16      | 95.4     | 131    | 0.75  | 21.7        | 0.506  | 131      | 3,96E-04 | 0.0081           | 0.9590       | 0.1440     | 0.1380     | 0.0268 | 3.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-15 (1-2)             | 0.576      | 3.75                   | 14      | 57.7     | 68.6   | 1.28  | 19.3        | 0.517  | 120      | 2,00E-04 | 0.0049           | 0.3280       | 0.0668     | 0.0499     | 0.0048 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-15 (2-3)             | 0.492      | 2.91                   | 11.2    | 36.2     | 63.6   | 0.563 | 17.6        | 0.492  | 76.8     | 1,50E-04 | 0.0049           | 0.6910       | 0.0868     | 0.1010     | 0.0048 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-16                                                                      | ISM           | 0-1         | DU-16 (0-1)             | 4.29       | 8.31                   | 26.6    | 131      | 306    | 5.12  | 28.1        | 0.543  | 371      | 2,44E-04 | 0.0076           | 3.2200       | 0.9680     | 0.4960     | 0.0346 | 2.6        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-16 (1-2)             | 2.29       | 6.92                   | 13.6    | 71.8     | 151    | 1.69  | 18.5        | 0.521  | 139      | 1,75E-05 | 0.0075           | 1.6300       | 0.2070     | 0.2460     | 0.0049 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-16 (2-3)             | 0.499      | 3.72                   | 12.9    | 29.1     | 37.5   | 0.429 | 16.8        | 0.539  | 71.3     | 7,62E-06 | 0.0050           | 0.4170       | 0.0624     | 0.0569     | 0.0050 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-17                                                                      | ISM           | 0-1         | DU-17 (0-1)             | 1.06       | 4.95                   | 12.4    | 59.2     | 81.4   | 0.575 | 16.4        | 0.499  | 156      | 4,04E-06 | 0.0050           | 0.4280       | 0.0851     | 0.0634     | 0.0257 | 2.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-17 (1-2)             | 0.511      | 3.72                   | 11.8    | 34.3     | 62.5   | 0.356 | 16.3        | 0.511  | 70.6     | 3,43E-06 | 0.0050           | 0.3630       | 0.0859     | 0.0513     | 0.0050 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-17 (2-3)             | 0.504      | 3.16                   | 11.1    | 26.8     | 35.1   | 0.121 | 14.6        | 0.504  | 58.4     | 7,81E-06 | 0.0050           | 0.2220       | 0.0348     | 0.0309     | 0.0049 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-18                                                                      | ISM           | 0-1         | DU-18 (0-1)             | 1.41       | 10.9                   | 22.8    | 111      | 280    | 1.72  | 23.5        | 0.531  | 204      | 6,68E-05 | 0.0069           | 1.8100       | 0.2630     | 0.2710     | 0.0435 | 3.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-18 (1-2)             | 0.495      | 6.22                   | 15.3    | 79.5     | 179    | 1.06  | 21.8        | 0.495  | 158      | 2,16E-05 | 0.0050           | 0.9940       | 0.1380     | 0.1380     | 0.0217 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-18 (2-3)             | 0.502      | 5.63                   | 13.9    | 59.9     | 92.3   | 0.681 | 18.3        | 0.497  | 118      | 1,19E-05 | 0.0051           | 0.5870       | 0.0481     | 0.0862     | 0.0290 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-19                                                                      | ISM           | 0-1         | DU-19 (0-1)             | 1.39       | 7.67                   | 13.2    | 107      | 257    | 0.666 | 16.5        | 0.541  | 215      | 1,34E-04 | 0.0121           | 2.3700       | 0.3430     | 0.4030     | 0.1440 | 2.6        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-19 (1-2)             | 0.957      | 11.2                   | 12      | 110      | 161    | 1.08  | 15.5        | 0.555  | 198      | 8,48E-05 | 0.0174           | 1.8200       | 0.3840     | 0.2700     | 0.0311 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-19 (2-3)             | 0.926      | 5.68                   | 11.2    | 44.9     | 70.8   | 0.327 | 15.5        | 0.522  | 113      | 4,66E-05 | 0.0051           | 0.5140       | 0.0627     | 0.0790     | 0.0568 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
| DU-20                                                                      | ISM           | 0-1         | DU-20 (0-1)             | 1.69       | 5.69                   | 19.6    | 58.4     | 76.2   | 0.314 | 22.7        | 0.517  | 117      | 3,49E-05 | 0.0048           | 0.8920       | 0.0970     | 0.1450     | 0.0390 | 1.0        | D/F TEQ                                   |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 1-2         | DU-20 (1-2)             | 0.536      | 4.08                   | 19.5    | 25.8     | 17.7   | 0.136 | 28.4        | 0.536  | 87.3     | 4,30E-06 | 0.0049           | 0.0881       | 0.0236     | 0.0132     | 0.0050 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |
|                                                                            |               | 2-3         | DU-20 (2-3)             | 0.511      | 3.68                   | 16.7    | 23       | 14.3   | 0.101 | 21.1        | 0.511  | 90.4     | 3,97E-06 | 0.0047           | 0.1350       | 0.0247     | 0.0193     | 0.0050 |            |                                           |                                                     |                                                             |                                                                  |                                                          |                                         |                                                              |                                                              |                                                                                                                                                                          |  |  |  |  |  |  |  |

Table 5  
Human Health Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                            | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Concentration in mg/kg |         |          |        |        |             |        |          |          |                  |              |            |            |        | Nominal Hot Spot Excavation Depth in Feet | COC Exceeding Human Health RG Post Hot Spot Removal | Nominal Exposure Point Concentrations <sup>2</sup> (mg/kg) |         |                   | Nominal Excess Cancer Risk <sup>2</sup> |         |                   | Comments |
|----------------------------------------------------------------------------|---------------|-------------|-------------------------|-------------|------------------------|---------|----------|--------|--------|-------------|--------|----------|----------|------------------|--------------|------------|------------|--------|-------------------------------------------|-----------------------------------------------------|------------------------------------------------------------|---------|-------------------|-----------------------------------------|---------|-------------------|----------|
|                                                                            |               |             |                         |             | Antimony               | Arsenic | Chromium | Copper | Lead   | Mercury     | Nickel | Selenium | Zinc     | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  |                                           |                                                     | Total PCBs                                                 | Arsenic | Dioxin/ Furan TEQ | cPAHs                                   | Arsenic | Dioxin/ Furan TEQ |          |
| Minimum Hot Spot Level for All Receptors - ISM Samples (Composite Samples) |               |             |                         |             | 27                     | 140     | 39 (76)  | 700    | 330    | 0.15 (0.23) | 200    | 5.2      | 1,200    | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                                      | 2.4                                                 |                                                            |         |                   |                                         |         |                   |          |
| Human Health RG                                                            |               |             |                         |             | 24                     | 8.8     | --       | 11,000 | 400    | --          | --     | --       | 1.5E-05  | --               | --           | --         | 0.55       | 0.74   |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
| Central Parcel (Cont.)                                                     | DU-21         | ISM         | 0-1                     | DU-21 (0-1) | 2.73                   | 10.5    | 14.8     | 128    | 295    | 0.776       | 20.3   | 0.493    | 242      | 7.03E-05         | 0.0187       | 2.0900     | 0.4640     | 0.3140 | 0.0492                                    | 3.0                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-21 (1-2) | 1.01                   | 4.93    | 11.8     | 56.2   | 116    | 0.276       | 17.7   | 0.5      | 180      | 2.06E-05         | 0.0074       | 1.0500     | 0.1510     | 0.1640 | 0.0364                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-21 (2-3) | 0.497                  | 4.48    | 11.6     | 45.9   | 89.7   | 0.154       | 18     | 0.5      | 109      | 1.01E-05         | 0.0052       | 0.6240     | 0.1480     | 0.0879 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-22         | ISM         | 0-1                     | DU-22 (0-1) | 2.89                   | 6.48    | 19.6     | 96.6   | 190    | 0.602       | 23.2   | 0.538    | 178      | 3.25E-05         | 0.1120       | 2.6500     | 1.9500     | 0.1310 | 0.0438                                    | 3.0                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-22 (1-2) | 2.63                   | 4.53    | 18.8     | 47.4   | 72.3   | 0.349       | 22.6   | 0.512    | 164      | 1.23E-05         | 0.0051       | 0.2350     | 0.0463     | 0.0289 | 0.0258                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-22 (2-3) | 1.09                   | 4.45    | 18       | 54     | 57.5   | 0.376       | 21.4   | 0.557    | 123      | 7.93E-06         | 0.0051       | 0.2250     | 0.0652     | 0.0292 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-23         | ISM         | 0-1                     | DU-23 (0-1) | 1.62                   | 5.99    | 22.1     | 150    | 276    | 1.02        | 22.9   | 0.497    | 184      | 4.00E-05         | 0.0061       | 0.7550     | 0.1410     | 0.1060 | 0.0591                                    | 3.0                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-23 (1-2) | 0.61                   | 4.63    | 18.4     | 69.5   | 70.9   | 0.545       | 20.5   | 0.518    | 127      | 1.05E-05         | 0.0050       | 0.5370     | 0.0638     | 0.1040 | 0.0265                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-23 (2-3) | 0.498                  | 3.82    | 15.6     | 41.9   | 82.2   | 0.426       | 18.8   | 0.488    | 99       | 5.92E-06         | 0.0051       | 0.2310     | 0.0313     | 0.0362 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-24         | ISM         | 0-1                     | DU-24 (0-1) | 0.546                  | 4.16    | 15.5     | 39.9   | 48.8   | 0.276       | 19.2   | 0.546    | 117      | 2.33E-05         | 0.0050       | 0.6300     | 0.0812     | 0.0907 | 0.0326                                    | 1.6                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-24 (1-2) | 0.496                  | 3.56    | 15       | 31.1   | 23.2   | 0.175       | 20.6   | 0.496    | 124      | 6.44E-06         | 0.0050       | 0.5000     | 0.0548     | 0.0740 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-24 (2-3) | 0.501                  | 2.84    | 10.9     | 17.6   | 13.8   | 0.0928      | 18.5   | 0.501    | 83.1     | 8.88E-06         | 0.0050       | 0.0883     | 0.0202     | 0.0145 | 0.0048                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-25         | ISM         | 0-1                     | DU-25 (0-1) | 0.822                  | 5.24    | 20.2     | 226    | 144    | 0.762       | 21.3   | 0.491    | 242      | 4.69E-05         | 0.0123       | 2.7700     | 0.4270     | 0.3860 | 0.0653                                    | 2.0                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-25 (1-2) | 0.493                  | 3.29    | 14.5     | 48.5   | 113    | 0.213       | 19.6   | 0.493    | 202      | 2.60E-06         | 0.0050       | 0.6430     | 0.1010     | 0.0905 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-25 (2-3) | 0.496                  | 3.17    | 12.6     | 30     | 43.2   | 0.116       | 18.7   | 0.496    | 138      | 1.94E-06         | 0.0048       | 0.6130     | 0.0873     | 0.0873 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-26         | ISM         | 0-1                     | DU-26 (0-1) | 4.79                   | 9.5     | 19.1     | 152    | 330    | 1.95        | 20.7   | 0.605    | 260      | 9.33E-05         | 0.0246       | 4.8900     | 0.7790     | 0.7230 | 0.1850                                    | 3.0                                                 | D/F TEQ                                                    |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-26 (1-2) | 1.4                    | 11.6    | 15.5     | 80.7   | 151    | 1.25        | 19.9   | 0.558    | 206      | 4.27E-05         | 0.0050       | 1.6600     | 0.1580     | 0.2810 | 0.0705                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-26 (2-3) | 0.529                  | 4.75    | 14.6     | 41.6   | 76.1   | 0.82        | 18.3   | 0.521    | 138      | 2.36E-05         | 0.0050       | 0.9930     | 0.1240     | 0.1480 | 0.1890                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-42         | Composite   | 0-1                     | DU-42 (0-1) | 0.512                  | 4.38    | 17.8     | 36.3   | 53.3   | 0.226       | 23.3   | 0.531    | 126      | 6.07E-05         | 0.0050       | 0.3470     | 0.0678     | 0.0507 | 0.0050                                    | 0.0                                                 | D/F TEQ                                                    |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-42 (1-2) | 0.667                  | 4.11    | 18.4     | 25.4   | 30.3   | 0.186       | 22.6   | 0.549    | 109      | 2.27E-05         | 0.0048       | 0.2200     | 0.0429     | 0.0309 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-42 (2-3) | 0.531                  | 3.76    | 17.4     | 21.1   | 20.1   | 0.125       | 20.7   | 0.531    | 87       | 8.27E-06         | 0.0050       | 0.1580     | 0.0297     | 0.0229 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
| East Parcel                                                                | DU-27         | ISM         | 0-1                     | DU-27 (0-1) | 1.3                    | 14.5    | 19.8     | 204    | 46.1   | 0.184       | 21.1   | 0.583    | 173      | 1.03E-04         | 0.0050       | 1.4000     | 0.1590     | 0.2130 | 0.1860                                    | 2.0                                                 | Arsenic D/F TEQ                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-27 (1-2) | 0.488                  | 8.72    | 16.9     | 81.2   | 39.1   | 0.0555      | 21.3   | 0.488    | 130      | 6.99E-05         | 0.0101       | 1.7800     | 0.3630     | 0.2420 | 0.1680                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-27 (2-3) | 1.15                   | 15.8    | 15.5     | 45.6   | 55.4   | 0.0643      | 18.4   | 0.512    | 139      | 2.40E-05         | 0.0050       | 0.6570     | 0.1030     | 0.0973 | 0.1780                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-28         | ISM         | 0-1                     | DU-28 (0-1) | 2.32                   | 10.5    | 16.4     | 184    | 78.1   | 0.649       | 17.9   | 0.513    | 267      | 1.91E-05         | 0.0070       | 2.3600     | 0.2610     | 0.4330 | 0.1000                                    | 2.5                                                 |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-28 (1-2) | 2.87                   | 13.3    | 17.3     | 327    | 74.1   | 0.706       | 17.2   | 0.493    | 231      | 3.27E-05         | 0.0085       | 3.1400     | 0.3090     | 0.5280 | 0.0718                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-28 (2-3) | 4.79                   | 7.4     | 16.9     | 229    | 113    | 0.207       | 19.6   | 0.522    | 275      | 1.49E-05         | 0.0084       | 1.8900     | 0.2380     | 0.3530 | 0.0370                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-29         | ISM         | 0-1                     | DU-29 (0-1) | 1.08                   | 6.95    | 12.1     | 69.3   | 103    | 0.0595      | 18.1   | 0.518    | 164      | 4.97E-05         | 0.0085       | 0.9880     | 0.1570     | 0.1540 | 0.0250                                    | 0.0                                                 | D/F TEQ                                                    |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-29 (1-2) | 1.02                   | 5.08    | 10.4     | 44.3   | 41.1   | 0.0436      | 15.3   | 0.545    | 100      | 1.53E-05         | 0.0051       | 0.4780     | 0.0641     | 0.0697 | 0.0047                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-29 (2-3) | 0.511                  | 3.6     | 10       | 27.8   | 45.7   | 0.0409      | 15.2   | 0.511    | 92.7     | 1.53E-05         | 0.0050       | 0.3800     | 0.0562     | 0.0588 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-30         | ISM         | 0-1                     | DU-30 (0-1) | 1.66                   | 4.22    | 14.5     | 63.4   | 131    | 0.0829      | 18.3   | 0.5      | 179      | 5.05E-05         | 0.0072       | 2.1500     | 0.2030     | 0.3980 | 0.0325                                    | 3.0                                                 | D/F TEQ                                                    |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-30 (1-2) | 2.09                   | 3.72    | 13.9     | 79.8   | 202    | 0.05        | 17.7   | 0.512    | 228      | 2.24E-05         | 0.0050       | 1.0000     | 0.1200     | 0.1690 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-30 (2-3) | 6.81                   | 4.14    | 11.6     | 86.6   | 220    | 0.159       | 15.7   | 0.501    | 152      | 1.44E-05         | 0.0050       | 0.4650     | 0.0681     | 0.0709 | 0.0456                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-31         | ISM         | 0-1                     | DU-31 (0-1) | 1.85                   | 6.09    | 14.5     | 35.4   | 44.8   | 0.0479      | 16.5   | 0.491    | 116      | 5.84E-05         | 0.0050       | 0.8540     | 0.1160     | 0.1240 | 0.0257                                    | 0.0                                                 | D/F TEQ                                                    |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-31 (1-2) | 0.743                  | 4.98    | 12.6     | 49.2   | 34.1   | 0.067       | 17     | 0.516    | 140      | 1.90E-05         | 0.0054       | 0.7680     | 0.1270     | 0.1190 | 0.0298                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-31 (2-3) | 0.735                  | 5.96    | 12.9     | 68.2   | 25     | 0.0415      | 16.7   | 0.519    | 109      | 1.09E-05         | 0.0050       | 0.6490     | 0.1100     | 0.0919 | 0.0270                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-32         | ISM         | 0-1                     | DU-32 (0-1) | 0.879                  | 8.99    | 12.4     | 31.6   | 28.9   | 0.0428      | 15.7   | 0.535    | 118      | 3.48E-05         | 0.0063       | 0.7760     | 0.1220     | 0.1150 | 0.0048                                    | 0.0                                                 | Arsenic D/F TEQ cPAHs                                      |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-32 (1-2) | 0.535                  | 7.1     | 11.1     | 23.4   | 20.9   | 0.0428      | 15.3   | 0.535    | 104      | 7.54E-06         | 0.0047       | 0.4910     | 0.0684     | 0.0754 | 0.0048                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-32 (2-3) | 0.492                  | 3.56    | 9.91     | 20.1   | 34.1   | 0.0394      | 14.2   | 0.492    | 90.2     | 7.59E-06         | 0.0405       | 3.5300     | 0.7460     | 0.5660 | 0.0047                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            | DU-33         | ISM         | 0-1                     | DU-33 (0-1) | 2.31                   | 6.62    | 9.85     | 79.8   | 88.8   | 0.0435      | 14.9   | 0.491    | 290      | 3.69E-05         | 0.0081       | 0.4140     | 0.1040     | 0.0542 | 0.0852                                    | 0.0                                                 | Arsenic D/F TEQ                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 1-2                     | DU-33 (1-2) | 1.84                   | 9.6     | 12.3     | 96.6   | 66.2   | 0.0413      | 17.8   | 0.516    | 354      | 1.67E-05         | 0.0066       | 0.4510     | 0.1280     | 0.0519 | 0.0501                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               |             | 2-3                     | DU-33 (2-3) | 0.666                  | 5.35    | 10.3     | 52.6   | 42.3   | 0.0423      | 16.4   | 0.529    | 234      | 1.21E-05         | 0.0049       | 0.4010     | 0.0650     | 0.0565 | 0.0579                                    |                                                     |                                                            |         |                   |                                         |         |                   |          |
| DU-34                                                                      | ISM           | 0-1         | DU-34 (0-1)             | 1.05        | 5.13                   | 14      | 32.6     | 41.4   | 0.044  | 22          | 0.523  | 182      | 6.03E-05 | 0.0178           | 1.7200       | 0.3960     | 0.2530     | 0.0330 | 0.0                                       | D/F TEQ                                             |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 1-2         | DU-34 (1-2)             | 0.557       | 4.95                   | 14.6    | 33.2     | 31.9   | 0.0447 | 24.3        | 0.498  | 177      | 2.82E-05 | 0.0098           | 1.1900       | 0.1900     | 0.1840     | 0.0476 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 2-3         | DU-34 (2-3)             | 0.537       | 3.69                   | 12.1    | 33.1     | 25.9   | 0.043  | 20.1        | 0.537  | 222      | 3.02E-05 | 0.0051           | 0.6510       | 0.1160     | 0.0973     | 0.0050 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
| DU-35                                                                      | ISM           | 0-1         | DU-35 (0-1)             | 0.512       | 4.4                    | 14.5    | 52.9     | 22.6   | 0.0415 | 17.8        | 0.512  | 174      | 1.05E-05 | 0.0053           | 0.6160       | 0.1040     | 0.0931     | 0.0284 | 0.0                                       | D/F TEQ                                             |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 1-2         | DU-35 (1-2)             | 0.531       | 3.81                   | 12.3    | 29.1     | 19     | 0.0425 | 15.3        | 0.531  | 168      | 1.31E-05 | 0.0050           | 0.7040       | 0.1060     | 0.1190     | 0.0396 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 2-3         | DU-35 (2-3)             | 0.524       | 3.37                   | 9.45    | 27.8     | 12.4   | 0.042  | 14.2        | 0.524  | 141      | 1.02E-05 | 0.0049           | 0.2500       | 0.0334     | 0.0355     | 0.0050 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
| DU-36                                                                      | ISM           | 0-1         | DU-36 (0-1)             | 3.77        | 5.03                   | 20.1    | 57.9     | 73.2   | 0.0398 | 22.6        | 0.498  | 266      | 4.21E-05 | 0.0060           | 0.6170       | 0.0892     | 0.0823     | 0.0279 | 0.0                                       | D/F TEQ                                             |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 1-2         | DU-36 (1-2)             | 3.44        | 4.23                   | 17.3    | 56.7     | 130    | 0.0606 | 19          | 0.52   | 222      | 3.70E-05 | 0.0082           | 0.7770       | 0.1290     | 0.1030     | 0.0050 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 2-3         | DU-36 (2-3)             | 3.62        | 4.12                   | 14.4    | 64.3     | 63.3   | 0.0449 | 18.3        | 0.526  | 190      | 2.80E-05 | 0.0050           | 0.2950       | 0.0564     | 0.0379     | 0.0284 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
| DU-38                                                                      | ISM           | 0-1         | DU-38 (0-1)             | 1.31        | 3.71                   | 13.1    | 27.7     | 30.5   | 0.0454 | 16.5        | 0.536  | 110      | 2.94E-05 | 0.0056           | 0.5940       | 0.0920     | 0.0828     | 0.0412 | 0.0                                       | D/F TEQ                                             |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 1-2         | DU-38 (1-2)             | 4.88        | 3.76                   | 12.3    | 56       | 76.7   | 0.0415 | 16          | 0.519  | 102      | 1.90E-05 | 0.0051           | 0.4550       | 0.0853     | 0.0635     | 0.0444 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 2-3         | DU-38 (2-3)             | 3.71        | 4.06                   | 13.6    | 51.4     | 51.3   | 0.0421 | 17.1        | 0.527  | 108      | 1.05E-05 | 0.0051           | 0.5190       | 0.0738     | 0.0442     | 0.0300 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
| DU-37                                                                      | Composite     | 0-1         | DU-37 (0-1)             | 0.495       | 3.72                   | 17.4    | 26.1     | 39.3   | 0.0396 | 18.6        | 0.572  | 74.4     | 6.78E-07 | 0.0050           | 0.0834       | 0.0210     | 0.0124     | 0.0049 | 0.0                                       |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 1-2         | DU-37 (1-2)             | 0.495       | 3.00                   | 14.9    | 21.4     | 12.6   | 0.043  | 18.8        | 0.537  | 61.5     | 6.32E-07 | 0.0050           | 0.1050       | 0.0213     | 0.0114     | 0.0050 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |
|                                                                            |               | 2-3         | DU-37 (2-3)             | 0.513       | 2.85                   | 13.4    | 16.9     | 8.96   | 0.0411 | 17.1        | 0.513  | 52.2     | 5.69E-07 | 0.0115           | 0.8510       | 0.2540     | 0.0970     | 0.0051 |                                           |                                                     |                                                            |         |                   |                                         |         |                   |          |

Table 5  
Human Health Excavation Evaluation  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                            | Decision Unit | Sample Type       | Sample Depth (feet bgs) | Sample ID   | Concentration in mg/kg |         |          |        |      |             |        |          |       |                  |              |            |            |        | Nominal Hot Spot Excavation Depth in Feet | COC Exceeding Human Health RG Post Hot Spot Removal | Nominal Exposure Point Concentrations <sup>2</sup> (mg/kg) |         |                   | Nominal Excess Cancer Risk <sup>2</sup> |  |  | Comments |
|----------------------------------------------------------------------------|---------------|-------------------|-------------------------|-------------|------------------------|---------|----------|--------|------|-------------|--------|----------|-------|------------------|--------------|------------|------------|--------|-------------------------------------------|-----------------------------------------------------|------------------------------------------------------------|---------|-------------------|-----------------------------------------|--|--|----------|
|                                                                            |               |                   |                         |             | Antimony               | Arsenic | Chromium | Copper | Lead | Mercury     | Nickel | Selenium | Zinc  | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH | cPAHs  |                                           |                                                     | Total PCBs                                                 | Arsenic | Dioxin/ Furan TEQ | cPAHs                                   |  |  |          |
| Minimum Hot Spot Level for All Receptors - ISM Samples (Composite Samples) |               |                   |                         |             | 27                     | 140     | 39 (76)  | 700    | 330  | 0.15 (0.23) | 200    | 5.2      | 1,200 | 6.1E-05          | 0.10         | 56         | 290        | 55     | 0.98                                      | 0.0                                                 |                                                            |         |                   |                                         |  |  |          |
| Human Health RG                                                            |               |                   |                         |             | 24                     | 8.8     | --       | 11,000 | 400  | --          | --     | --       | --    | 1.5E-05          | --           | --         | --         | 0.55   | 0.74                                      |                                                     |                                                            |         |                   |                                         |  |  |          |
| East Parcel (Cont.)                                                        | DU-39         | Composite         | 0-1                     | DU-39 (0-1) | 0.534                  | 2.69    | 13.4     | 21.3   | 6.09 | 0.0427      | 16     | 0.534    | 62.8  | 3.68E-06         | 0.0049       | 0.0270     | 0.0172     | 0.0057 | 0.0049                                    | 0.0                                                 |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 1-2                     | DU-39 (1-2) | 0.56                   | 3.24    | 15.1     | 17.9   | 5.11 | 0.0448      | 18.3   | 0.615    | 57.4  | 1.38E-06         | 0.0049       | 0.0247     | 0.1750     | 0.0057 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 2-3                     | DU-39 (2-3) | 0.525                  | 3.44    | 16       | 18.4   | 6.88 | 0.042       | 19.2   | 0.525    | 54.3  | 1.36E-06         | 0.0049       | 0.0955     | 0.1290     | 0.0124 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            | DU-40         | Composite         | 0-1                     | DU-40 (0-1) | 0.509                  | 2.88    | 12.9     | 16.2   | 3.75 | 0.0407      | 16.3   | 0.509    | 44.3  | 7.34E-07         | 0.0050       | 0.0249     | 0.0174     | 0.0057 | 0.0049                                    | 0.0                                                 |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 1-2                     | DU-40 (1-2) | 0.513                  | 3.4     | 13.4     | 15.4   | 3.47 | 0.0411      | 17.7   | 0.513    | 44.7  | 5.18E-07         | 0.0050       | 0.0281     | 0.0175     | 0.0061 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 2-3                     | DU-40 (2-3) | 0.525                  | 3.13    | 13.7     | 16.6   | 3.1  | 0.042       | 18.2   | 0.525    | 45.1  | 5.52E-07         | 0.0051       | 0.0279     | 0.0177     | 0.0061 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            | DU-43         | Composite         | 0-1                     | DU-43 (0-1) | 0.503                  | 2.92    | 13.8     | 18.8   | 5.42 | 0.0402      | 16.9   | 0.522    | 53.9  | 3.00E-06         | 0.0049       | 0.1200     | 0.0236     | 0.0163 | 0.0051                                    | 0.0                                                 |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 1-2                     | DU-43 (1-2) | 0.536                  | 2.89    | 14       | 18.7   | 9.65 | 0.0429      | 18.5   | 0.536    | 56.4  | 1.26E-06         | 0.0051       | 0.1220     | 0.0813     | 0.0106 | 0.0051                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 2-3                     | DU-43 (2-3) | 0.523                  | 3.06    | 13.8     | 16.3   | 4.35 | 0.0418      | 18.4   | 0.523    | 46    | 6.63E-07         | 0.0050       | 0.0616     | 0.0174     | 0.0097 | 0.0050                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            | DU-44         | Composite         | 0-1                     | DU-44 (0-1) | 0.619                  | 3.12    | 14       | 17.9   | 13   | 0.0394      | 17.7   | 0.492    | 83.7  | 1.38E-06         | 0.0050       | 0.1430     | 0.0294     | 0.0180 | 0.0049                                    | 0.0                                                 |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 1-2                     | DU-44 (1-2) | 0.486                  | 3.24    | 14.3     | 15.7   | 6.23 | 0.0389      | 17.2   | 0.486    | 51.3  | 8.37E-07         | 0.0050       | 0.0910     | 0.0206     | 0.0127 | 0.0049                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 2-3                     | DU-44 (2-3) | 0.505                  | 3.06    | 13.2     | 15     | 5.94 | 0.0404      | 16.0   | 0.505    | 45.9  | 7.25E-07         | 0.0049       | 0.0840     | 0.0171     | 0.0129 | 0.0048                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            | DU-41         | ISM (Berm Sample) | 0-1                     | DU-41 (0-1) | 2.81                   | 50.1    | 16.9     | 78.6   | 83.8 | 0.262       | 16.5   | 0.531    | 139   | 2.55E-04         | 0.0184       | 2.1100     | 0.3120     | 0.3360 | 0.0691                                    | See Table 4                                         |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 1-2                     | DU-41 (1-2) | 2.39                   | 14.1    | 20.7     | 71.1   | 129  | 0.108       | 18.4   | 0.514    | 165   | 2.42E-04         | 0.0427       | 1.9400     | 0.5590     | 0.2760 | 0.0926                                    |                                                     |                                                            |         |                   |                                         |  |  |          |
|                                                                            |               |                   | 2-3                     | DU-41 (2-3) | 1.69                   | 19.6    | 21.7     | 45.2   | 109  | 0.0732      | 21.7   | 0.511    | 182   | 1.55E-04         | 0.0129       | 1.0800     | 0.2310     | 0.1490 | 0.0438                                    |                                                     |                                                            |         |                   |                                         |  |  |          |

Notes:

1. Definition of table shading:

|  |                                             |
|--|---------------------------------------------|
|  | Exceeds Any Hot Spot Level.                 |
|  | Exceeds Human Health CUL.                   |
|  | Layer Targeted for Partial Hot Spot Removal |
|  | Layer Targeted for Hot Spot Removal         |

2. See Table 6.

Table 6  
Excavation Evaluation: Human Health Residual Risk  
Basis of Design Report  
Willamette Cove Upland Facility

| West Parcel                                     |                                 |         |                               |         | Central Parcel |                                 |        |                               |        | East Parcel |                                 |                  |                               |         |                  |         |  |
|-------------------------------------------------|---------------------------------|---------|-------------------------------|---------|----------------|---------------------------------|--------|-------------------------------|--------|-------------|---------------------------------|------------------|-------------------------------|---------|------------------|---------|--|
| Sample                                          | Residual Concentration in mg/kg |         |                               |         | Sample         | Residual Concentration in mg/kg |        |                               |        | Sample      | Residual Concentration in mg/kg |                  |                               |         |                  |         |  |
|                                                 | All Residual Data               |         | Upper 1 foot of Residual Data |         |                | All Residual Data               |        | Upper 1 foot of Residual Data |        |             | All Residual Data               |                  | Upper 1 foot of Residual Data |         |                  |         |  |
|                                                 | Dioxin/Furan TEQ                | cPAHs   | Dioxin/Furan TEQ              | cPAHs   |                | Dioxin/Furan TEQ                | cPAHs  | Dioxin/Furan TEQ              | cPAHs  |             | Arsenic                         | Dioxin/Furan TEQ | cPAHs                         | Arsenic | Dioxin/Furan TEQ | cPAHs   |  |
| DU-1 (0-1)                                      | 2.21E-05                        | 0.4460  | 2.21E-05                      | 0.4460  | DU-10 (0-1)    |                                 |        |                               |        | DU-27 (0-1) |                                 |                  |                               |         |                  |         |  |
| DU-1 (1-2)                                      |                                 |         |                               |         | DU-10 (1-2)    |                                 |        |                               |        | DU-27 (1-2) |                                 |                  |                               |         |                  |         |  |
| DU-1 (2-3)                                      | 1.07E-05                        | 0.3280  |                               |         | DU-10 (2-3)    | 4.52E-06                        | 2.6000 | 4.52E-06                      | 2.6000 | DU-27 (2-3) | 15.8                            | 2.40E-05         | 0.0973                        | 15.8    | 2.40E-05         | 0.0973  |  |
| DU-2 (0-1)                                      | 6.95E-06                        | 0.1650  | 6.95E-06                      | 0.1650  | DU-11 (0-1)    |                                 |        |                               |        | DU-28 (0-1) |                                 |                  |                               |         |                  |         |  |
| DU-2 (1-2)                                      | 3.44E-06                        | 0.1080  |                               |         | DU-11 (1-2)    |                                 |        |                               |        | DU-28 (1-2) |                                 |                  |                               |         |                  |         |  |
| DU-2 (2-3)                                      | 2.42E-06                        | 0.0319  |                               |         | DU-11 (2-3)    | 5.89E-06                        | 5.1300 | 5.89E-06                      | 5.1300 | DU-28 (2-3) | 7.4                             | 1.49E-05         | 0.3530                        | 7.4     | 1.49E-05         | 0.3530  |  |
| DU-3 (0-1)                                      | 2.63E-05                        | 0.1530  | 2.63E-05                      | 0.1530  | DU-12 (0-1)    |                                 |        |                               |        | DU-29 (0-1) | 6.95                            | 4.97E-05         | 0.1540                        | 6.95    | 4.97E-05         | 0.1540  |  |
| DU-3 (1-2)                                      | 7.82E-06                        | 0.1290  |                               |         | DU-12 (1-2)    |                                 |        |                               |        | DU-29 (1-2) | 5.08                            | 1.53E-05         | 0.0697                        |         |                  |         |  |
| DU-3 (2-3)                                      | 4.57E-06                        | 0.1030  |                               |         | DU-12 (2-3)    | 2.60E-06                        | 0.0900 | 2.60E-06                      | 0.0900 | DU-29 (2-3) | 3.6                             | 1.53E-05         | 0.0588                        |         |                  |         |  |
| DU-4 (0-1)                                      | 2.09E-05                        | 0.4280  | 2.09E-05                      | 0.4280  | DU-13 (0-1)    |                                 |        |                               |        | DU-30 (0-1) | 4.22                            | 5.05E-05         | 0.3980                        | 4.22    | 5.05E-05         | 0.3980  |  |
| DU-4 (1-2)                                      | 1.66E-05                        | 1.7500  |                               |         | DU-13 (1-2)    |                                 |        |                               |        | DU-30 (1-2) | 3.72                            | 2.24E-05         | 0.1690                        |         |                  |         |  |
| DU-4 (2-3)                                      | 1.47E-05                        | 0.7670  |                               |         | DU-13 (2-3)    | 2.66E-05                        | 0.2630 | 2.66E-05                      | 0.2630 | DU-30 (2-3) |                                 |                  |                               |         |                  |         |  |
| DU-5 (0-1)                                      |                                 |         |                               |         | DU-14 (0-1)    |                                 |        |                               |        | DU-31 (0-1) | 6.09                            | 5.84E-05         | 0.1240                        | 6.09    | 5.84E-05         | 0.1240  |  |
| DU-5 (1-2)                                      |                                 |         |                               |         | DU-14 (1-2)    |                                 |        |                               |        | DU-31 (1-2) | 4.98                            | 1.90E-05         | 0.1190                        |         |                  |         |  |
| DU-5 (2-3)                                      | 2.33E-05                        | 0.4080  | 2.33E-05                      | 0.4080  | DU-14 (2-3)    | 1.43E-05                        | 0.1950 | 1.43E-05                      | 0.1950 | DU-31 (2-3) | 5.96                            | 1.09E-05         | 0.0919                        |         |                  |         |  |
| DU-6 (0-1)                                      | 1.04E-05                        | 0.1880  | 1.04E-05                      | 0.1880  | DU-15 (0-1)    |                                 |        |                               |        | DU-32 (0-1) | 8.99                            | 3.48E-05         | 0.1150                        | 8.99    | 3.48E-05         | 0.1150  |  |
| DU-6 (1-2)                                      |                                 |         |                               |         | DU-15 (1-2)    |                                 |        |                               |        | DU-32 (1-2) | 7.1                             | 7.54E-06         | 0.0754                        |         |                  |         |  |
| DU-6 (2-3)                                      | 1.14E-05                        | 0.2260  |                               |         | DU-15 (2-3)    | 1.50E-04                        | 0.1010 | 1.50E-04                      | 0.1010 | DU-32 (2-3) | 3.56                            | 7.59E-06         | 0.0560                        |         |                  |         |  |
| DU-7 (0-1)                                      |                                 |         |                               |         | DU-16 (0-1)    |                                 |        |                               |        | DU-33 (0-1) | 6.62                            | 3.69E-05         | 0.0542                        | 6.62    | 3.69E-05         | 0.0542  |  |
| DU-7 (1-2)                                      | 1.24E-05                        | 0.0711  | 1.24E-05                      | 0.0711  | DU-16 (1-2)    |                                 |        |                               |        | DU-33 (1-2) | 9.6                             | 1.67E-05         | 0.0519                        |         |                  |         |  |
| DU-7 (2-3)                                      | 8.17E-06                        | 0.0478  |                               |         | DU-16 (2-3)    | 7.62E-06                        | 0.0569 | 7.62E-06                      | 0.0569 | DU-33 (2-3) | 5.35                            | 1.21E-05         | 0.0555                        |         |                  |         |  |
| DU-8 (0-1)                                      |                                 |         |                               |         | DU-17 (0-1)    |                                 |        |                               |        | DU-34 (0-1) | 5.13                            | 6.03E-05         | 0.2530                        | 5.13    | 6.03E-05         | 0.2530  |  |
| DU-8 (1-2)                                      |                                 |         |                               |         | DU-17 (1-2)    |                                 |        |                               |        | DU-34 (1-2) | 4.95                            | 2.82E-05         | 0.1840                        |         |                  |         |  |
| DU-8 (2-3)                                      | 2.34E-05                        | 0.0847  | 2.34E-05                      | 0.0847  | DU-17 (2-3)    | 7.81E-06                        | 0.0309 | 7.81E-06                      | 0.0309 | DU-34 (2-3) | 3.69                            | 3.02E-05         | 0.0973                        |         |                  |         |  |
| DU-9 (0-1)                                      |                                 |         |                               |         | DU-18 (0-1)    |                                 |        |                               |        | DU-35 (0-1) | 4.4                             | 4.05E-05         | 0.0931                        | 4.4     | 4.05E-05         | 0.0931  |  |
| DU-9 (1-2)                                      | 1.28E-05                        | 0.0771  | 1.28E-05                      | 0.0771  | DU-18 (1-2)    |                                 |        |                               |        | DU-35 (1-2) | 3.81                            | 1.31E-05         | 0.1190                        |         |                  |         |  |
| DU-9 (2-3)                                      | 1.23E-05                        | 0.1800  |                               |         | DU-18 (2-3)    | 1.29E-05                        | 0.0862 | 1.29E-05                      | 0.0862 | DU-35 (2-3) | 3.37                            | 1.02E-05         | 0.0355                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-19 (0-1)    |                                 |        |                               |        | DU-36 (0-1) | 5.03                            | 4.21E-05         | 0.0823                        | 5.03    | 4.21E-05         | 0.0823  |  |
|                                                 |                                 |         |                               |         | DU-19 (1-2)    |                                 |        |                               |        | DU-36 (1-2) | 4.23                            | 3.70E-05         | 0.1030                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-19 (2-3)    | 4.66E-05                        | 0.0790 | 4.66E-05                      | 0.0790 | DU-36 (2-3) | 4.12                            | 2.80E-05         | 0.0379                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-20 (0-1)    |                                 |        |                               |        | DU-38 (0-1) | 3.71                            | 2.94E-05         | 0.0828                        | 3.71    | 2.94E-05         | 0.0828  |  |
|                                                 |                                 |         |                               |         | DU-20 (1-2)    | 4.30E-06                        | 0.0132 | 4.30E-06                      | 0.0132 | DU-38 (1-2) | 3.76                            | 1.90E-05         | 0.0635                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-20 (2-3)    | 3.97E-06                        | 0.0193 |                               |        | DU-38 (2-3) | 4.06                            | 1.05E-05         | 0.0442                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-21 (0-1)    |                                 |        |                               |        | DU-37 (0-1) | 3.72                            | 6.78E-07         | 0.0124                        | 3.72    | 6.78E-07         | 0.0124  |  |
|                                                 |                                 |         |                               |         | DU-21 (1-2)    |                                 |        |                               |        | DU-37 (1-2) | 3.00                            | 6.32E-07         | 0.0114                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-21 (2-3)    | 1.01E-05                        | 0.0879 | 1.01E-05                      | 0.0879 | DU-37 (2-3) | 2.85                            | 5.69E-07         | 0.0070                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-22 (0-1)    |                                 |        |                               |        | DU-39 (0-1) | 2.69                            | 3.68E-06         | 0.0057                        | 2.69    | 3.68E-06         | 0.0057  |  |
|                                                 |                                 |         |                               |         | DU-22 (1-2)    |                                 |        |                               |        | DU-39 (1-2) | 3.24                            | 1.38E-06         | 0.0057                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-22 (2-3)    | 7.93E-06                        | 0.0292 | 7.93E-06                      | 0.0292 | DU-39 (2-3) | 3.44                            | 1.36E-06         | 0.0124                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-23 (0-1)    |                                 |        |                               |        | DU-40 (0-1) | 2.88                            | 7.34E-07         | 0.0057                        | 2.88    | 7.34E-07         | 0.0057  |  |
|                                                 |                                 |         |                               |         | DU-23 (1-2)    |                                 |        |                               |        | DU-40 (1-2) | 3.4                             | 5.18E-07         | 0.0061                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-23 (2-3)    |                                 |        |                               |        | DU-40 (2-3) | 3.13                            | 5.52E-07         | 0.0061                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-24 (0-1)    |                                 |        |                               |        | DU-43 (0-1) | 2.92                            | 3.00E-06         | 0.0163                        | 2.92    | 3.00E-06         | 0.0163  |  |
|                                                 |                                 |         |                               |         | DU-24 (1-2)    | 6.44E-06                        | 0.0740 | 6.44E-06                      | 0.0740 | DU-43 (1-2) | 2.89                            | 1.26E-06         | 0.0106                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-24 (2-3)    | 8.88E-06                        | 0.0145 |                               |        | DU-43 (2-3) | 3.06                            | 6.63E-07         | 0.0097                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-25 (0-1)    |                                 |        |                               |        | DU-44 (0-1) | 3.12                            | 1.38E-06         | 0.0180                        | 3.12    | 1.38E-06         | 0.0180  |  |
|                                                 |                                 |         |                               |         | DU-25 (1-2)    |                                 |        |                               |        | DU-44 (1-2) | 3.24                            | 8.37E-07         | 0.0127                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-25 (2-3)    | 1.94E-06                        | 0.0873 | 1.94E-06                      | 0.0873 | DU-44 (2-3) | 3.06                            | 7.25E-07         | 0.0129                        |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-26 (0-1)    |                                 |        |                               |        | DU-41 (0-1) |                                 |                  |                               |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-26 (1-2)    |                                 |        |                               |        | DU-41 (1-2) |                                 |                  |                               |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-26 (2-3)    | 2.36E-05                        | 0.1480 | 2.36E-05                      | 0.1480 | DU-41 (2-3) |                                 |                  |                               |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-42 (0-1)    | 6.07E-05                        | 0.0507 | 6.07E-05                      | 0.0507 |             |                                 |                  |                               |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-42 (1-2)    | 2.27E-05                        | 0.0309 |                               |        |             |                                 |                  |                               |         |                  |         |  |
|                                                 |                                 |         |                               |         | DU-42 (2-3)    | 8.27E-06                        | 0.0229 |                               |        |             |                                 |                  |                               |         |                  |         |  |
| Number of Samples                               |                                 | 19      | 19                            | 9       | 9              | 21                              |        | 21                            |        | 17          |                                 | 17               |                               | 43      |                  | 43      |  |
| Maximum                                         |                                 | 2.6E-05 | 1.8                           | 2.6E-05 | 0.45           | 1.5E-04                         |        | 5.13                          |        | 1.5E-04     |                                 | 5.13             |                               | 15.8    |                  | 6.0E-05 |  |
| Mean                                            |                                 | 1.3E-05 | 0.30                          | 1.8E-05 | 0.22           | 2.1E-05                         |        | 0.44                          |        | 2.3E-05     |                                 | 0.54             |                               | 4.7     |                  | 1.8E-05 |  |
| Standard Deviation                              |                                 | 7.0E-06 | 0.39                          | 6.6E-06 | 0.15           | 3.2E-05                         |        | 1.18                          |        | 3.5E-05     |                                 | 1.29             |                               | 2.4     |                  | 1.7E-05 |  |
| 90% UCL (Student-t)                             |                                 | 1.6E-05 | 0.45                          | 2.2E-05 | 0.32           | 3.3E-05                         |        | 0.88                          |        | 3.8E-05     |                                 | 1.08             |                               | 5.3     |                  | 2.2E-05 |  |
| Remediation Goal                                |                                 | 1.5E-05 | 0.55                          | 1.5E-05 | 0.55           | 1.5E-05                         |        | 0.55                          |        | 1.5E-05     |                                 | 0.55             |                               | 8.8     |                  | 1.5E-05 |  |
| Excess Cancer Risk or Arsenic Exceedance Factor | Central Tendency                | 9.E-07  | 5.E-07                        | 1.E-06  | 4.E-07         | 1.E-06                          |        | 8.E-07                        |        | 2.E-06      |                                 | 1.E-06           |                               | 0.5     |                  | 1.E-06  |  |
|                                                 | Reasonable Maximum Exposure     | 1.E-06  | 8.E-07                        | 1.E-06  | 6.E-07         | 2.E-06                          |        | 2.E-06                        |        | 3.E-06      |                                 | 2.E-06           |                               | 0.6     |                  | 1.E-06  |  |

Notes:

1. Definition of table shading:

|  |                                             |
|--|---------------------------------------------|
|  | Layer Targeted for Partial Hot Spot Removal |
|  | Layer Targeted for Hot Spot Removal         |

Table 7  
Human Health Residual Hazard Quotients  
Basis of Design Report  
Willamette Cove Upland Facility

| West Parcel   |                       |        |                  |       | Central Parcel |                       |        |                  |       | East Parcel |                       |                  |        |                 |                  |       |
|---------------|-----------------------|--------|------------------|-------|----------------|-----------------------|--------|------------------|-------|-------------|-----------------------|------------------|--------|-----------------|------------------|-------|
| Sample        | Residual Data (mg/kg) |        | Hazard Quotient  |       | Sample         | Residual Data (mg/kg) |        | Hazard Quotient  |       | Sample      | Residual Data (mg/kg) |                  |        | Hazard Quotient |                  |       |
|               | Dioxin/Furan TEQ      | cPAHs  | Dioxin/Furan TEQ | cPAHs |                | Dioxin/Furan TEQ      | cPAHs  | Dioxin/Furan TEQ | cPAHs |             | Arsenic               | Dioxin/Furan TEQ | cPAHs  | Arsenic         | Dioxin/Furan TEQ | cPAHs |
| HH RG (mg/kg) |                       |        | 1.5E-05          | 0.55  |                |                       |        | 1.5E-05          | 0.55  |             | 8.8                   | 1.5E-05          | 0.55   | 8.8             | 1.5E-05          | 0.55  |
| DU-1 (0-1)    | 2.21E-05              | 0.4460 | 1.5              | 0.8   | DU-10 (0-1)    |                       |        |                  |       | DU-27 (0-1) |                       |                  |        |                 |                  |       |
| DU-1 (1-2)    |                       |        |                  |       | DU-10 (1-2)    |                       |        |                  |       | DU-27 (1-2) |                       |                  |        |                 |                  |       |
| DU-1 (2-3)    | 1.07E-05              | 0.3280 | 0.7              | 0.6   | DU-10 (2-3)    |                       |        |                  |       | DU-27 (2-3) | 15.8                  | 2.40E-05         | 0.0973 | 1.8             | 1.6              | 0.2   |
| DU-2 (0-1)    | 6.95E-06              | 0.1650 | 0.5              | 0.3   | DU-11 (0-1)    |                       |        |                  |       | DU-28 (0-1) |                       |                  |        |                 |                  |       |
| DU-2 (1-2)    | 3.44E-06              | 0.1080 | 0.2              | 0.2   | DU-11 (1-2)    |                       |        |                  |       | DU-28 (1-2) |                       |                  |        |                 |                  |       |
| DU-2 (2-3)    | 2.42E-06              | 0.0319 | 0.2              | 0.1   | DU-11 (2-3)    |                       |        |                  |       | DU-28 (2-3) | 7.4                   | 1.49E-05         | 0.3530 | 0.8             | 1.0              | 0.6   |
| DU-3 (0-1)    | 2.63E-05              | 0.1530 | 1.8              | 0.3   | DU-12 (0-1)    |                       |        |                  |       | DU-29 (0-1) | 6.95                  | 4.97E-05         | 0.1540 | 0.8             | 3.3              | 0.3   |
| DU-3 (1-2)    | 7.82E-06              | 0.1290 | 0.5              | 0.2   | DU-12 (1-2)    |                       |        |                  |       | DU-29 (1-2) | 5.08                  | 1.53E-05         | 0.0697 | 0.6             | 1.0              | 0.1   |
| DU-3 (2-3)    | 4.57E-06              | 0.1030 | 0.3              | 0.2   | DU-12 (2-3)    |                       |        |                  |       | DU-29 (2-3) | 3.6                   | 1.53E-05         | 0.0588 | 0.4             | 1.0              | 0.1   |
| DU-4 (0-1)    | 2.09E-05              | 0.4280 | 1.4              | 0.8   | DU-13 (0-1)    |                       |        |                  |       | DU-30 (0-1) | 4.22                  | 5.05E-05         | 0.3980 | 0.5             | 3.4              | 0.7   |
| DU-4 (1-2)    | 1.66E-05              | 1.7500 | 1.1              | 3.2   | DU-13 (1-2)    |                       |        |                  |       | DU-30 (1-2) | 3.72                  | 2.24E-05         | 0.1690 | 0.4             | 1.5              | 0.3   |
| DU-4 (2-3)    | 1.47E-05              | 0.7670 | 1.0              | 1.4   | DU-13 (2-3)    |                       |        |                  |       | DU-30 (2-3) |                       |                  |        |                 |                  |       |
| DU-5 (0-1)    |                       |        |                  |       | DU-14 (0-1)    |                       |        |                  |       | DU-31 (0-1) | 6.09                  | 5.84E-05         | 0.1240 | 0.7             | 3.9              | 0.2   |
| DU-5 (1-2)    |                       |        |                  |       | DU-14 (1-2)    |                       |        |                  |       | DU-31 (1-2) | 4.98                  | 1.90E-05         | 0.1190 | 0.6             | 1.3              | 0.2   |
| DU-5 (2-3)    |                       |        |                  |       | DU-14 (2-3)    |                       |        |                  |       | DU-31 (2-3) | 5.96                  | 1.09E-05         | 0.0919 | 0.7             | 0.7              | 0.2   |
| DU-6 (0-1)    | 1.04E-05              | 0.1880 | 0.7              | 0.3   | DU-15 (0-1)    |                       |        |                  |       | DU-32 (0-1) | 8.99                  | 3.48E-05         | 0.1150 | 1.0             | 2.3              | 0.2   |
| DU-6 (1-2)    |                       |        |                  |       | DU-15 (1-2)    |                       |        |                  |       | DU-32 (1-2) | 7.1                   | 7.54E-06         | 0.0754 | 0.8             | 0.5              | 0.1   |
| DU-6 (2-3)    | 1.14E-05              | 0.2260 | 0.8              | 0.4   | DU-15 (2-3)    |                       |        |                  |       | DU-32 (2-3) | 3.56                  | 7.59E-06         | 0.5660 | 0.4             | 0.5              | 1.0   |
| DU-7 (0-1)    |                       |        |                  |       | DU-16 (0-1)    |                       |        |                  |       | DU-33 (0-1) | 6.62                  | 3.69E-05         | 0.0542 | 0.8             | 2.5              | 0.1   |
| DU-7 (1-2)    | 1.24E-05              | 0.0711 | 0.8              | 0.1   | DU-16 (1-2)    |                       |        |                  |       | DU-33 (1-2) | 9.6                   | 1.67E-05         | 0.0519 | 1.1             | 1.1              | 0.1   |
| DU-7 (2-3)    | 8.17E-06              | 0.0478 | 0.5              | 0.1   | DU-16 (2-3)    | 7.62E-06              | 0.0569 | 0.5              | 0.1   | DU-33 (2-3) | 5.35                  | 1.21E-05         | 0.0555 | 0.6             | 0.8              | 0.1   |
| DU-8 (0-1)    |                       |        |                  |       | DU-17 (0-1)    |                       |        |                  |       | DU-34 (0-1) | 5.13                  | 6.03E-05         | 0.2530 | 0.6             | 4.0              | 0.5   |
| DU-8 (1-2)    |                       |        |                  |       | DU-17 (1-2)    |                       |        |                  |       | DU-34 (1-2) | 4.95                  | 2.82E-05         | 0.1840 | 0.6             | 1.9              | 0.3   |
| DU-8 (2-3)    |                       |        |                  |       | DU-17 (2-3)    | 7.81E-06              | 0.0309 | 0.5              | 0.1   | DU-34 (2-3) | 3.69                  | 3.02E-05         | 0.0973 | 0.4             | 2.0              | 0.2   |
| DU-9 (0-1)    |                       |        |                  |       | DU-18 (0-1)    |                       |        |                  |       | DU-35 (0-1) | 4.4                   | 4.05E-05         | 0.0931 | 0.5             | 2.7              | 0.2   |
| DU-9 (1-2)    | 1.28E-05              | 0.0771 | 0.9              | 0.1   | DU-18 (1-2)    |                       |        |                  |       | DU-35 (1-2) | 3.81                  | 1.31E-05         | 0.1190 | 0.4             | 0.9              | 0.2   |
| DU-9 (2-3)    | 1.23E-05              | 0.1800 | 0.8              | 0.3   | DU-18 (2-3)    |                       |        |                  |       | DU-35 (2-3) | 3.37                  | 1.02E-05         | 0.0355 | 0.4             | 0.7              | 0.1   |
|               |                       |        |                  |       | DU-19 (0-1)    |                       |        |                  |       | DU-36 (0-1) | 5.03                  | 4.21E-05         | 0.0823 | 0.6             | 2.8              | 0.1   |
|               |                       |        |                  |       | DU-19 (1-2)    |                       |        |                  |       | DU-36 (1-2) | 4.23                  | 3.70E-05         | 0.1030 | 0.5             | 2.5              | 0.2   |
|               |                       |        |                  |       | DU-19 (2-3)    | 4.66E-05              | 0.0790 | 3.1              | 0.1   | DU-36 (2-3) | 4.12                  | 2.80E-05         | 0.0379 | 0.5             | 1.9              | 0.1   |
|               |                       |        |                  |       | DU-20 (0-1)    |                       |        |                  |       | DU-38 (0-1) | 3.71                  | 2.94E-05         | 0.0828 | 0.4             | 2.0              | 0.2   |
|               |                       |        |                  |       | DU-20 (1-2)    | 4.30E-06              | 0.0132 | 0.3              | 0.0   | DU-38 (1-2) | 3.76                  | 1.90E-05         | 0.0635 | 0.4             | 1.3              | 0.1   |
|               |                       |        |                  |       | DU-20 (2-3)    | 3.97E-06              | 0.0193 | 0.3              | 0.0   | DU-38 (2-3) | 4.06                  | 1.05E-05         | 0.0442 | 0.5             | 0.7              | 0.1   |
|               |                       |        |                  |       | DU-21 (0-1)    |                       |        |                  |       | DU-37 (0-1) | 3.72                  | 6.78E-07         | 0.0124 | 0.4             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-21 (1-2)    |                       |        |                  |       | DU-37 (1-2) | 3.00                  | 6.32E-07         | 0.0114 | 0.3             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-21 (2-3)    | 1.01E-05              | 0.0879 | 0.7              | 0.2   | DU-37 (2-3) | 2.85                  | 5.69E-07         | 0.0970 | 0.3             | 0.0              | 0.2   |
|               |                       |        |                  |       | DU-22 (0-1)    |                       |        |                  |       | DU-39 (0-1) | 2.69                  | 3.68E-06         | 0.0057 | 0.3             | 0.2              | 0.0   |
|               |                       |        |                  |       | DU-22 (1-2)    |                       |        |                  |       | DU-39 (1-2) | 3.24                  | 1.38E-06         | 0.0057 | 0.4             | 0.1              | 0.0   |
|               |                       |        |                  |       | DU-22 (2-3)    |                       |        |                  |       | DU-39 (2-3) | 3.44                  | 1.36E-06         | 0.0124 | 0.4             | 0.1              | 0.0   |
|               |                       |        |                  |       | DU-23 (0-1)    |                       |        |                  |       | DU-40 (0-1) | 2.88                  | 7.34E-07         | 0.0057 | 0.3             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-23 (1-2)    |                       |        |                  |       | DU-40 (1-2) | 3.4                   | 5.18E-07         | 0.0061 | 0.4             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-23 (2-3)    |                       |        |                  |       | DU-40 (2-3) | 3.13                  | 5.52E-07         | 0.0061 | 0.4             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-24 (0-1)    |                       |        |                  |       | DU-43 (0-1) | 2.92                  | 3.00E-06         | 0.0163 | 0.3             | 0.2              | 0.0   |
|               |                       |        |                  |       | DU-24 (1-2)    | 6.44E-06              | 0.0740 | 0.4              | 0.1   | DU-43 (1-2) | 2.89                  | 1.26E-06         | 0.0106 | 0.3             | 0.1              | 0.0   |
|               |                       |        |                  |       | DU-24 (2-3)    | 8.88E-06              | 0.0145 | 0.6              | 0.0   | DU-43 (2-3) | 3.06                  | 6.63E-07         | 0.0097 | 0.3             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-25 (0-1)    |                       |        |                  |       | DU-44 (0-1) | 3.12                  | 1.38E-06         | 0.0180 | 0.4             | 0.1              | 0.0   |
|               |                       |        |                  |       | DU-25 (1-2)    |                       |        |                  |       | DU-44 (1-2) | 3.24                  | 8.37E-07         | 0.0127 | 0.4             | 0.1              | 0.0   |
|               |                       |        |                  |       | DU-25 (2-3)    | 1.94E-06              | 0.0873 | 0.1              | 0.2   | DU-44 (2-3) | 3.06                  | 7.25E-07         | 0.0129 | 0.3             | 0.0              | 0.0   |
|               |                       |        |                  |       | DU-26 (0-1)    |                       |        |                  |       | DU-41 (0-1) |                       |                  |        |                 |                  |       |
|               |                       |        |                  |       | DU-26 (1-2)    |                       |        |                  |       | DU-41 (1-2) |                       |                  |        |                 |                  |       |
|               |                       |        |                  |       | DU-26 (2-3)    |                       |        |                  |       | DU-41 (2-3) |                       |                  |        |                 |                  |       |
|               |                       |        |                  |       | DU-42 (0-1)    | 6.07E-05              | 0.0507 | 4.0              | 0.1   |             |                       |                  |        |                 |                  |       |
|               |                       |        |                  |       | DU-42 (1-2)    | 2.27E-05              | 0.0309 | 1.5              | 0.1   |             |                       |                  |        |                 |                  |       |
|               |                       |        |                  |       | DU-42 (2-3)    | 8.27E-06              | 0.0229 | 0.6              | 0.0   |             |                       |                  |        |                 |                  |       |

Notes:

1. Definition of table shading:

- Layer Targeted for Partial Hot Spot Removal
- Layer Targeted for Hot Spot Removal
- HQ >= 1.0

Table 8  
Excavation Evaluation: Data Uncertainty Screening  
Basis of Design Report  
Willamette Cove Upland Facility

| Parcel  | COCs with Poor Replicate RSD <sup>1</sup> | Hot Spot Level (mg/kg) | Human Health RG | Maximum Replicate RSD | Adjustment Factor | Maximum Residual Concentration, Excluding Replicates (mg/kg) | Adjusted Concentration (mg/kg) | Maximum Exceedance Factor |                 |
|---------|-------------------------------------------|------------------------|-----------------|-----------------------|-------------------|--------------------------------------------------------------|--------------------------------|---------------------------|-----------------|
|         |                                           |                        |                 |                       |                   |                                                              |                                | Hot Spot                  | Human Health RG |
| West    | Mercury                                   | 0.15                   | --              | 65%                   | 165%              | 0.141                                                        | 0.23                           | 1.6                       | --              |
|         | PCBs                                      | 0.98                   | 0.74            | 72%                   | 172%              | 0.558                                                        | 0.96                           | <1                        | 1.3             |
| Central | Dibenzofuran                              | 0.1                    | --              | 123%                  | 223%              | 0.0244                                                       | 0.05                           | <1                        | --              |
|         | HPAHs                                     | 56                     | --              | 86%                   | 186%              | 16.9                                                         | 31                             | <1                        | --              |
|         | LPAHs                                     | 290                    | --              | 118%                  | 218%              | 3.37                                                         | 7                              | <1                        | --              |
|         | cPAHs                                     | 55                     | 0.55            | 65%                   | 165%              | 2.6                                                          | 4.29                           | <1                        | 8               |
|         | Total PCBs                                | 0.98                   | 0.74            | 83%                   | 183%              | 0.0568                                                       | 0.10                           | <1                        | <1              |
| East    | Antimony                                  | 27                     | 24              | 72%                   | 172%              | 4.79                                                         | 8.2                            | <1                        | <1              |
|         | Copper                                    | 700                    | 11,000          | 52%                   | 152%              | 229                                                          | 347                            | <1                        | <1              |
|         | Lead                                      | 330                    | 400             | 58%                   | 158%              | 202                                                          | 320                            | <1                        | <1              |

Notes

1. RSD > 50%. Source, RDI report, Appendix I (Apex, 2023a)
2. COC = chemical of concern
3. RSD = Relative standard deviation between replicates and replicate mean
4. Shaded values exceed RG screening level

Table 9

Excavation Evaluation: Human Health Residual Risk, Adjusted Concentrations  
Basis of Design Report  
Willamette Cove Upland Facility

| Total PCBs, West Parcel |                     |                       | cPAHs, Central Parcel |                |                       |
|-------------------------|---------------------|-----------------------|-----------------------|----------------|-----------------------|
| Sample                  | RSD <sup>3</sup>    | 72%                   | Sample                | RSD            | 65%                   |
|                         | Total PCBs in mg/kg |                       |                       | cPAHs in mg/kg |                       |
|                         | Measured            | Adjusted <sup>4</sup> |                       | Measured       | Adjusted <sup>4</sup> |
| DU-1 (0-1)              | 0.427               | 0.733                 | DU-10 (0-1)           | 5.19           |                       |
| DU-1 (1-2)              | 2.750               |                       | DU-10 (1-2)           | 4.7            |                       |
| DU-1 (2-3)              | 0.110               | 0.189                 | DU-10 (2-3)           | 2.6            | 4.29                  |
| DU-2 (0-1)              | 0.186               | 0.319                 | DU-11 (0-1)           | 5.4            |                       |
| DU-2 (1-2)              | 0.558               | 0.958                 | DU-11 (1-2)           | 2.65           |                       |
| DU-2 (2-3)              | 0.030               | 0.051                 | DU-11 (2-3)           | 5.13           | 5.13                  |
| DU-3 (0-1)              | 0.025               | 0.043                 | DU-12 (0-1)           | 0.393          |                       |
| DU-3 (1-2)              | 0.005               | 0.009                 | DU-12 (1-2)           | 0.143          |                       |
| DU-3 (2-3)              | 0.005               | 0.008                 | DU-12 (2-3)           | 0.09           | 0.148                 |
| DU-4 (0-1)              | 0.032               | 0.054                 | DU-13 (0-1)           | 1.17           |                       |
| DU-4 (1-2)              | 0.025               | 0.042                 | DU-13 (1-2)           | 0.45           |                       |
| DU-4 (2-3)              | 0.035               | 0.060                 | DU-13 (2-3)           | 0.263          | 0.263                 |
| DU-5 (0-1)              | 0.177               |                       | DU-14 (0-1)           | 0.149          |                       |
| DU-5 (1-2)              | 0.143               |                       | DU-14 (1-2)           | 0.257          |                       |
| DU-5 (2-3)              | 0.387               | 0.387                 | DU-14 (2-3)           | 0.195          | 0.322                 |
| DU-6 (0-1)              | 0.063               | 0.107                 | DU-15 (0-1)           | 0.138          |                       |
| DU-6 (1-2)              | 0.111               |                       | DU-15 (1-2)           | 0.0499         |                       |
| DU-6 (2-3)              | 0.167               | 0.287                 | DU-15 (2-3)           | 0.101          | 0.167                 |
| DU-7 (0-1)              | 0.053               |                       | DU-16 (0-1)           | 0.496          |                       |
| DU-7 (1-2)              | 0.057               | 0.097                 | DU-16 (1-2)           | 0.246          |                       |
| DU-7 (2-3)              | 0.050               | 0.086                 | DU-16 (2-3)           | 0.0569         | 0.094                 |
| DU-8 (0-1)              | 0.099               |                       | DU-17 (0-1)           | 0.0634         |                       |
| DU-8 (1-2)              | 0.068               |                       | DU-17 (1-2)           | 0.0513         |                       |
| DU-8 (2-3)              | 0.098               |                       | DU-17 (2-3)           | 0.0309         | 0.051                 |
| DU-9 (0-1)              | 0.064               |                       | DU-18 (0-1)           | 0.271          |                       |
| DU-9 (1-2)              | 0.035               | 0.061                 | DU-18 (1-2)           | 0.138          |                       |
| DU-9 (2-3)              | 0.048               | 0.082                 | DU-18 (2-3)           | 0.0862         | 0.086                 |
|                         |                     |                       | DU-19 (0-1)           | 0.403          |                       |
|                         |                     |                       | DU-19 (1-2)           | 0.27           |                       |
|                         |                     |                       | DU-19 (2-3)           | 0.079          | 0.130                 |
|                         |                     |                       | DU-20 (0-1)           | 0.145          |                       |
|                         |                     |                       | DU-20 (1-2)           | 0.0132         | 0.022                 |
|                         |                     |                       | DU-20 (2-3)           | 0.0193         | 0.032                 |
|                         |                     |                       | DU-21 (0-1)           | 0.314          |                       |
|                         |                     |                       | DU-21 (1-2)           | 0.164          |                       |
|                         |                     |                       | DU-21 (2-3)           | 0.0879         | 0.145                 |
|                         |                     |                       | DU-22 (0-1)           | 0.131          |                       |
|                         |                     |                       | DU-22 (1-2)           | 0.0289         |                       |
|                         |                     |                       | DU-22 (2-3)           | 0.0292         | 0.029                 |
|                         |                     |                       | DU-23 (0-1)           | 0.106          |                       |
|                         |                     |                       | DU-23 (1-2)           | 0.104          |                       |
|                         |                     |                       | DU-23 (2-3)           | 0.0362         | 0.060                 |
|                         |                     |                       | DU-24 (0-1)           | 0.0907         |                       |
|                         |                     |                       | DU-24 (1-2)           | 0.074          | 0.122                 |
|                         |                     |                       | DU-24 (2-3)           | 0.0145         | 0.024                 |
|                         |                     |                       | DU-25 (0-1)           | 0.386          |                       |
|                         |                     |                       | DU-25 (1-2)           | 0.0905         |                       |
|                         |                     |                       | DU-25 (2-3)           | 0.0873         | 0.144                 |
|                         |                     |                       | DU-26 (0-1)           | 0.723          |                       |
|                         |                     |                       | DU-26 (1-2)           | 0.281          |                       |
|                         |                     |                       | DU-26 (2-3)           | 0.148          | 0.148                 |
|                         |                     |                       | DU-42 (0-1)           | 0.0507         | 0.084                 |
|                         |                     |                       | DU-42 (1-2)           | 0.0309         | 0.051                 |
|                         |                     |                       | DU-42 (2-3)           | 0.0229         | 0.038                 |
| Number of Samples       |                     | 18                    | Number of Samples     |                | 22                    |
| Mean                    |                     | 0.20                  | Mean                  |                | 0.53                  |
| Standard Deviation      |                     | 0.25                  | Standard Deviation    |                | 1.33                  |
| 90% UCL (Student-t)     |                     | 0.30                  | 90% UCL (Student-t)   |                | 1.01                  |
| Remediation Goal        |                     | 0.74                  | Remediation Goal      |                | 0.55                  |
| Excess Cancer Risk      |                     | 4.E-07                | Excess Cancer Risk    |                | 2.E-06                |

## Notes:

1. Green shade are layers targeted for removal.
2. Blue shade are layers with replicate samples that are targeted for removal.
3. RSD = replicate standard deviation.
4. Adjusted concentrations: maximum of replicates for DUs with replicates; measured concentration adjusted upward by the RSD for DUs without replicates.

Table 10  
Preliminary Removal Volume  
Basis of Design Report  
Willamette Cove Upland Facility

| Parcel  | DU | Area (ac) | Removal Thickness (ft) |                   | Off-Site Disposal Volume (cy) | Comments        |
|---------|----|-----------|------------------------|-------------------|-------------------------------|-----------------|
|         |    |           | Excavation             | Off-Site Disposal |                               |                 |
| West    | 1  | 0.50      | 2.0                    | 1.0               | 807                           | Buried hot spot |
|         | 2  | 0.50      | 0                      | 0                 | 0                             |                 |
|         | 3  | 0.43      | 0                      | 0                 | 0                             |                 |
|         | 4  | 0.42      | 0                      | 0                 | 0                             |                 |
|         | 5  | 0.53      | 3.0                    | 3.0               | 2565                          |                 |
|         | 6  | 0.53      | 2.0                    | 1.0               | 855                           |                 |
|         | 7  | 0.49      | 1.0                    | 1.0               | 791                           |                 |
|         | 8  | 0.44      | 3.0                    | 3.0               | 2130                          |                 |
|         | 9  | 0.43      | 1.0                    | 1.0               | 694                           |                 |
| Central | 10 | 0.49      | 3.0                    | 3.0               | 2372                          |                 |
|         | 11 | 0.54      | 3.0                    | 3.0               | 2614                          |                 |
|         | 12 | 0.44      | 3.0                    | 3.0               | 2130                          |                 |
|         | 13 | 0.52      | 3.0                    | 3.0               | 2517                          |                 |
|         | 14 | 0.44      | 3.0                    | 3.0               | 2130                          |                 |
|         | 15 | 0.49      | 3.0                    | 3.0               | 2372                          |                 |
|         | 16 | 0.40      | 2.6                    | 2.6               | 1678                          |                 |
|         | 17 | 0.50      | 2.0                    | 2.0               | 1613                          |                 |
|         | 18 | 0.41      | 3.0                    | 3.0               | 1984                          |                 |
|         | 19 | 0.51      | 2.6                    | 2.6               | 2139                          |                 |
|         | 20 | 0.68      | 1.0                    | 1.0               | 1097                          |                 |
|         | 21 | 0.39      | 2.4                    | 2.4               | 1510                          |                 |
|         | 22 | 0.62      | 3.0                    | 3.0               | 3001                          |                 |
|         | 23 | 0.62      | 3.0                    | 3.0               | 3001                          |                 |
|         | 24 | 0.44      | 1.6                    | 1.6               | 1136                          |                 |
|         | 25 | 0.45      | 2.0                    | 2.0               | 1452                          |                 |
|         | 26 | 0.44      | 3.0                    | 3.0               | 2130                          |                 |
|         | 42 | 0.09      | 0                      | 0                 | 0                             |                 |

Table 10  
Preliminary Removal Volume  
Basis of Design Report  
Willamette Cove Upland Facility

| Parcel               | DU           | Area (ac) | Removal Thickness (ft) |                   | Off-Site Disposal Volume (cy) | Comments                                            |
|----------------------|--------------|-----------|------------------------|-------------------|-------------------------------|-----------------------------------------------------|
|                      |              |           | Excavation             | Off-Site Disposal |                               |                                                     |
| East                 | 27           | 0.40      | 2.0                    | 2.0               | 1291                          | Buried hot spot<br>Est. from surface topo.          |
|                      | 28           | 0.43      | 2.5                    | 2.5               | 1734                          |                                                     |
|                      | 29           | 0.42      | 0                      | 0                 | 0                             |                                                     |
|                      | 30           | 0.42      | 3.0                    | 1.0               | 678                           |                                                     |
|                      | 30 Pile      | --        | --                     | --                | 160                           |                                                     |
|                      | 31           | 0.29      | 0                      | 0                 | 0                             |                                                     |
|                      | 32           | 0.46      | 0                      | 0                 | 0                             |                                                     |
|                      | 33           | 0.39      | 0                      | 0                 | 0                             |                                                     |
|                      | 33 Pile      | --        | --                     | --                | 207                           |                                                     |
|                      | 34           | 0.40      | 0                      | 0                 | 0                             |                                                     |
|                      | 35           | 0.39      | 0                      | 0                 | 0                             |                                                     |
|                      | 36           | 0.26      | 0                      | 0                 | 0                             |                                                     |
|                      | 36 Pile      | --        | --                     | --                | 33                            |                                                     |
|                      | 37           | 0.25      | 0                      | 0                 | 0                             |                                                     |
|                      | 38           | 0.47      | 0                      | 0                 | 0                             |                                                     |
| East (Cont.)         | 39           | 0.50      | 0                      | 0                 | 0                             | Buried hot spot in DU-30<br>Est. from surface topo. |
|                      | 40           | 0.49      | 0                      | 0                 | 0                             |                                                     |
|                      | 41 Adj DU-27 | 0.03      | 2.0                    | 2.0               | 94                            |                                                     |
|                      | 41 Adj DU-28 | 0.11      | 2.5                    | 2.5               | 426                           |                                                     |
|                      | 41 Adj DU-29 | 0.11      | 0                      | 0.0               | 0                             |                                                     |
|                      | 41 Adj DU-30 | 0.15      | 0                      | 0                 | 0                             |                                                     |
|                      | 41 Pile      | --        | --                     | --                | 410                           |                                                     |
|                      | 43           | 0.14      | 0                      | 0                 | 0                             |                                                     |
|                      | 44           | 0.20      | 0                      | 0                 | 0                             |                                                     |
| or Average Thickness |              | 19.1      |                        | 1.53              | 47,700                        |                                                     |

Table 11  
Hazard Quotient and Hazard Index - Plants  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 40         |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |
| Plant RBC (mg/kg)            |               |             |                         |             | 5               | 18      | 39       | 70     | 120  | 0.30    | 38     | 0.52     | 160  |            |              |
| West Parcel                  | DU-1          | ISM         | 0-1                     | DU-1 (0-1)  | 0.2             |         |          | 2.6    | 0.6  |         | 0.7    |          | 0.9  |            | 5.0          |
|                              |               |             | 1-2                     | DU-1 (1-2)  | 0.1             |         | 1.1      | 0.9    | 2.7  | 0.3     | 0.8    |          | 0.9  | 6.8        |              |
|                              |               |             | 2-3                     | DU-1 (2-3)  |                 |         |          | 1.0    | 0.5  | 0.3     | 0.7    |          | 1.1  | 3.5        |              |
|                              | DU-2          | ISM         | 0-1                     | DU-2 (0-1)  | 0.1             |         |          | 1.7    | 0.8  | 0.2     |        |          |      |            | 2.9          |
|                              |               |             | 1-2                     | DU-2 (1-2)  |                 |         | 2.4      | 1.0    | 0.4  |         |        |          | 3.8  |            |              |
|                              |               |             | 2-3                     | DU-2 (2-3)  |                 |         | 0.6      |        |      |         | 0.6    |          |      |            |              |
|                              | DU-3          | ISM         | 0-1                     | DU-3 (0-1)  |                 |         |          | 0.4    |      |         |        |          |      |            | 0.4          |
|                              |               |             | 1-2                     | DU-3 (1-2)  |                 |         | 0.4      |        |      |         |        |          | 0.4  |            |              |
|                              |               |             | 2-3                     | DU-3 (2-3)  |                 |         |          |        |      |         |        |          | 0.0  |            |              |
|                              | DU-4          | ISM         | 0-1                     | DU-4 (0-1)  |                 |         |          | 0.4    |      | 0.2     | 0.6    |          |      |            | 1.3          |
|                              |               |             | 1-2                     | DU-4 (1-2)  |                 |         | 0.4      |        |      | 0.6     |        |          | 1.0  |            |              |
|                              |               |             | 2-3                     | DU-4 (2-3)  |                 |         | 0.5      | 0.4    | 0.3  |         | 0.7    |          | 1.8  |            |              |
|                              | DU-5          | ISM         | 0-1                     | DU-5 (0-1)  | 0.2             | 0.5     | 1.3      | 4.9    | 0.5  | 1.2     | 0.9    | 0.7      | 1.3  |            | 12           |
|                              |               |             | 1-2                     | DU-5 (1-2)  | 0.2             |         | 1.1      | 3.4    | 0.6  | 1.2     | 1.6    | 0.6      | 1.1  |            | 10           |
|                              |               |             | 2-3                     | DU-5 (2-3)  | 0.1             |         | 1.2      | 3.1    | 1.0  | 0.9     | 0.8    |          | 1.4  |            | 8.5          |
|                              | DU-6          | ISM         | 0-1                     | DU-6 (0-1)  |                 |         |          | 1.0    | 0.2  | 0.4     |        |          | 0.8  |            | 2.5          |
|                              |               |             | 1-2                     | DU-6 (1-2)  |                 |         |          | 1.3    | 0.3  | 0.5     |        |          | 0.8  |            | 2.9          |
|                              |               |             | 2-3                     | DU-6 (2-3)  |                 |         |          | 1.4    | 0.3  | 0.5     |        |          | 0.7  |            | 2.9          |
|                              | DU-7          | ISM         | 0-1                     | DU-7 (0-1)  |                 |         |          | 0.5    |      | 1.0     |        |          | 0.8  |            | 2.3          |
|                              |               |             | 1-2                     | DU-7 (1-2)  |                 |         |          | 0.4    |      | 0.4     |        |          |      |            | 0.9          |
|                              |               |             | 2-3                     | DU-7 (2-3)  |                 |         |          | 0.3    |      | 0.3     |        |          |      |            | 0.7          |
|                              | DU-8          | ISM         | 0-1                     | DU-8 (0-1)  |                 |         |          | 0.5    | 0.3  | 0.5     |        |          | 0.9  |            | 2.2          |
|                              |               |             | 1-2                     | DU-8 (1-2)  |                 |         |          | 0.5    | 0.3  | 0.5     |        |          | 0.8  |            | 2.1          |
|                              |               |             | 2-3                     | DU-8 (2-3)  |                 |         |          | 0.5    | 0.3  | 0.5     |        |          | 0.8  |            | 2.0          |
|                              | DU-9          | ISM         | 0-1                     | DU-9 (0-1)  | 0.1             |         |          | 0.6    | 0.2  | 0.5     | 0.7    |          | 1.0  |            | 3.1          |
|                              |               |             | 1-2                     | DU-9 (1-2)  |                 |         |          | 0.5    | 0.3  | 0.5     | 0.6    |          | 0.7  |            | 2.7          |
|                              |               |             | 2-3                     | DU-9 (2-3)  |                 |         |          | 0.5    |      | 0.5     | 0.7    |          |      | 0.8        |              |
| Central Parcel               | DU-10         | ISM         | 0-1                     | DU-10 (0-1) |                 |         |          | 0.5    | 0.7  | 3.6     | 0.8    |          | 0.7  |            | 6.2          |
|                              |               |             | 1-2                     | DU-10 (1-2) | 0.1             |         |          | 0.5    | 0.5  | 2.8     | 0.7    |          |      |            | 4.5          |
|                              |               |             | 2-3                     | DU-10 (2-3) | 0.1             |         |          | 0.5    | 0.6  | 2.0     |        |          | 0.7  |            | 3.9          |
|                              | DU-11         | ISM         | 0-1                     | DU-11 (0-1) |                 |         |          | 0.6    | 0.5  | 2.4     | 0.8    |          | 0.7  |            | 4.9          |
|                              |               |             | 1-2                     | DU-11 (1-2) |                 |         |          | 0.5    | 0.4  | 2.1     | 0.7    |          |      |            | 3.8          |
|                              |               |             | 2-3                     | DU-11 (2-3) |                 |         |          | 0.5    | 0.4  | 2.0     | 0.7    |          |      |            | 3.6          |

Table 11  
Hazard Quotient and Hazard Index - Plants  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 40         |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |
| Plant RBC (mg/kg)            |               |             |                         |             | 5               | 18      | 39       | 70     | 120  | 0.30    | 38     | 0.52     | 160  |            |              |
| Central Parcel               | DU-12         | ISM         | 0-1                     | DU-12 (0-1) | 0.2             |         |          | 1.1    | 1.4  | 1.0     |        |          | 1.0  |            | 4.7          |
|                              |               |             | 1-2                     | DU-12 (1-2) |                 |         |          | 0.8    | 1.1  | 0.9     |        |          |      | 2.8        |              |
|                              |               |             | 2-3                     | DU-12 (2-3) |                 |         |          | 0.6    | 0.6  | 0.7     |        |          |      | 1.9        |              |
|                              | DU-13         | ISM         | 0-1                     | DU-13 (0-1) | 0.2             |         |          | 1.3    | 2.0  | 3.8     |        |          | 1.3  |            | 8.6          |
|                              |               |             | 1-2                     | DU-13 (1-2) |                 |         |          | 0.8    | 1.3  | 2.6     |        |          | 0.8  |            | 5.5          |
|                              |               |             | 2-3                     | DU-13 (2-3) |                 |         |          | 0.8    | 1.5  | 2.6     |        |          | 0.8  |            | 5.6          |
|                              | DU-14         | ISM         | 0-1                     | DU-14 (0-1) | 0.6             |         |          | 1.1    | 1.1  | 4.4     | 0.6    |          | 0.9  |            | 8.7          |
|                              |               |             | 1-2                     | DU-14 (1-2) | 1.5             |         |          | 1.7    | 2.0  | 10.3    | 0.6    |          | 1.3  |            | 17           |
|                              |               |             | 2-3                     | DU-14 (2-3) | 0.6             |         |          | 2.6    | 1.4  | 8.3     | 0.7    |          | 1.0  |            | 15           |
|                              | DU-15         | ISM         | 0-1                     | DU-15 (0-1) | 0.6             |         |          | 1.4    | 1.1  | 2.5     |        |          | 0.8  |            | 6.3          |
|                              |               |             | 1-2                     | DU-15 (1-2) | 0.1             |         |          | 0.8    | 0.6  | 4.3     |        |          | 0.8  |            | 6.5          |
|                              |               |             | 2-3                     | DU-15 (2-3) |                 |         |          | 0.5    | 0.5  | 1.9     |        |          |      |            | 2.9          |
|                              | DU-16         | ISM         | 0-1                     | DU-16 (0-1) | 0.9             |         |          | 1.9    | 2.6  | 17.1    | 0.7    |          | 2.3  |            | 25           |
|                              |               |             | 1-2                     | DU-16 (1-2) | 0.5             |         |          | 1.0    | 1.3  | 5.6     |        |          | 0.9  |            | 9.2          |
|                              |               |             | 2-3                     | DU-16 (2-3) |                 |         |          | 0.4    | 0.3  | 1.4     |        | 1.0      |      |            | 3.2          |
|                              | DU-17         | ISM         | 0-1                     | DU-17 (0-1) | 0.2             |         |          | 0.8    | 0.7  | 1.9     |        |          | 1.0  |            | 4.6          |
|                              |               |             | 1-2                     | DU-17 (1-2) |                 |         |          | 0.5    | 0.5  | 1.2     |        |          |      |            | 2.2          |
|                              |               |             | 2-3                     | DU-17 (2-3) |                 |         |          | 0.4    | 0.3  | 0.4     |        |          |      |            | 1.1          |
|                              | DU-18         | ISM         | 0-1                     | DU-18 (0-1) | 0.3             | 0.6     |          | 1.6    | 2.3  | 5.7     | 0.6    |          | 1.3  |            | 12           |
|                              |               |             | 1-2                     | DU-18 (1-2) |                 |         |          | 1.1    | 1.5  | 3.5     |        |          | 1.0  |            | 7.1          |
|                              |               |             | 2-3                     | DU-18 (2-3) |                 |         |          | 0.9    | 0.8  | 2.3     |        | 1.0      | 0.7  |            | 5.6          |
|                              | DU-19         | ISM         | 0-1                     | DU-19 (0-1) | 0.3             |         |          | 1.5    | 2.1  | 2.2     |        |          | 1.3  |            | 7.5          |
|                              |               |             | 1-2                     | DU-19 (1-2) | 0.2             | 0.6     |          | 1.6    | 1.3  | 3.6     |        |          | 1.2  |            | 8.6          |
|                              |               |             | 2-3                     | DU-19 (2-3) | 0.2             |         |          | 0.6    | 0.6  | 1.1     |        |          | 0.7  |            | 3.2          |
| DU-20                        | ISM           | 0-1         | DU-20 (0-1)             | 0.3         |                 |         | 0.8      | 0.6    | 1.0  |         |        | 0.7      |      | 3.6        |              |
|                              |               | 1-2         | DU-20 (1-2)             |             |                 |         | 0.4      |        | 0.5  | 0.7     |        |          |      | 1.6        |              |
|                              |               | 2-3         | DU-20 (2-3)             |             |                 |         |          |        | 0.3  |         |        |          |      | 0.3        |              |
| DU-21                        | ISM           | 0-1         | DU-21 (0-1)             | 0.5         | 0.6             |         | 1.8      | 2.5    | 2.6  |         |        | 1.5      |      | 9.5        |              |
|                              |               | 1-2         | DU-21 (1-2)             | 0.2         |                 |         | 0.8      | 1.0    | 0.9  |         |        | 1.1      |      | 4.0        |              |
|                              |               | 2-3         | DU-21 (2-3)             |             |                 |         | 0.7      | 0.7    | 0.5  |         |        | 0.7      |      | 2.6        |              |
| DU-22                        | ISM           | 0-1         | DU-22 (0-1)             | 0.6         |                 |         | 1.4      | 1.6    | 2.0  |         |        | 1.1      |      | 6.7        |              |
|                              |               | 1-2         | DU-22 (1-2)             | 0.5         |                 |         | 0.7      | 0.6    | 1.2  |         |        | 1.0      |      | 4.0        |              |
|                              |               | 2-3         | DU-22 (2-3)             | 0.2         |                 |         | 0.8      | 0.5    | 1.3  |         |        | 0.8      |      | 3.5        |              |

Table 11  
Hazard Quotient and Hazard Index - Plants  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 40         |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |
| Plant RBC (mg/kg)            |               |             |                         |             | 5               | 18      | 39       | 70     | 120  | 0.30    | 38     | 0.52     | 160  |            |              |
| Central Parcel               | DU-23         | ISM         | 0-1                     | DU-23 (0-1) | 0.3             |         |          | 2.1    | 2.3  | 3.4     |        |          | 1.2  |            | 9.3          |
|                              |               |             | 1-2                     | DU-23 (1-2) | 0.1             |         |          | 1.0    | 0.6  | 1.8     |        | 0.8      |      | 4.3        |              |
|                              |               |             | 2-3                     | DU-23 (2-3) |                 |         |          | 0.6    | 0.7  | 1.4     |        |          |      | 2.7        |              |
|                              | DU-24         | ISM         | 0-1                     | DU-24 (0-1) |                 |         |          | 0.6    | 0.4  | 0.9     |        |          | 0.7  |            | 2.6          |
|                              |               |             | 1-2                     | DU-24 (1-2) |                 |         |          | 0.4    |      | 0.6     |        |          | 0.8  |            | 1.8          |
|                              |               |             | 2-3                     | DU-24 (2-3) |                 |         |          |        |      | 0.3     |        |          |      |            | 0.3          |
|                              | DU-25         | ISM         | 0-1                     | DU-25 (0-1) | 0.2             |         |          | 3.2    | 1.2  | 2.5     |        |          | 1.5  |            | 8.6          |
|                              |               |             | 1-2                     | DU-25 (1-2) |                 |         |          | 0.7    | 0.9  | 0.7     |        |          | 1.3  |            | 3.6          |
|                              |               |             | 2-3                     | DU-25 (2-3) |                 |         |          | 0.4    | 0.4  | 0.4     |        |          | 0.9  |            | 2.0          |
|                              | DU-26         | ISM         | 0-1                     | DU-26 (0-1) | 1.0             | 0.5     |          | 2.2    | 2.8  | 6.5     |        | 1.2      | 1.6  |            | 16           |
|                              |               |             | 1-2                     | DU-26 (1-2) | 0.3             | 0.6     |          | 1.2    | 1.3  | 4.2     |        | 1.1      | 1.3  |            | 9.9          |
|                              |               |             | 2-3                     | DU-26 (2-3) | 0.1             |         |          | 0.6    | 0.6  | 2.7     |        |          | 0.9  |            | 4.9          |
|                              | DU-42         | Composite   | 0-1                     | DU-42 (0-1) |                 |         |          | 0.5    |      |         |        |          |      |            | 0.5          |
|                              |               |             | 1-2                     | DU-42 (1-2) | 0.1             |         |          |        |      |         |        |          |      |            | 0.1          |
|                              |               |             | 2-3                     | DU-42 (2-3) |                 |         |          |        |      |         |        |          |      |            | 0.0          |
| East Parcel                  | DU-27         | ISM         | 0-1                     | DU-27 (0-1) | 0.3             | 0.8     |          | 2.9    | 0.4  | 0.6     |        | 1.1      | 1.1  |            | 7.2          |
|                              |               |             | 1-2                     | DU-27 (1-2) |                 |         |          | 1.2    | 0.3  |         |        |          | 0.8  |            | 2.3          |
|                              |               |             | 2-3                     | DU-27 (2-3) | 0.2             | 0.9     |          | 0.7    | 0.5  |         |        |          | 0.9  |            | 3.1          |
|                              | DU-28         | ISM         | 0-1                     | DU-28 (0-1) | 0.5             | 0.6     |          | 2.6    | 0.7  | 2.2     |        |          | 1.7  |            | 8.2          |
|                              |               |             | 1-2                     | DU-28 (1-2) | 0.6             | 0.7     |          | 4.7    | 0.6  | 2.4     |        |          | 1.4  |            | 10           |
|                              |               |             | 2-3                     | DU-28 (2-3) | 1.0             |         |          | 3.3    | 0.9  | 0.7     |        |          | 1.7  |            | 7.6          |
|                              | DU-29         | ISM         | 0-1                     | DU-29 (0-1) | 0.2             |         |          | 1.0    | 0.9  |         |        |          | 1.0  |            | 3.1          |
|                              |               |             | 1-2                     | DU-29 (1-2) | 0.2             |         |          | 0.6    | 0.3  |         |        |          |      |            | 1.2          |
|                              |               |             | 2-3                     | DU-29 (2-3) |                 |         |          | 0.4    | 0.4  |         |        |          |      |            | 0.8          |
|                              | DU-30         | ISM         | 0-1                     | DU-30 (0-1) | 0.3             |         |          | 0.9    | 1.1  | 0.3     |        |          | 1.1  |            | 3.7          |
|                              |               |             | 1-2                     | DU-30 (1-2) | 0.4             |         |          | 1.1    | 1.7  |         |        |          | 1.4  |            | 4.7          |
|                              |               |             | 2-3                     | DU-30 (2-3) | 1.4             |         |          | 1.2    | 1.8  | 0.5     |        |          | 1.0  |            | 5.9          |
|                              | DU-31         | ISM         | 0-1                     | DU-31 (0-1) | 0.4             |         |          | 0.5    | 0.4  |         |        |          | 0.7  |            | 2.0          |
|                              |               |             | 1-2                     | DU-31 (1-2) | 0.1             |         |          | 0.7    | 0.3  |         |        |          | 0.9  |            | 2.0          |
|                              |               |             | 2-3                     | DU-31 (2-3) | 0.1             |         |          | 1.0    |      |         |        |          | 0.7  |            | 1.8          |
| DU-32                        | ISM           | 0-1         | DU-32 (0-1)             | 0.2         | 0.5             |         | 0.5      | 0.2    |      |         |        | 0.7      |      | 2.1        |              |
|                              |               | 1-2         | DU-32 (1-2)             |             |                 |         |          |        |      |         |        |          |      | 0.0        |              |
|                              |               | 2-3         | DU-32 (2-3)             |             |                 |         |          | 0.3    |      |         |        |          |      | 0.3        |              |

Table 11  
Hazard Quotient and Hazard Index - Plants  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |     |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|-----|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total PCBs |              |     |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 40         |              |     |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |     |
| Plant RBC (mg/kg)            |               |             |                         |             | 5               | 18      | 39       | 70     | 120  | 0.30    | 38     | 0.52     | 160  |            |              |     |
| East Parcel                  | DU-33         | ISM         | 0-1                     | DU-33 (0-1) | 0.5             | 0.5     |          | 1.1    | 0.7  |         |        |          | 1.8  |            | 4.2          |     |
|                              |               |             | 1-2                     | DU-33 (1-2) | 0.4             |         |          | 1.4    | 0.6  |         |        | 2.2      | 5.0  |            |              |     |
|                              |               |             | 2-3                     | DU-33 (2-3) | 0.1             |         |          | 0.8    | 0.4  |         |        | 1.5      | 2.7  |            |              |     |
|                              | DU-34         | ISM         | 0-1                     | DU-34 (0-1) | 0.2             |         |          | 0.5    | 0.3  | 0.6     |        | 1.1      |      | 2.2        |              |     |
|                              |               |             | 1-2                     | DU-34 (1-2) | 0.1             |         |          | 0.5    | 0.3  |         |        | 1.1      |      | 2.6        |              |     |
|                              |               |             | 2-3                     | DU-34 (2-3) |                 |         |          | 0.5    |      |         |        | 1.4      |      | 1.9        |              |     |
|                              | DU-35         | ISM         | 0-1                     | DU-35 (0-1) |                 |         |          | 0.8    |      |         |        | 1.1      |      | 1.8        |              |     |
|                              |               |             | 1-2                     | DU-35 (1-2) |                 |         |          | 0.4    |      |         |        | 1.1      |      | 1.5        |              |     |
|                              |               |             | 2-3                     | DU-35 (2-3) |                 |         |          | 0.4    |      |         |        | 0.9      |      | 1.3        |              |     |
|                              | DU-36         | ISM         | 0-1                     | DU-36 (0-1) | 0.8             |         |          | 0.8    | 0.6  |         |        |          | 1.7  |            | 3.9          |     |
|                              |               |             | 1-2                     | DU-36 (1-2) | 0.7             |         |          | 0.8    | 1.1  |         |        | 1.4      | 4.0  |            |              |     |
|                              |               |             | 2-3                     | DU-36 (2-3) | 0.7             |         |          | 0.7    | 0.5  |         |        | 1.2      | 3.1  |            |              |     |
|                              | DU-38         | ISM         | 0-1                     | DU-38 (0-1) | 0.3             |         |          | 0.4    | 0.3  |         |        |          | 0.7  |            | 1.6          |     |
|                              |               |             | 1-2                     | DU-38 (1-2) | 1.0             |         |          | 0.8    | 0.6  |         |        |          | 2.4  |            |              |     |
|                              |               |             | 2-3                     | DU-38 (2-3) | 0.7             |         |          | 0.7    | 0.4  |         |        | 0.7      | 2.6  |            |              |     |
|                              | DU-37         | Composite   | 0-1                     | DU-37 (0-1) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              |               |             | 1-2                     | DU-37 (1-2) |                 |         |          |        |      |         |        |          |      |            |              | 0.0 |
|                              |               |             | 2-3                     | DU-37 (2-3) |                 |         |          |        |      |         |        |          |      |            |              | 0.0 |
|                              | DU-39         | Composite   | 0-1                     | DU-39 (0-1) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              |               |             | 1-2                     | DU-39 (1-2) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              |               |             | 2-3                     | DU-39 (2-3) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              | DU-40         | Composite   | 0-1                     | DU-40 (0-1) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              |               |             | 1-2                     | DU-40 (1-2) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |
|                              |               |             | 2-3                     | DU-40 (2-3) |                 |         |          |        |      |         |        |          |      |            | 0.0          |     |

Table 11  
Hazard Quotient and Hazard Index - Plants  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type       | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |
|------------------------------|---------------|-------------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|
|                              |               |                   |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total PCBs |              |
| ISM Background (mg/kg)       |               |                   |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 40         |              |
| Composite Background (mg/kg) |               |                   |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |
| Plant RBC (mg/kg)            |               |                   |                         |             | 5               | 18      | 39       | 70     | 120  | 0.30    | 38     | 0.52     | 160  |            |              |
| East Parcel                  | DU-43         | Composite         | 0-1                     | DU-43 (0-1) |                 |         |          |        |      |         |        |          |      | 0.0        |              |
|                              |               |                   | 1-2                     | DU-43 (1-2) |                 |         |          |        |      |         |        |          | 0.0  |            |              |
|                              |               |                   | 2-3                     | DU-43 (2-3) |                 |         |          |        |      |         |        |          | 0.0  |            |              |
|                              | DU-44         | Composite         | 0-1                     | DU-44 (0-1) | 0.1             |         |          |        |      |         |        |          |      | 0.1        |              |
|                              |               |                   | 1-2                     | DU-44 (1-2) |                 |         |          |        |      |         |        |          | 0.0  |            |              |
|                              |               |                   | 2-3                     | DU-44 (2-3) |                 |         |          |        |      |         |        |          | 0.0  |            |              |
|                              | DU-41         | ISM (Berm Sample) | 0-1                     | DU-41 (0-1) | 0.6             | 2.8     |          | 1.1    | 0.7  | 0.9     |        |          | 0.9  | 6.9        |              |
|                              |               |                   | 1-2                     | DU-41 (1-2) | 0.5             | 0.8     |          | 1.0    | 1.1  | 0.4     |        |          | 1.0  | 4.7        |              |
|                              |               |                   | 2-3                     | DU-41 (2-3) | 0.3             | 1.1     |          | 0.6    | 0.9  | 0.2     |        |          | 1.1  | 4.4        |              |

Notes:

1. Definition of table shading:

- COC was not detected. Hazard Quotient not calculated.
- Layer excavated.
- Layer partially excavated; Maximum allowable residual Hazard Quotient is 9.9

2. Only Hazard Quotients equal to or greater than 0.1 are shown.

Table 12  
Hazard Quotient and Hazard Index - Invertebrates  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                            | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            | Hazard Index |            |
|----------------------------------------------------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|--------------|------------|
|                                                                            |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total HPAH |              | Total LPAH |
| ISM Background (mg/kg)<br>Composite Background (mg/kg)<br>Invertebrate RBC |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |            |              |            |
|                                                                            |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |              |            |
|                                                                            |               |             |                         |             | 78              |         | 39       | 80     | 1700 | 0.10    | 280    | 4.10     | 120  | 18         | 29           |            |
| West Parcel                                                                | DU-1          | ISM         | 0-1                     | DU-1 (0-1)  |                 |         |          | 2.3    |      |         |        |          | 1.3  | 0.1        |              | 3.7        |
|                                                                            |               |             | 1-2                     | DU-1 (1-2)  |                 |         | 1.1      | 0.8    | 0.2  | 0.9     | 0.1    |          | 1.2  | 0.1        |              | 4.3        |
|                                                                            |               |             | 2-3                     | DU-1 (2-3)  |                 |         |          | 0.9    |      | 0.8     |        |          | 1.5  | 0.1        |              | 3.3        |
|                                                                            | DU-2          | ISM         | 0-1                     | DU-2 (0-1)  |                 |         |          | 1.5    |      | 0.7     |        |          |      |            |              | 2.2        |
|                                                                            |               |             | 1-2                     | DU-2 (1-2)  |                 |         |          | 2.1    |      | 1.2     |        |          |      |            |              | 3.4        |
|                                                                            |               |             | 2-3                     | DU-2 (2-3)  |                 |         |          | 0.5    |      |         |        |          |      |            |              | 0.5        |
|                                                                            | DU-3          | ISM         | 0-1                     | DU-3 (0-1)  |                 |         |          | 0.3    |      |         |        |          |      |            |              | 0.3        |
|                                                                            |               |             | 1-2                     | DU-3 (1-2)  |                 |         |          | 0.3    |      |         |        |          |      |            |              | 0.3        |
|                                                                            |               |             | 2-3                     | DU-3 (2-3)  |                 |         |          |        |      |         |        |          |      |            |              | 0.0        |
|                                                                            | DU-4          | ISM         | 0-1                     | DU-4 (0-1)  |                 |         |          | 0.4    |      | 0.7     |        |          |      | 0.1        |              | 1.2        |
|                                                                            |               |             | 1-2                     | DU-4 (1-2)  |                 |         |          | 0.3    |      |         |        |          | 0.7  | 0.1        |              | 1.1        |
|                                                                            |               |             | 2-3                     | DU-4 (2-3)  |                 |         |          | 0.4    |      | 0.8     |        |          | 1.0  | 0.3        |              | 2.4        |
|                                                                            | DU-5          | ISM         | 0-1                     | DU-5 (0-1)  |                 |         | 1.3      | 4.3    |      | 3.5     | 0.1    |          | 1.8  |            |              | 11         |
|                                                                            |               |             | 1-2                     | DU-5 (1-2)  |                 |         | 1.1      | 3.0    |      | 3.7     | 0.2    |          | 1.5  |            |              | 9.5        |
|                                                                            |               |             | 2-3                     | DU-5 (2-3)  |                 |         | 1.2      | 2.7    |      | 2.7     | 0.1    |          | 1.9  | 0.2        |              | 8.8        |
|                                                                            | DU-6          | ISM         | 0-1                     | DU-6 (0-1)  |                 |         |          | 0.8    |      | 1.3     |        |          | 1.1  |            |              | 3.3        |
|                                                                            |               |             | 1-2                     | DU-6 (1-2)  |                 |         |          | 1.1    |      | 1.6     |        |          | 1.0  |            |              | 3.7        |
|                                                                            |               |             | 2-3                     | DU-6 (2-3)  |                 |         |          | 1.3    |      | 1.4     |        |          | 0.9  |            |              | 3.6        |
|                                                                            | DU-7          | ISM         | 0-1                     | DU-7 (0-1)  |                 |         |          | 0.5    |      | 3.0     |        |          | 1.1  |            |              | 4.5        |
|                                                                            |               |             | 1-2                     | DU-7 (1-2)  |                 |         |          | 0.4    |      | 1.3     |        |          |      |            |              | 1.7        |
|                                                                            |               |             | 2-3                     | DU-7 (2-3)  |                 |         |          | 0.3    |      | 0.9     |        |          |      |            |              | 1.2        |
|                                                                            | DU-8          | ISM         | 0-1                     | DU-8 (0-1)  |                 |         |          | 0.4    |      | 1.5     |        |          | 1.2  |            |              | 3.1        |
|                                                                            |               |             | 1-2                     | DU-8 (1-2)  |                 |         |          | 0.4    |      | 1.6     |        |          | 1.1  |            |              | 3.1        |
|                                                                            |               |             | 2-3                     | DU-8 (2-3)  |                 |         |          | 0.4    |      | 1.6     |        |          | 1.1  |            |              | 3.0        |
|                                                                            | DU-9          | ISM         | 0-1                     | DU-9 (0-1)  |                 |         |          | 0.5    |      | 1.6     |        |          | 1.3  |            |              | 3.4        |
|                                                                            |               |             | 1-2                     | DU-9 (1-2)  |                 |         |          | 0.4    |      | 1.4     |        |          | 1.0  |            |              | 2.8        |
|                                                                            |               |             | 2-3                     | DU-9 (2-3)  |                 |         |          | 0.5    |      | 1.4     |        |          | 1.0  |            |              | 2.9        |
| Central Parcel                                                             | DU-10         | ISM         | 0-1                     | DU-10 (0-1) |                 |         |          | 0.4    |      | 11      | 0.1    |          | 0.9  | 1.6        | 0.1          | 14         |
|                                                                            |               |             | 1-2                     | DU-10 (1-2) |                 |         |          | 0.4    |      | 8.3     |        |          | 1.6  | 0.2        |              | 11         |
|                                                                            |               |             | 2-3                     | DU-10 (2-3) |                 |         |          | 0.4    |      | 6.1     |        |          | 1.0  | 0.9        | 0.1          | 8.5        |
|                                                                            | DU-11         | ISM         | 0-1                     | DU-11 (0-1) |                 |         |          | 0.5    |      | 7.3     | 0.1    |          | 1.0  | 1.7        | 0.3          | 11         |
|                                                                            |               |             | 1-2                     | DU-11 (1-2) |                 |         |          | 0.5    |      | 6.3     | 0.1    |          |      | 0.8        | 0.1          | 7.8        |
|                                                                            |               |             | 2-3                     | DU-11 (2-3) |                 |         |          | 0.4    |      | 6.0     |        |          |      | 1.7        | 0.3          | 8.4        |

Table 12  
Hazard Quotient and Hazard Index - Invertebrates  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                            | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            |            | Hazard Index |
|----------------------------------------------------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|------------|--------------|
|                                                                            |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total HPAH | Total LPAH |              |
| ISM Background (mg/kg)<br>Composite Background (mg/kg)<br>Invertebrate RBC |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |            |            |              |
|                                                                            |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |            |              |
|                                                                            |               |             |                         |             | 78              |         | 39       | 80     | 1700 | 0.10    | 280    | 4.10     | 120  | 18         | 29         |              |
| Central Parcel                                                             | DU-12         | ISM         | 0-1                     | DU-12 (0-1) |                 |         |          | 1.0    |      | 2.9     |        |          | 1.4  | 0.1        |            | 5.4          |
|                                                                            |               |             | 1-2                     | DU-12 (1-2) |                 |         |          | 0.7    |      | 2.8     |        |          |      |            | 3.4        |              |
|                                                                            |               |             | 2-3                     | DU-12 (2-3) |                 |         |          | 0.5    |      | 2.1     |        |          |      |            | 2.6        |              |
|                                                                            | DU-13         | ISM         | 0-1                     | DU-13 (0-1) |                 |         |          | 1.2    | 0.1  | 12      |        |          | 1.7  | 0.4        |            | 15           |
|                                                                            |               |             | 1-2                     | DU-13 (1-2) |                 |         |          | 0.7    |      | 7.9     |        |          | 1.1  | 0.2        |            | 9.7          |
|                                                                            |               |             | 2-3                     | DU-13 (2-3) |                 |         |          | 0.7    | 0.1  | 7.7     |        |          | 1.1  |            |            | 9.5          |
|                                                                            | DU-14         | ISM         | 0-1                     | DU-14 (0-1) |                 |         |          | 0.9    |      | 13      |        |          | 1.2  |            |            | 15           |
|                                                                            |               |             | 1-2                     | DU-14 (1-2) |                 |         |          | 1.5    | 0.1  | 31      |        |          | 1.7  |            |            | 34           |
|                                                                            |               |             | 2-3                     | DU-14 (2-3) |                 |         |          | 2.3    |      | 25      |        |          | 1.4  |            |            | 29           |
|                                                                            | DU-15         | ISM         | 0-1                     | DU-15 (0-1) |                 |         |          | 1.2    |      | 7.5     |        |          | 1.1  |            |            | 9.8          |
|                                                                            |               |             | 1-2                     | DU-15 (1-2) |                 |         |          | 0.7    |      | 13      |        |          | 1.0  |            |            | 15           |
|                                                                            |               |             | 2-3                     | DU-15 (2-3) |                 |         |          | 0.5    |      | 5.6     |        |          |      |            |            | 6.1          |
|                                                                            | DU-16         | ISM         | 0-1                     | DU-16 (0-1) |                 |         |          | 1.6    | 0.2  | 51      | 0.1    |          | 3.1  | 0.2        |            | 56           |
|                                                                            |               |             | 1-2                     | DU-16 (1-2) |                 |         |          | 0.9    |      | 17      |        |          | 1.2  |            |            | 19           |
|                                                                            |               |             | 2-3                     | DU-16 (2-3) |                 |         |          | 0.4    |      | 4.3     |        | 0.1      |      |            |            | 4.8          |
|                                                                            | DU-17         | ISM         | 0-1                     | DU-17 (0-1) |                 |         |          | 0.7    |      | 5.8     |        |          | 1.3  |            |            | 7.8          |
|                                                                            |               |             | 1-2                     | DU-17 (1-2) |                 |         |          | 0.4    |      | 3.6     |        |          |      |            |            | 4.0          |
|                                                                            |               |             | 2-3                     | DU-17 (2-3) |                 |         |          | 0.3    |      | 1.2     |        |          |      |            |            | 1.5          |
|                                                                            | DU-18         | ISM         | 0-1                     | DU-18 (0-1) |                 |         |          | 1.4    | 0.2  | 17      |        |          | 1.7  | 0.1        |            | 21           |
|                                                                            |               |             | 1-2                     | DU-18 (1-2) |                 |         |          | 1.0    | 0.1  | 11      |        |          | 1.3  |            |            | 13           |
|                                                                            |               |             | 2-3                     | DU-18 (2-3) |                 |         |          | 0.7    |      | 6.8     |        | 0.1      | 1.0  |            |            | 8.7          |
|                                                                            | DU-19         | ISM         | 0-1                     | DU-19 (0-1) |                 |         |          | 1.3    | 0.2  | 6.7     |        |          | 1.8  | 0.1        |            | 10           |
|                                                                            |               |             | 1-2                     | DU-19 (1-2) |                 |         |          | 1.4    |      | 11      |        |          | 1.7  | 0.1        |            | 14           |
|                                                                            |               |             | 2-3                     | DU-19 (2-3) |                 |         |          | 0.6    |      | 3.3     |        |          | 0.9  |            |            | 4.8          |
|                                                                            | DU-20         | ISM         | 0-1                     | DU-20 (0-1) |                 |         |          | 0.7    |      | 3.1     |        |          | 1.0  |            |            | 4.8          |
|                                                                            |               |             | 1-2                     | DU-20 (1-2) |                 |         |          | 0.3    |      | 1.4     | 0.1    |          |      |            |            | 1.8          |
|                                                                            |               |             | 2-3                     | DU-20 (2-3) |                 |         |          |        |      | 1.0     |        |          |      |            |            | 1.0          |
|                                                                            | DU-21         | ISM         | 0-1                     | DU-21 (0-1) |                 |         |          | 1.6    | 0.2  | 7.8     |        |          | 2.0  | 0.1        |            | 12           |
|                                                                            |               |             | 1-2                     | DU-21 (1-2) |                 |         |          | 0.7    |      | 2.8     |        |          | 1.5  |            |            | 5.0          |
|                                                                            |               |             | 2-3                     | DU-21 (2-3) |                 |         |          | 0.6    |      | 1.5     |        |          | 0.9  |            |            | 3.0          |
|                                                                            | DU-22         | ISM         | 0-1                     | DU-22 (0-1) |                 |         |          | 1.2    | 0.1  | 6.0     |        |          | 1.5  | 0.1        |            | 9.0          |
|                                                                            |               |             | 1-2                     | DU-22 (1-2) |                 |         |          | 0.6    |      | 3.5     |        |          | 1.4  |            |            | 5.4          |
|                                                                            |               |             | 2-3                     | DU-22 (2-3) |                 |         |          | 0.7    |      | 3.8     |        |          | 1.0  |            |            | 5.5          |

Table 12  
Hazard Quotient and Hazard Index - Invertebrates  
Basis of Design Report  
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| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |       |         |        |          |      |            |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|-------|---------|--------|----------|------|------------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead  | Mercury | Nickel | Selenium | Zinc | Total HPAH | Total LPAH |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27    | 0.073   | 23.4   | 0.33     | 105  |            |            |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79    | 0.23    | 47     | 0.71     | 180  |            |            |              |
| Invertebrate RBC             |               |             |                         |             | 78              |         | 39       | 80     | 1700  | 0.10    | 280    | 4.10     | 120  | 18         | 29         |              |
| Central Parcel               | DU-23         | ISM         | 0-1                     | DU-23 (0-1) |                 |         |          | 1.9    | 0.2   | 10      |        |          | 1.5  |            |            | 14           |
|                              |               |             | 1-2                     | DU-23 (1-2) |                 |         |          | 0.9    |       | 5.5     |        |          | 1.1  |            | 7.4        |              |
|                              |               |             | 2-3                     | DU-23 (2-3) |                 |         |          | 0.5    |       | 4.3     |        |          |      |            | 4.8        |              |
|                              | DU-24         | ISM         | 0-1                     | DU-24 (0-1) |                 |         |          | 0.5    | DU-24 | 2.8     |        |          | 1.0  |            |            | 4.2          |
|                              |               |             | 1-2                     | DU-24 (1-2) |                 |         |          | 0.4    |       | 1.8     |        |          | 1.0  |            | 3.2        |              |
|                              |               |             | 2-3                     | DU-24 (2-3) |                 |         |          |        |       | 0.9     |        |          |      |            | 0.9        |              |
|                              | DU-25         | ISM         | 0-1                     | DU-25 (0-1) |                 |         |          | 2.8    | DU-25 | 7.6     |        |          | 2.0  | 0.2        |            | 13           |
|                              |               |             | 1-2                     | DU-25 (1-2) |                 |         |          | 0.6    |       | 2.1     |        |          | 1.7  |            | 4.4        |              |
|                              |               |             | 2-3                     | DU-25 (2-3) |                 |         |          | 0.4    |       | 1.2     |        |          | 1.2  |            | 2.7        |              |
|                              | DU-26         | ISM         | 0-1                     | DU-26 (0-1) |                 |         |          | 1.9    | 0.2   | 20      |        | 0.1      | 2.2  | 0.3        |            | 24           |
|                              |               |             | 1-2                     | DU-26 (1-2) |                 |         |          | 1.0    |       | 13      |        | 0.1      | 1.7  |            | 15         |              |
|                              |               |             | 2-3                     | DU-26 (2-3) |                 |         |          | 0.5    | DU-26 | 8.2     |        |          | 1.2  |            | 9.9        |              |
|                              | DU-42         | Composite   | 0-1                     | DU-42 (0-1) |                 |         |          | 0.5    |       |         |        |          |      |            |            | 0.5          |
|                              |               |             | 1-2                     | DU-42 (1-2) |                 |         |          |        |       |         |        |          |      |            |            | 0.0          |
|                              |               |             | 2-3                     | DU-42 (2-3) |                 |         |          |        |       |         |        |          |      |            |            | 0.0          |
| East Parcel                  | DU-27         | ISM         | 0-1                     | DU-27 (0-1) |                 |         |          | 2.6    | DU-27 | 1.8     |        | 0.1      | 1.4  |            |            | 6.0          |
|                              |               |             | 1-2                     | DU-27 (1-2) |                 |         |          | 1.0    |       |         |        |          | 1.1  |            | 2.1        |              |
|                              |               |             | 2-3                     | DU-27 (2-3) |                 |         |          | 0.6    | DU-27 |         |        |          | 1.2  |            | 1.7        |              |
|                              | DU-28         | ISM         | 0-1                     | DU-28 (0-1) |                 |         |          | 2.3    | DU-28 | 6.5     |        |          | 2.2  | 0.1        |            | 11.1         |
|                              |               |             | 1-2                     | DU-28 (1-2) |                 |         |          | 4.1    |       | 7.1     |        |          | 1.9  | 0.2        | 13.2       |              |
|                              |               |             | 2-3                     | DU-28 (2-3) |                 |         |          | 2.9    |       | 2.1     |        |          | 2.3  | 0.1        | 7.3        |              |
|                              | DU-29         | ISM         | 0-1                     | DU-29 (0-1) |                 |         |          | 0.9    |       |         |        |          | 1.4  |            |            | 2.2          |
|                              |               |             | 1-2                     | DU-29 (1-2) |                 |         |          | 0.6    |       |         |        |          |      |            | 0.6        |              |
|                              |               |             | 2-3                     | DU-29 (2-3) |                 |         |          | 0.3    |       |         |        |          |      |            | 0.3        |              |
|                              | DU-30         | ISM         | 0-1                     | DU-30 (0-1) |                 |         |          | 0.8    |       | 0.8     |        |          | 1.5  | 0.1        |            | 3.2          |
|                              |               |             | 1-2                     | DU-30 (1-2) |                 |         |          | 1.0    | 0.1   |         |        |          | 1.9  |            | 3.0        |              |
|                              |               |             | 2-3                     | DU-30 (2-3) |                 |         |          | 1.1    | 0.1   | 1.6     |        |          | 1.3  |            | 4.1        |              |
|                              | DU-31         | ISM         | 0-1                     | DU-31 (0-1) |                 |         |          | 0.4    |       |         |        |          | 1.0  |            |            | 1.4          |
|                              |               |             | 1-2                     | DU-31 (1-2) |                 |         |          | 0.6    |       |         |        |          | 1.2  |            | 1.8        |              |
|                              |               |             | 2-3                     | DU-31 (2-3) |                 |         |          | 0.9    |       |         |        |          | 0.9  |            | 1.8        |              |
| DU-32                        | ISM           | 0-1         | DU-32 (0-1)             |             |                 |         | 0.4      |        |       |         |        | 1.0      |      |            | 1.4        |              |
|                              |               | 1-2         | DU-32 (1-2)             |             |                 |         |          |        |       |         |        |          |      | 0.0        |            |              |
|                              |               | 2-3         | DU-32 (2-3)             |             |                 |         |          |        |       |         |        |          | 0.2  | 0.2        |            |              |

Table 12  
Hazard Quotient and Hazard Index - Invertebrates  
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| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total HPAH | Total LPAH |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |            |            |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |            |              |
| Invertebrate RBC             |               |             |                         |             | 78              |         | 39       | 80     | 1700 | 0.10    | 280    | 4.10     | 120  | 18         | 29         |              |
| East Parcel                  | DU-33         | ISM         | 0-1                     | DU-33 (0-1) |                 |         |          | 1.0    |      |         |        |          | 2.4  |            |            | 3.4          |
|                              |               |             | 1-2                     | DU-33 (1-2) |                 |         |          |        |      |         |        | 3.0      |      |            | 4.2        |              |
|                              |               |             | 2-3                     | DU-33 (2-3) |                 |         |          |        |      |         |        | 2.0      |      |            | 2.6        |              |
|                              | DU-34         | ISM         | 0-1                     | DU-34 (0-1) |                 |         |          | 0.4    |      |         |        | 1.5      |      |            | 1.9        |              |
|                              |               |             | 1-2                     | DU-34 (1-2) |                 |         |          | 0.4    |      |         |        | 1.5      |      |            | 1.9        |              |
|                              |               |             | 2-3                     | DU-34 (2-3) |                 |         |          | 0.4    |      |         |        | 1.9      |      |            | 2.3        |              |
|                              | DU-35         | ISM         | 0-1                     | DU-35 (0-1) |                 |         |          | 0.7    |      |         |        | 1.5      |      |            | 2.1        |              |
|                              |               |             | 1-2                     | DU-35 (1-2) |                 |         |          | 0.4    |      |         |        | 1.4      |      |            | 1.8        |              |
|                              |               |             | 2-3                     | DU-35 (2-3) |                 |         |          | 0.3    |      |         |        | 1.2      |      |            | 1.5        |              |
|                              | DU-36         | ISM         | 0-1                     | DU-36 (0-1) |                 |         |          | 0.7    |      |         |        | 2.2      |      |            | 2.9        |              |
|                              |               |             | 1-2                     | DU-36 (1-2) |                 |         |          | 0.7    |      |         |        | 1.9      |      |            | 2.6        |              |
|                              |               |             | 2-3                     | DU-36 (2-3) |                 |         |          | 0.6    |      |         |        | 1.6      |      |            | 2.2        |              |
|                              | DU-38         | ISM         | 0-1                     | DU-38 (0-1) |                 |         |          | 0.3    |      |         |        | 0.9      |      |            | 1.3        |              |
|                              |               |             | 1-2                     | DU-38 (1-2) |                 |         |          | 0.7    |      |         |        |          |      |            | 0.7        |              |
|                              |               |             | 2-3                     | DU-38 (2-3) |                 |         |          | 0.6    |      |         |        | 0.9      |      |            | 1.5        |              |
|                              | DU-37         | Composite   | 0-1                     | DU-37 (0-1) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 1-2                     | DU-37 (1-2) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 2-3                     | DU-37 (2-3) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              | DU-39         | Composite   | 0-1                     | DU-39 (0-1) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 1-2                     | DU-39 (1-2) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 2-3                     | DU-39 (2-3) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              | DU-40         | Composite   | 0-1                     | DU-40 (0-1) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 1-2                     | DU-40 (1-2) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |             | 2-3                     | DU-40 (2-3) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |

Table 12  
Hazard Quotient and Hazard Index - Invertebrates  
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| Sample Location              | Decision Unit | Sample Type       | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |            |            | Hazard Index |
|------------------------------|---------------|-------------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------|------------|--------------|
|                              |               |                   |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Total HPAH | Total LPAH |              |
| ISM Background (mg/kg)       |               |                   |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |            |            |              |
| Composite Background (mg/kg) |               |                   |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |            |            |              |
| Invertebrate RBC             |               |                   |                         |             | 78              |         | 39       | 80     | 1700 | 0.10    | 280    | 4.10     | 120  | 18         | 29         |              |
| East Parcel                  | DU-43         | Composite         | 0-1                     | DU-43 (0-1) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |                   | 1-2                     | DU-43 (1-2) |                 |         |          |        |      |         |        |          |      |            | 0.0        |              |
|                              |               |                   | 2-3                     | DU-43 (2-3) |                 |         |          |        |      |         |        |          |      |            | 0.0        |              |
|                              | DU-44         | Composite         | 0-1                     | DU-44 (0-1) |                 |         |          |        |      |         |        |          |      |            |            | 0.0          |
|                              |               |                   | 1-2                     | DU-44 (1-2) |                 |         |          |        |      |         |        |          |      |            | 0.0        |              |
|                              |               |                   | 2-3                     | DU-44 (2-3) |                 |         |          |        |      |         |        |          |      |            | 0.0        |              |
|                              | DU-41         | ISM (Berm Sample) | 0-1                     | DU-41 (0-1) |                 |         |          | 1.0    |      | 2.6     |        |          | 1.2  | 0.1        |            | 4.9          |
|                              |               |                   | 1-2                     | DU-41 (1-2) |                 |         |          | 0.9    |      | 1.1     |        |          | 1.4  | 0.1        |            | 3.5          |
|                              |               |                   | 2-3                     | DU-41 (2-3) |                 |         |          | 0.6    |      | 0.7     |        |          | 1.5  |            |            | 2.8          |

Notes:

1. Definition of table shading:

- COC was not detected. Hazard Quotient not calculated.
- Layer excavated.
- Layer partially excavated; Maximum allowable residual Hazard Quotient is 9.9

2. Only Hazard Quotients equal to or greater than 0.1 are shown.

Table 13  
Hazard Quotient and Hazard Index - Birds  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |            |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |            |              |
| Bird RBC                     |               |             |                         |             |                 | 575     | 87       | 88     | 33   | 0.015   | 139    | 3.42     | 673  | 8.90E-05         | 0.734      |              |
| West Parcel                  | DU-1          | ISM         | 0-1                     | DU-1 (0-1)  |                 |         |          | 2.0    | 2.3  |         | 0.2    |          | 0.2  | 0.2              | 0.6        | 5.6          |
|                              |               |             | 1-2                     | DU-1 (1-2)  |                 |         | 0.5      | 0.7    | 9.7  | 5.8     | 0.2    |          | 0.2  | 0.3              | 3.7        | 21           |
|                              |               |             | 2-3                     | DU-1 (2-3)  |                 |         |          | 0.8    | 1.7  | 5.4     | 0.2    |          | 0.3  | 0.1              | 0.1        | 8.7          |
|                              | DU-2          | ISM         | 0-1                     | DU-2 (0-1)  |                 |         |          | 1.4    | 2.9  | 4.9     |        |          |      |                  | 0.3        | 9.4          |
|                              |               |             | 1-2                     | DU-2 (1-2)  |                 |         |          | 1.9    | 3.6  | 8.3     |        |          |      | 0.8              | 15         |              |
|                              |               |             | 2-3                     | DU-2 (2-3)  |                 |         |          | 0.5    |      |         |        |          |      | 0.5              |            |              |
|                              | DU-3          | ISM         | 0-1                     | DU-3 (0-1)  |                 |         |          | 0.3    |      |         |        |          | 0.3  |                  | 0.6        |              |
|                              |               |             | 1-2                     | DU-3 (1-2)  |                 |         |          | 0.3    |      |         |        |          | 0.3  | 0.3              |            |              |
|                              |               |             | 2-3                     | DU-3 (2-3)  |                 |         |          |        |      |         |        |          | 0.0  |                  |            |              |
|                              | DU-4          | ISM         | 0-1                     | DU-4 (0-1)  |                 |         |          | 0.3    |      | 5.0     | 0.2    |          |      | 0.2              |            | 5.7          |
|                              |               |             | 1-2                     | DU-4 (1-2)  |                 |         |          | 0.3    |      | 0.2     |        |          | 0.2  | 0.7              |            |              |
|                              |               |             | 2-3                     | DU-4 (2-3)  |                 |         |          | 0.4    | 1.4  | 5.1     |        |          | 0.2  | 0.2              | 7.2        |              |
|                              | DU-5          | ISM         | 0-1                     | DU-5 (0-1)  |                 |         | 0.6      | 3.9    | 1.9  | 23      | 0.2    | 0.1      | 0.3  | 0.2              | 0.2        | 31           |
|                              |               |             | 1-2                     | DU-5 (1-2)  |                 |         | 0.5      | 2.7    | 2.1  | 25      | 0.4    |          | 0.3  | 0.2              | 0.2        | 31           |
|                              |               |             | 2-3                     | DU-5 (2-3)  |                 |         | 0.5      | 2.4    | 3.6  | 18      | 0.2    |          | 0.3  | 0.3              | 0.5        | 26           |
|                              | DU-6          | ISM         | 0-1                     | DU-6 (0-1)  |                 |         |          | 0.8    | 0.9  | 8.5     |        |          | 0.2  | 0.1              |            | 10           |
|                              |               |             | 1-2                     | DU-6 (1-2)  |                 |         |          | 1.0    | 1.2  | 10      |        |          | 0.2  | 0.3              | 0.2        | 13           |
|                              |               |             | 2-3                     | DU-6 (2-3)  |                 |         |          | 1.1    | 1.1  | 9.4     |        |          | 0.2  | 0.1              | 0.2        | 12           |
|                              | DU-7          | ISM         | 0-1                     | DU-7 (0-1)  |                 |         |          | 0.4    |      | 20      |        |          | 0.2  | 0.2              |            | 21           |
|                              |               |             | 1-2                     | DU-7 (1-2)  |                 |         |          | 0.3    |      | 8.7     |        |          |      | 0.1              |            | 9.1          |
|                              |               |             | 2-3                     | DU-7 (2-3)  |                 |         |          | 0.3    |      | 6.2     |        |          |      |                  | 6.5        |              |
|                              | DU-8          | ISM         | 0-1                     | DU-8 (0-1)  |                 |         |          | 0.4    | 1.2  | 10      |        |          | 0.2  | 0.3              | 0.1        | 12           |
|                              |               |             | 1-2                     | DU-8 (1-2)  |                 |         |          | 0.4    | 1.0  | 11      |        |          | 0.2  | 0.3              |            | 13           |
|                              |               |             | 2-3                     | DU-8 (2-3)  |                 |         |          | 0.4    | 0.9  | 10      |        |          | 0.2  | 0.3              | 0.1        | 12           |
|                              | DU-9          | ISM         | 0-1                     | DU-9 (0-1)  |                 |         |          | 0.5    | 0.9  | 11      | 0.2    |          | 0.2  | 0.2              |            | 13           |
|                              |               |             | 1-2                     | DU-9 (1-2)  |                 |         |          | 0.4    | 1.2  | 9.4     | 0.2    |          | 0.2  | 0.1              |            | 12           |
|                              |               |             | 2-3                     | DU-9 (2-3)  |                 |         |          | 0.4    |      | 9.4     | 0.2    |          | 0.2  | 0.1              |            | 10           |
| Central Parcel               | DU-10         | ISM         | 0-1                     | DU-10 (0-1) |                 |         |          | 0.4    | 2.6  | 71      | 0.2    |          | 0.2  | 0.2              |            | 75           |
|                              |               |             | 1-2                     | DU-10 (1-2) |                 |         |          | 0.4    | 1.7  | 55      | 0.2    |          |      |                  |            | 58           |
|                              |               |             | 2-3                     | DU-10 (2-3) |                 |         |          | 0.4    | 2.2  | 41      |        |          | 0.2  |                  |            | 43           |
|                              | DU-11         | ISM         | 0-1                     | DU-11 (0-1) |                 |         |          | 0.4    | 1.7  | 48      | 0.2    |          | 0.2  | 0.1              |            | 51           |
|                              |               |             | 1-2                     | DU-11 (1-2) |                 |         |          | 0.4    | 1.5  | 42      | 0.2    |          |      |                  |            | 44           |
|                              |               |             | 2-3                     | DU-11 (2-3) |                 |         |          | 0.4    | 1.3  | 40      | 0.2    |          |      |                  |            | 42           |

Table 13  
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| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |            |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |            |              |
| Bird RBC                     |               |             |                         |             |                 | 575     | 87       | 88     | 33   | 0.015   | 139    | 3.42     | 673  | 8.90E-05         | 0.734      |              |
| Central Parcel               | DU-12         | ISM         | 0-1                     | DU-12 (0-1) |                 |         |          | 0.9    | 5.0  | 19      |        |          | 0.2  | 0.3              |            | 26           |
|                              |               |             | 1-2                     | DU-12 (1-2) |                 |         |          | 0.6    | 4.0  | 18      |        |          |      |                  | 23         |              |
|                              |               |             | 2-3                     | DU-12 (2-3) |                 |         |          | 0.5    | 2.1  | 14      |        |          |      |                  | 16         |              |
|                              | DU-13         | ISM         | 0-1                     | DU-13 (0-1) |                 |         |          | 1.1    | 7.3  | 77      |        |          | 0.3  | 3.1              |            | 88           |
|                              |               |             | 1-2                     | DU-13 (1-2) |                 |         |          | 0.6    | 4.7  | 52      |        |          | 0.2  | 0.4              |            | 58           |
|                              |               |             | 2-3                     | DU-13 (2-3) |                 |         |          | 0.6    | 5.3  | 51      |        |          | 0.2  | 0.3              |            | 58           |
|                              | DU-14         | ISM         | 0-1                     | DU-14 (0-1) |                 |         |          | 0.8    | 4.1  | 89      | 0.2    |          | 0.2  | 0.9              |            | 95           |
|                              |               |             | 1-2                     | DU-14 (1-2) |                 |         |          | 1.4    | 7.3  | 207     | 0.2    |          | 0.3  | 0.4              |            | 216          |
|                              |               |             | 2-3                     | DU-14 (2-3) |                 |         |          | 2.1    | 4.9  | 167     | 0.2    |          | 0.2  | 0.2              |            | 174          |
|                              | DU-15         | ISM         | 0-1                     | DU-15 (0-1) |                 |         |          | 1.1    | 4.0  | 50      |        |          | 0.2  | 4.5              |            | 60           |
|                              |               |             | 1-2                     | DU-15 (1-2) |                 |         |          | 0.7    | 2.1  | 85      |        |          | 0.2  | 2.3              |            | 90           |
|                              |               |             | 2-3                     | DU-15 (2-3) |                 |         |          | 0.4    | 1.9  | 38      |        |          |      | 1.7              |            | 42           |
|                              | DU-16         | ISM         | 0-1                     | DU-16 (0-1) |                 |         |          | 1.5    | 9.3  | 341     | 0.2    |          | 0.6  | 2.7              |            | 356          |
|                              |               |             | 1-2                     | DU-16 (1-2) |                 |         |          | 0.8    | 4.6  | 113     |        |          | 0.2  | 0.2              |            | 118          |
|                              |               |             | 2-3                     | DU-16 (2-3) |                 |         |          | 0.3    | 1.1  | 9.9     |        | 0.2      |      |                  |            | 12           |
|                              | DU-17         | ISM         | 0-1                     | DU-17 (0-1) |                 |         |          | 0.7    | 2.5  | 38      |        |          | 0.2  | 0.5              |            | 42           |
|                              |               |             | 1-2                     | DU-17 (1-2) |                 |         |          | 0.4    | 1.9  | 24      |        |          |      |                  |            | 26           |
|                              |               |             | 2-3                     | DU-17 (2-3) |                 |         |          | 0.3    | 1.1  | 8.1     |        |          |      |                  |            | 9.4          |
|                              | DU-18         | ISM         | 0-1                     | DU-18 (0-1) |                 |         |          | 1.3    | 8.5  | 115     | 0.2    |          | 0.3  | 0.8              |            | 126          |
|                              |               |             | 1-2                     | DU-18 (1-2) |                 |         |          | 0.9    | 5.4  | 71      |        |          | 0.2  | 0.2              |            | 77           |
|                              |               |             | 2-3                     | DU-18 (2-3) |                 |         |          | 0.7    | 2.8  | 45      |        | 0.1      | 0.2  | 0.1              |            | 49           |
|                              | DU-19         | ISM         | 0-1                     | DU-19 (0-1) |                 |         |          | 1.2    | 7.8  | 44      |        |          | 0.3  | 1.5              | 0.2        | 55           |
|                              |               |             | 1-2                     | DU-19 (1-2) |                 |         |          | 1.3    | 4.9  | 72      |        |          | 0.3  | 1.0              |            | 79           |
|                              |               |             | 2-3                     | DU-19 (2-3) |                 |         |          | 0.5    | 2.1  | 9.9     |        |          | 0.2  | 0.5              |            | 13           |
|                              | DU-20         | ISM         | 0-1                     | DU-20 (0-1) |                 |         |          | 0.7    | 2.3  | 21      |        |          | 0.2  | 0.4              |            | 24           |
|                              |               |             | 1-2                     | DU-20 (1-2) |                 |         |          | 0.3    |      | 9.1     | 0.2    |          |      |                  |            | 9.6          |
|                              |               |             | 2-3                     | DU-20 (2-3) |                 |         |          |        |      | 6.7     |        |          |      |                  |            | 6.7          |
|                              | DU-21         | ISM         | 0-1                     | DU-21 (0-1) |                 |         |          | 1.5    | 8.9  | 52      |        |          | 0.4  | 0.8              |            | 63           |
|                              |               |             | 1-2                     | DU-21 (1-2) |                 |         |          | 0.6    | 3.5  | 18      |        |          | 0.3  | 0.2              |            | 23           |
|                              |               |             | 2-3                     | DU-21 (2-3) |                 |         |          | 0.5    | 2.7  | 9.9     |        |          | 0.2  | 0.1              |            | 13           |
|                              | DU-22         | ISM         | 0-1                     | DU-22 (0-1) |                 |         |          | 1.1    | 5.8  | 40      |        |          | 0.3  | 0.4              |            | 48           |
|                              |               |             | 1-2                     | DU-22 (1-2) |                 |         |          | 0.5    | 2.2  | 23      |        |          | 0.2  | 0.1              |            | 26           |
|                              |               |             | 2-3                     | DU-22 (2-3) |                 |         |          | 0.6    | 1.7  | 25      |        |          | 0.2  |                  |            | 28           |

Table 13  
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| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |            | Hazard Index |     |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|------------|--------------|-----|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Total PCBs |              |     |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |            |              |     |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |            |              |     |
| Bird RBC                     |               |             |                         |             |                 | 575     | 87       | 88     | 33   | 0.015   | 139    | 3.42     | 673  | 8.90E-05         | 0.734      |              |     |
| Central Parcel               | DU-23         | ISM         | 0-1                     | DU-23 (0-1) |                 |         |          | 1.7    | 8.4  | 68      |        |          | 0.3  | 0.4              |            | 79           |     |
|                              |               |             | 1-2                     | DU-23 (1-2) |                 |         |          | 0.8    | 2.1  | 36      |        |          | 0.2  | 0.1              |            | 40           |     |
|                              |               |             | 2-3                     | DU-23 (2-3) |                 |         |          | 0.5    | 2.5  | 28      |        |          |      |                  |            | 31           |     |
|                              | DU-24         | ISM         | 0-1                     | DU-24 (0-1) |                 |         |          | 0.5    | 1.5  | 18      |        |          | 0.2  | 0.3              |            | 21           |     |
|                              |               |             | 1-2                     | DU-24 (1-2) |                 |         |          | 0.4    |      | 9.9     |        |          | 0.2  |                  |            | 10           |     |
|                              |               |             | 2-3                     | DU-24 (2-3) |                 |         |          |        |      | 6.2     |        |          |      |                  |            | 6.2          |     |
|                              | DU-25         | ISM         | 0-1                     | DU-25 (0-1) |                 |         |          | 2.6    | 4.4  | 51      |        |          | 0.4  | 0.5              |            | 59           |     |
|                              |               |             | 1-2                     | DU-25 (1-2) |                 |         |          | 0.6    | 3.4  | 14      |        |          | 0.3  |                  |            | 18           |     |
|                              |               |             | 2-3                     | DU-25 (2-3) |                 |         |          | 0.3    | 1.3  | 7.7     |        |          | 0.2  |                  |            | 9.6          |     |
|                              | DU-26         | ISM         | 0-1                     | DU-26 (0-1) |                 |         |          | 1.7    | 10.0 | 130     |        | 0.2      | 0.4  | 1.0              | 0.3        | 144          |     |
|                              |               |             | 1-2                     | DU-26 (1-2) |                 |         |          | 0.9    | 4.6  | 83      |        | 0.2      | 0.3  | 0.5              |            | 90           |     |
|                              |               |             | 2-3                     | DU-26 (2-3) |                 |         |          | 0.5    | 2.3  | 55      |        |          | 0.2  | 0.3              | 0.3        | 58           |     |
|                              | DU-42         | Composite   | 0-1                     | DU-42 (0-1) |                 |         |          | 0.4    |      |         |        |          |      | 0.7              |            | 1.1          |     |
|                              |               |             | 1-2                     | DU-42 (1-2) |                 |         |          |        |      |         |        |          |      | 0.3              |            | 0.3          |     |
|                              |               |             | 2-3                     | DU-42 (2-3) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |     |
|                              | East Parcel   | DU-27       | ISM                     | 0-1         | DU-27 (0-1)     |         |          |        | 2.3  | 1.4     | 12     |          | 0.2  | 0.3              | 1.2        | 0.3          | 18  |
|                              |               |             |                         | 1-2         | DU-27 (1-2)     |         |          |        | 0.9  | 1.2     |        |          |      | 0.2              | 0.8        | 0.2          | 3.3 |
|                              |               |             |                         | 2-3         | DU-27 (2-3)     |         |          |        | 0.5  | 1.7     |        |          |      | 0.2              | 0.3        | 0.2          | 2.9 |
| DU-28                        |               | ISM         | 0-1                     | DU-28 (0-1) |                 |         |          | 2.1    | 2.4  | 43      |        |          | 0.4  | 0.2              | 0.1        | 48           |     |
|                              |               |             | 1-2                     | DU-28 (1-2) |                 |         |          | 3.7    | 2.2  | 47      |        |          | 0.3  | 0.4              |            | 54           |     |
|                              |               |             | 2-3                     | DU-28 (2-3) |                 |         |          | 2.6    | 3.4  | 9.9     |        |          | 0.4  | 0.2              |            | 17           |     |
| DU-29                        |               | ISM         | 0-1                     | DU-29 (0-1) |                 |         |          | 0.8    | 3.1  |         |        |          | 0.2  | 0.6              |            | 4.7          |     |
|                              |               |             | 1-2                     | DU-29 (1-2) |                 |         |          | 0.5    | 1.2  |         |        |          |      | 0.2              |            | 1.9          |     |
|                              |               |             | 2-3                     | DU-29 (2-3) |                 |         |          | 0.3    | 1.4  |         |        |          |      | 0.2              |            | 1.9          |     |
| DU-30                        |               | ISM         | 0-1                     | DU-30 (0-1) |                 |         |          | 0.7    | 4.0  | 5.5     |        |          | 0.3  | 0.6              |            | 11           |     |
|                              |               |             | 1-2                     | DU-30 (1-2) |                 |         |          | 0.9    | 6.1  |         |        |          | 0.3  | 0.3              |            | 7.6          |     |
|                              |               |             | 2-3                     | DU-30 (2-3) |                 |         |          | 1.0    | 6.7  | 11      |        |          | 0.2  | 0.2              |            | 19           |     |
| DU-31                        |               | ISM         | 0-1                     | DU-31 (0-1) |                 |         |          | 0.4    | 1.4  |         |        |          | 0.2  | 0.7              |            | 2.6          |     |
|                              |               |             | 1-2                     | DU-31 (1-2) |                 |         |          | 0.6    | 1.0  |         |        |          | 0.2  | 0.2              |            | 2.0          |     |
|                              |               |             | 2-3                     | DU-31 (2-3) |                 |         |          | 0.8    |      |         |        |          | 0.2  | 0.1              |            | 1.1          |     |
| DU-32                        |               | ISM         | 0-1                     | DU-32 (0-1) |                 |         |          | 0.4    | 0.9  |         |        |          | 0.2  | 0.4              |            | 1.8          |     |
|                              |               |             | 1-2                     | DU-32 (1-2) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |     |
|                              |               |             | 2-3                     | DU-32 (2-3) |                 |         |          |        | 1.0  |         |        |          |      |                  |            | 1.0          |     |

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| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |            | Hazard Index |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|------------|--------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Total PCBs |              |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |            |              |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |            |              |
| Bird RBC                     |               |             |                         |             |                 | 575     | 87       | 88     | 33   | 0.015   | 139    | 3.42     | 673  | 8.90E-05         | 0.734      |              |
| East Parcel                  | DU-33         | ISM         | 0-1                     | DU-33 (0-1) |                 |         |          | 0.9    | 2.7  |         |        |          | 0.4  | 0.4              | 0.1        | 4.6          |
|                              |               |             | 1-2                     | DU-33 (1-2) |                 |         |          | 1.1    | 2.0  |         |        | 0.5      | 0.2  |                  | 3.8        |              |
|                              |               |             | 2-3                     | DU-33 (2-3) |                 |         |          | 0.6    | 1.3  |         |        | 0.3      | 0.1  |                  | 2.4        |              |
|                              | DU-34         | ISM         | 0-1                     | DU-34 (0-1) |                 |         |          | 0.4    | 1.3  |         |        |          | 0.3  | 0.7              |            | 2.6          |
|                              |               |             | 1-2                     | DU-34 (1-2) |                 |         |          | 0.4    | 1.0  |         | 0.2    |          | 0.3  | 0.3              |            | 2.1          |
|                              |               |             | 2-3                     | DU-34 (2-3) |                 |         |          | 0.4    |      |         |        | 0.3      | 0.3  |                  | 1.0        |              |
|                              | DU-35         | ISM         | 0-1                     | DU-35 (0-1) |                 |         |          | 0.6    |      |         |        |          | 0.3  | 0.5              |            | 1.3          |
|                              |               |             | 1-2                     | DU-35 (1-2) |                 |         |          | 0.3    |      |         |        |          | 0.2  | 0.1              |            | 0.7          |
|                              |               |             | 2-3                     | DU-35 (2-3) |                 |         |          | 0.3    |      |         |        |          | 0.2  | 0.1              |            | 0.6          |
|                              | DU-36         | ISM         | 0-1                     | DU-36 (0-1) |                 |         |          | 0.7    | 2.2  |         |        |          | 0.4  | 0.5              |            | 3.7          |
|                              |               |             | 1-2                     | DU-36 (1-2) |                 |         |          | 0.6    | 3.9  |         |        |          | 0.3  | 0.4              |            | 5.3          |
|                              |               |             | 2-3                     | DU-36 (2-3) |                 |         |          | 0.5    | 1.9  |         |        |          | 0.3  | 0.3              |            | 3.0          |
|                              | DU-38         | ISM         | 0-1                     | DU-38 (0-1) |                 |         |          | 0.3    | 0.9  |         |        |          | 0.2  | 0.3              |            | 1.7          |
|                              |               |             | 1-2                     | DU-38 (1-2) |                 |         |          | 0.6    | 2.3  |         |        |          | 0.2  | 0.2              |            | 3.2          |
|                              |               |             | 2-3                     | DU-38 (2-3) |                 |         |          | 0.6    | 1.6  |         |        |          | 0.2  | 0.1              |            | 2.4          |
|                              | DU-37         | Composite   | 0-1                     | DU-37 (0-1) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 1-2                     | DU-37 (1-2) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 2-3                     | DU-37 (2-3) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              | DU-39         | Composite   | 0-1                     | DU-39 (0-1) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 1-2                     | DU-39 (1-2) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 2-3                     | DU-39 (2-3) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              | DU-40         | Composite   | 0-1                     | DU-40 (0-1) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 1-2                     | DU-40 (1-2) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |             | 2-3                     | DU-40 (2-3) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |

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| Sample Location              | Decision Unit | Sample Type       | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |            | Hazard Index |
|------------------------------|---------------|-------------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|------------|--------------|
|                              |               |                   |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Total PCBs |              |
| ISM Background (mg/kg)       |               |                   |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |            |              |
| Composite Background (mg/kg) |               |                   |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |            |              |
| Bird RBC                     |               |                   |                         |             |                 | 575     | 87       | 88     | 33   | 0.015   | 139    | 3.42     | 673  | 8.90E-05         | 0.734      |              |
| East Parcel                  | DU-43         | Composite         | 0-1                     | DU-43 (0-1) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |                   | 1-2                     | DU-43 (1-2) |                 |         |          |        |      |         |        |          |      |                  | 0.0        |              |
|                              |               |                   | 2-3                     | DU-43 (2-3) |                 |         |          |        |      |         |        |          |      |                  | 0.0        |              |
|                              | DU-44         | Composite         | 0-1                     | DU-44 (0-1) |                 |         |          |        |      |         |        |          |      |                  |            | 0.0          |
|                              |               |                   | 1-2                     | DU-44 (1-2) |                 |         |          |        |      |         |        |          |      |                  | 0.0        |              |
|                              |               |                   | 2-3                     | DU-44 (2-3) |                 |         |          |        |      |         |        |          |      |                  | 0.0        |              |
|                              | DU-41         | ISM (Berm Sample) | 0-1                     | DU-41 (0-1) |                 |         |          | 0.9    | 2.5  | 17      |        | 0.2      | 2.9  |                  |            | 24           |
|                              |               |                   | 1-2                     | DU-41 (1-2) |                 |         |          | 0.8    | 3.9  | 7.2     |        | 0.2      | 2.7  | 0.1              |            | 15           |
|                              |               |                   | 2-3                     | DU-41 (2-3) |                 |         |          | 0.5    | 3.3  | 4.9     |        | 0.3      | 1.7  |                  |            | 11           |

Notes:

1. Definition of table shading:

-  COC was not detected. Hazard Quotient not calculated.
-  Layer excavated.
-  Layer partially excavated; Maximum allowable residual Hazard Quotient is 9.9

2. Only Hazard Quotients equal to or greater than 0.1 are shown.

Table 14  
Hazard Quotient and Hazard Index - Mammals  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |              |            |            | Hazard Index |            |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|--------------|------------|------------|--------------|------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH |              | Total PCBs |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |              |            |            |              |            |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |              |            |            |              |            |
| Mammal RBC                   |               |             |                         |             | 2.7             | 83      | 342      | 82     | 122  | 3.53    | 20     | 1.1      | 201  | 6.10E-06         | 0.01         | 5.6        | 100        | 0.098        |            |
| West Parcel                  | DU-1          | ISM         | 0-1                     | DU-1 (0-1)  | 0.3             |         |          | 2.2    | 0.6  |         | 1.4    |          | 0.8  | 3.6              | 0.8          | 0.5        |            | 4.4          | 14         |
|                              |               |             | 1-2                     | DU-1 (1-2)  | 0.3             |         | 0.1      | 0.8    | 2.6  |         | 1.5    |          | 0.7  | 4.2              | 1.0          | 0.5        |            | 28           | 40         |
|                              |               |             | 2-3                     | DU-1 (2-3)  |                 |         |          | 0.8    | 0.5  |         | 1.3    |          | 0.9  | 1.8              |              | 0.4        |            | 1.1          | 6.7        |
|                              | DU-2          | ISM         | 0-1                     | DU-2 (0-1)  | 0.2             |         |          | 1.5    | 0.8  |         |        |          | 1.1  | 0.5              | 0.2          |            | 1.9        | 6.2          |            |
|                              |               |             | 1-2                     | DU-2 (1-2)  |                 |         |          | 2.1    | 1.0  |         |        |          | 0.6  |                  | 0.1          |            | 5.7        | 9.4          |            |
|                              |               |             | 2-3                     | DU-2 (2-3)  |                 |         |          | 0.5    |      |         |        |          | 0.4  |                  |              | 0.3        | 1.2        |              |            |
|                              | DU-3          | ISM         | 0-1                     | DU-3 (0-1)  |                 |         |          | 0.3    |      |         |        |          | 4.3  |                  | 0.2          |            | 0.3        | 5.1          |            |
|                              |               |             | 1-2                     | DU-3 (1-2)  |                 |         |          | 0.3    |      |         |        |          | 1.3  |                  | 0.2          |            |            | 1.8          |            |
|                              |               |             | 2-3                     | DU-3 (2-3)  |                 |         |          |        |      |         |        |          | 0.7  |                  | 0.1          |            | 0.9        |              |            |
|                              | DU-4          | ISM         | 0-1                     | DU-4 (0-1)  |                 |         |          | 0.4    |      |         | 1.2    |          |      | 3.4              | 0.6          | 0.5        |            | 0.3          | 6.3        |
|                              |               |             | 1-2                     | DU-4 (1-2)  |                 |         |          | 0.3    |      |         | 1.2    |          |      | 2.7              | 3.3          | 2.1        |            | 0.3          | 10         |
|                              |               |             | 2-3                     | DU-4 (2-3)  |                 |         |          | 0.4    | 0.4  |         |        |          | 0.6  | 2.4              | 0.9          | 0.8        |            | 0.4          | 5.9        |
|                              | DU-5          | ISM         | 0-1                     | DU-5 (0-1)  | 0.4             | 0.1     | 0.2      | 4.2    | 0.5  |         | 1.6    | 0.3      | 1.0  | 2.8              | 0.7          | 0.3        |            | 1.8          | 14         |
|                              |               |             | 1-2                     | DU-5 (1-2)  | 0.3             |         | 0.1      | 2.9    | 0.6  | 0.1     | 2.9    | 0.3      | 0.9  | 2.5              | 0.6          | 0.2        |            | 1.5          | 13         |
|                              |               |             | 2-3                     | DU-5 (2-3)  | 0.2             |         | 0.1      | 2.6    | 1.0  |         | 1.6    |          | 1.1  | 3.8              | 1.0          | 0.5        |            | 3.9          | 16         |
|                              | DU-6          | ISM         | 0-1                     | DU-6 (0-1)  |                 |         |          | 0.8    | 0.2  |         |        |          | 0.7  | 1.7              | 0.5          | 0.2        |            | 0.6          | 4.8        |
|                              |               |             | 1-2                     | DU-6 (1-2)  |                 |         |          | 1.1    | 0.3  |         |        |          | 0.6  | 4.1              | 0.9          | 0.2        |            | 1.1          | 8.4        |
|                              |               |             | 2-3                     | DU-6 (2-3)  |                 |         |          | 1.2    | 0.3  |         |        |          | 0.6  | 1.9              | 1.1          | 0.3        |            | 1.7          | 7.0        |
|                              | DU-7          | ISM         | 0-1                     | DU-7 (0-1)  |                 |         |          | 0.4    |      |         |        |          | 0.6  | 2.9              |              | 0.1        |            | 0.5          | 4.6        |
|                              |               |             | 1-2                     | DU-7 (1-2)  |                 |         |          | 0.4    |      |         |        |          |      | 2.0              |              |            |            | 0.6          | 3.0        |
|                              |               |             | 2-3                     | DU-7 (2-3)  |                 |         |          | 0.3    |      |         |        |          |      | 1.3              |              |            |            | 0.5          | 2.1        |
|                              | DU-8          | ISM         | 0-1                     | DU-8 (0-1)  |                 |         |          | 0.4    | 0.3  |         |        |          | 0.7  | 3.9              | 0.5          | 0.1        |            | 1.0          | 7.0        |
|                              |               |             | 1-2                     | DU-8 (1-2)  |                 |         |          | 0.4    | 0.3  |         |        |          | 0.6  | 4.0              | 0.6          |            |            | 0.7          | 6.6        |
|                              |               |             | 2-3                     | DU-8 (2-3)  |                 |         |          | 0.4    | 0.3  |         |        |          | 0.6  | 3.8              | 0.6          | 0.1        |            | 1.0          | 6.8        |
|                              | DU-9          | ISM         | 0-1                     | DU-9 (0-1)  | 0.2             |         |          | 0.5    | 0.2  |         | 1.3    |          | 0.8  | 2.9              | 0.6          | 0.2        |            | 0.7          | 7.4        |
|                              |               |             | 1-2                     | DU-9 (1-2)  |                 |         |          | 0.4    | 0.3  |         | 1.2    |          | 0.6  | 2.1              |              |            |            | 0.4          | 5.0        |
|                              |               |             | 2-3                     | DU-9 (2-3)  |                 |         |          | 0.5    |      |         | 1.3    |          | 0.6  | 2.0              | 0.8          | 0.2        |            | 0.5          | 5.9        |
| Central Parcel               | DU-10         | ISM         | 0-1                     | DU-10 (0-1) |                 |         |          | 0.4    | 0.7  | 0.3     | 1.5    |          | 0.5  | 2.8              | 2.4          | 5.3        |            | 0.3          | 14         |
|                              |               |             | 1-2                     | DU-10 (1-2) | 0.2             |         |          | 0.4    | 0.4  | 0.2     | 1.4    |          |      | 0.9              | 4.9          | 5.1        |            | 0.3          | 14         |
|                              |               |             | 2-3                     | DU-10 (2-3) | 0.2             |         |          | 0.4    | 0.6  | 0.2     |        |          | 0.6  | 0.7              | 2.4          | 3.0        |            |              | 8.1        |
|                              | DU-11         | ISM         | 0-1                     | DU-11 (0-1) |                 |         |          | 0.5    | 0.5  | 0.2     | 1.5    |          | 0.6  | 1.9              | 8.2          | 5.6        |            | 0.4          | 19         |
|                              |               |             | 1-2                     | DU-11 (1-2) |                 |         |          | 0.5    | 0.4  | 0.2     | 1.4    |          |      | 0.9              | 4.9          | 2.7        |            | 0.4          | 11         |
|                              |               |             | 2-3                     | DU-11 (2-3) |                 |         |          | 0.4    | 0.4  | 0.2     | 1.3    |          |      | 1.0              | 6.1          | 5.4        |            | 0.4          | 15         |

Table 14  
Hazard Quotient and Hazard Index - Mammals  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |              |            |            | Hazard Index |            |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|--------------|------------|------------|--------------|------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH |              | Total PCBs |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |              |            |            |              |            |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  | 6.10E-06         | 0.01         | 5.6        | 100        | 0.098        |            |
| Mammal RBC                   |               |             |                         |             | 2.7             | 83      | 342      | 82     | 122  | 3.53    | 20     | 1.1      | 201  |                  |              |            |            |              |            |
| Central Parcel               | DU-12         | ISM         | 0-1                     | DU-12 (0-1) | 0.3             |         |          | 1.0    | 1.4  |         |        | 0.8      | 4.2  | 0.7              | 0.4          |            | 0.5        | 9.3          |            |
|                              |               |             | 1-2                     | DU-12 (1-2) |                 |         | 0.7      | 1.1    |      |         | 0.7    | 0.6      | 0.2  |                  | 0.3          | 3.5        |            |              |            |
|                              |               |             | 2-3                     | DU-12 (2-3) |                 |         | 0.5      | 0.6    |      |         | 0.4    |          | 0.1  |                  | 1.6          |            |            |              |            |
|                              | DU-13         | ISM         | 0-1                     | DU-13 (0-1) | 0.3             |         |          | 1.2    | 2.0  | 0.3     |        | 1.0      | 45   | 0.8              | 1.4          |            | 0.7        | 53           |            |
|                              |               |             | 1-2                     | DU-13 (1-2) |                 |         | 0.6      | 1.3    | 0.2  |         | 0.6    | 5.9      | 1.6  | 0.5              |              | 0.3        | 11         |              |            |
|                              |               |             | 2-3                     | DU-13 (2-3) |                 |         | 0.7      | 1.4    | 0.2  |         | 0.6    | 4.4      | 0.5  | 0.3              |              | 0.3        | 8.5        |              |            |
|                              | DU-14         | ISM         | 0-1                     | DU-14 (0-1) | 1.0             |         |          | 0.9    | 1.1  | 0.4     | 1.2    |          | 0.7  | 13               | 2.3          | 0.2        |            | 0.3          | 21         |
|                              |               |             | 1-2                     | DU-14 (1-2) | 2.7             |         |          | 1.5    | 2.0  | 0.9     | 1.2    |          | 1.0  | 5.6              | 2.2          | 0.3        |            |              | 17         |
|                              |               |             | 2-3                     | DU-14 (2-3) | 1.1             |         |          | 2.3    | 1.3  | 0.7     | 1.2    |          | 0.8  | 2.4              | 1.4          | 0.2        |            |              | 11         |
|                              | DU-15         | ISM         | 0-1                     | DU-15 (0-1) | 1.0             |         |          | 1.2    | 1.1  | 0.2     |        | 0.7      | 65   | 0.8              | 0.2          |            | 0.3        | 70           |            |
|                              |               |             | 1-2                     | DU-15 (1-2) | 0.2             |         |          | 0.7    | 0.6  | 0.4     |        | 0.6      | 33   |                  |              |            |            | 35           |            |
|                              |               |             | 2-3                     | DU-15 (2-3) |                 |         | 0.4      | 0.5    | 0.2  |         |        | 25       |      | 0.1              |              |            |            | 26           |            |
|                              | DU-16         | ISM         | 0-1                     | DU-16 (0-1) | 1.6             |         |          | 1.6    | 2.5  | 1.5     | 1.4    |          | 1.8  | 40               | 7.8          | 0.6        |            | 0.4          | 59         |
|                              |               |             | 1-2                     | DU-16 (1-2) | 0.8             |         |          | 0.9    | 1.2  | 0.5     |        | 0.7      | 2.9  | 0.8              | 0.3          |            |            |              | 8.0        |
|                              |               |             | 2-3                     | DU-16 (2-3) |                 |         | 0.4      | 0.3    | 0.1  |         | 0.5    |          | 1.2  |                  |              |            |            |              | 2.5        |
|                              | DU-17         | ISM         | 0-1                     | DU-17 (0-1) | 0.4             |         |          | 0.7    | 0.7  | 0.2     |        | 0.8      | 6.6  |                  |              |            | 0.3        | 9.6          |            |
|                              |               |             | 1-2                     | DU-17 (1-2) |                 |         | 0.4      | 0.5    | 0.1  |         |        | 0.6      |      |                  |              |            |            |              | 1.6        |
|                              |               |             | 2-3                     | DU-17 (2-3) |                 |         | 0.3      | 0.3    |      |         |        | 1.3      |      |                  |              |            |            |              | 1.9        |
|                              | DU-18         | ISM         | 0-1                     | DU-18 (0-1) | 0.5             | 0.1     |          | 1.4    | 2.3  | 0.5     | 1.2    |          | 1.0  | 11               | 0.7          | 0.3        |            | 0.4          | 19         |
|                              |               |             | 1-2                     | DU-18 (1-2) |                 |         | 1.0      | 1.5    | 0.3  |         |        | 0.8      | 3.5  |                  | 0.2          |            | 0.2        | 7.4          |            |
|                              |               |             | 2-3                     | DU-18 (2-3) |                 |         | 0.7      | 0.8    | 0.2  |         | 0.5    | 0.6      | 2.1  |                  | 0.1          |            | 0.3        | 5.2          |            |
|                              | DU-19         | ISM         | 0-1                     | DU-19 (0-1) | 0.5             |         |          | 1.3    | 2.1  | 0.2     |        |          | 1.1  | 22               | 1.2          | 0.4        |            | 1.5          | 30         |
|                              |               |             | 1-2                     | DU-19 (1-2) | 0.4             | 0.1     |          | 1.3    | 1.3  | 0.3     |        |          | 1.0  | 14               | 1.7          | 0.3        |            | 0.3          | 21         |
|                              |               |             | 2-3                     | DU-19 (2-3) | 0.3             |         |          | 0.5    | 0.6  |         |        | 0.6      | 7.6  |                  |              |            | 0.6        | 10           |            |
|                              | DU-20         | ISM         | 0-1                     | DU-20 (0-1) | 0.6             |         |          | 0.7    | 0.6  |         |        |          | 0.6  | 5.7              |              | 0.2        |            | 0.4          | 8.8        |
|                              |               |             | 1-2                     | DU-20 (1-2) |                 |         | 0.3      |        |      |         | 1.4    |          |      | 0.7              |              |            |            |              | 2.4        |
|                              |               |             | 2-3                     | DU-20 (2-3) |                 |         |          |        |      |         |        |          | 0.7  |                  |              |            |            |              | 0.7        |
|                              | DU-21         | ISM         | 0-1                     | DU-21 (0-1) | 1.0             | 0.1     |          | 1.6    | 2.4  | 0.2     |        |          | 1.2  | 12               | 1.9          | 0.4        |            | 0.5          | 21         |
|                              |               |             | 1-2                     | DU-21 (1-2) | 0.4             |         |          | 0.7    | 1.0  |         |        |          | 0.9  | 3.4              | 0.7          | 0.2        |            | 0.4          | 7.6        |
|                              |               |             | 2-3                     | DU-21 (2-3) |                 |         |          | 0.6    | 0.7  |         |        |          | 0.5  | 1.6              | 0.5          | 0.1        |            |              | 4.1        |
|                              | DU-22         | ISM         | 0-1                     | DU-22 (0-1) | 1.1             |         |          | 1.2    | 1.6  | 0.2     |        |          | 0.9  | 5.3              | 11           | 0.5        |            | 0.4          | 22         |
|                              |               |             | 1-2                     | DU-22 (1-2) | 1.0             |         |          | 0.6    | 0.6  |         |        |          | 0.8  | 2.0              |              |            |            | 0.3          | 5.2        |
|                              |               |             | 2-3                     | DU-22 (2-3) | 0.4             |         |          | 0.7    | 0.5  | 0.1     |        |          | 0.6  | 1.3              |              |            |            |              | 3.6        |

Table 14  
Hazard Quotient and Hazard Index - Mammals  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |              |            |            | Hazard Index |            |     |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|--------------|------------|------------|--------------|------------|-----|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH |              | Total PCBs |     |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |              |            |            |              |            |     |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |              |            |            |              |            |     |
| Mammal RBC                   |               |             |                         |             | 2.7             | 83      | 342      | 82     | 122  | 3.53    | 20     | 1.1      | 201  | 6.10E-06         | 0.01         | 5.6        | 100        | 0.098        |            |     |
| Central Parcel               | DU-23         | ISM         | 0-1                     | DU-23 (0-1) | 0.6             |         |          | 1.8    | 2.3  | 0.3     |        |          | 0.9  | 6.6              | 0.6          | 0.1        |            | 0.6          | 14         |     |
|                              |               |             | 1-2                     | DU-23 (1-2) | 0.2             |         |          | 0.8    | 0.6  | 0.2     |        |          | 0.6  | 1.7              |              |            |            | 0.3          | 4.4        |     |
|                              |               |             | 2-3                     | DU-23 (2-3) | 0.2             |         |          | 0.5    | 0.7  | 0.1     |        |          |      | 1.0              |              |            |            |              | 2.5        |     |
|                              | DU-24         | ISM         | 0-1                     | DU-24 (0-1) |                 |         |          | 0.5    | 0.4  |         |        |          | 0.6  | 3.8              |              | 0.1        |            | 0.3          | 5.7        |     |
|                              |               |             | 1-2                     | DU-24 (1-2) |                 |         |          | 0.4    |      |         |        |          | 0.6  | 1.1              |              |            |            |              | 2.1        |     |
|                              |               |             | 2-3                     | DU-24 (2-3) |                 |         |          |        |      |         |        |          |      | 1.5              |              |            |            |              | 1.5        |     |
|                              | DU-25         | ISM         | 0-1                     | DU-25 (0-1) | 0.3             |         |          | 2.8    | 1.2  | 0.2     |        |          | 1.2  | 7.7              | 1.2          | 0.5        |            | 0.7          | 16         |     |
|                              |               |             | 1-2                     | DU-25 (1-2) |                 |         |          | 0.6    | 0.9  |         |        |          | 1.0  | 0.4              |              | 0.1        |            |              | 3.1        |     |
|                              |               |             | 2-3                     | DU-25 (2-3) |                 |         |          | 0.4    | 0.4  |         |        |          | 0.7  | 0.3              |              | 0.1        |            |              | 1.8        |     |
|                              | DU-26         | ISM         | 0-1                     | DU-26 (0-1) | 1.8             | 0.1     |          | 1.9    | 2.7  | 0.6     |        | 0.6      | 1.3  | 15               | 2.5          | 0.9        |            | 1.9          | 29         |     |
|                              |               |             | 1-2                     | DU-26 (1-2) | 0.5             | 0.1     |          | 1.0    | 1.2  | 0.4     |        | 0.5      | 1.0  | 7.0              |              | 0.3        |            | 0.7          | 13         |     |
|                              |               |             | 2-3                     | DU-26 (2-3) | 0.2             |         |          | 0.5    | 0.6  | 0.2     |        |          | 0.7  | 3.9              |              | 0.2        |            | 1.9          | 8.2        |     |
|                              | DU-42         | Composite   | 0-1                     | DU-42 (0-1) |                 |         |          | 0.4    |      |         |        |          |      | 10               |              |            |            |              | 10         |     |
|                              |               |             | 1-2                     | DU-42 (1-2) | 0.2             |         |          |        |      |         |        |          |      | 3.7              |              |            |            |              | 4.0        |     |
|                              |               |             | 2-3                     | DU-42 (2-3) |                 |         |          |        |      |         |        |          |      | 1.4              |              |            |            |              | 1.4        |     |
|                              | East Parcel   | DU-27       | ISM                     | 0-1         | DU-27 (0-1)     | 0.5     | 0.2      |        | 2.5  | 0.4     |        |          | 0.5  | 0.9              | 17           |            | 0.3        |              | 1.9        | 24  |
|                              |               |             |                         | 1-2         | DU-27 (1-2)     |         |          |        | 1.0  | 0.3     |        |          |      | 0.6              | 11           | 1.0        | 0.3        |              | 1.7        | 16  |
|                              |               |             |                         | 2-3         | DU-27 (2-3)     | 0.4     | 0.2      |        | 0.6  | 0.5     |        |          |      | 0.7              | 3.9          |            | 0.1        |              | 1.8        | 8.2 |
| DU-28                        |               | ISM         | 0-1                     | DU-28 (0-1) | 0.9             | 0.1     |          | 2.2    | 0.6  | 0.2     |        |          | 1.3  | 3.1              | 0.7          | 0.4        |            | 1.0          | 11         |     |
|                              |               |             | 1-2                     | DU-28 (1-2) | 1.1             | 0.2     |          | 4.0    | 0.6  | 0.2     |        |          | 1.1  | 5.4              | 0.9          | 0.6        |            | 0.7          | 15         |     |
|                              |               |             | 2-3                     | DU-28 (2-3) | 1.8             |         |          | 2.8    | 0.9  |         |        |          | 1.4  | 2.4              | 0.8          | 0.3        |            | 0.4          | 11         |     |
| DU-29                        |               | ISM         | 0-1                     | DU-29 (0-1) | 0.4             |         |          | 0.8    | 0.8  |         |        |          | 0.8  | 8.2              | 0.8          | 0.2        |            | 0.3          | 12         |     |
|                              |               |             | 1-2                     | DU-29 (1-2) | 0.4             |         |          | 0.5    | 0.3  |         |        |          |      | 2.5              |              |            |            |              | 3.8        |     |
|                              |               |             | 2-3                     | DU-29 (2-3) |                 |         |          | 0.3    | 0.4  |         |        |          |      | 2.5              |              |            |            |              | 3.2        |     |
| DU-30                        |               | ISM         | 0-1                     | DU-30 (0-1) | 0.6             |         |          | 0.8    | 1.1  |         |        |          | 0.9  | 8.3              | 0.7          | 0.4        |            | 0.3          | 13         |     |
|                              |               |             | 1-2                     | DU-30 (1-2) | 0.8             |         |          | 1.0    | 1.7  |         |        |          | 1.1  | 3.7              |              | 0.2        |            |              | 8.4        |     |
|                              |               |             | 2-3                     | DU-30 (2-3) | 2.5             |         |          | 1.1    | 1.8  |         |        |          | 0.8  | 2.4              |              |            |            |              | 8.5        |     |
| DU-31                        |               | ISM         | 0-1                     | DU-31 (0-1) | 0.7             |         |          | 0.4    | 0.4  |         |        |          | 0.6  | 9.6              | 0.5          | 0.2        |            | 0.3          | 13         |     |
|                              |               |             | 1-2                     | DU-31 (1-2) | 0.3             |         |          | 0.6    | 0.3  |         |        |          | 0.7  | 3.1              | 0.5          | 0.1        |            | 0.3          | 5.9        |     |
|                              |               |             | 2-3                     | DU-31 (2-3) | 0.3             |         |          | 0.8    |      |         |        |          | 0.5  | 1.8              |              | 0.1        |            | 0.3          | 3.8        |     |
| DU-32                        |               | ISM         | 0-1                     | DU-32 (0-1) | 0.3             | 0.1     |          | 0.4    | 0.2  |         |        |          | 0.6  | 5.7              | 0.6          | 0.1        |            |              | 8.1        |     |
|                              |               |             | 1-2                     | DU-32 (1-2) |                 |         |          |        |      |         |        |          |      | 1.2              |              |            |            |              | 1.2        |     |
|                              |               |             | 2-3                     | DU-32 (2-3) |                 |         |          |        | 0.3  |         |        |          |      | 1.2              | 4.1          | 0.6        |            |              | 6.2        |     |

Table 14  
Hazard Quotient and Hazard Index - Mammals  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location              | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |              |            |            | Hazard Index |            |
|------------------------------|---------------|-------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|--------------|------------|------------|--------------|------------|
|                              |               |             |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH |              | Total PCBs |
| ISM Background (mg/kg)       |               |             |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  |                  |              |            |            |              |            |
| Composite Background (mg/kg) |               |             |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |              |            |            |              |            |
| Mammal RBC                   |               |             |                         |             | 2.7             | 83      | 342      | 82     | 122  | 3.53    | 20     | 1.1      | 201  | 6.10E-06         | 0.01         | 5.6        | 100        | 0.098        |            |
| East Parcel                  | DU-33         | ISM         | 0-1                     | DU-33 (0-1) | 0.9             | 0.1     |          | 1.0    | 0.7  |         |        |          | 1.4  | 6.1              | 0.8          |            |            | 0.9          | 12         |
|                              |               |             | 1-2                     | DU-33 (1-2) | 0.7             |         | 1.2      | 0.5    |      | 1.8     |        |          | 2.7  | 0.7              | 0.5          |            |            | 8.2          |            |
|                              |               |             | 2-3                     | DU-33 (2-3) | 0.2             |         | 0.6      | 0.4    |      | 1.2     |        |          | 2.0  |                  | 0.6          |            |            | 5.0          |            |
|                              | DU-34         | ISM         | 0-1                     | DU-34 (0-1) | 0.4             |         |          | 0.4    | 0.3  |         | 1.2    |          | 0.9  | 9.9              | 1.8          | 0.3        |            | 0.3          | 14         |
|                              |               |             | 1-2                     | DU-34 (1-2) | 0.2             | 0.4     | 0.3      |        | 0.9  | 4.6     |        |          | 1.0  | 0.2              | 0.5          | 9.3        |            |              |            |
|                              |               |             | 2-3                     | DU-34 (2-3) |                 | 0.4     |          |        | 1.1  | 4.9     |        |          | 0.5  | 0.1              |              | 7.1        |            |              |            |
|                              | DU-35         | ISM         | 0-1                     | DU-35 (0-1) |                 |         |          | 0.6    |      |         |        |          | 0.9  | 6.6              | 0.5          | 0.1        |            | 0.3          | 9.1        |
|                              |               |             | 1-2                     | DU-35 (1-2) |                 | 0.4     |          |        | 0.8  | 2.1     |        |          | 0.1  |                  | 0.4          | 3.9        |            |              |            |
|                              |               |             | 2-3                     | DU-35 (2-3) |                 | 0.3     |          |        | 0.7  | 1.7     |        |          |      |                  | 2.7          |            |            |              |            |
|                              | DU-36         | ISM         | 0-1                     | DU-36 (0-1) | 1.4             |         |          | 0.7    | 0.6  |         |        |          | 1.3  | 6.9              | 0.6          | 0.1        |            | 0.3          | 12         |
|                              |               |             | 1-2                     | DU-36 (1-2) | 1.3             | 0.7     | 1.1      |        | 1.1  | 6.1     |        |          | 0.8  | 0.1              |              | 11         |            |              |            |
|                              |               |             | 2-3                     | DU-36 (2-3) | 1.3             | 0.6     | 0.5      |        | 0.9  | 4.6     |        |          |      |                  | 0.3          | 8.2        |            |              |            |
|                              | DU-38         | ISM         | 0-1                     | DU-38 (0-1) | 0.5             |         |          | 0.3    | 0.3  |         |        |          | 0.5  | 4.8              | 0.6          | 0.1        |            | 0.4          | 7.5        |
|                              |               |             | 1-2                     | DU-38 (1-2) | 1.8             | 0.7     | 0.6      |        | 3.1  |         |        |          |      | 0.5              | 6.7          |            |            |              |            |
|                              |               |             | 2-3                     | DU-38 (2-3) | 1.4             | 0.6     | 0.4      |        | 0.5  | 1.7     |        |          |      |                  | 0.3          | 5.0        |            |              |            |
|                              | DU-37         | Composite   | 0-1                     | DU-37 (0-1) |                 |         |          |        |      |         |        |          |      | 0.1              |              |            |            |              | 0.1        |
|                              |               |             | 1-2                     | DU-37 (1-2) |                 |         |          |        |      | 0.1     |        |          |      |                  |              | 0.1        |            |              |            |
|                              |               |             | 2-3                     | DU-37 (2-3) |                 |         |          |        |      |         |        |          | 1.2  | 0.2              |              | 1.3        |            |              |            |
|                              | DU-39         | Composite   | 0-1                     | DU-39 (0-1) |                 |         |          |        |      |         |        |          |      | 0.6              |              |            |            |              | 0.6        |
|                              |               |             | 1-2                     | DU-39 (1-2) |                 |         |          |        |      | 0.2     |        |          |      |                  |              | 0.2        |            |              |            |
|                              |               |             | 2-3                     | DU-39 (2-3) |                 |         |          |        |      | 0.2     |        |          |      |                  |              | 0.2        |            |              |            |
|                              | DU-40         | Composite   | 0-1                     | DU-40 (0-1) |                 |         |          |        |      |         |        |          |      | 0.1              |              |            |            |              | 0.1        |
|                              |               |             | 1-2                     | DU-40 (1-2) |                 |         |          |        |      |         |        |          |      |                  |              | 0.0        |            |              |            |
|                              |               |             | 2-3                     | DU-40 (2-3) |                 |         |          |        |      |         |        |          |      |                  |              | 0.0        |            |              |            |

Table 14  
Hazard Quotient and Hazard Index - Mammals  
Basis of Design Report  
Willamette Cove Upland Facility

| Sample Location                                                      | Decision Unit | Sample Type       | Sample Depth (feet bgs) | Sample ID   | Hazard Quotient |         |          |        |      |         |        |          |      |                  |              |            |            | Hazard Index |            |
|----------------------------------------------------------------------|---------------|-------------------|-------------------------|-------------|-----------------|---------|----------|--------|------|---------|--------|----------|------|------------------|--------------|------------|------------|--------------|------------|
|                                                                      |               |                   |                         |             | Antimony        | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc | Dioxin/Furan TEQ | Dibenzofuran | Total HPAH | Total LPAH |              | Total PCBs |
| ISM Background (mg/kg)<br>Composite Background (mg/kg)<br>Mammal RBC |               |                   |                         |             | 0.29            | 8.8     | 39       | 24     | 27   | 0.073   | 23.4   | 0.33     | 105  | 6.10E-06         | 0.01         | 5.6        | 100        | 0.098        |            |
|                                                                      |               |                   |                         |             | 0.56            | 8.8     | 76       | 34     | 79   | 0.23    | 47     | 0.71     | 180  |                  |              |            |            |              |            |
|                                                                      |               |                   |                         |             | 2.7             | 83      | 342      | 82     | 122  | 3.53    | 20     | 1.1      | 201  |                  |              |            |            |              |            |
| East Parcel                                                          | DU-43         | Composite         | 0-1                     | DU-43 (0-1) |                 |         |          |        |      |         |        |          | 0.5  |                  |              |            |            | 0.5          |            |
|                                                                      |               |                   | 1-2                     | DU-43 (1-2) |                 |         |          |        |      |         |        | 0.2      |      |                  |              |            | 0.2        |              |            |
|                                                                      |               |                   | 2-3                     | DU-43 (2-3) |                 |         |          |        |      |         |        | 0.1      |      |                  |              |            | 0.1        |              |            |
|                                                                      | DU-44         | Composite         | 0-1                     | DU-44 (0-1) | 0.2             |         |          |        |      |         |        |          | 0.2  |                  |              |            |            | 0.5          |            |
|                                                                      |               |                   | 1-2                     | DU-44 (1-2) |                 |         |          |        |      |         |        | 0.1      |      |                  |              |            | 0.1        |              |            |
|                                                                      |               |                   | 2-3                     | DU-44 (2-3) |                 |         |          |        |      |         | 0.1    |          |      |                  |              | 0.1        |            |              |            |
|                                                                      | DU-41         | ISM (Berm Sample) | 0-1                     | DU-41 (0-1) | 1.0             | 0.6     |          | 1.0    | 0.7  |         |        | 0.7      | 42   | 1.8              | 0.4          |            | 0.7        | 49           |            |
|                                                                      |               |                   | 1-2                     | DU-41 (1-2) | 0.9             | 0.2     |          | 0.9    | 1.1  |         |        | 0.8      | 40   | 4.3              | 0.3          |            | 0.9        | 49           |            |
|                                                                      |               |                   | 2-3                     | DU-41 (2-3) | 0.6             | 0.2     |          | 0.6    | 0.9  |         |        | 0.9      | 25   | 1.3              | 0.2          |            | 0.4        | 30           |            |

Notes:

1. Definition of table shading:

 COC was not detected. Hazard Quotient not calculated.

 Layer excavated.

 Layer partially excavated; Maximum allowable residual Hazard Quotient is 9.9

2. Only Hazard Quotients equal to or greater than 0.1 are shown.

Table 15  
Cap Thickness  
Basis of Design Report  
Willamette Cove Upland Facility

| Parcel  | DU | Max HQ | Max HI | Design Cap Thickness (ft) <sup>2</sup> | Material Thickness and Quantities |                        |                    |           |                          |                  |                       |                       | Comments                             |
|---------|----|--------|--------|----------------------------------------|-----------------------------------|------------------------|--------------------|-----------|--------------------------|------------------|-----------------------|-----------------------|--------------------------------------|
|         |    |        |        |                                        | Topsoil Thickness                 | General Fill Thickness | Demarcation Layer? | Area (ac) | Area Within Layback (ac) | Vol Topsoil (cy) | Vol General Fill (cy) | Demarcation Area (sy) |                                      |
| West    | 1  | 5.4    | 14     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.50      | 0.00                     | 807              | 1613                  | 2,420                 | Cap thickness based on Layer 3 data. |
|         | 2  | 8.3    | 15     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.50      | 0.00                     | 807              | 1613                  | 2,420                 |                                      |
|         | 3  | 4.3    | 5.1    | 1.0                                    | 1.0                               | 0.0                    | No                 | 0.43      | 0.00                     | 694              | 0                     | 0                     |                                      |
|         | 4  | 5.1    | 10     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.42      | 0.00                     | 678              | 1355                  | 2,033                 |                                      |
|         | 5  | 18.2   | 26     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.53      | 0.17                     | 581              | 1162                  | 2,565                 |                                      |
|         | 6  | 9.4    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.53      | 0.17                     | 581              | 1162                  | 2,565                 |                                      |
|         | 7  | 8.7    | 9.1    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.49      | 0.19                     | 484              | 968                   | 2,372                 |                                      |
|         | 8  | 10     | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.44      | 0.17                     | 436              | 871                   | 2,130                 |                                      |
|         | 9  | 9.4    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.43      | 0.23                     | 323              | 645                   | 2,081                 |                                      |
| Central | 10 | 41     | 43     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.49      | 0.00                     | 791              | 1581                  | 2,372                 | Cap thickness based on Layer 3 data. |
|         | 11 | 40     | 42     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.54      | 0.14                     | 645              | 1291                  | 2,614                 | Cap thickness based on Layer 3 data. |
|         | 12 | 14     | 16     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.44      | 0.00                     | 710              | 1420                  | 2,130                 | Cap thickness based on Layer 3 data. |
|         | 13 | 51     | 58     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.52      | 0.12                     | 645              | 1291                  | 2,517                 | Cap thickness based on Layer 3 data. |
|         | 14 | 167    | 174    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.44      | 0.00                     | 710              | 1420                  | 2,130                 | Cap thickness based on Layer 3 data. |
|         | 15 | 38     | 42     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.49      | 0.34                     | 242              | 484                   | 2,372                 | Cap thickness based on Layer 3 data. |
|         | 16 | 9.9    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.40      | 0.20                     | 323              | 645                   | 1,936                 | Cap thickness based on Layer 3 data. |
|         | 17 | 8.1    | 9.4    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.50      | 0.00                     | 807              | 1613                  | 2,420                 |                                      |
|         | 18 | 45     | 49     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.41      | 0.00                     | 661              | 1323                  | 1,984                 |                                      |
|         | 19 | 9.9    | 13     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.51      | 0.51                     | 0                | 0                     | 2,468                 |                                      |
|         | 20 | 9.1    | 9.6    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.68      | 0.00                     | 1097             | 2194                  | 3,291                 |                                      |
|         | 21 | 9.9    | 13     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.39      | 0.03                     | 581              | 1162                  | 1,888                 |                                      |
|         | 22 | 25     | 28     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.62      | 0.00                     | 1000             | 2001                  | 3,001                 | Cap thickness based on Layer 3 data. |
|         | 23 | 28     | 31     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.62      | 0.00                     | 1000             | 2001                  | 3,001                 | Cap thickness based on Layer 3 data. |
|         | 24 | 9.9    | 10     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.44      | 0.00                     | 710              | 1420                  | 2,130                 | Cap thickness based on Layer 3 data. |
|         | 25 | 7.7    | 9.6    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.45      | 0.00                     | 726              | 1452                  | 2,178                 |                                      |
|         | 26 | 55     | 58     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.44      | 0.34                     | 161              | 323                   | 2,130                 |                                      |
|         | 42 | 5.4    | 5.4    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.09      | 0.08                     | 16               | 32                    | 436                   |                                      |

Table 15  
Cap Thickness  
Basis of Design Report  
Willamette Cove Upland Facility

| Parcel               | DU | Max HQ | Max HI | Design Cap Thickness (ft) <sup>2</sup> | Material Thickness and Quantities |                        |                    |           |                          |                  |                       |                       | Comments                             |
|----------------------|----|--------|--------|----------------------------------------|-----------------------------------|------------------------|--------------------|-----------|--------------------------|------------------|-----------------------|-----------------------|--------------------------------------|
|                      |    |        |        |                                        | Topsoil Thickness                 | General Fill Thickness | Demarcation Layer? | Area (ac) | Area Within Layback (ac) | Vol Topsoil (cy) | Vol General Fill (cy) | Demarcation Area (sy) |                                      |
| East                 | 27 | 3.9    | 8.2    | 1.0                                    | 1.0                               | 0.0                    | No                 | 0.40      | 0.00                     | 645              | 0                     | 0                     | Cap thickness based on Layer 3 data. |
|                      | 28 | 9.9    | 17     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.43      | 0.00                     | 694              | 1387                  | 2,081                 |                                      |
|                      | 29 | 8.2    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.42      | 0.00                     | 678              | 1355                  | 2,033                 |                                      |
|                      | 30 | 8.3    | 13     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.42      | 0.00                     | 678              | 1355                  | 2,033                 |                                      |
|                      | 31 | 9.6    | 13     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.29      | 0.00                     | 468              | 936                   | 1,404                 |                                      |
|                      | 32 | 5.7    | 8.1    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.46      | 0.00                     | 742              | 1484                  | 2,226                 |                                      |
|                      | 33 | 6.1    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.39      | 0.00                     | 629              | 1258                  | 1,888                 |                                      |
|                      | 34 | 9.9    | 14     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.40      | 0.00                     | 645              | 1291                  | 1,936                 |                                      |
|                      | 35 | 6.6    | 9.1    | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.39      | 0.00                     | 629              | 1258                  | 1,888                 |                                      |
|                      | 36 | 6.9    | 12     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.26      | 0.00                     | 419              | 839                   | 1,258                 |                                      |
|                      | 37 | 1.2    | 1.3    | 1.0                                    | 1.0                               | 0.0                    | No                 | 0.25      | 0.05                     | 323              | 0                     | 0                     |                                      |
|                      | 38 | 4.8    | 7.5    | 1.0                                    | 1.0                               | 0.0                    | No                 | 0.47      | 0.04                     | 694              | 0                     | 0                     |                                      |
|                      | 39 | 0.6    | 0.6    | 0.0                                    | 1.0                               | 0.0                    | No                 | 0.50      | 0.00                     | 807              | 0                     | 0                     |                                      |
|                      | 40 | 0.1    | 0.1    | 0.0                                    | 1.0                               | 0.0                    | No                 | 0.49      | 0.00                     | 791              | 0                     | 0                     |                                      |
|                      | 41 | 25     | 30     | 3.0                                    | 1.0                               | 2.0                    | Yes                | 0.40      | 0.00                     | 645              | 1291                  | 1,936                 |                                      |
|                      | 43 | 0.5    | 0.5    | 0.0                                    | 1.0                               | 0.0                    | No                 | 0.14      | 0.00                     | 226              | 0                     | 0                     |                                      |
|                      | 44 | 0.2    | 0.5    | 0.0                                    | 1.0                               | 0.0                    | No                 | 0.20      | 0.00                     | 323              | 0                     | 0                     |                                      |
| Subtotals            |    |        |        |                                        |                                   |                        |                    | 19.05     | 2.78                     | 26,200           | 43,500                | 78,300                |                                      |
| Total Fill Required: |    |        |        |                                        |                                   |                        |                    |           | 70,000 cy                |                  |                       |                       |                                      |

Notes

1. Definition of table shading:

|  |                    |
|--|--------------------|
|  | HQ greater than 5  |
|  | HI greater than 10 |

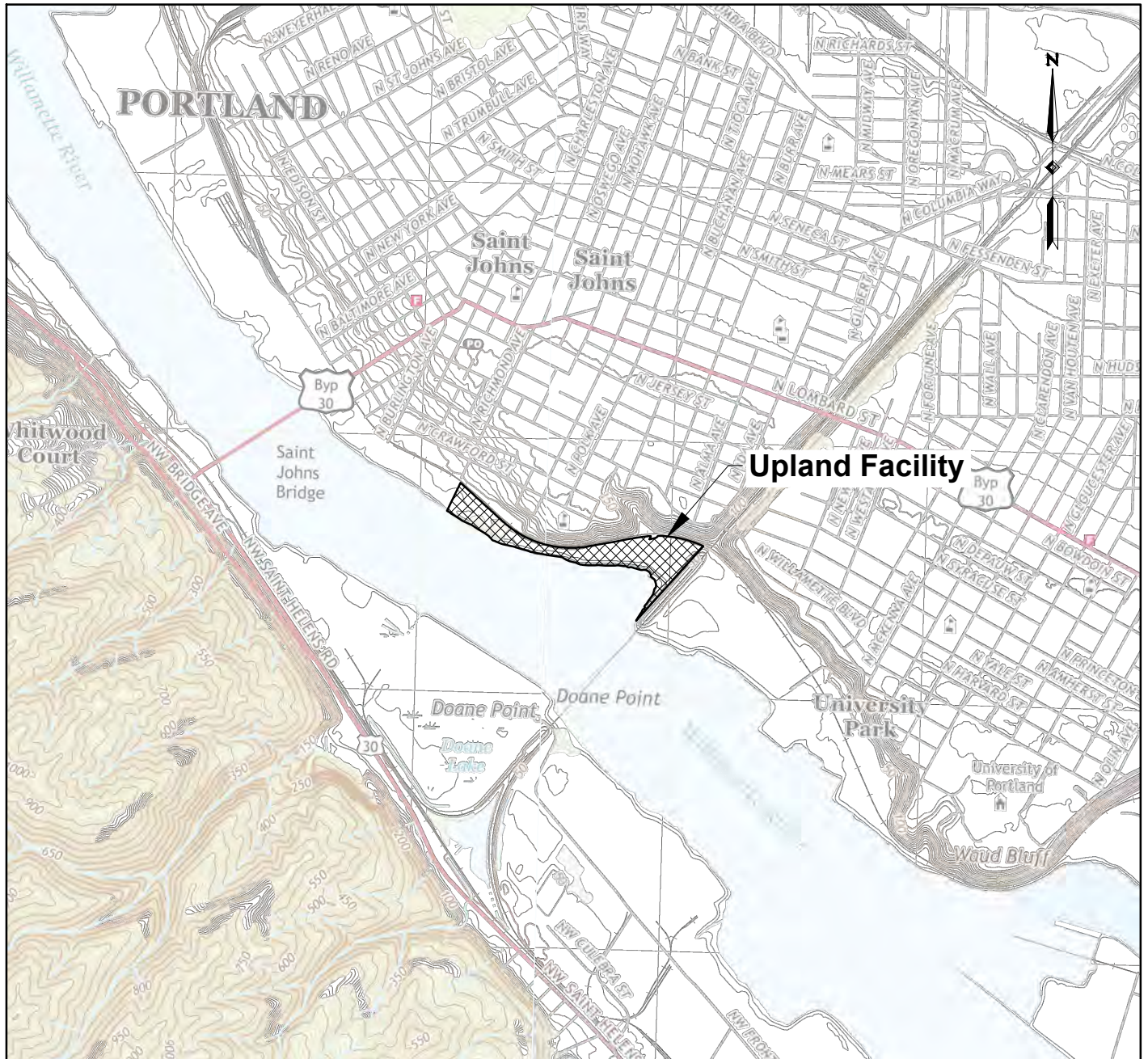
2. Cap thickness determined as follows:

No cap required if both HQ and HI are less than 1.

A 1-foot cap is required if HI is greater than 1 and both the HQ<5 and the HI is <10.

A 3-foot cap with demarcation layer is required if either the HQ>5 or the HI>10.

I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\29 Basis of Design Report\32-23011207 01 (Facility Location).dwg Modified 4/14/2025 by JPore



### Linnton and Portland, Oregon

United States Geological Survey  
7.5 Minute Series Topographic Map  
Contour Interval: 10 feet  
Scale: 1 inch = 24,000 feet  
Date: 2020

0 2,000 4,000  
Scale in Feet



## Site Location Map

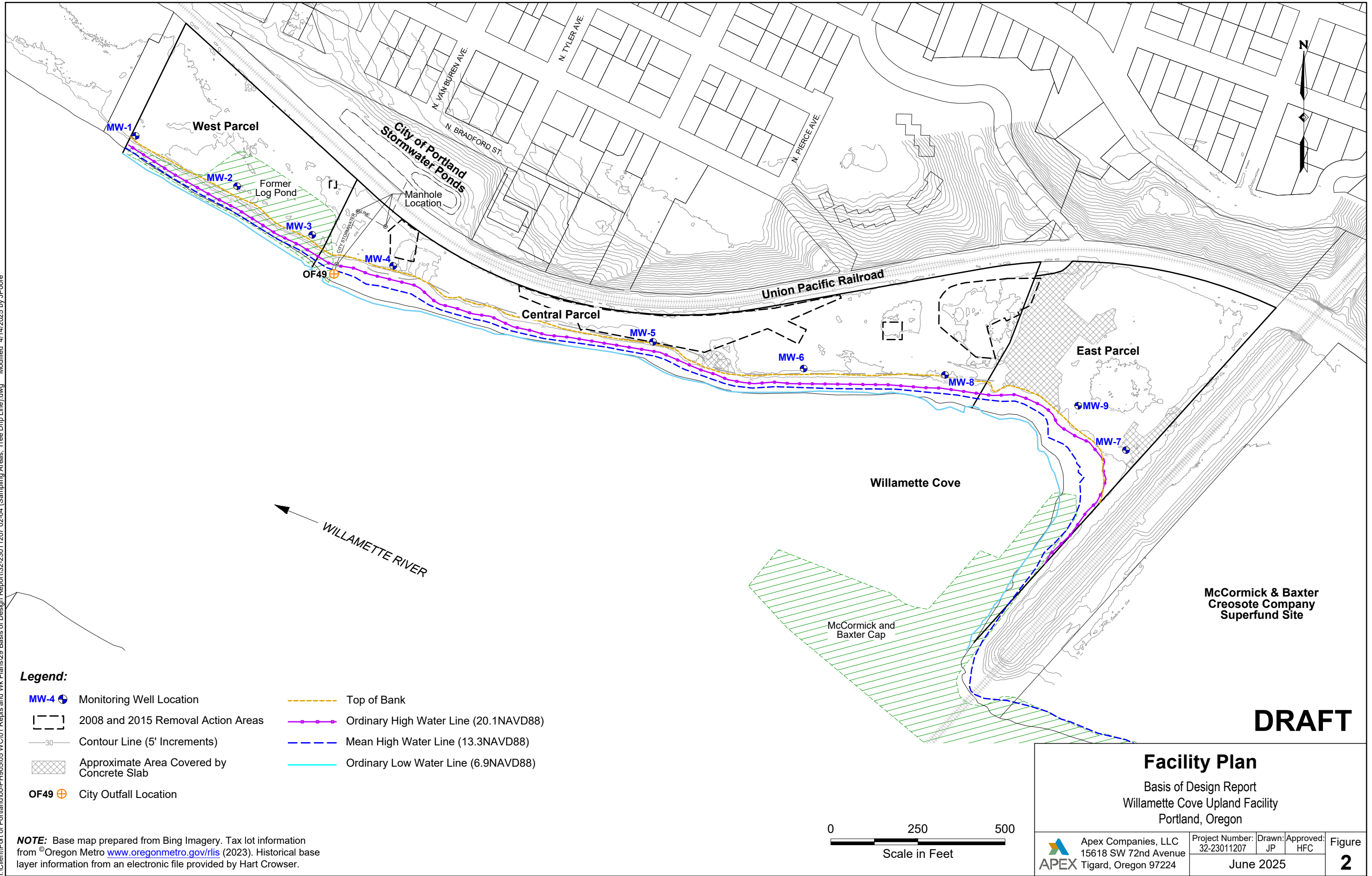
Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon

 Apex Companies, LLC  
15618 SW 72nd Avenue  
Tigard, Oregon 97224

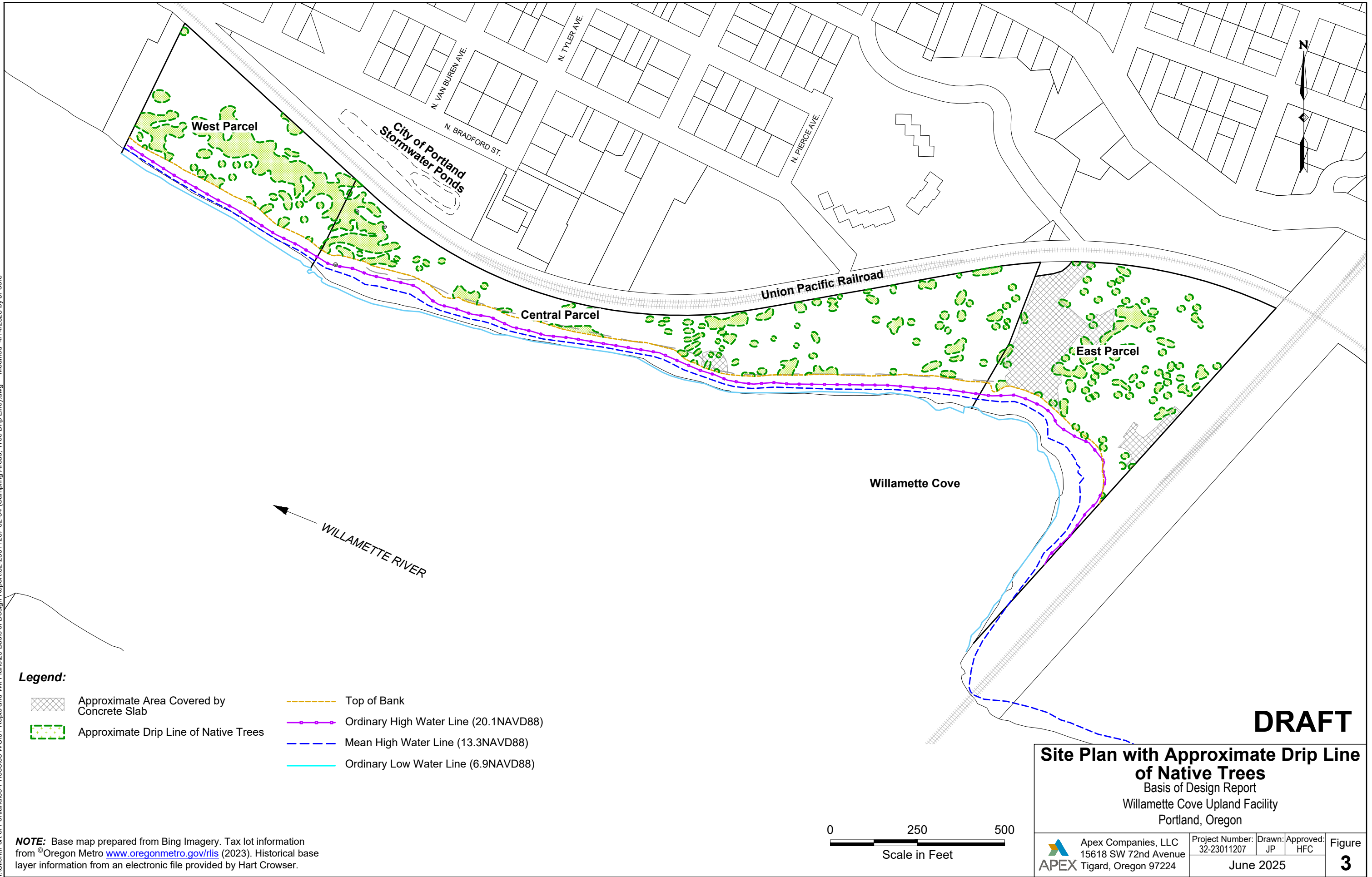
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|--------------------------------|--------------|------------------|
| Project Number:<br>32-23011207 | Drawn:<br>JP | Approved:<br>HFC |
| June 2025                      |              |                  |

Figure  
**1**

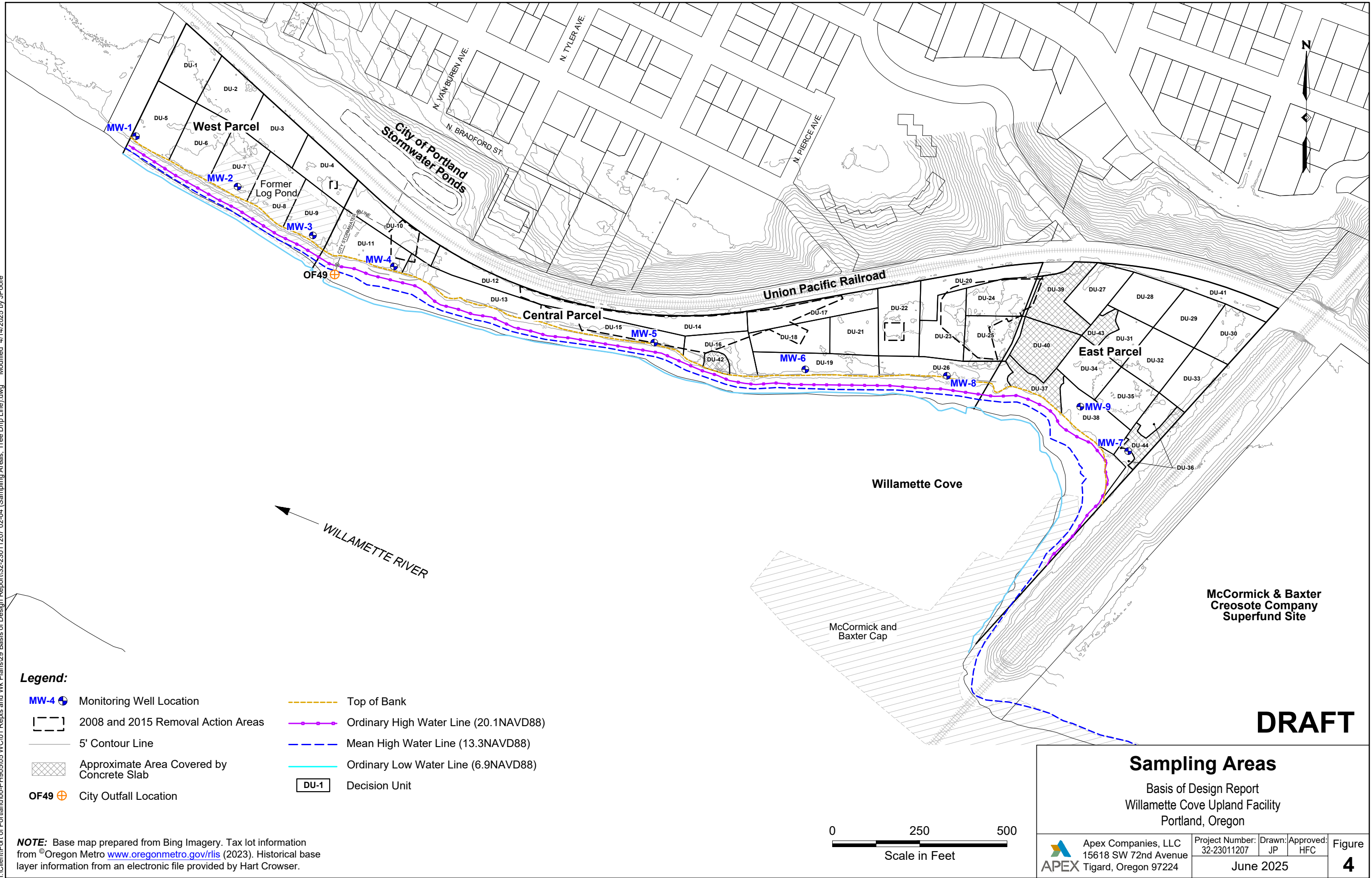
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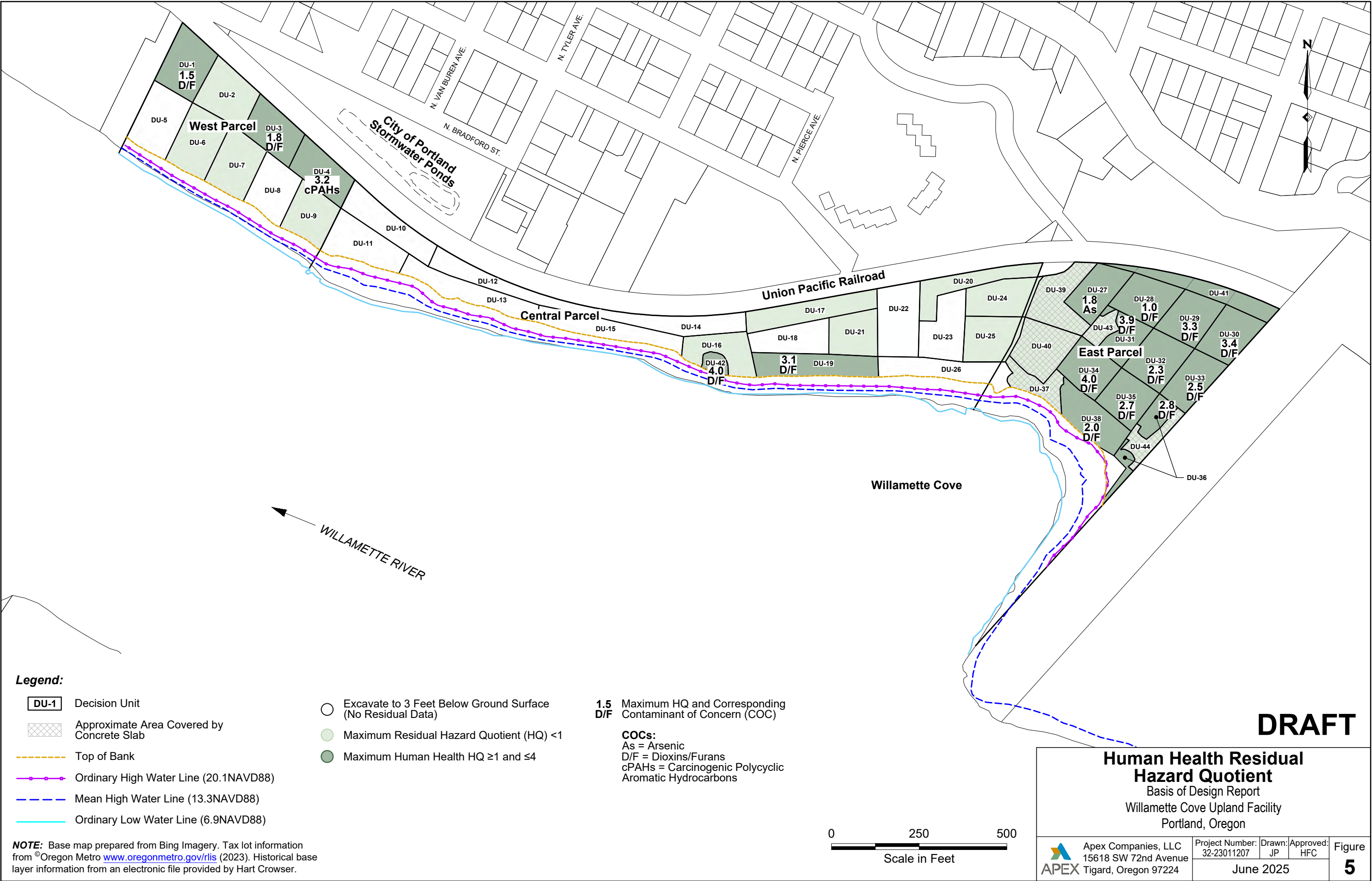
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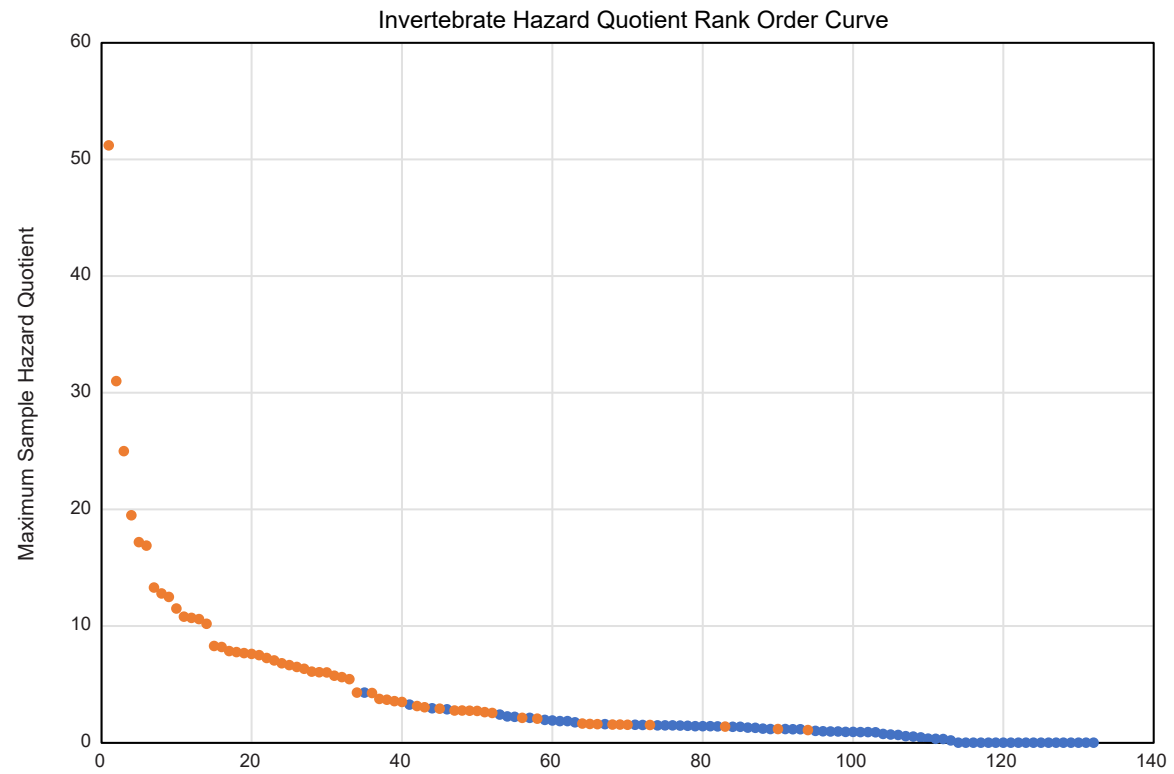
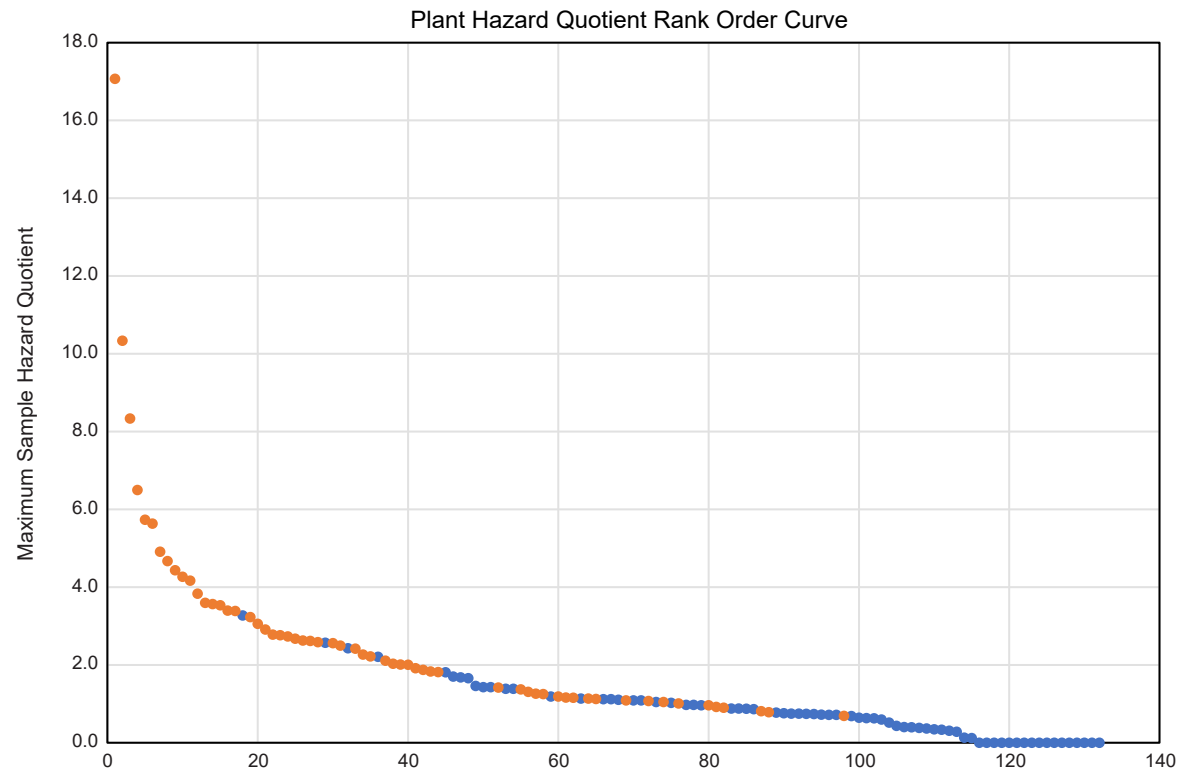
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I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\29 Basis of Design Report\32-23011207 05 HH Residual Hazard Q\dwg Modified 4/16/2025 by JPoore

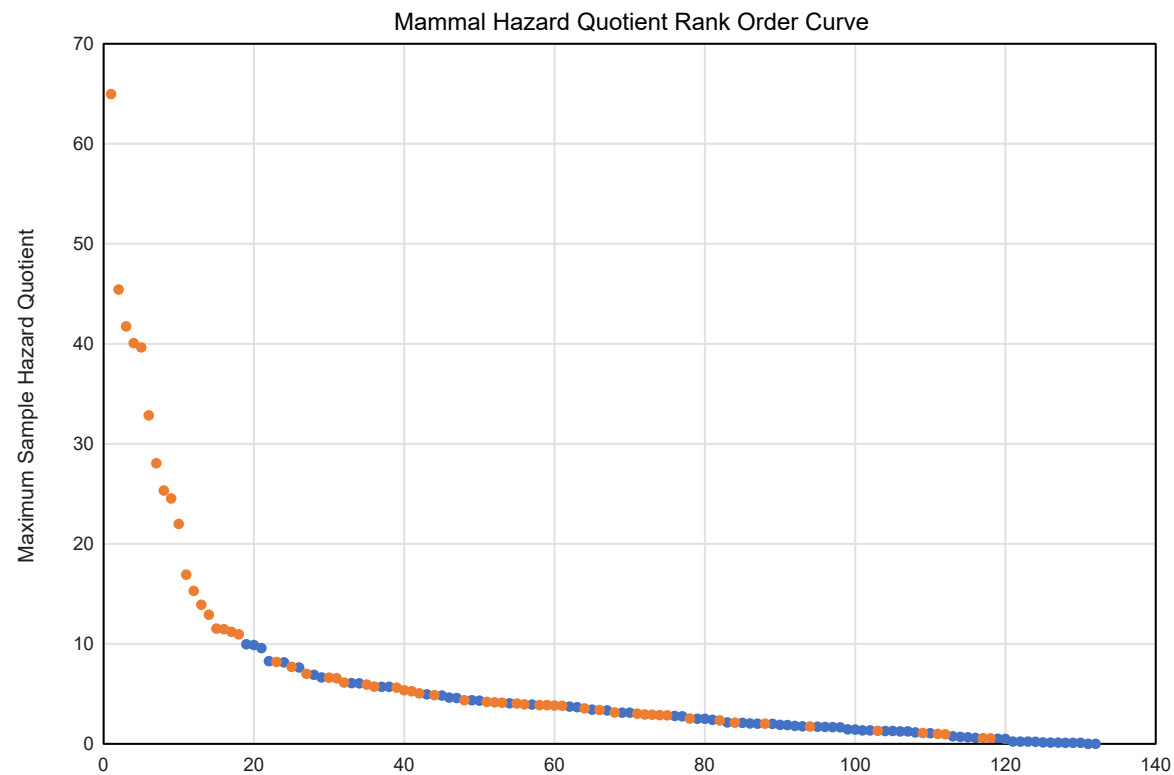
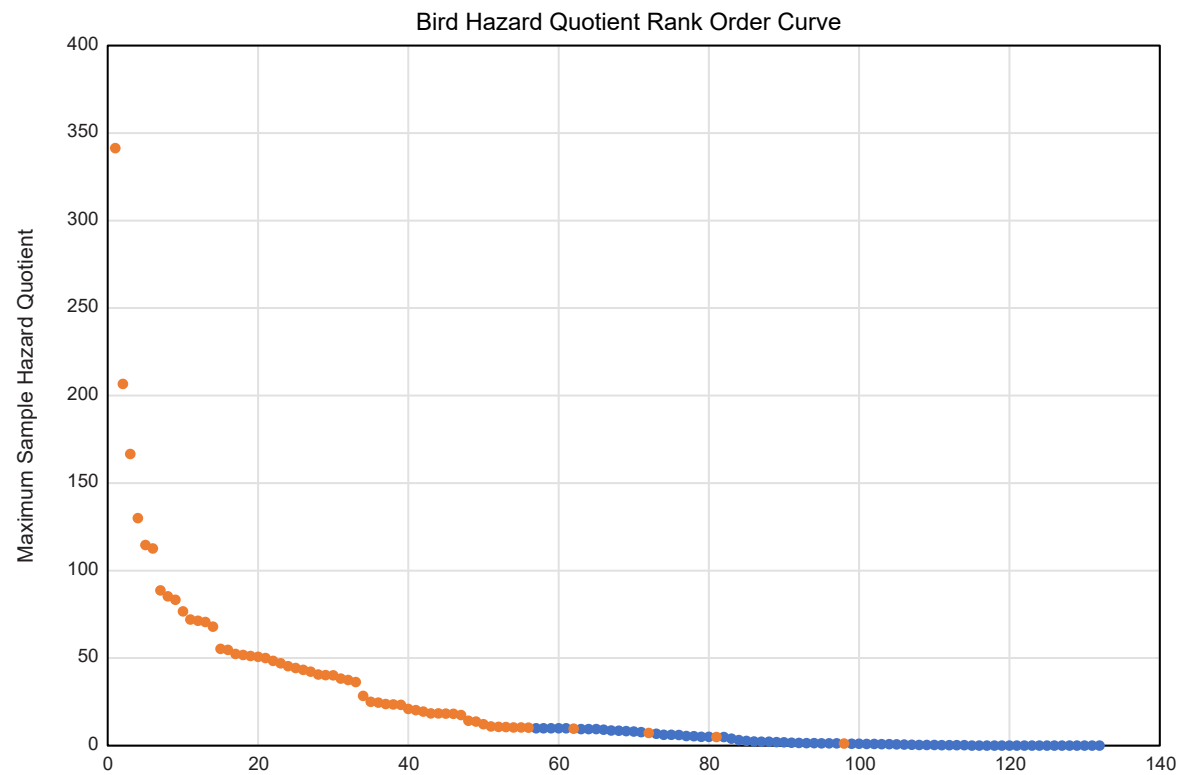


I:\Client\Port of Portland\00-PH90505 WC\01 Repts and Wk Plans\29 Basis of Design Report\32-23011207 06AB (Eco Rank Order Curves).des



**Legend:**

- No Removal
- Removal



**DRAFT**

**Ecological Hazard Quotient  
Rank Order Curves**

Basis of Design Report  
Willamette Cove Project Area  
Portland Harbor Superfund Site

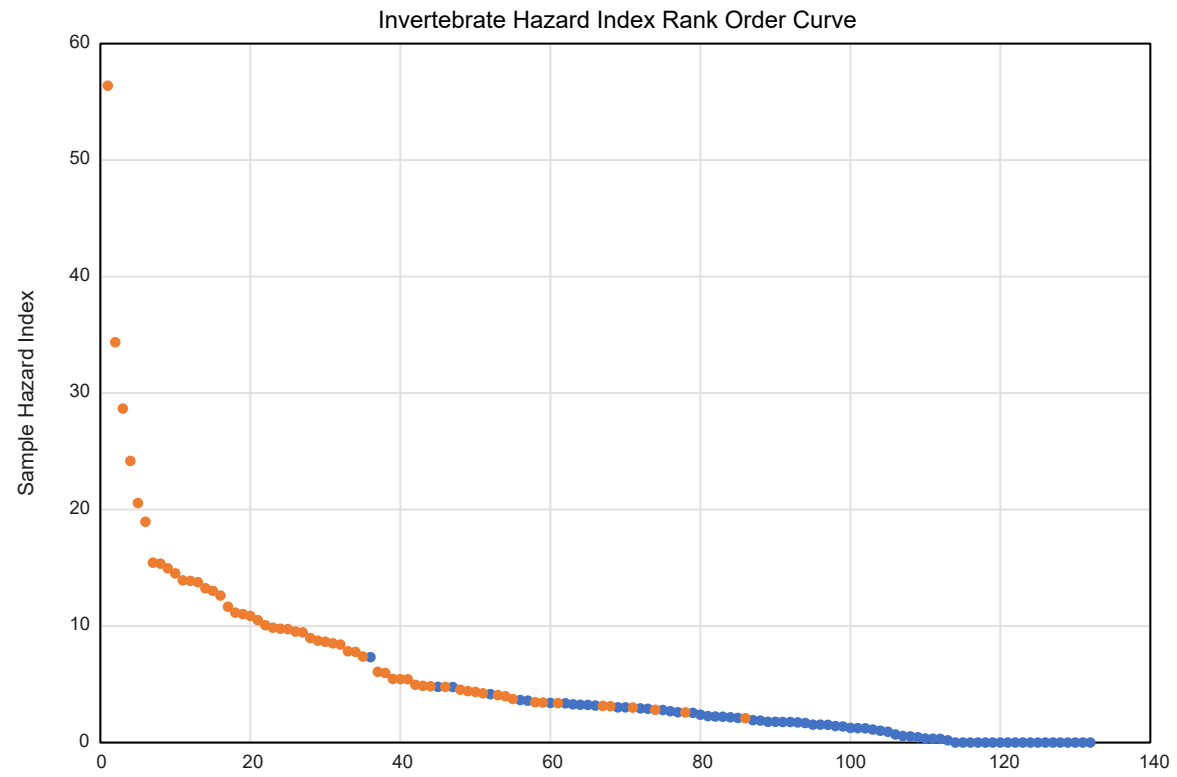
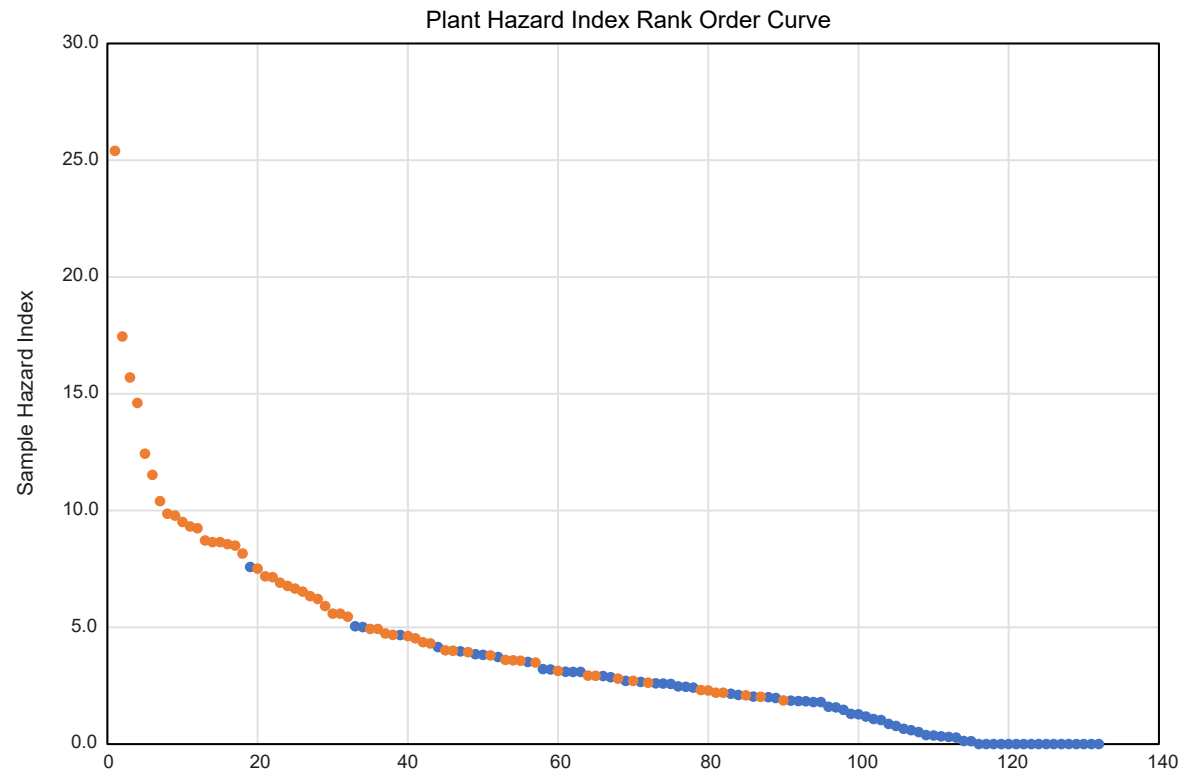
 Apex Companies, LLC  
15618 SW 72nd Avenue  
Tigard, Oregon 97224

Project Number: 32-23011207  
Drawn: JP  
Approved: HFC

June 2025

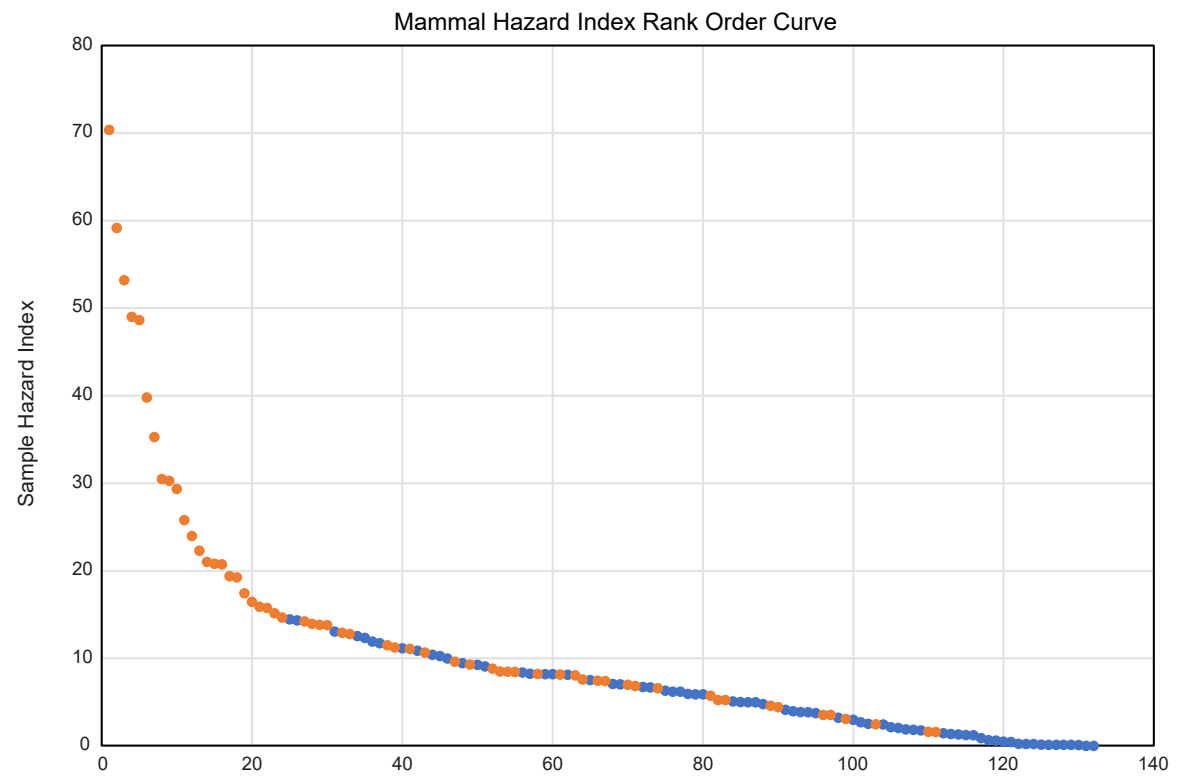
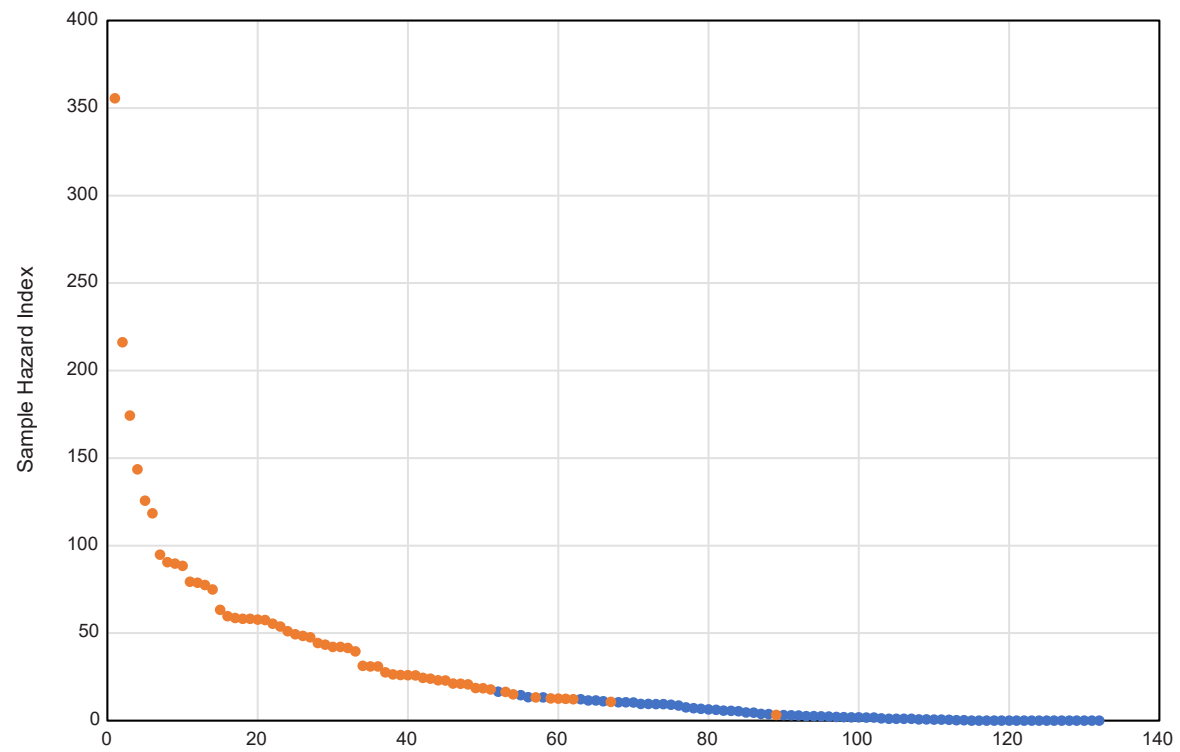
Figure  
**6A**

I:\Client\Port of Portland\00-PH90505 WC\01 Repts and Wk Plans\29 Basis of Design Report\32-23011207 06AB (Eco Rank Order Curves).des



**Legend:**

- No Removal
- Removal



**DRAFT**

**Ecological Hazard Index  
Rank Order Curves**

Basis of Design Report  
Willamette Cove Project Area  
Portland Harbor Superfund Site

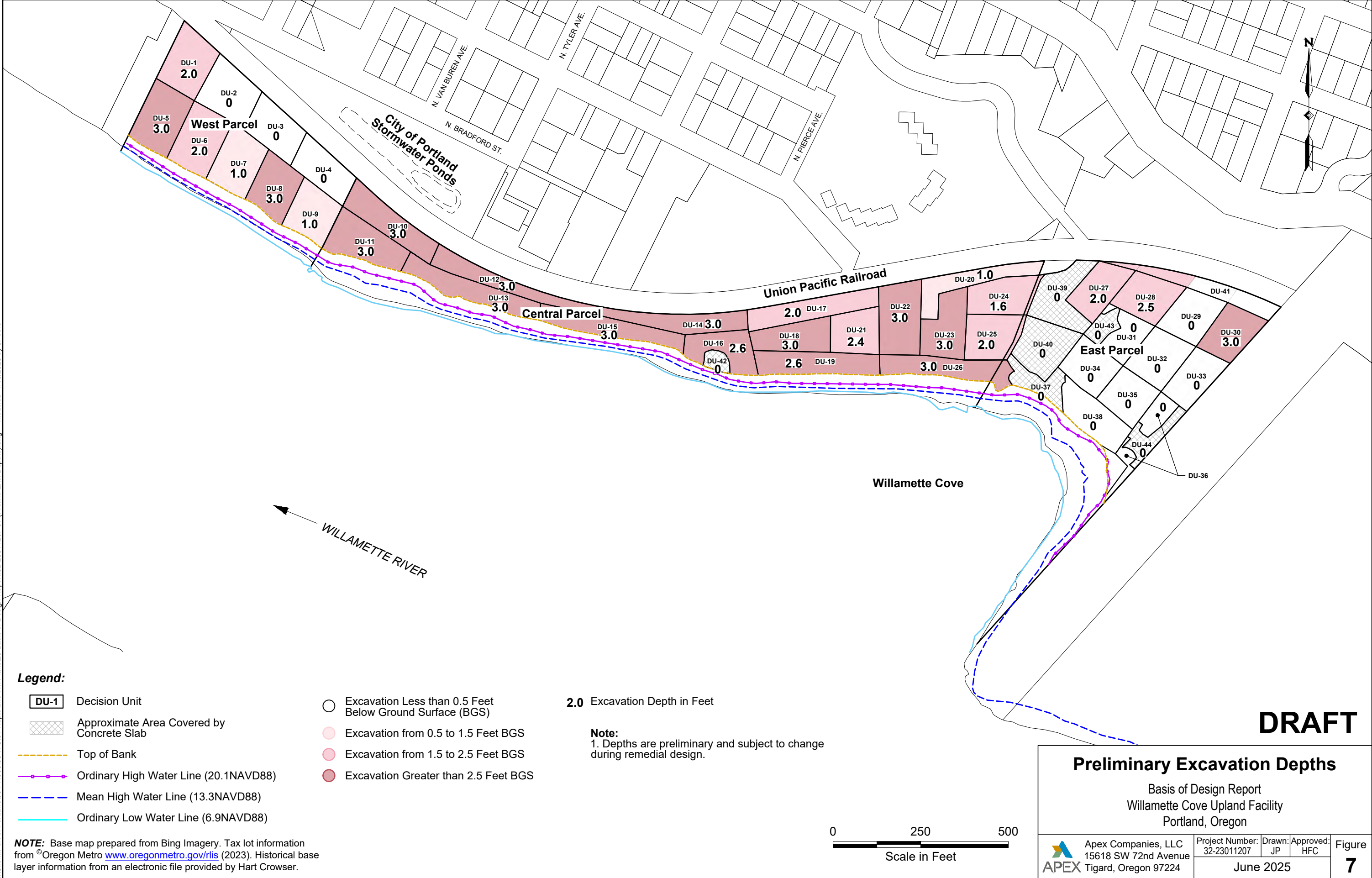
 Apex Companies, LLC  
15618 SW 72nd Avenue  
Tigard, Oregon 97224

Project Number: 32-23011207  
Drawn: JP  
Approved: HFC

June 2025

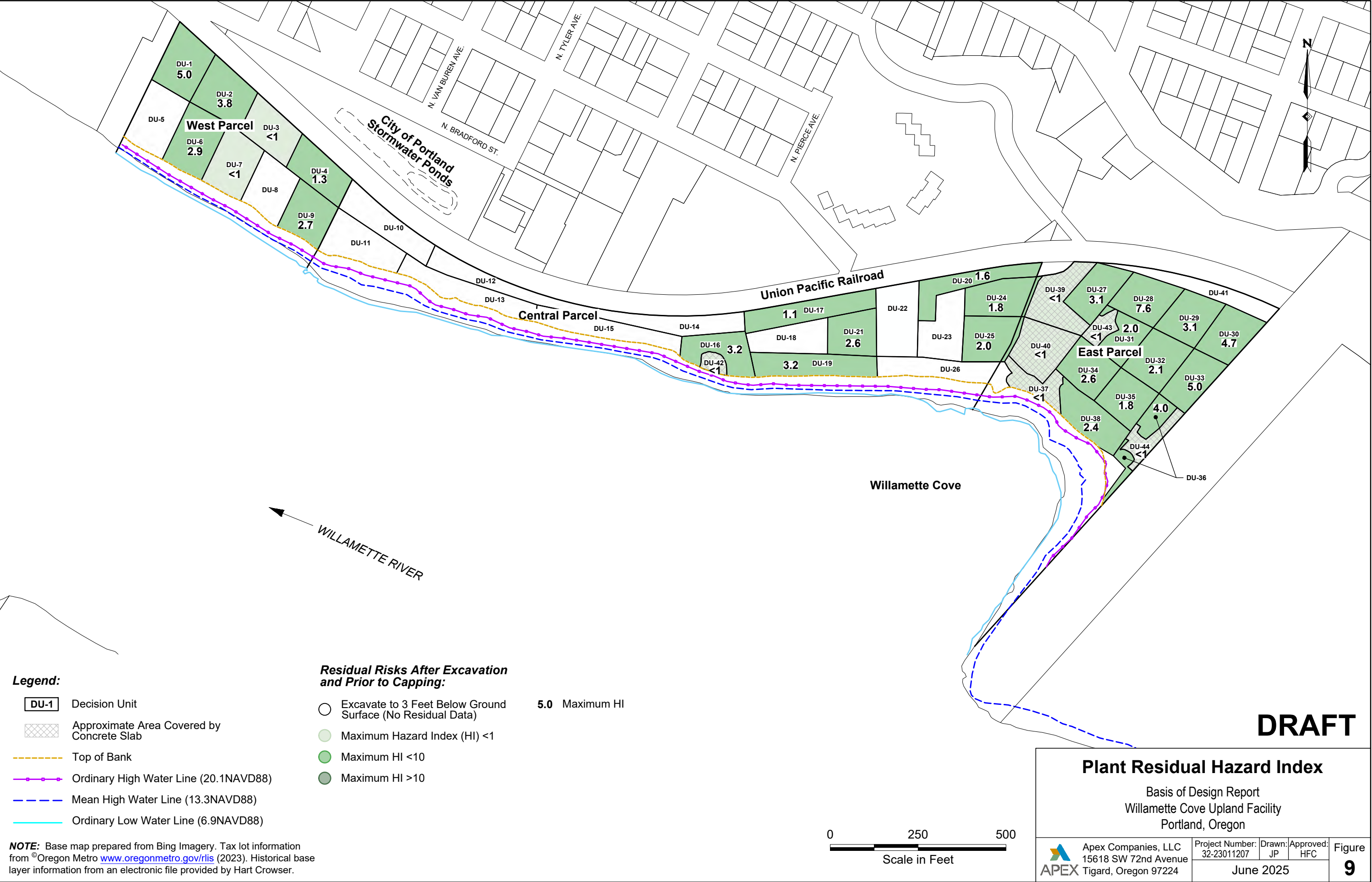
Figure  
**6B**

I:\Client\Port of Portland\00-PPH0505 WCO1 Repts and Wk Plans\29 Basis of Design Report\32-23011207 07 (Prelim. Exc. Depths).dwg Modified 4/16/2025 by J.Poore

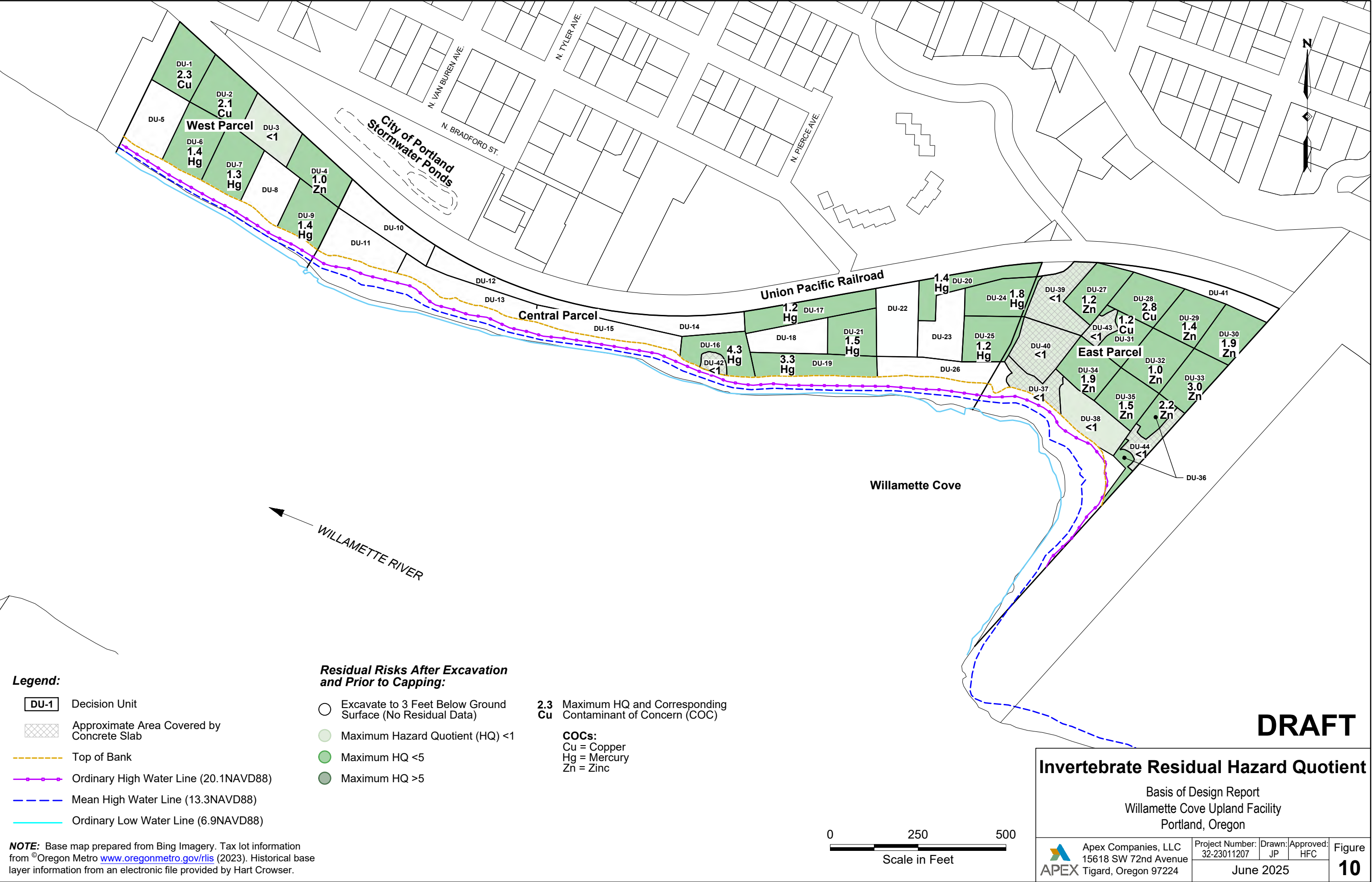




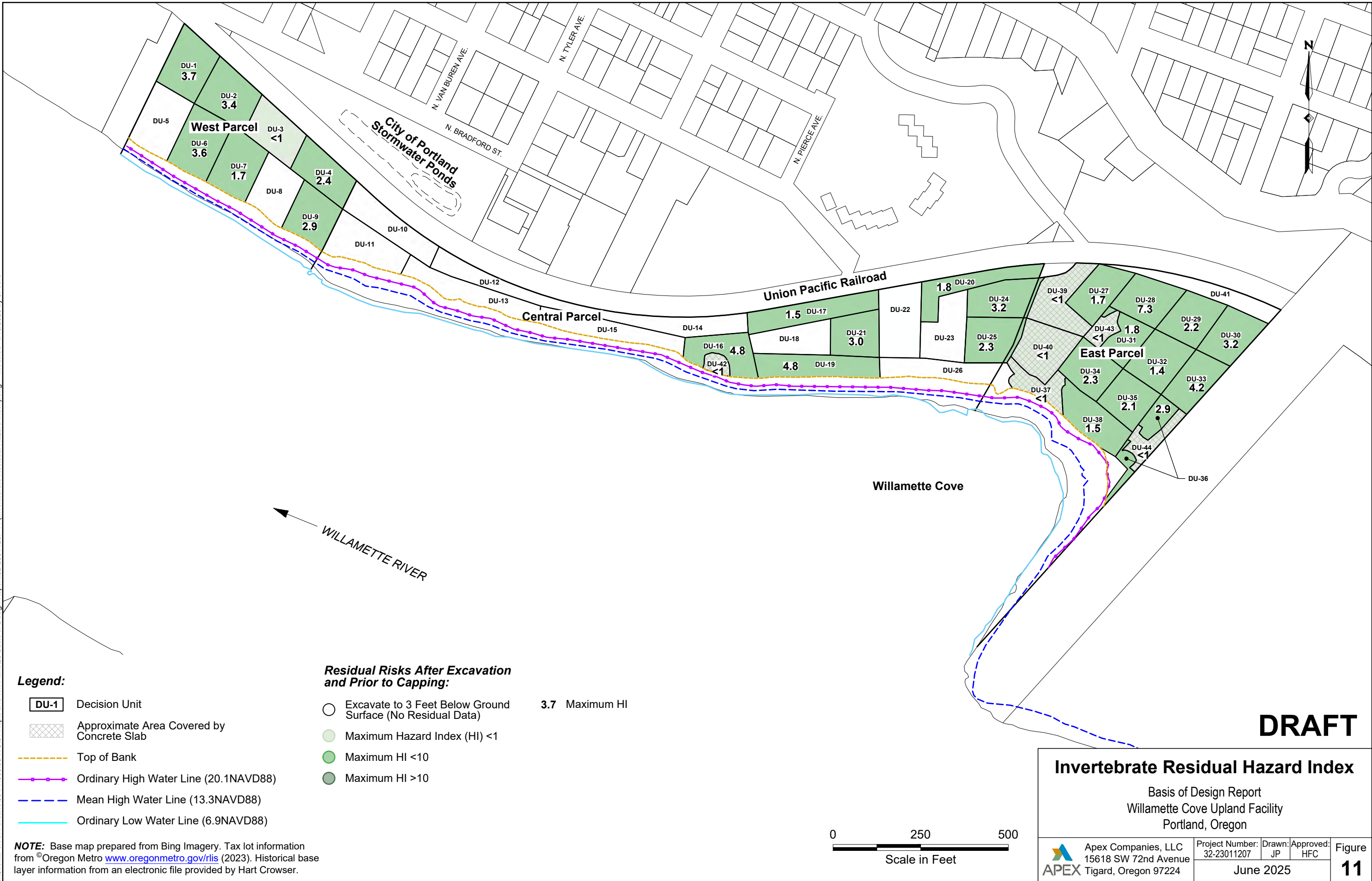
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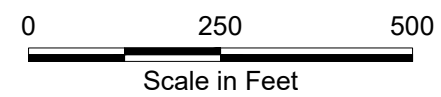
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I:\Client\Port of Portland\00-PPH090505 WC\01 Repts and Wk Plans\29 Basis of Design Report\32-23011207 11 (Invertebrate Residual Hazard Index).dwg Modified 4/16/2025 by JPoore



**NOTE:** Base map prepared from Bing Imagery. Tax lot information from ©Oregon Metro [www.oregonmetro.gov/rliis](http://www.oregonmetro.gov/rliis) (2023). Historical base layer information from an electronic file provided by Hart Crowser.



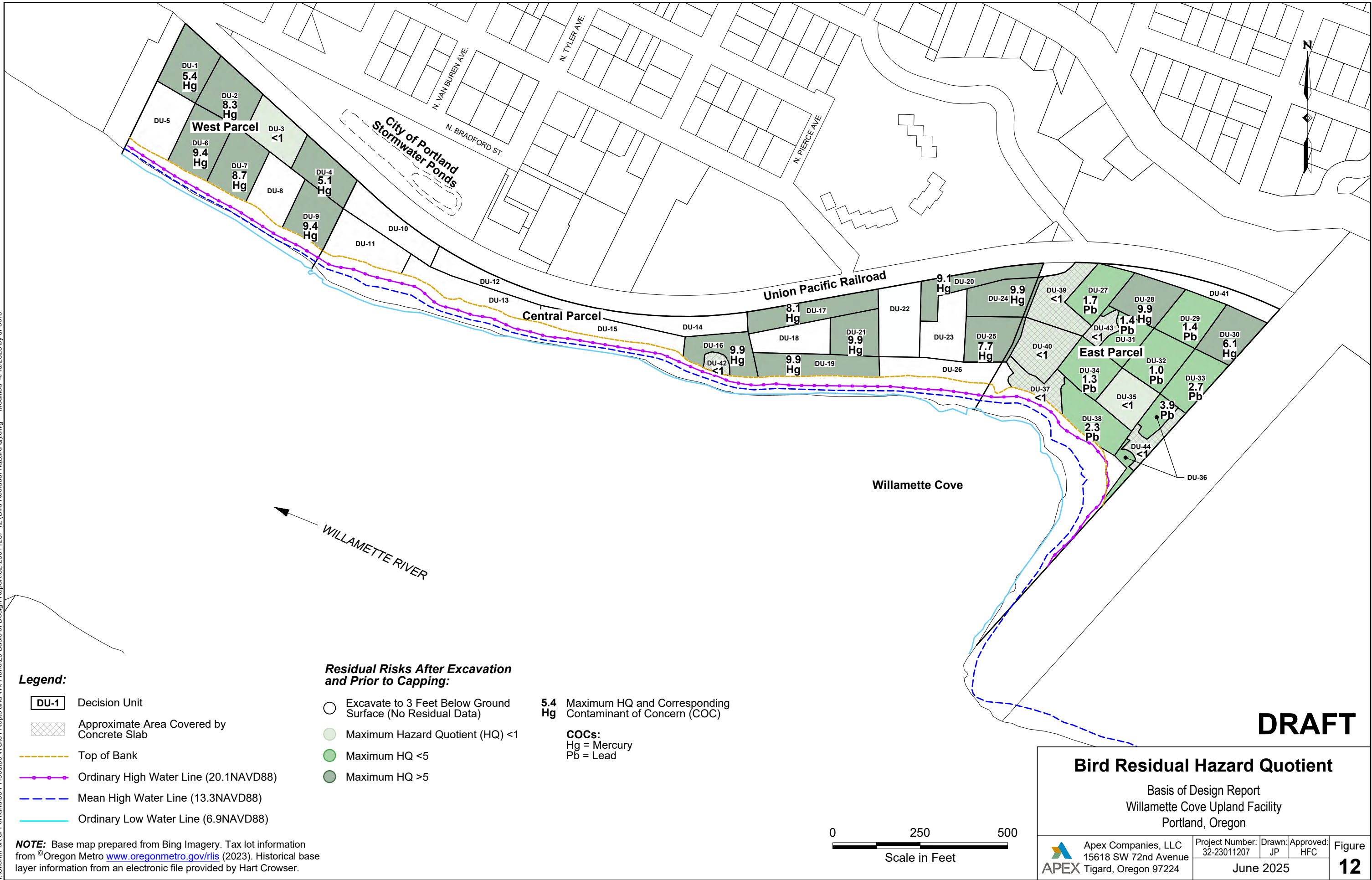
# DRAFT

## Invertebrate Residual Hazard Index

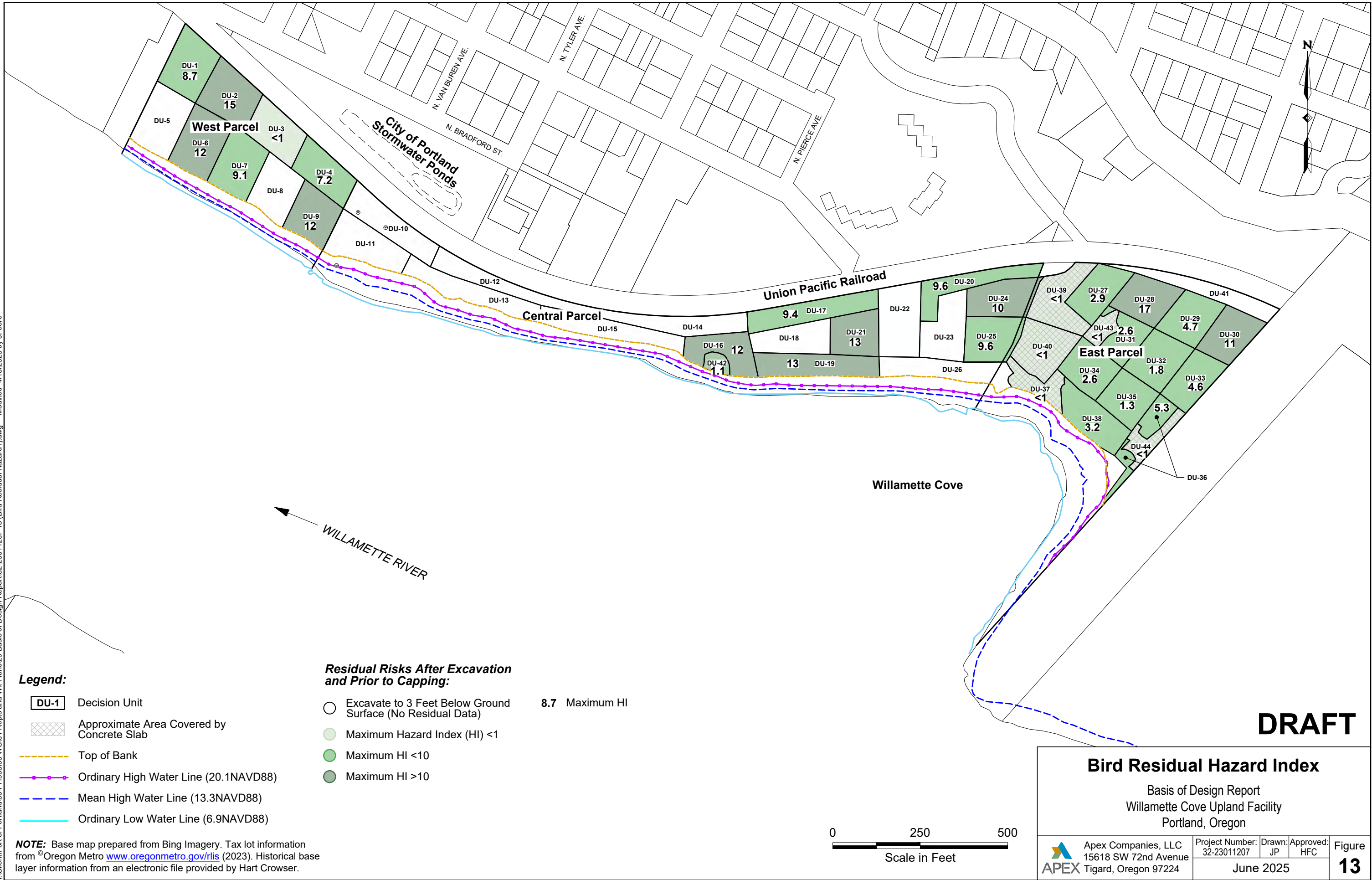
Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon

|                                                                                                                                                           |                                |              |                  |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|------------------|---------------------|
|  Apex Companies, LLC<br>15618 SW 72nd Avenue<br>Tigard, Oregon 97224 | Project Number:<br>32-23011207 | Drawn:<br>JP | Approved:<br>HFC | Figure<br><b>11</b> |
|                                                                                                                                                           | June 2025                      |              |                  |                     |

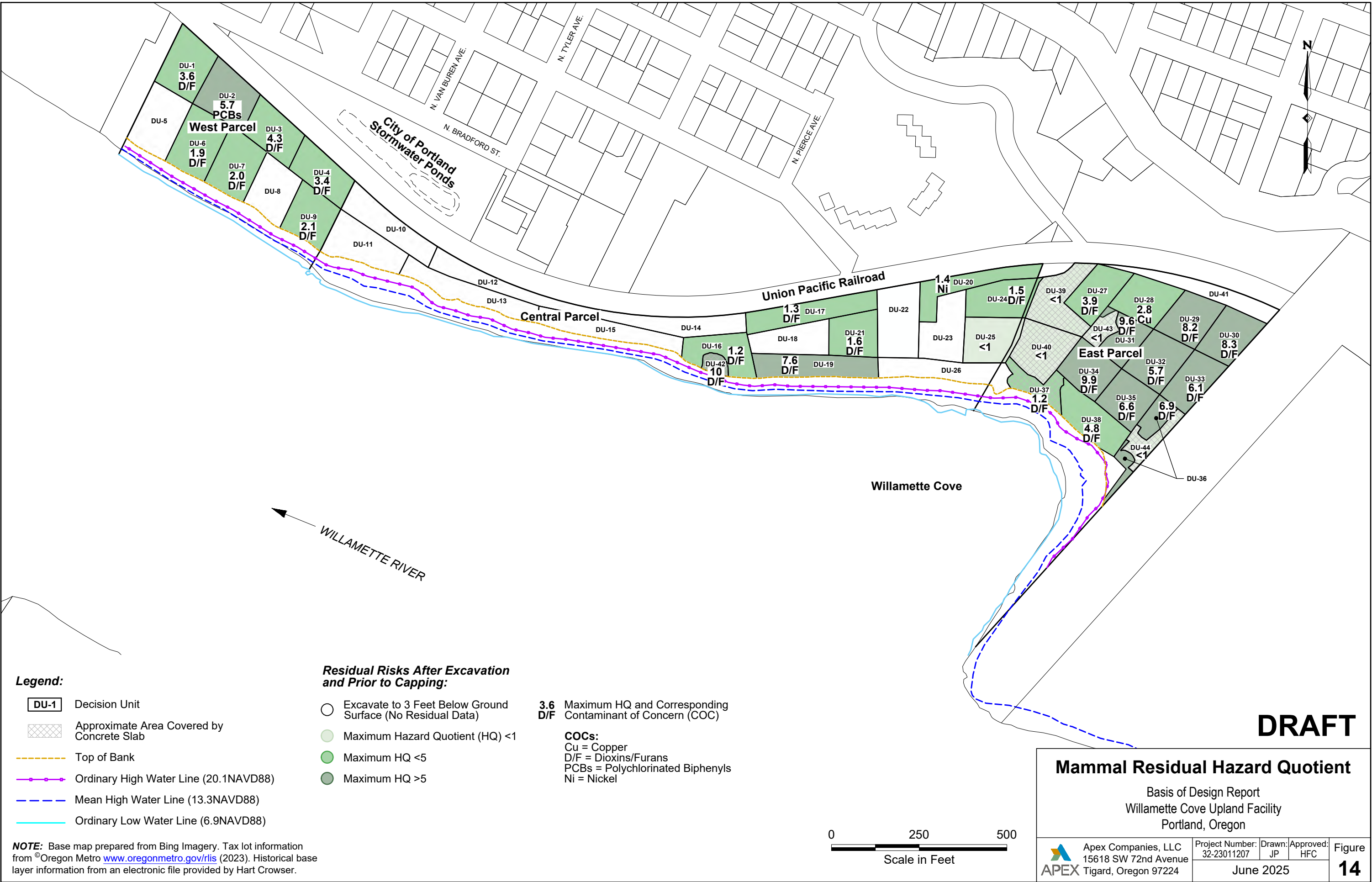
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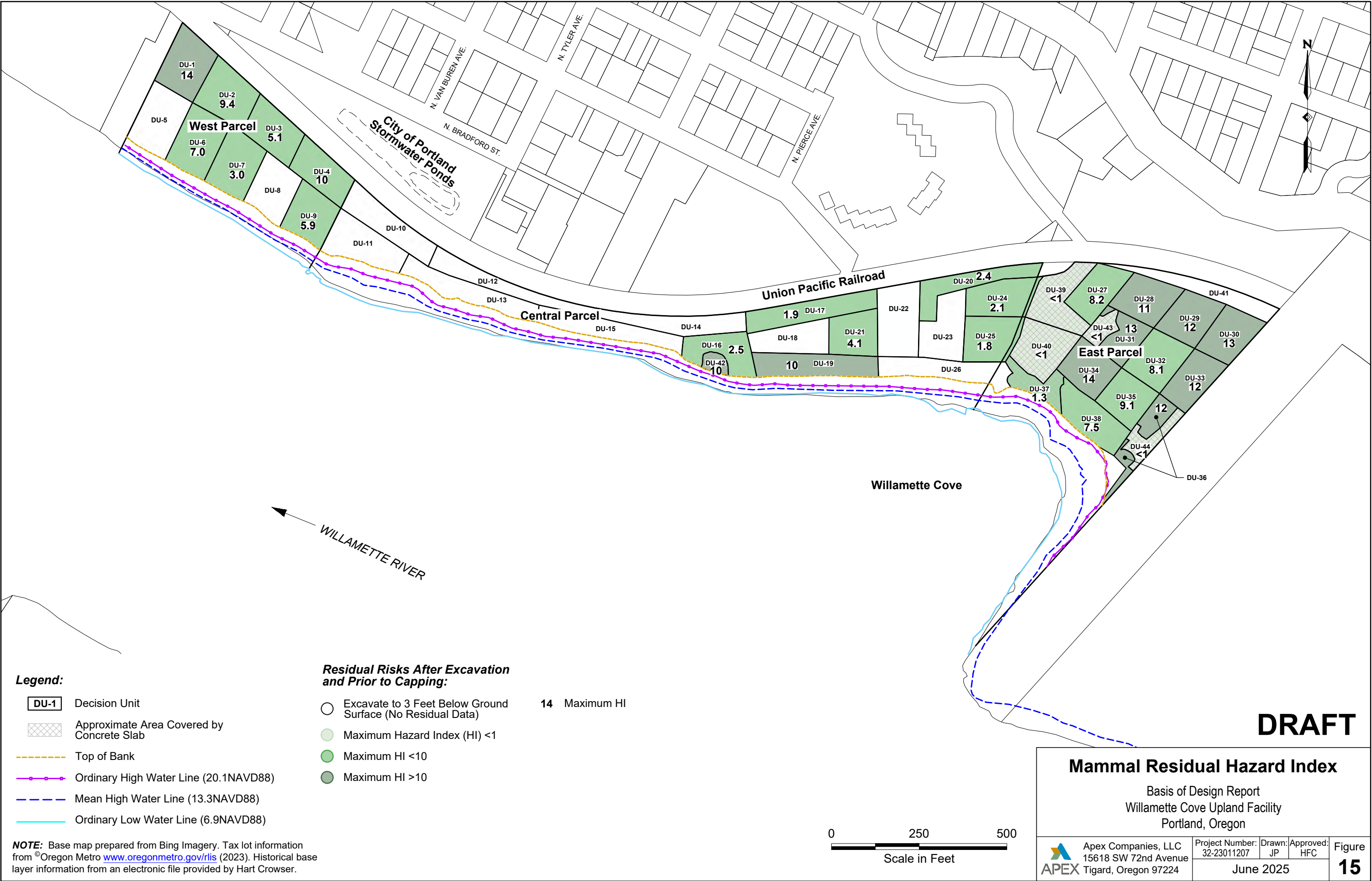
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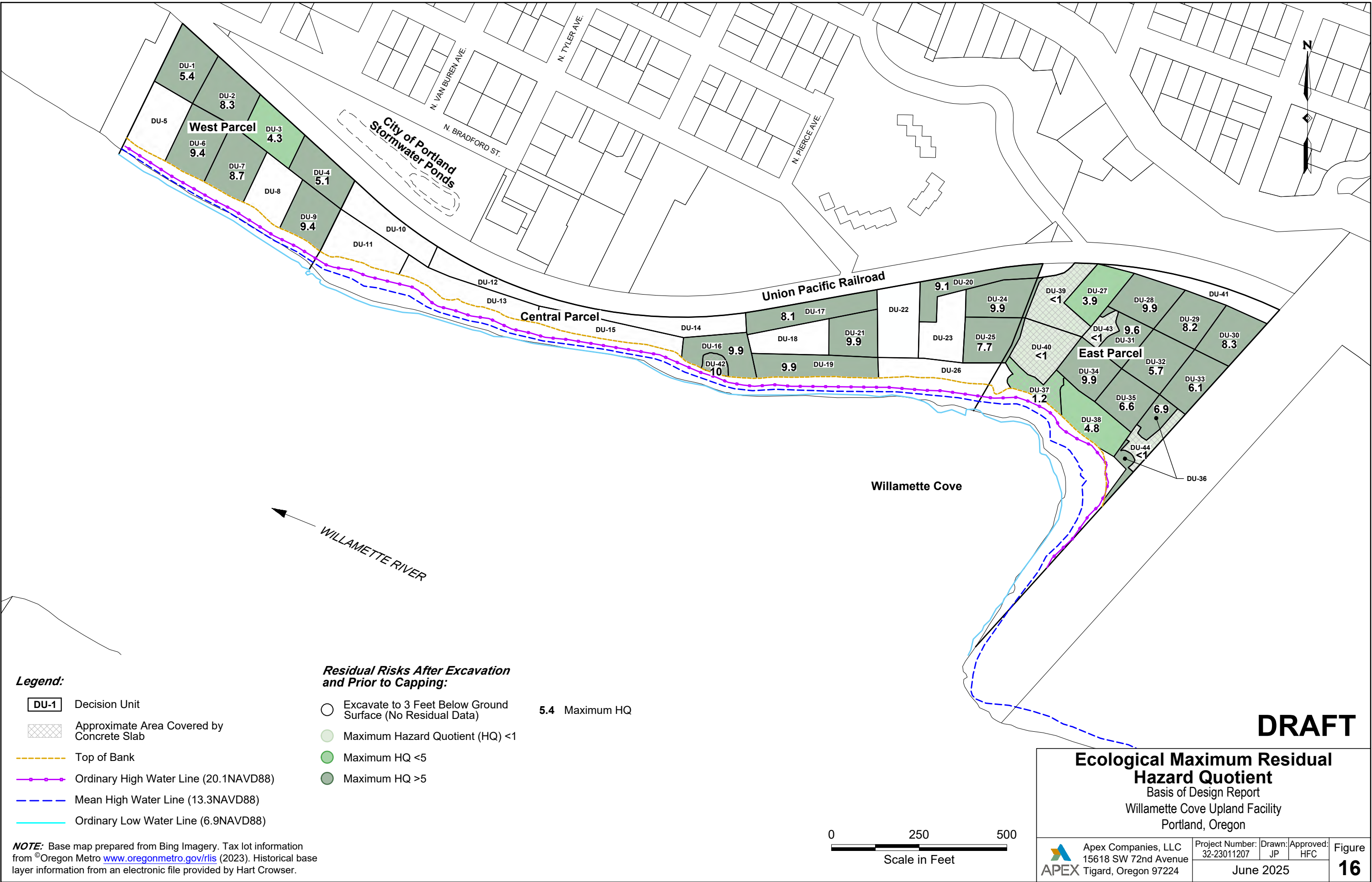
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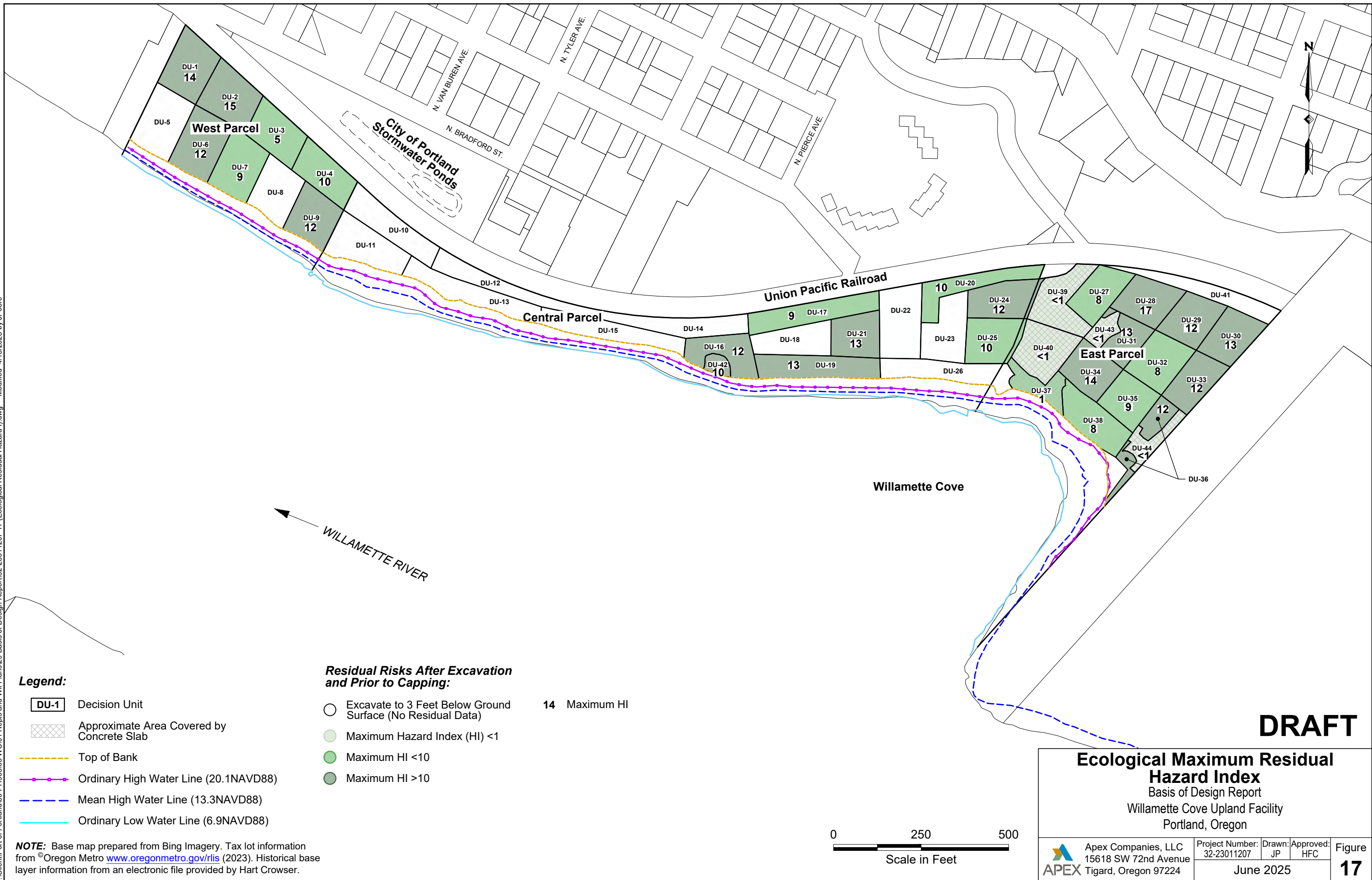
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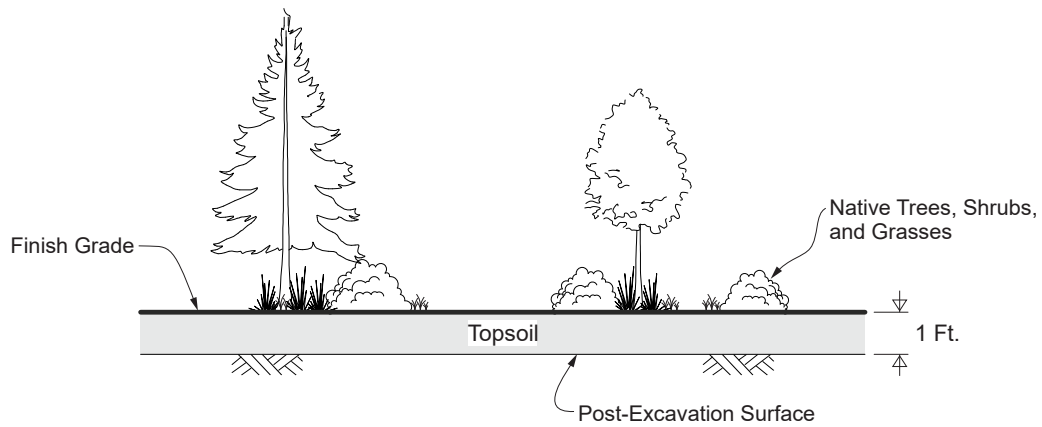


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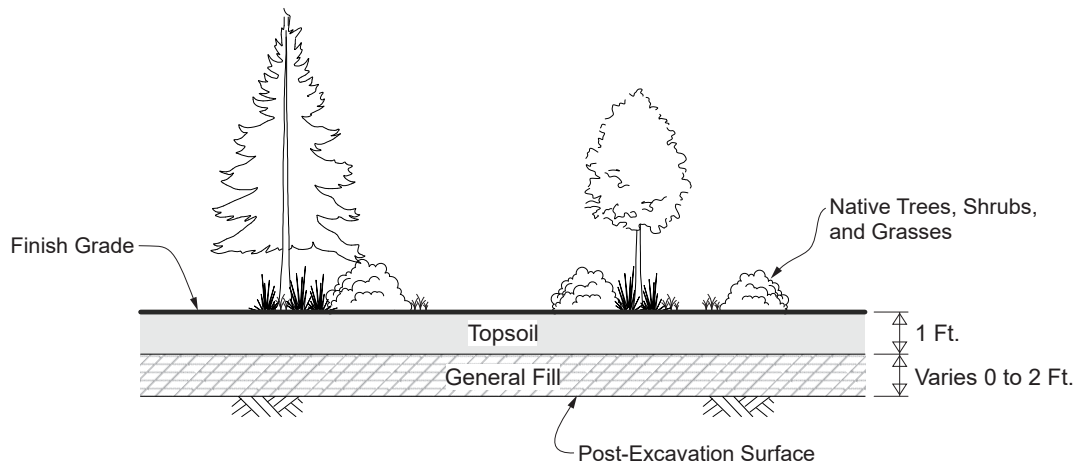


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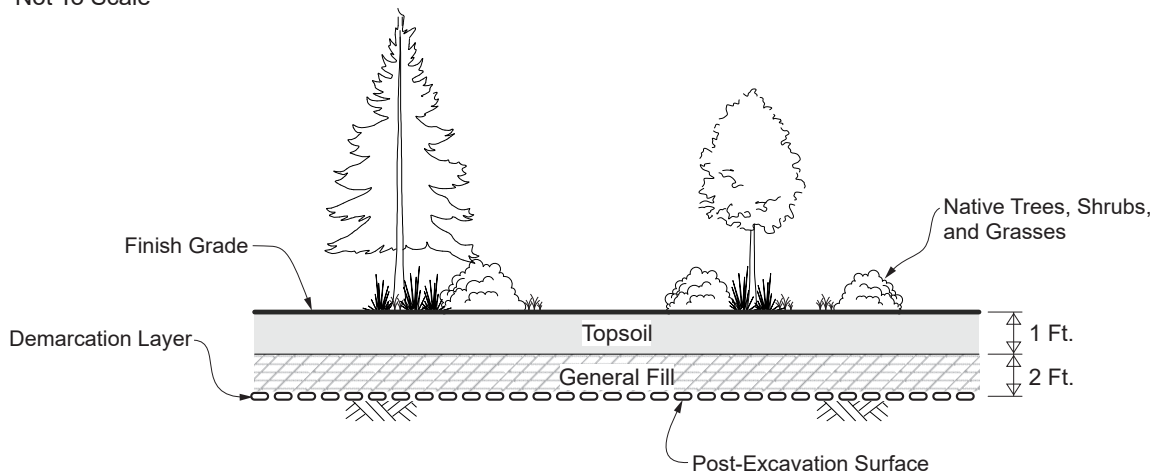




**A** No Cap - Residual Ecological Hazard Index Less Than One  
Not To Scale



**B** Standard Cap - Residual Ecological Hazard Index Greater Than One; Residual Ecological Hazard Quotient Less Than Five and Residual Ecological Hazard Index Less than Ten  
Not To Scale



**C** Enhanced Cap - Residual Ecological Hazard Quotient Greater than Five or Residual Ecological Hazard Index Greater than Ten  
Not To Scale

**DRAFT**

## Site Restoration and CAP Details

Basis of Design Report  
Willamette Cove Project Area  
Portland Harbor Superfund Site

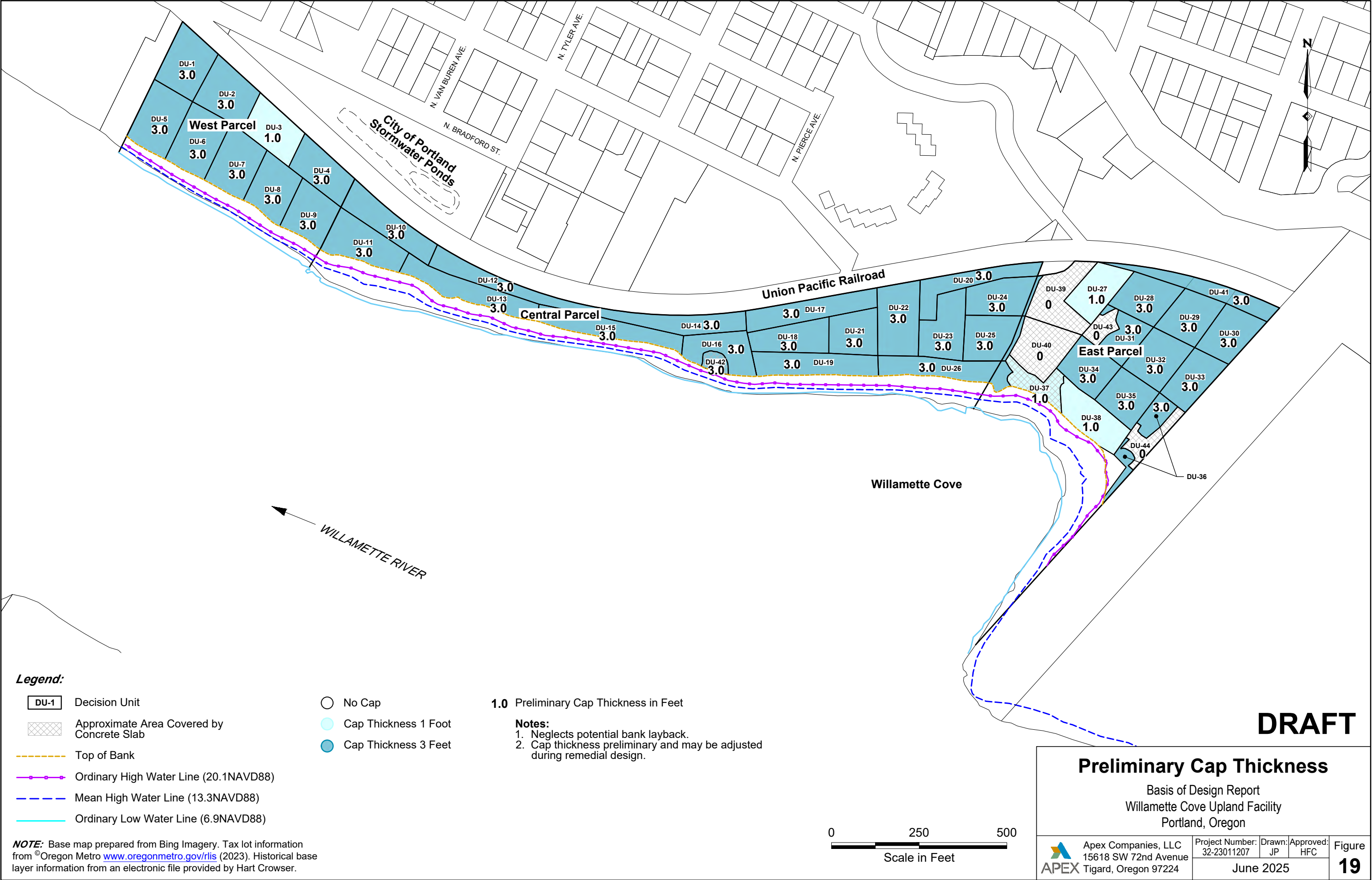
**APEX** Apex Companies, LLC  
15618 SW 72nd Avenue  
Tigard, Oregon 97224

Project Number: 32-23011207  
Drawn: JP  
Approved: HFC

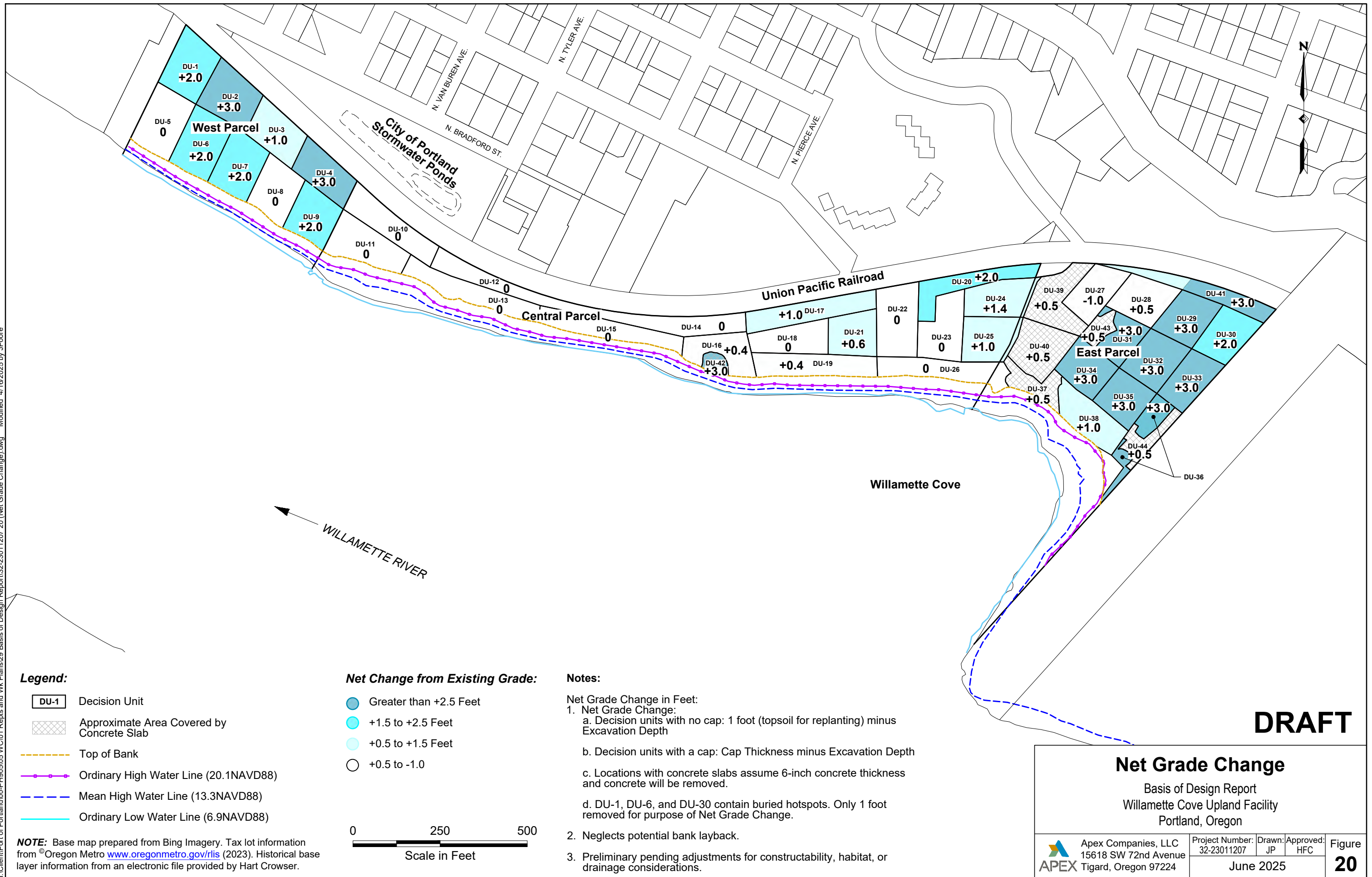
June 2025

Figure  
**18**

I:\Client\Port of Portland\00-Portland\05 WCO1 Repts and Wk Plans\29 Basis of Design Report\32-23011207 19 (Prelim. Cap Thickness).dwg Modified: 4/15/2025 by JPoore



I:\Client\Port of Portland\00-Portland\05 WCO1 Repts and Wk Plans\29 Basis of Design Report\32-23011207 20 (Net Grade Change).dwg Modified 4/16/2025 by JPoore



## ***Appendix A***

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### **Remedial Design Investigation Data Tables and Data Screening Summary Figures**

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Metals by EPA Method 6020B |         |          |        |        |          |        |          |        |  |
|-------------------------|---------------|-------------|-------------------------|--------------|-------------|----------------------------|---------|----------|--------|--------|----------|--------|----------|--------|--|
|                         |               |             |                         |              |             | Concentrations in mg/kg    |         |          |        |        |          |        |          |        |  |
|                         |               |             |                         |              |             | Antimony                   | Arsenic | Chromium | Copper | Lead   | Mercury  | Nickel | Selenium | Zinc   |  |
| Ecological ISM PRG      |               |             |                         |              |             | 2.7                        | 18      | 39       | 70     | 33     | 0.073    | 23     | 0.52     | 120    |  |
| Ecological ISM Hot Spot |               |             |                         |              |             | 27                         | 180     | 39       | 700    | 330    | 0.15     | 200    | 5.2      | 1,200  |  |
| West Parcel             | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 0.801 J                    | 6.24    | 37.4     | 180    | 74.8   | 0.0696 J | 27.1   | 0.514 U  | 151    |  |
|                         |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 0.712 J                    | 5.41    | 41.3     | 64.6   | 321    | 0.0863   | 30.9   | 0.516 U  | 140    |  |
|                         |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 0.529 U                    | 5.79    | 29.5     | 69.5   | 57.5   | 0.0813 J | 25.0   | 0.529 U  | 179    |  |
|                         | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 0.603 J                    | 5.41    | 21.5     | 119    | 96.2   | 0.0731 J | 18.9   | 0.505 U  | 99.4   |  |
|                         |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 0.515 U                    | 5.36    | 22.0     | 170    | 118    | 0.124    | 16.4   | 0.515 U  | 88.8   |  |
|                         |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 0.495 U                    | 5.21    | 15.5     | 41.9   | 24.4   | 0.0607 J | 14.7   | 0.495 U  | 78.0   |  |
|                         | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 0.547 U                    | 6.87    | 16.2     | 26.8   | 20.1   | 0.0438 U | 16.3   | 0.547 U  | 80.4   |  |
|                         |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 0.497 U                    | 6.65    | 16.5     | 25.8   | 15.8   | 0.0455 J | 17.1   | 0.497 U  | 72.2   |  |
|                         |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 0.536 U                    | 6.65    | 15.7     | 21.6   | 13.5   | 0.0497 J | 16.0   | 0.536 U  | 64.7   |  |
|                         | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 0.565 U                    | 6.57    | 16.3     | 29.1   | 23.7   | 0.0746 J | 23.9   | 0.565 U  | 89.4   |  |
|                         |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 0.515 U                    | 6.87    | 16.3     | 26.6   | 23.9   | 0.0596 J | 24.6   | 0.515 U  | 79.4   |  |
|                         |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 0.502 U                    | 7.63    | 18.4     | 34.0   | 45.1   | 0.0760 J | 22.4   | 0.502 U  | 115    |  |
|                         | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 0.992 J-                   | 8.89    | 52.3     | 344    | 62.1 J | 0.110    | 31.9 J | 0.369 J  | 191    |  |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 0.853                      | 8.98    | 46.2     | 303    | 50.8   | 0.104    | 31.2   | 0.341 J  | 211    |  |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 0.944                      | 8.43    | 50.6     | 308    | 57.2   | 0.352    | 32.6   | 0.316 J  | 197    |  |
|                         |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 0.551                      | 7.47    | 41.4     | 237    | 70.5   | 0.111    | 27.6   | 0.335 J  | 157    |  |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 0.832                      | 8.09    | 41.2     | 223    | 51.8   | 0.131    | 29.5   | 0.326 J  | 179    |  |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 0.572                      | 7.18    | 42.9     | 220    | 53.7   | 0.369    | 58.9   | 0.317 J  | 167    |  |
|                         |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 0.426 J                    | 6.73    | 38.4     | 159    | 55.9   | 0.153    | 27.1   | 0.309 J  | 147    |  |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 0.596                      | 6.29    | 36.8     | 144    | 68.1   | 0.107    | 26.2   | 0.300 J  | 224    |  |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 0.479 J                    | 6.56    | 47.1     | 214    | 118    | 0.273    | 31.3   | 0.304 J  | 195    |  |
|                         |               |             | 0-1                     | DU-5 (0-1) M | --          | 0.930 J                    | 8.77    | 49.7     | 318    | 56.7 J | 0.189 J  | 31.9 J | 0.342 J  | 200    |  |
|                         |               |             | 1-2                     | DU-5 (1-2) M | --          | 0.652                      | 7.58    | 41.8     | 227    | 58.7   | 0.204 J  | 38.7   | 0.326 J  | 168    |  |
|                         |               |             | 2-3                     | DU-5 (2-3) M | --          | 0.500 J                    | 6.53    | 40.8     | 172    | 80.7   | 0.178    | 28.2   | 0.304 J  | 189    |  |
|                         | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 0.539 U                    | 4.93    | 22.1     | 67.6   | 28.2   | 0.128    | 19.6   | 0.539 U  | 135    |  |
|                         |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 0.560 U                    | 4.89    | 25.2     | 91.6   | 40.0   | 0.156    | 21.8   | 0.560 U  | 124    |  |
|                         |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 0.526 U                    | 4.67    | 23.2     | 100    | 37.8   | 0.141    | 22.0   | 0.526 U  | 112    |  |
|                         | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 0.537 U                    | 4.37    | 19.2     | 36.0   | 23.3   | 0.304    | 19.3   | 0.537 U  | 126    |  |
|                         |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 0.547 U                    | 3.98    | 18.6     | 30.1   | 18.7   | 0.130    | 19.7   | 0.547 U  | 92.7   |  |
|                         |               |             | 2-3                     | DU-7 (2-3)   | 07/29/2022  | 0.536 U                    | 3.07    | 16.2     | 24.2   | 14.9   | 0.0927   | 19.1   | 0.536 U  | 75.1   |  |
|                         | DU-8          | ISM         | 0-1                     | DU-8 (0-1)   | 08/05/2022  | 0.560 U                    | 4.33    | 21.7     | 32.5   | 39.1   | 0.154    | 19.6   | 0.560 U  | 144    |  |
|                         |               |             | 1-2                     | DU-8 (1-2)   | 08/05/2022  | 0.501 U                    | 4.13    | 24.6     | 32.9   | 31.4   | 0.164    | 19.7   | 0.501 U  | 130    |  |
|                         |               |             | 2-3                     | DU-8 (2-3)   | 08/05/2022  | 0.545 U                    | 4.13    | 21.9     | 32.0   | 31.0   | 0.156    | 20.7   | 0.545 U  | 126    |  |
|                         | DU-9          | ISM         | 0-1                     | DU-9 (0-1)   | 08/08/2022  | 0.623 J                    | 5.25    | 30.6     | 40.6   | 28.2   | 0.160    | 26.5   | 0.506 U  | 154 J- |  |
|                         |               |             | 1-2                     | DU-9 (1-2)   | 08/08/2022  | 0.555 U                    | 4.81    | 27.8     | 34.6   | 40.7   | 0.141    | 24.4   | 0.555 U  | 115    |  |
|                         |               |             | 2-3                     | DU-9 (2-3)   | 08/08/2022  | 0.512 U                    | 5.12    | 31.0     | 37.4   | 21.5   | 0.141    | 26.2   | 0.512 U  | 122    |  |

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |   |         |  |          |  |        |    |       |  |         |       |        |       |          |      |       |  |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---|---------|--|----------|--|--------|----|-------|--|---------|-------|--------|-------|----------|------|-------|--|
|                         |               |             |                         |               |             | Concentrations in mg/kg    |   |         |  |          |  |        |    |       |  |         |       |        |       |          |      |       |  |
|                         |               |             |                         |               |             | Antimony                   |   | Arsenic |  | Chromium |  | Copper |    | Lead  |  | Mercury |       | Nickel |       | Selenium |      | Zinc  |  |
| Ecological ISM PRG      |               |             |                         |               |             | 2.7                        |   | 18      |  | 39       |  | 70     |    | 33    |  | 0.073   |       | 23     |       | 0.52     |      | 120   |  |
| Ecological ISM Hot Spot |               |             |                         |               |             | 27                         |   | 180     |  | 39       |  | 700    |    | 330   |  | 0.15    |       | 200    |       | 5.2      |      | 1,200 |  |
| Central Parcel          | DU-10         | ISM         | 0-1                     | DU-10 (0-1)   | 08/12/2022  | 0.541                      | U | 4.50    |  | 14.8     |  | 33.3   |    | 86.5  |  | 1.07    |       | 29.9   | 0.541 | U        | 106  |       |  |
|                         |               |             | 1-2                     | DU-10 (1-2)   | 08/12/2022  | 0.531                      | J | 5.56    |  | 15.3     |  | 33.6   |    | 54.8  |  | 0.829   |       | 27.5   | 0.513 | U        | 94.9 |       |  |
|                         |               |             | 2-3                     | DU-10 (2-3)   | 08/12/2022  | 0.514                      | J | 5.16    |  | 14.5     |  | 32.2   |    | 73.3  |  | 0.609   |       | 22.6   | 0.491 | U        | 117  |       |  |
|                         | DU-11         | ISM         | 0-1                     | DU-11 (0-1)A  | 08/10/2022  | 0.545                      | U | 4.60    |  | 23.6     |  | 38.5   |    | 53.1  |  | 0.721   |       | 29.3   | 0.545 | U        | 116  |       |  |
|                         |               |             | 0-1 FR                  | DU-11 (0-1)B  | 08/10/2022  | 0.520                      | U | 3.98    |  | 19.9     |  | 35.0   |    | 56.1  |  | 0.687   |       | 25.6   | 0.520 | U        | 104  |       |  |
|                         |               |             | 0-1 FR                  | DU-11 (0-1)C  | 08/10/2022  | 0.541                      | U | 4.14    |  | 22.2     |  | 36.7   |    | 50.6  |  | 0.726   |       | 26.5   | 0.541 | U        | 110  |       |  |
|                         |               |             | 1-2                     | DU-11 (1-2)A  | 08/10/2022  | 0.535                      | U | 3.93    |  | 21.4     |  | 33.0   |    | 42.8  |  | 0.504   |       | 27.0   | 0.535 | U        | 90.1 |       |  |
|                         |               |             | 1-2 FR                  | DU-11 (1-2)B  | 08/10/2022  | 0.508                      | U | 4.08    |  | 21.6     |  | 34.2   |    | 44.4  |  | 0.563   |       | 27.3   | 0.508 | U        | 93.1 |       |  |
|                         |               |             | 1-2 FR                  | DU-11 (1-2)C  | 08/10/2022  | 0.520                      | U | 4.15    |  | 22.0     |  | 37.3   |    | 49.0  |  | 0.633   |       | 28.2   | 0.520 | U        | 99.5 |       |  |
|                         |               |             | 2-3                     | DU-11 (2-3)A  | 08/10/2022  | 0.526                      | U | 4.23    |  | 22.0     |  | 32.2   |    | 41.0  |  | 0.382   |       | 26.1   | 0.526 | U        | 95.0 |       |  |
|                         |               |             | 2-3 FR                  | DU-11 (2-3)B  | 08/10/2022  | 0.522                      | U | 4.19    |  | 21.0     |  | 35.2   |    | 43.3  |  | 0.604   |       | 26.4   | 0.522 | U        | 95.0 |       |  |
|                         |               |             | 2-3 FR                  | DU-11 (2-3)C  | 08/10/2022  | 0.497                      | U | 3.90    |  | 20.2     |  | 35.1   |    | 34.5  |  | 0.590   |       | 25.8   | 0.497 | U        | 86.5 |       |  |
|                         |               |             | 0-1                     | DU-11 (0-1) M | --          | 0.545                      | U | 4.24    |  | 21.9     |  | 36.7   |    | 53.3  |  | 0.711   |       | 27.1   | 0.545 | U        | 110  |       |  |
|                         |               |             | 1-2                     | DU-11 (1-2) M | --          | 0.535                      | U | 4.05    |  | 21.7     |  | 34.8   |    | 45.4  |  | 0.567   |       | 27.5   | 0.535 | U        | 94.2 |       |  |
|                         |               |             | 2-3                     | DU-11 (2-3) M | --          | 0.526                      | U | 4.11    |  | 21.1     |  | 34.2   |    | 39.6  |  | 0.525   |       | 26.1   | 0.526 | U        | 92.2 |       |  |
|                         | DU-12         | ISM         | 0-1                     | DU-12 (0-1)   | 08/16/2022  | 0.830                      | J | 4.95    |  | 14.8     |  | 78.9   |    | 165   |  | 0.292   |       | 19.8   | 0.504 | U        | 166  |       |  |
|                         |               |             | 1-2                     | DU-12 (1-2)   | 08/16/2022  | 0.493                      | U | 4.26    |  | 14.0     |  | 55.7   |    | 131   |  | 0.275   |       | 19.0   | 0.493 | U        | 104  |       |  |
|                         |               |             | 2-3                     | DU-12 (2-3)   | 08/16/2022  | 0.551                      | U | 3.62    |  | 13.7     |  | 41     |    | 70.8  |  | 0.207   |       | 17.8   | 0.551 | U        | 79.7 |       |  |
|                         | DU-13         | ISM         | 0-1                     | DU-13 (0-1)A  | 08/29/2022  | 0.792                      | J | 6.04    |  | 14.2     |  | 94.3   |    | 241   |  | 1.15    |       | 21.4   | 0.563 | U        | 204  |       |  |
|                         |               |             | 0-1 FR                  | DU-13 (0-1)B  | 08/29/2022  | 0.562                      | U | 5.53    |  | 14.2     |  | 60.4   |    | 180   |  | 0.895   |       | 19.6   | 0.562 | U        | 155  |       |  |
|                         |               |             | 0-1 FR                  | DU-13 (0-1)C  | 08/29/2022  | 0.923                      | J | 5.41    |  | 14.1     |  | 55.5   |    | 199   |  | 0.848   |       | 19.4   | 0.541 | U        | 155  |       |  |
|                         |               |             | 1-2                     | DU-13 (1-2)A  | 08/30/2022  | 0.513                      | U | 4.79    |  | 13.8     |  | 53.0   |    | 86.5  |  | 0.785   |       | 18.6   | 0.513 | U        | 109  |       |  |
|                         |               |             | 1-2 FR                  | DU-13 (1-2)B  | 08/30/2022  | 0.520                      | U | 4.61    |  | 13.7     |  | 43.7   |    | 92.3  |  | 0.572   |       | 18.4   | 0.520 | U        | 103  |       |  |
|                         |               |             | 1-2 FR                  | DU-13 (1-2)C  | 08/30/2022  | 0.540                      | U | 4.72    |  | 13.8     |  | 44.7   |    | 154   |  | 0.614   |       | 18.1   | 0.540 | U        | 128  |       |  |
|                         |               |             | 2-3                     | DU-13 (2-3)A  | 08/31/2022  | 0.562                      | U | 3.75    |  | 12.6     |  | 43.3   |    | 175   |  | 0.745   |       | 18.4   | 0.562 | U        | 127  |       |  |
|                         |               |             | 2-3 FR                  | DU-13 (2-3)B  | 08/31/2022  | 0.522                      | U | 3.89    |  | 12.6     |  | 40.6   |    | 92.4  |  | 0.698   |       | 17.3   | 0.522 | U        | 90.6 |       |  |
|                         |               |             | 2-3 FR                  | DU-13 (2-3)C  | 08/31/2022  | 0.548                      | U | 4.04    |  | 12.6     |  | 54.2   |    | 94.6  |  | 0.769   |       | 17.7   | 0.548 | U        | 97.3 |       |  |
|                         |               |             | 0-1                     | DU-13 (0-1) M | --          | 0.759                      | J | 5.66    |  | 14.2     |  | 70.1   |    | 207   |  | 0.964   |       | 20.1   | 0.563 | U        | 171  |       |  |
|                         |               |             | 1-2                     | DU-13 (1-2) M | --          | 0.540                      | U | 4.71    |  | 13.8     |  | 47.1   |    | 111   |  | 0.657   |       | 18.4   | 0.540 | U        | 113  |       |  |
|                         |               |             | 2-3                     | DU-13 (2-3) M | --          | 0.562                      | U | 3.89    |  | 12.6     |  | 46.0   |    | 121   |  | 0.737   |       | 17.8   | 0.562 | U        | 105  |       |  |
|                         | DU-14         | ISM         | 0-1                     | DU-14 (0-1)   | 08/17/2022  | 2.81                       |   | 6.14    |  | 22.9     |  | 73.5   |    | 134   |  | 1.33    |       | 24.3   | 0.514 | U        | 147  |       |  |
|                         |               |             | 1-2                     | DU-14 (1-2)   | 08/17/2022  | 7.38                       |   | 6.87    |  | 21.6     |  | 122    |    | 240   |  | 3.10    |       | 23.7   | 0.519 | U        | 204  |       |  |
|                         |               |             | 2-3                     | DU-14 (2-3)   | 08/17/2022  | 3.04                       |   | 5.66    |  | 20.6     |  | 185    |    | 162   |  | 2.50    |       | 24.8   | 0.493 | U        | 164  |       |  |
|                         | DU-15         | ISM         | 0-1                     | DU-15 (0-1)   | 08/19/2022  | 2.81                       |   | 5.04    |  | 16.0     |  | 95.4   |    | 131   |  | 0.750   |       | 21.7   | 0.506 | U        | 131  |       |  |
|                         |               |             | 1-2                     | DU-15 (1-2)   | 08/19/2022  | 0.576                      | J | 3.75    |  | 14.0     |  | 57.7   |    | 68.6  |  | 1.28    |       | 19.3   | 0.517 | U        | 120  |       |  |
|                         |               |             | 2-3                     | DU-15 (2-3)   | 08/19/2022  | 0.492                      | U | 2.91    |  | 11.2     |  | 36.2   |    | 63.6  |  | 0.563   |       | 17.6   | 0.492 | U        | 76.8 |       |  |
|                         | DU-16         | ISM         | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 4.29                       |   | 8.31    |  | 24.8     |  | 93.4   | J+ | 237   |  | 2.43    |       | 25.6   | 0.543 | U        | 371  |       |  |
|                         |               |             | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 2.31                       |   | 7.56    |  | 26.6     |  | 131    | J+ | 265   |  | 5.12    |       | 28.1   | 0.494 | U        | 355  |       |  |
|                         |               |             | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 3.04                       |   | 7.89    |  | 17.9     |  | 127    | J+ | 306   |  | 3.87    |       | 23.2   | 0.539 | U        | 283  |       |  |
|                         |               |             | 0-1                     | DU-16 (0-1) M | --          | 3.21                       |   | 7.92    |  | 23.1     |  | 117    | J  | 269   |  | 3.81    |       | 25.6   | 0.543 | U        | 336  |       |  |
|                         |               |             | 1-2                     | DU-16 (1-2)   | 11/7/2022   | 2.29                       |   | 6.92    |  | 13.6     |  | 71.8   |    | 151   |  | 1.69    |       | 18.5   | 0.521 | U        | 139  |       |  |
|                         | 2-3           | DU-16 (2-3) | 11/7/2022               | 0.499         | U           | 3.72                       |   | 12.9    |  | 29.1     |  | 37.5   |    | 0.429 |  | 16.8    | 0.539 | J      | 71.3  |          |      |       |  |

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |        |      |         |        |          |       |       |      |     |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|--------|------|---------|--------|----------|-------|-------|------|-----|
|                         |               |             |                         |               |             | Concentrations in mg/kg    |         |          |        |      |         |        |          |       |       |      |     |
|                         |               |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper | Lead | Mercury | Nickel | Selenium | Zinc  |       |      |     |
| Ecological ISM PRG      |               |             |                         |               |             | 2.7                        | 18      | 39       | 70     | 33   | 0.073   | 23     | 0.52     | 120   |       |      |     |
| Ecological ISM Hot Spot |               |             |                         |               |             | 27                         | 180     | 39       | 700    | 330  | 0.15    | 200    | 5.2      | 1,200 |       |      |     |
| Central Parcel          | DU-17         | ISM         | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 1.06                       |         | 4.95     | 12.4   | 59.2 | 81.4    | 0.575  | 16.4     | 0.499 | U     | 156  |     |
|                         |               |             | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 0.511                      | U       | 3.72     | 11.8   | 34.3 | 62.5    | 0.356  | 16.3     | 0.511 | U     | 70.6 |     |
|                         |               |             | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 0.504                      | U       | 3.16     | 11.1   | 26.8 | 35.1    | 0.121  | 14.6     | 0.504 | U     | 58.4 |     |
|                         | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 0.874                      | J       | 6.99     | 22.1   | 71.0 | 198     | 0.965  | 22.5     | 0.531 | U     | 146  |     |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 1.41                       |         | 10.9     | 22.8   | 111  | 198     | 1.72   | 23.5     | 0.505 | U     | 173  |     |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 1.06                       |         | 8.94     | 20.8   | 87.7 | 280     | 1.20   | 23.3     | 0.499 | U     | 204  |     |
|                         |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 0.491                      | U       | 5.38     | 14.0   | 58.2 | 179     | 0.806  | 18.3     | 0.491 | U     | 156  |     |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 0.495                      | U       | 5.98     | 15.3   | 79.5 | 150     | 1.06   | 21.8     | 0.495 | U     | 158  |     |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 0.490                      | U       | 6.22     | 14.3   | 77.7 | 119     | 0.985  | 18.3     | 0.490 | U     | 133  |     |
|                         |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 0.502                      | U       | 3.77     | 11.9   | 30.8 | 55.4    | 0.296  | 16.6     | 0.502 | U     | 94.4 |     |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 0.489                      | U       | 5.31     | 13.0   | 59.9 | 92.3    | 0.681  | 17.8     | 0.489 | U     | 105  |     |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 0.489                      | U       | 5.63     | 13.9   | 53.0 | 75.2    | 0.679  | 18.3     | 0.497 | J     | 118  |     |
|                         |               |             | 0-1                     | DU-18 (0-1) M | --          | 1.11                       | J       | 8.94     | 21.9   | 89.9 | 225     | 1.30   | 23.1     | 0.531 | U     | 174  |     |
|                         |               |             | 1-2                     | DU-18 (1-2) M | --          | 0.495                      | U       | 5.86     | 14.5   | 71.8 | 149     | 0.950  | 19.5     | 0.495 | U     | 149  |     |
|                         |               |             | 2-3                     | DU-18 (2-3) M | --          | 0.502                      | U       | 4.90     | 12.9   | 47.9 | 74      | 0.552  | 17.6     | 0.496 | J     | 106  |     |
|                         | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 1.39                       |         | 7.67     | 13.2   | 107  | 257     | 0.666  | 16.5     | 0.541 | U     | 215  |     |
|                         |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 0.957                      | J       | 11.2     | 12.0   | 110  | 161     | 1.08   | 15.5     | 0.555 | U     | 198  |     |
|                         |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 0.926                      | J       | 5.68     | 11.2   | 44.9 | 70.8    | 0.327  | 15.5     | 0.522 | U     | 113  |     |
|                         | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 1.69                       |         | 5.69     | 19.6   | 58.4 | 76.2    | 0.314  | 22.7     | 0.517 | U     | 117  |     |
|                         |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 0.536                      | U       | 4.08     | 19.5   | 25.8 | 17.7    | 0.136  | 28.4     | 0.536 | U     | 87.3 |     |
|                         |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 0.511                      | U       | 3.68     | 16.7   | 23.0 | 14.3    | 0.101  | 21.1     | 0.511 | U     | 90.4 |     |
|                         | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 2.73                       |         | 10.5     | 14.8   | 128  | J+      | 295    | 0.776    | 20.3  | 0.493 | U    | 242 |
|                         |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 1.01                       |         | 4.93     | 11.8   | 56.2 | J+      | 116    | 0.276    | 17.7  | 0.500 | U    | 180 |
|                         |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 0.497                      | U       | 4.48     | 11.6   | 45.9 | J+      | 89.7   | 0.154    | 18.0  | 0.497 | U    | 109 |
|                         | DU-22         | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 2.89                       |         | 6.48     | 19.0   | 82.3 | 129     | 0.592  | 21.0     | 0.530 | U     | 167  |     |
|                         |               |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 2.79                       |         | 5.77     | 18.0   | 86.7 | 148     | 0.602  | 21.4     | 0.506 | U     | 169  |     |
|                         |               |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 2.03                       |         | 5.83     | 19.6   | 96.6 | 190     | 0.430  | 23.2     | 0.538 | U     | 178  |     |
|                         |               |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 0.922                      | J       | 4.41     | 17.4   | 31.7 | 47.8    | 0.231  | 21.1     | 0.494 | U     | 125  |     |
|                         |               |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 2.63                       |         | 4.33     | 16.1   | 47.4 | 72.3    | 0.349  | 20.8     | 0.512 | U     | 109  |     |
|                         |               |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 2.04                       |         | 4.53     | 18.8   | 44.8 | 65.4    | 0.161  | 22.6     | 0.497 | U     | 164  |     |
|                         |               |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 0.731                      | J       | 4.45     | 17.2   | 29.4 | 51.9    | 0.190  | 20.2     | 0.499 | U     | 96.5 |     |
|                         |               |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 0.839                      | J       | 4.43     | 18.0   | 54.0 | 57.5    | 0.376  | 21.4     | 0.509 | U     | 98.6 |     |
|                         |               |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 1.09                       | J       | 3.92     | 16.0   | 32.6 | 43.4    | 0.355  | 20.8     | 0.557 | U     | 123  |     |
|                         |               |             | 0-1                     | DU-22 (0-1) M | --          | 2.57                       |         | 6.03     | 18.9   | 88.5 | 156     | 0.541  | 21.9     | 0.538 | U     | 171  |     |
|                         |               |             | 1-2                     | DU-22 (1-2) M | --          | 1.86                       | J       | 4.42     | 17.4   | 41.3 | 61.8    | 0.247  | 21.5     | 0.512 | U     | 133  |     |
|                         |               |             | 2-3                     | DU-22 (2-3) M | --          | 0.887                      | J       | 4.27     | 17.1   | 38.7 | 50.9    | 0.307  | 20.8     | 0.557 | U     | 106  |     |
|                         | DU-23         | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 1.62                       |         | 5.99     | 22.1   | 150  | 276     | 1.02   | 22.9     | 0.497 | U     | 184  |     |
|                         |               |             | 1-2                     | DU-23 (1-2)   | 10/12/2022  | 0.61                       | J       | 4.63     | 18.4   | 69.5 | 70.9    | 0.545  | 20.5     | 0.518 | U     | 127  |     |
|                         |               |             | 2-3                     | DU-23 (2-3)   | 10/12/2022  | 0.498                      | J       | 3.82     | 15.6   | 41.9 | 82.2    | 0.426  | 18.8     | 0.488 | U     | 99   |     |
|                         | DU-24         | ISM         | 0-1                     | DU-24 (0-1)   | 09/21/2022  | 0.546                      | U       | 4.16     | 15.5   | 39.9 | 48.8    | 0.276  | 19.2     | 0.546 | U     | 117  |     |
|                         |               |             | 1-2                     | DU-24 (1-2)   | 09/21/2022  | 0.496                      | U       | 3.56     | 15.0   | 31.1 | 23.2    | 0.175  | 20.6     | 0.496 | U     | 124  |     |
|                         |               |             | 2-3                     | DU-24 (2-3)   | 09/21/2022  | 0.501                      | U       | 2.84     | 10.9   | 17.6 | 13.8    | 0.0928 | 18.5     | 0.501 | U     | 83.1 |     |
|                         | DU-25         | ISM         | 0-1                     | DU-25 (0-1)   | 09/23/2022  | 0.822                      | J       | 5.24     | 20.2   | 226  | 144     | 0.762  | 21.3     | 0.491 | U     | 242  |     |
|                         |               |             | 1-2                     | DU-25 (1-2)   | 09/23/2022  | 0.493                      | U       | 3.29     | 14.5   | 48.5 | 113     | 0.213  | 19.6     | 0.493 | U     | 202  |     |
|                         |               |             | 2-3                     | DU-25 (2-3)   | 09/23/2022  | 0.496                      | U       | 3.17     | 12.6   | 30.0 | 43.2    | 0.116  | 18.7     | 0.496 | U     | 138  |     |

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |   |         |  |          |  |        |   |      |  |         |   |        |  |          |   |       |      |
|------------------------------|----------------------|-------------|-------------------------|---------------|-------------|----------------------------|---|---------|--|----------|--|--------|---|------|--|---------|---|--------|--|----------|---|-------|------|
|                              |                      |             |                         |               |             | Concentrations in mg/kg    |   |         |  |          |  |        |   |      |  |         |   |        |  |          |   |       |      |
|                              |                      |             |                         |               |             | Antimony                   |   | Arsenic |  | Chromium |  | Copper |   | Lead |  | Mercury |   | Nickel |  | Selenium |   | Zinc  |      |
| Ecological ISM PRG           |                      |             |                         |               |             | 2.7                        |   | 18      |  | 39       |  | 70     |   | 33   |  | 0.073   |   | 23     |  | 0.52     |   | 120   |      |
| Ecological ISM Hot Spot      |                      |             |                         |               |             | 27                         |   | 180     |  | 39       |  | 700    |   | 330  |  | 0.15    |   | 200    |  | 5.2      |   | 1,200 |      |
| Central Parcel               | DU-26                | ISM         | 0-1                     | DU-26 (0-1)A  | 11/09/2022  | 3.22                       |   | 9.50    |  | 18.8     |  | 152    |   | 330  |  | 1.95    |   | 20.7   |  | 0.605    | J |       | 260  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)B  | 11/09/2022  | 4.79                       |   | 9.01    |  | 17.1     |  | 129    |   | 302  |  | 1.28    |   | 19.4   |  | 0.502    | J |       | 244  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)C  | 11/09/2022  | 3.61                       |   | 6.81    |  | 19.1     |  | 105    |   | 292  |  | 1.53    |   | 20.4   |  | 0.522    | J |       | 235  |
|                              |                      |             | 1-2                     | DU-26 (1-2)A  | 11/10/2022  | 1.4                        |   | 5.16    |  | 14.7     |  | 80.7   |   | 151  |  | 0.944   |   | 18.3   |  | 0.511    | U |       | 206  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)B  | 11/10/2022  | 0.728                      | J | 4.61    |  | 13.2     |  | 48.5   |   | 121  |  | 0.397   |   | 17.2   |  | 0.558    | J |       | 182  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)C  | 11/10/2022  | 1.06                       |   | 11.6    |  | 15.5     |  | 79.8   |   | 143  |  | 1.25    |   | 19.9   |  | 0.532    | U |       | 186  |
|                              |                      |             | 2-3                     | DU-26 (2-3)A  | 11/11/2022  | 0.491                      | U | 3.92    |  | 14.6     |  | 36.1   |   | 65.2 |  | 0.258   |   | 18.1   |  | 0.491    | U |       | 112  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)B  | 11/11/2022  | 0.521                      | U | 4.33    |  | 12.4     |  | 41.6   |   | 59.8 |  | 0.820   |   | 18.3   |  | 0.521    | U |       | 108  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)C  | 11/11/2022  | 0.529                      | J | 4.75    |  | 13.3     |  | 39.6   |   | 76.1 |  | 0.537   |   | 17.5   |  | 0.512    | U |       | 138  |
|                              |                      |             | 0-1                     | DU-26 (0-1) M | --          | 3.87                       |   | 8.44    |  | 18.3     |  | 129    |   | 308  |  | 1.59    |   | 20.2   |  | 0.543    | J |       | 246  |
|                              |                      |             | 1-2                     | DU-26 (1-2) M | --          | 1.06                       | J | 7.12    |  | 14.5     |  | 69.7   |   | 138  |  | 0.864   |   | 18.5   |  | 0.534    | J |       | 191  |
|                              |                      |             | 2-3                     | DU-26 (2-3) M | --          | 0.514                      | J | 4.33    |  | 13.4     |  | 39.1   |   | 67.0 |  | 0.538   |   | 18.0   |  | 0.521    | U |       | 119  |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)   | 11/30/2022  | 0.512                      | U | 4.38    |  | 17.8     |  | 36.3   |   | 53.3 |  | 0.226   |   | 23.3   |  | 0.531    | J |       | 126  |
|                              |                      |             | 1-2                     | DU-42 (1-2)   | 11/30/2022  | 0.667                      | J | 4.11    |  | 18.4     |  | 25.4   |   | 30.3 |  | 0.186   |   | 22.6   |  | 0.549    | U |       | 109  |
|                              |                      |             | 2-3                     | DU-42 (2-3)   | 11/30/2022  | 0.531                      | U | 3.76    |  | 17.4     |  | 21.1   |   | 20.1 |  | 0.125   |   | 20.7   |  | 0.531    | U |       | 87.0 |
| East Parcel                  | DU-27                | ISM         | 0-1                     | DU-27 (0-1)   | 10/05/2022  | 1.3                        |   | 14.5    |  | 19.8     |  | 204    |   | 46.1 |  | 0.184   |   | 21.1   |  | 0.583    | J |       | 173  |
|                              |                      |             | 1-2                     | DU-27 (1-2)   | 10/05/2022  | 0.488                      | U | 8.72    |  | 16.9     |  | 81.2   |   | 39.1 |  | 0.0555  | J | 21.3   |  | 0.488    | U |       | 130  |
|                              |                      |             | 2-3                     | DU-27 (2-3)   | 10/05/2022  | 1.15                       |   | 15.8    |  | 15.5     |  | 45.6   |   | 55.4 |  | 0.0643  | J | 18.4   |  | 0.512    | U |       | 139  |
|                              | DU-28                | ISM         | 0-1                     | DU-28 (0-1)   | 09/14/2022  | 2.32                       |   | 10.5    |  | 16.4     |  | 184    |   | 78.1 |  | 0.649   |   | 17.9   |  | 0.513    | U |       | 267  |
|                              |                      |             | 1-2                     | DU-28 (1-2)   | 09/14/2022  | 2.87                       |   | 13.3    |  | 17.3     |  | 327    |   | 74.1 |  | 0.706   |   | 17.2   |  | 0.493    | U |       | 231  |
|                              |                      |             | 2-3                     | DU-28 (2-3)   | 09/14/2022  | 4.79                       |   | 7.40    |  | 16.9     |  | 229    |   | 113  |  | 0.207   |   | 19.6   |  | 0.522    | U |       | 275  |
|                              | DU-29                | ISM         | 0-1                     | DU-29 (0-1)   | 09/15/2022  | 1.08                       |   | 6.95    |  | 12.1     |  | 69.3   | J | 103  |  | 0.0595  | J | 18.1   |  | 0.518    | U |       | 164  |
|                              |                      |             | 1-2                     | DU-29 (1-2)   | 09/15/2022  | 1.02                       | J | 5.08    |  | 10.4     |  | 44.3   |   | 41.1 |  | 0.0436  | U | 15.3   |  | 0.545    | U |       | 100  |
|                              |                      |             | 2-3                     | DU-29 (2-3)   | 09/15/2022  | 0.511                      | U | 3.60    |  | 10.0     |  | 27.8   |   | 45.7 |  | 0.0409  | U | 15.2   |  | 0.511    | U |       | 92.7 |
|                              | DU-30                | ISM         | 0-1                     | DU-30 (0-1)   | 09/16/2022  | 1.66                       |   | 4.22    |  | 14.5     |  | 63.4   |   | 131  |  | 0.0829  |   | 18.3   |  | 0.500    | U |       | 179  |
|                              |                      |             | 1-2                     | DU-30 (1-2)   | 09/16/2022  | 2.09                       |   | 3.72    |  | 13.9     |  | 79.8   |   | 202  |  | 0.05    | J | 17.7   |  | 0.512    | U |       | 228  |
|                              |                      |             | 2-3                     | DU-30 (2-3)   | 09/16/2022  | 6.81                       |   | 4.14    |  | 11.6     |  | 86.6   |   | 220  |  | 0.159   |   | 15.7   |  | 0.501    | U |       | 152  |
|                              | DU-31                | ISM         | 0-1                     | DU-31 (0-1)   | 11/03/2022  | 1.85                       |   | 6.09    |  | 14.5     |  | 35.4   |   | 44.8 |  | 0.0479  | J | 16.5   |  | 0.491    | U |       | 116  |
|                              |                      |             | 1-2                     | DU-31 (1-2)   | 11/03/2022  | 0.743                      | J | 4.98    |  | 12.6     |  | 49.2   |   | 34.1 |  | 0.067   | J | 17.0   |  | 0.516    | U |       | 140  |
|                              |                      |             | 2-3                     | DU-31 (2-3)   | 11/03/2022  | 0.735                      | J | 5.96    |  | 12.9     |  | 68.2   |   | 25   |  | 0.0415  | U | 16.7   |  | 0.519    | U |       | 109  |

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit           | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |    |         |  |          |  |        |   |      |        |         |      |        |       |          |      |       |  |  |
|---------------------------|-------------------------|-------------|-------------------------|---------------|-------------|----------------------------|----|---------|--|----------|--|--------|---|------|--------|---------|------|--------|-------|----------|------|-------|--|--|
|                           |                         |             |                         |               |             | Concentrations in mg/kg    |    |         |  |          |  |        |   |      |        |         |      |        |       |          |      |       |  |  |
|                           |                         |             |                         |               |             | Antimony                   |    | Arsenic |  | Chromium |  | Copper |   | Lead |        | Mercury |      | Nickel |       | Selenium |      | Zinc  |  |  |
| Ecological ISM PRG        |                         |             |                         |               |             | 2.7                        |    | 18      |  | 39       |  | 70     |   | 33   |        | 0.073   |      | 23     |       | 0.52     |      | 120   |  |  |
| Ecological ISM Hot Spot   |                         |             |                         |               |             | 27                         |    | 180     |  | 39       |  | 700    |   | 330  |        | 0.15    |      | 200    |       | 5.2      |      | 1,200 |  |  |
| East Parcel               | DU-32                   | ISM         | 0-1                     | DU-32 (0-1)   | 09/22/2022  | 0.879                      | J  | 8.99    |  | 12.4     |  | 31.6   |   | 28.9 | 0.0428 | U       | 15.7 |        | 0.535 | U        | 118  |       |  |  |
|                           |                         |             | 1-2                     | DU-32 (1-2)   | 09/22/2022  | 0.535                      | U  | 7.10    |  | 11.1     |  | 23.4   |   | 20.9 | 0.0428 | U       | 15.3 |        | 0.535 | U        | 104  |       |  |  |
|                           |                         |             | 2-3                     | DU-32 (2-3)   | 09/22/2022  | 0.492                      | U  | 3.56    |  | 9.91     |  | 20.1   |   | 34.1 | 0.0394 | U       | 14.2 |        | 0.492 | U        | 90.2 |       |  |  |
|                           | DU-33                   | ISM         | 0-1                     | DU-33 (0-1)   | 09/20/2022  | 2.31                       |    | 6.62    |  | 9.85     |  | 79.8   |   | 88.8 | 0.0435 | J       | 14.9 |        | 0.491 | U        | 290  |       |  |  |
|                           |                         |             | 1-2                     | DU-33 (1-2)   | 09/20/2022  | 1.84                       |    | 9.60    |  | 12.3     |  | 96.6   |   | 66.2 | 0.0413 | U       | 17.8 |        | 0.516 | U        | 354  |       |  |  |
|                           |                         |             | 2-3                     | DU-33 (2-3)   | 09/20/2022  | 0.666                      | J  | 5.35    |  | 10.3     |  | 52.6   |   | 42.8 | 0.0423 | U       | 16.4 |        | 0.529 | U        | 234  |       |  |  |
|                           | DU-34                   | ISM         | 0-1                     | DU-34 (0-1)   | 09/27/2022  | 1.05                       |    | 5.13    |  | 14.0     |  | 32.6   |   | 41.4 | 0.044  | J       | 22.0 |        | 0.523 | U        | 182  |       |  |  |
|                           |                         |             | 1-2                     | DU-34 (1-2)   | 09/27/2022  | 0.557                      | J  | 4.95    |  | 14.6     |  | 33.2   |   | 31.9 | 0.0447 | J       | 24.3 |        | 0.498 | U        | 177  |       |  |  |
|                           |                         |             | 2-3                     | DU-34 (2-3)   | 09/27/2022  | 0.537                      | U  | 3.69    |  | 12.1     |  | 33.1   |   | 25.9 | 0.043  | U       | 20.1 |        | 0.537 | U        | 222  |       |  |  |
|                           | DU-35                   | ISM         | 0-1                     | DU-35 (0-1)   | 10/07/2022  | 0.512                      | U  | 4.40    |  | 14.5     |  | 52.9   |   | 22.6 | 0.0415 | J       | 17.8 |        | 0.512 | U        | 174  |       |  |  |
|                           |                         |             | 1-2                     | DU-35 (1-2)   | 10/07/2022  | 0.531                      | U  | 3.81    |  | 12.3     |  | 29.1   |   | 19.0 | 0.0425 | U       | 15.3 |        | 0.531 | U        | 168  |       |  |  |
|                           |                         |             | 2-3                     | DU-35 (2-3)   | 10/07/2022  | 0.524                      | U  | 3.37    |  | 9.45     |  | 27.8   |   | 12.4 | 0.042  | U       | 14.2 |        | 0.524 | U        | 141  |       |  |  |
|                           | DU-36                   | ISM         | 0-1                     | DU-36 (0-1)   | 11/01/2022  | 3.77                       | J+ | 5.03    |  | 20.1     |  | 57.9   |   | 73.2 | 0.0398 | U       | 22.6 |        | 0.498 | U        | 266  |       |  |  |
|                           |                         |             | 1-2                     | DU-36 (1-2)   | 11/01/2022  | 3.44                       |    | 4.23    |  | 17.3     |  | 56.7   |   | 130  | 0.0606 | J       | 19.0 |        | 0.520 | U        | 222  |       |  |  |
|                           |                         |             | 2-3                     | DU-36 (2-3)   | 11/01/2022  | 3.62                       |    | 4.12    |  | 14.4     |  | 46.3   |   | 63.3 | 0.0449 | J       | 18.3 |        | 0.526 | U        | 190  |       |  |  |
|                           | DU-38                   | ISM         | 0-1                     | DU-38 (0-1)A  | 11/14/2022  | 1.31                       |    | 3.69    |  | 13.1     |  | 27.7   |   | 30.5 | 0.039  | J       | 16.5 |        | 0.486 | U        | 109  |       |  |  |
|                           |                         |             | 0-1 FR                  | DU-38 (0-1)B  | 11/14/2022  | 0.959                      | J  | 3.71    |  | 11.9     |  | 22.8   |   | 25.8 | 0.0454 | J       | 15.0 |        | 0.534 | U        | 107  |       |  |  |
|                           |                         |             | 0-1 FR                  | DU-38 (0-1)C  | 11/14/2022  | 0.629                      | J  | 3.66    |  | 12.4     |  | 23.2   |   | 27.1 | 0.0431 | J       | 16.3 |        | 0.536 | U        | 110  |       |  |  |
|                           |                         |             | 1-2                     | DU-38 (1-2)A  | 11/16/2022  | 0.661                      | J  | 3.20    |  | 10.7     |  | 18.3   |   | 19.3 | 0.0415 | U       | 13.7 |        | 0.519 | U        | 84.4 |       |  |  |
|                           |                         |             | 1-2 FR                  | DU-38 (1-2)B  | 11/16/2022  | 4.88                       |    | 3.76    |  | 10.9     |  | 56.0   |   | 76.7 | 0.0407 | U       | 15.3 |        | 0.508 | U        | 102  |       |  |  |
|                           |                         |             | 1-2 FR                  | DU-38 (1-2)C  | 11/16/2022  | 1.84                       |    | 3.35    |  | 12.3     |  | 23.0   |   | 31.4 | 0.0411 | U       | 16.0 |        | 0.514 | U        | 94.6 |       |  |  |
|                           |                         |             | 2-3                     | DU-38 (2-3)A  | 11/17/2022  | 0.998                      |    | 3.58    |  | 13.5     |  | 30.3   |   | 19.9 | 0.0396 | U       | 17.1 |        | 0.495 | U        | 83.3 |       |  |  |
|                           |                         |             | 2-3 FR                  | DU-38 (2-3)B  | 11/17/2022  | 3.71                       |    | 3.63    |  | 12.7     |  | 51.4   |   | 51.3 | 0.039  | U       | 16.5 |        | 0.487 | U        | 108  |       |  |  |
|                           |                         |             | 2-3 FR                  | DU-38 (2-3)C  | 11/17/2022  | 0.921                      | J  | 4.06    |  | 13.6     |  | 26.0   |   | 22.1 | 0.0421 | U       | 16.8 |        | 0.527 | U        | 107  |       |  |  |
|                           |                         |             | 0-1                     | DU-38 (0-1) M | --          | 0.966                      | J  | 3.69    |  | 12.5     |  | 24.6   |   | 27.8 | 0.043  | J       | 15.9 |        | 0.536 | U        | 109  |       |  |  |
|                           |                         |             | 1-2                     | DU-38 (1-2) M | --          | 2.46                       | J  | 3.44    |  | 11.3     |  | 32.4   | J | 42.5 | J      | 0.042   | U    | 15.0   |       | 0.519    | U    | 93.7  |  |  |
|                           |                         |             | 2-3                     | DU-38 (2-3) M | --          | 1.88                       | J  | 3.76    |  | 13.3     |  | 35.9   |   | 31.1 |        | 0.042   | U    | 16.8   |       | 0.527    | U    | 99.4  |  |  |
| East Parcel Concrete Slab | DU-37                   | Composite   | 0-1                     | DU-37 (0-1)   | 11/28/2022  | 0.495                      | U  | 3.72    |  | 17.4     |  | 26.1   |   | 39.3 | 0.0396 | U       | 18.6 |        | 0.572 | J        | 74.4 |       |  |  |
|                           |                         |             | 1-2                     | DU-37 (1-2)   | 11/28/2022  | 0.495                      | U  | 3.00    |  | 14.9     |  | 21.4   |   | 12.6 | 0.043  | J       | 18.8 |        | 0.537 | J        | 61.5 |       |  |  |
|                           |                         |             | 2-3                     | DU-37 (2-3)   | 11/28/2022  | 0.513                      | U  | 2.85    |  | 13.4     |  | 16.9   |   | 8.96 | 0.0411 | U       | 17.1 |        | 0.513 | U        | 52.2 |       |  |  |
|                           | DU-39                   | Composite   | 0-1                     | DU-39 (0-1)   | 11/29/2022  | 0.534                      | U  | 2.69    |  | 13.4     |  | 21.3   |   | 6.09 | 0.0427 | U       | 16.0 |        | 0.534 | U        | 62.8 |       |  |  |
|                           |                         |             | 1-2                     | DU-39 (1-2)   | 11/29/2022  | 0.56                       | U  | 3.24    |  | 15.1     |  | 17.9   |   | 5.11 | 0.0448 | U       | 18.3 |        | 0.615 | J        | 57.4 |       |  |  |
|                           |                         |             | 2-3                     | DU-39 (2-3)   | 11/29/2022  | 0.525                      | U  | 3.44    |  | 16       |  | 18.4   |   | 6.88 | 0.042  | U       | 19.2 |        | 0.525 | U        | 54.3 |       |  |  |
|                           | DU-40                   | Composite   | 0-1                     | DU-40 (0-1)   | 11/18/2022  | 0.509                      | U  | 2.88    |  | 12.9     |  | 16.2   |   | 3.75 | 0.0407 | U       | 16.3 |        | 0.509 | U        | 44.3 |       |  |  |
|                           |                         |             | 1-2                     | DU-40 (1-2)   | 11/18/2022  | 0.513                      | U  | 3.40    |  | 13.4     |  | 15.4   |   | 3.47 | 0.0411 | U       | 17.7 |        | 0.513 | U        | 44.7 |       |  |  |
|                           |                         |             | 2-3                     | DU-40 (2-3)   | 11/18/2022  | 0.525                      | U  | 3.13    |  | 13.7     |  | 16.6   |   | 3.1  | 0.042  | U       | 18.2 |        | 0.525 | U        | 45.1 |       |  |  |
|                           | DU-43<br>(Within DU-31) | Composite   | 0-1                     | DU-43 (0-1)   | 11/21/2022  | 0.503                      | U  | 2.92    |  | 13.8     |  | 18.8   |   | 5.42 | J      | 0.0402  | U    | 16.9   |       | 0.522    | J    | 53.9  |  |  |
|                           |                         |             | 1-2                     | DU-43 (1-2)   | 11/21/2022  | 0.536                      | U  | 2.89    |  | 14.0     |  | 18.7   |   | 9.65 | J      | 0.0429  | U    | 18.5   |       | 0.536    | U    | 56.4  |  |  |
|                           |                         |             | 2-3                     | DU-43 (2-3)   | 11/21/2022  | 0.523                      | U  | 3.06    |  | 13.8     |  | 16.3   |   | 4.35 | J      | 0.0418  | U    | 18.4   |       | 0.523    | U    | 46.0  |  |  |
|                           | DU-44<br>(Within DU-36) | Composite   | 0-1                     | DU-44 (0-1)   | 12/01/2022  | 0.619                      | J  | 3.12    |  | 14.0     |  | 17.9   |   | 13.0 |        | 0.039   | U    | 17.7   |       | 0.492    | U    | 83.7  |  |  |
|                           |                         |             | 1-2                     | DU-44 (1-2)   | 12/01/2022  | 0.486                      | U  | 3.24    |  | 14.3     |  | 15.7   |   | 6.23 | 0.039  | U       | 17.2 |        | 0.486 | U        | 51.3 |       |  |  |
|                           |                         |             | 2-3                     | DU-44 (2-3)   | 12/01/2022  | 0.505                      | U  | 3.06    |  | 13.2     |  | 15.0   |   | 5.94 |        | 0.040   | U    | 16.0   |       | 0.505    | U    | 45.9  |  |  |

Table 2a  
Soil Results - Metals - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |        |      |          |        |          |       |  |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|--------|------|----------|--------|----------|-------|--|
|                         |               |             |                         |               |             | Concentrations in mg/kg    |         |          |        |      |          |        |          |       |  |
|                         |               |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper | Lead | Mercury  | Nickel | Selenium | Zinc  |  |
| Ecological ISM PRG      |               |             |                         |               |             | 2.7                        | 18      | 39       | 70     | 33   | 0.073    | 23     | 0.52     | 120   |  |
| Ecological ISM Hot Spot |               |             |                         |               |             | 27                         | 180     | 39       | 700    | 330  | 0.15     | 200    | 5.2      | 1,200 |  |
| East Parcel Soil Berms  | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 0.695 J                    | 5.65    | 16.9     | 52.5   | 83.8 | 0.0558 J | 16.0   | 0.492 U  | 104   |  |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 1.68                       | 12.2    | 16.8     | 67.5   | 78.4 | 0.0934   | 15.9   | 0.531 U  | 138   |  |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 2.81                       | 50.1    | 16.3     | 78.6   | 75.4 | 0.262    | 16.5   | 0.491 U  | 139   |  |
|                         |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 2.39                       | 10.6    | 20.7     | 62.0   | 129  | 0.108    | 18.4   | 0.509 U  | 147   |  |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 1.4                        | 11.1    | 18.1     | 52.4   | 112  | 0.105    | 17.7   | 0.501 U  | 165   |  |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 1.88                       | 14.1    | 18.5     | 71.1   | 126  | 0.0878   | 18.3   | 0.514 U  | 157   |  |
|                         |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 1.49                       | 19.6    | 21.7     | 43.6   | 107  | 0.0732 J | 21.1   | 0.505 U  | 161   |  |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 1.29                       | 10.7    | 20.1     | 42.0   | 47.5 | 0.0523 J | 21.3   | 0.505 U  | 160   |  |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 1.69                       | 11.6    | 21.4     | 45.2   | 109  | 0.0528 J | 21.7   | 0.511 U  | 182   |  |
|                         |               |             | 0-1                     | DU-41 (0-1) M | --          | 1.73 J                     | 22.7 J  | 16.7     | 66.2   | 79.2 | 0.137 J  | 16.1   | 0.531 U  | 127   |  |
|                         |               |             | 1-2                     | DU-41 (1-2) M | --          | 1.89                       | 11.9    | 19.1     | 61.8   | 122  | 0.100    | 18.1   | 0.514 U  | 156   |  |
|                         |               |             | 2-3                     | DU-41 (2-3) M | --          | 1.49                       | 14.0    | 21.1     | 43.6   | 87.8 | 0.059 J  | 21.4   | 0.511 U  | 168   |  |

## Notes:

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

mg/kg = Milligrams per kilogram (parts per million).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

U = Analyte was not detected.

J = Result is estimated.

J- = Result is estimated and may be biased low.

J+ = Result is estimated and may be biased high.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Metals by EPA Method 6020B |         |          |         |        |          |        |          |      |  |
|---------------------------|---------------|-------------|-------------------------|--------------|-------------|----------------------------|---------|----------|---------|--------|----------|--------|----------|------|--|
|                           |               |             |                         |              |             | Concentrations in mg/kg    |         |          |         |        |          |        |          |      |  |
|                           |               |             |                         |              |             | Antimony                   | Arsenic | Chromium | Copper  | Lead   | Mercury  | Nickel | Selenium | Zinc |  |
| Human Health ISM PRG      |               |             |                         |              |             | 24.3                       | 8.8     | --       | 11,000  | 400    | --       | --     | --       | --   |  |
| Human Health ISM Hot Spot |               |             |                         |              |             | 243                        | 140     | --       | 110,000 | 4,000  | --       | --     | --       | --   |  |
| West Parcel               | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 0.801 J                    | 6.24    | 37.4     | 180     | 74.8   | 0.0696 J | 27.1   | 0.514 U  | 151  |  |
|                           |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 0.712 J                    | 5.41    | 41.3     | 64.6    | 321    | 0.0863   | 30.9   | 0.516 U  | 140  |  |
|                           |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 0.529 U                    | 5.79    | 29.5     | 69.5    | 57.5   | 0.0813 J | 25.0   | 0.529 U  | 179  |  |
|                           | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 0.603 J                    | 5.41    | 21.5     | 119     | 96.2   | 0.0731 J | 18.9   | 0.505 U  | 99.4 |  |
|                           |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 0.515 U                    | 5.36    | 22.0     | 170     | 118    | 0.124    | 16.4   | 0.515 U  | 88.8 |  |
|                           |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 0.495 U                    | 5.21    | 15.5     | 41.9    | 24.4   | 0.0607 J | 14.7   | 0.495 U  | 78.0 |  |
|                           | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 0.547 U                    | 6.87    | 16.2     | 26.8    | 20.1   | 0.0438 U | 16.3   | 0.547 U  | 80.4 |  |
|                           |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 0.497 U                    | 6.65    | 16.5     | 25.8    | 15.8   | 0.0455 J | 17.1   | 0.497 U  | 72.2 |  |
|                           |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 0.536 U                    | 6.65    | 15.7     | 21.6    | 13.5   | 0.0497 J | 16.0   | 0.536 U  | 64.7 |  |
|                           | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 0.565 U                    | 6.57    | 16.3     | 29.1    | 23.7   | 0.0746 J | 23.9   | 0.565 U  | 89.4 |  |
|                           |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 0.515 U                    | 6.87    | 16.3     | 26.6    | 23.9   | 0.0596 J | 24.6   | 0.515 U  | 79.4 |  |
|                           |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 0.502 U                    | 7.63    | 18.4     | 34.0    | 45.1   | 0.0760 J | 22.4   | 0.502 U  | 115  |  |
|                           | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 0.992 J-                   | 8.89    | 52.3     | 344     | 62.1 J | 0.110    | 31.9 J | 0.369 J  | 191  |  |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 0.853                      | 8.98    | 46.2     | 303     | 50.8   | 0.104    | 31.2   | 0.341 J  | 211  |  |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 0.944                      | 8.43    | 50.6     | 308     | 57.2   | 0.352    | 32.6   | 0.316 J  | 197  |  |
|                           |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 0.551                      | 7.47    | 41.4     | 237     | 70.5   | 0.111    | 27.6   | 0.335 J  | 157  |  |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 0.832                      | 8.09    | 41.2     | 223     | 51.8   | 0.131    | 29.5   | 0.326 J  | 179  |  |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 0.572                      | 7.18    | 42.9     | 220     | 53.7   | 0.369    | 58.9   | 0.317 J  | 167  |  |
|                           |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 0.426 J                    | 6.73    | 38.4     | 159     | 55.9   | 0.153    | 27.1   | 0.309 J  | 147  |  |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 0.596                      | 6.29    | 36.8     | 144     | 68.1   | 0.107    | 26.2   | 0.300 J  | 224  |  |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 0.479 J                    | 6.56    | 47.1     | 214     | 118    | 0.273    | 31.3   | 0.304 J  | 195  |  |
|                           |               |             | 0-1                     | DU-5 (0-1) M | --          | 0.930 J                    | 8.77    | 49.7     | 318     | 56.7 J | 0.189 J  | 31.9 J | 0.342 J  | 200  |  |
|                           |               |             | 1-2                     | DU-5 (1-2) M | --          | 0.652                      | 7.58    | 41.8     | 227     | 58.7   | 0.204 J  | 38.7   | 0.326 J  | 168  |  |
|                           |               |             | 2-3                     | DU-5 (2-3) M | --          | 0.500 J                    | 6.53    | 40.8     | 172     | 80.7   | 0.178    | 28.2   | 0.304 J  | 189  |  |
|                           | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 0.539 U                    | 4.93    | 22.1     | 67.6    | 28.2   | 0.128    | 19.6   | 0.539 U  | 135  |  |
|                           |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 0.560 U                    | 4.89    | 25.2     | 91.6    | 40.0   | 0.156    | 21.8   | 0.560 U  | 124  |  |
|                           |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 0.526 U                    | 4.67    | 23.2     | 100     | 37.8   | 0.141    | 22.0   | 0.526 U  | 112  |  |
|                           | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 0.537 U                    | 4.37    | 19.2     | 36.0    | 23.3   | 0.304    | 19.3   | 0.537 U  | 126  |  |
|                           |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 0.547 U                    | 3.98    | 18.6     | 30.1    | 18.7   | 0.130    | 19.7   | 0.547 U  | 92.7 |  |
|                           |               |             | 2-3                     | DU-7 (2-3)   | 07/29/2022  | 0.536 U                    | 3.07    | 16.2     | 24.2    | 14.9   | 0.0927   | 19.1   | 0.536 U  | 75.1 |  |
|                           | DU-8          | ISM         | 0-1                     | DU-8 (0-1)   | 08/05/2022  | 0.560 U                    | 4.33    | 21.7     | 32.5    | 39.1   | 0.154    | 19.6   | 0.560 U  | 144  |  |
|                           |               |             | 1-2                     | DU-8 (1-2)   | 08/05/2022  | 0.501 U                    | 4.13    | 24.6     | 32.9    | 31.4   | 0.164    | 19.7   | 0.501 U  | 130  |  |
|                           |               |             | 2-3                     | DU-8 (2-3)   | 08/05/2022  | 0.545 U                    | 4.13    | 21.9     | 32.0    | 31.0   | 0.156    | 20.7   | 0.545 U  | 126  |  |
|                           | DU-9          | ISM         | 0-1                     | DU-9 (0-1)   | 08/08/2022  | 0.623 J                    | 5.25    | 30.6     | 40.6    | 28.2   | 0.160    | 26.5   | 0.506 U  | 154  |  |
|                           |               |             | 1-2                     | DU-9 (1-2)   | 08/08/2022  | 0.555 U                    | 4.81    | 27.8     | 34.6    | 40.7   | 0.141    | 24.4   | 0.555 U  | 115  |  |
|                           |               |             | 2-3                     | DU-9 (2-3)   | 08/08/2022  | 0.512 U                    | 5.12    | 31.0     | 37.4    | 21.5   | 0.141    | 26.2   | 0.512 U  | 122  |  |

Please see notes at end of table.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |   |         |      |          |      |         |      |       |   |         |  |        |  |          |  |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---|---------|------|----------|------|---------|------|-------|---|---------|--|--------|--|----------|--|
|                           |               |             |                         |               |             | Concentrations in mg/kg    |   |         |      |          |      |         |      |       |   |         |  |        |  |          |  |
|                           |               |             |                         |               |             | Antimony                   |   | Arsenic |      | Chromium |      | Copper  |      | Lead  |   | Mercury |  | Nickel |  | Selenium |  |
| Human Health ISM PRG      |               |             |                         |               |             | 24.3                       |   | 8.8     |      | --       |      | 11,000  |      | 400   |   | --      |  | --     |  | --       |  |
| Human Health ISM Hot Spot |               |             |                         |               |             | 243                        |   | 140     |      | --       |      | 110,000 |      | 4,000 |   | --      |  | --     |  | --       |  |
| Central Parcel            | DU-10         | ISM         | 0-1                     | DU-10 (0-1)   | 08/12/2022  | 0.541                      | U | 4.50    | 14.8 | 33.3     | 86.5 | 1.07    | 29.9 | 0.541 | U | 106     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-10 (1-2)   | 08/12/2022  | 0.531                      | J | 5.56    | 15.3 | 33.6     | 54.8 | 0.829   | 27.5 | 0.513 | U | 94.9    |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-10 (2-3)   | 08/12/2022  | 0.514                      | J | 5.16    | 14.5 | 32.2     | 73.3 | 0.609   | 22.6 | 0.491 | U | 117     |  |        |  |          |  |
|                           | DU-11         | ISM         | 0-1                     | DU-11 (0-1)A  | 08/10/2022  | 0.545                      | U | 4.60    | 23.6 | 38.5     | 53.1 | 0.721   | 29.3 | 0.545 | U | 116     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-11 (0-1)B  | 08/10/2022  | 0.520                      | U | 3.98    | 19.9 | 35.0     | 56.1 | 0.687   | 25.6 | 0.520 | U | 104     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-11 (0-1)C  | 08/10/2022  | 0.541                      | U | 4.14    | 22.2 | 36.7     | 50.6 | 0.726   | 26.5 | 0.541 | U | 110     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-11 (1-2)A  | 08/10/2022  | 0.535                      | U | 3.93    | 21.4 | 33.0     | 42.8 | 0.504   | 27.0 | 0.535 | U | 90.1    |  |        |  |          |  |
|                           |               |             | 1-2 FR                  | DU-11 (1-2)B  | 08/10/2022  | 0.508                      | U | 4.08    | 21.6 | 34.2     | 44.4 | 0.563   | 27.3 | 0.508 | U | 93.1    |  |        |  |          |  |
|                           |               |             | 1-2 FR                  | DU-11 (1-2)C  | 08/10/2022  | 0.520                      | U | 4.15    | 22.0 | 37.3     | 49.0 | 0.633   | 28.2 | 0.520 | U | 99.5    |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-11 (2-3)A  | 08/10/2022  | 0.526                      | U | 4.23    | 22.0 | 32.2     | 41.0 | 0.382   | 26.1 | 0.526 | U | 95.0    |  |        |  |          |  |
|                           |               |             | 2-3 FR                  | DU-11 (2-3)B  | 08/10/2022  | 0.522                      | U | 4.19    | 21.0 | 35.2     | 43.3 | 0.604   | 26.4 | 0.522 | U | 95.0    |  |        |  |          |  |
|                           |               |             | 2-3 FR                  | DU-11 (2-3)C  | 08/10/2022  | 0.497                      | U | 3.90    | 20.2 | 35.1     | 34.5 | 0.590   | 25.8 | 0.497 | U | 86.5    |  |        |  |          |  |
|                           |               |             | 0-1                     | DU-11 (0-1) M | --          | 0.545                      | U | 4.24    | 21.9 | 36.7     | 53.3 | 0.711   | 27.1 | 0.545 | U | 110     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-11 (1-2) M | --          | 0.535                      | U | 4.05    | 21.7 | 34.8     | 45.4 | 0.567   | 27.5 | 0.535 | U | 94.2    |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-11 (2-3) M | --          | 0.526                      | U | 4.11    | 21.1 | 34.2     | 39.6 | 0.525   | 26.1 | 0.526 | U | 92.2    |  |        |  |          |  |
|                           | DU-12         | ISM         | 0-1                     | DU-12 (0-1)   | 08/16/2022  | 0.830                      | J | 4.95    | 14.8 | 78.9     | 165  | 0.292   | 19.8 | 0.504 | U | 166     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-12 (1-2)   | 08/16/2022  | 0.493                      | U | 4.26    | 14.0 | 55.7     | 131  | 0.275   | 19.0 | 0.493 | U | 104     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-12 (2-3)   | 08/16/2022  | 0.551                      | U | 3.62    | 13.7 | 41       | 70.8 | 0.207   | 17.8 | 0.551 | U | 79.7    |  |        |  |          |  |
|                           | DU-13         | ISM         | 0-1                     | DU-13 (0-1)A  | 08/29/2022  | 0.792                      | J | 6.04    | 14.2 | 94.3     | 241  | 1.15    | 21.4 | 0.563 | U | 204     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-13 (0-1)B  | 08/29/2022  | 0.562                      | U | 5.53    | 14.2 | 60.4     | 180  | 0.895   | 19.6 | 0.562 | U | 155     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-13 (0-1)C  | 08/29/2022  | 0.923                      | J | 5.41    | 14.1 | 55.5     | 199  | 0.848   | 19.4 | 0.541 | U | 155     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-13 (1-2)A  | 08/30/2022  | 0.513                      | U | 4.79    | 13.8 | 53.0     | 86.5 | 0.785   | 18.6 | 0.513 | U | 109     |  |        |  |          |  |
|                           |               |             | 1-2 FR                  | DU-13 (1-2)B  | 08/30/2022  | 0.520                      | U | 4.61    | 13.7 | 43.7     | 92.3 | 0.572   | 18.4 | 0.520 | U | 103     |  |        |  |          |  |
|                           |               |             | 1-2 FR                  | DU-13 (1-2)C  | 08/30/2022  | 0.540                      | U | 4.72    | 13.8 | 44.7     | 154  | 0.614   | 18.1 | 0.540 | U | 128     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-13 (2-3)A  | 08/31/2022  | 0.562                      | U | 3.75    | 12.6 | 43.3     | 175  | 0.745   | 18.4 | 0.562 | U | 127     |  |        |  |          |  |
|                           |               |             | 2-3 FR                  | DU-13 (2-3)B  | 08/31/2022  | 0.522                      | U | 3.89    | 12.6 | 40.6     | 92.4 | 0.698   | 17.3 | 0.522 | U | 90.6    |  |        |  |          |  |
|                           |               |             | 2-3 FR                  | DU-13 (2-3)C  | 08/31/2022  | 0.548                      | U | 4.04    | 12.6 | 54.2     | 94.6 | 0.769   | 17.7 | 0.548 | U | 97.3    |  |        |  |          |  |
|                           |               |             | 0-1                     | DU-13 (0-1) M | --          | 0.759                      | J | 5.66    | 14.2 | 70.1     | 207  | 0.964   | 20.1 | 0.563 | U | 171     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-13 (1-2) M | --          | 0.540                      | U | 4.71    | 13.8 | 47.1     | 111  | 0.657   | 18.4 | 0.540 | U | 113     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-13 (2-3) M | --          | 0.562                      | U | 3.89    | 12.6 | 46.0     | 121  | 0.737   | 17.8 | 0.562 | U | 105     |  |        |  |          |  |
|                           | DU-14         | ISM         | 0-1                     | DU-14 (0-1)   | 08/17/2022  | 2.81                       |   | 6.14    | 22.9 | 73.5     | 134  | 1.33    | 24.3 | 0.514 | U | 147     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-14 (1-2)   | 08/17/2022  | 7.38                       |   | 6.87    | 21.6 | 122      | 240  | 3.10    | 23.7 | 0.519 | U | 204     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-14 (2-3)   | 08/17/2022  | 3.04                       |   | 5.66    | 20.6 | 185      | 162  | 2.50    | 24.8 | 0.493 | U | 164     |  |        |  |          |  |
|                           | DU-15         | ISM         | 0-1                     | DU-15 (0-1)   | 08/19/2022  | 2.81                       |   | 5.04    | 16.0 | 95.4     | 131  | 0.750   | 21.7 | 0.506 | U | 131     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-15 (1-2)   | 08/19/2022  | 0.576                      | J | 3.75    | 14.0 | 57.7     | 68.6 | 1.28    | 19.3 | 0.517 | U | 120     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-15 (2-3)   | 08/19/2022  | 0.492                      | U | 2.91    | 11.2 | 36.2     | 63.6 | 0.563   | 17.6 | 0.492 | U | 76.8    |  |        |  |          |  |
|                           | DU-16         | ISM         | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 4.29                       |   | 8.31    | 24.8 | 93.4     | J+   | 2.43    | 25.6 | 0.543 | U | 371     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 2.31                       |   | 7.56    | 26.6 | 131      | J+   | 5.12    | 28.1 | 0.494 | U | 355     |  |        |  |          |  |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 3.04                       |   | 7.89    | 17.9 | 127      | J+   | 3.87    | 23.2 | 0.539 | U | 283     |  |        |  |          |  |
|                           |               |             | 0-1                     | DU-16 (0-1) M | --          | 3.21                       |   | 7.92    | 23.1 | 117      | J    | 3.81    | 25.6 | 0.543 | U | 336     |  |        |  |          |  |
|                           |               |             | 1-2                     | DU-16 (1-2)   | 11/7/2022   | 2.29                       |   | 6.92    | 13.6 | 71.8     | 151  | 1.69    | 18.5 | 0.521 | U | 139     |  |        |  |          |  |
|                           |               |             | 2-3                     | DU-16 (2-3)   | 11/7/2022   | 0.499                      | U | 3.72    | 12.9 | 29.1     | 37.5 | 0.429   | 16.8 | 0.539 | J | 71.3    |  |        |  |          |  |

Please see notes at end of table.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |         |       |         |        |          |        |  |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|---------|-------|---------|--------|----------|--------|--|
|                           |               |             |                         |               |             | Concentrations in mg/kg    |         |          |         |       |         |        |          |        |  |
|                           |               |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper  | Lead  | Mercury | Nickel | Selenium | Zinc   |  |
| Human Health ISM PRG      |               |             |                         |               |             | 24.3                       | 8.8     | --       | 11,000  | 400   | --      | --     | --       | --     |  |
| Human Health ISM Hot Spot |               |             |                         |               |             | 243                        | 140     | --       | 110,000 | 4,000 | --      | --     | --       | --     |  |
| Central Parcel            | DU-17         | ISM         | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 1.06                       | 4.95    | 12.4     | 59.2    | 81.4  | 0.575   | 16.4   | 0.499 U  | 156    |  |
|                           |               |             | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 0.511 U                    | 3.72    | 11.8     | 34.3    | 62.5  | 0.356   | 16.3   | 0.511 U  | 70.6   |  |
|                           |               |             | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 0.504 U                    | 3.16    | 11.1     | 26.8    | 35.1  | 0.121   | 14.6   | 0.504 U  | 58.4   |  |
|                           | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 0.874 J                    | 6.99    | 22.1     | 71.0    | 198   | 0.965   | 22.5   | 0.531 U  | 146    |  |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 1.41                       | 10.9    | 22.8     | 111     | 198   | 1.72    | 23.5   | 0.505 U  | 173    |  |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 1.06                       | 8.94    | 20.8     | 87.7    | 280   | 1.20    | 23.3   | 0.499 U  | 204    |  |
|                           |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 0.491 U                    | 5.38    | 14.0     | 58.2    | 179   | 0.806   | 18.3   | 0.491 U  | 156    |  |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 0.495 U                    | 5.98    | 15.3     | 79.5    | 150   | 1.06    | 21.8   | 0.495 U  | 158    |  |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 0.490 U                    | 6.22    | 14.3     | 77.7    | 119   | 0.985   | 18.3   | 0.490 U  | 133    |  |
|                           |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 0.502 U                    | 3.77    | 11.9     | 30.8    | 55.4  | 0.296   | 16.6   | 0.502 U  | 94.4   |  |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 0.489 U                    | 5.31    | 13.0     | 59.9    | 92.3  | 0.681   | 17.8   | 0.489 U  | 105    |  |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 0.489 U                    | 5.63    | 13.9     | 53.0    | 75.2  | 0.679   | 18.3   | 0.497 J  | 118    |  |
|                           |               |             | 0-1                     | DU-18 (0-1) M | --          | 1.11 J                     | 8.94    | 21.9     | 89.9    | 225   | 1.30    | 23.1   | 0.531 U  | 174    |  |
|                           |               |             | 1-2                     | DU-18 (1-2) M | --          | 0.495 U                    | 5.86    | 14.5     | 71.8    | 149   | 0.950   | 19.5   | 0.495 U  | 149    |  |
|                           |               |             | 2-3                     | DU-18 (2-3) M | --          | 0.502 U                    | 4.90    | 12.9     | 47.9    | 74    | 0.552   | 17.6   | 0.496 J  | 106    |  |
|                           | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 1.39                       | 7.67    | 13.2     | 107     | 257   | 0.666   | 16.5   | 0.541 U  | 215    |  |
|                           |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 0.957 J                    | 11.2    | 12.0     | 110     | 161   | 1.08    | 15.5   | 0.555 U  | 198    |  |
|                           |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 0.926 J                    | 5.68    | 11.2     | 44.9    | 70.8  | 0.327   | 15.5   | 0.522 U  | 113    |  |
|                           | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 1.69                       | 5.69    | 19.6     | 58.4    | 76.2  | 0.314   | 22.7   | 0.517 U  | 117    |  |
|                           |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 0.536 U                    | 4.08    | 19.5     | 25.8    | 17.7  | 0.136   | 28.4   | 0.536 U  | 87.3   |  |
|                           |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 0.511 U                    | 3.68    | 16.7     | 23.0    | 14.3  | 0.101   | 21.1   | 0.511 U  | 90.4   |  |
|                           | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 2.73                       | 10.5    | 14.8     | 128 J+  | 295   | 0.776   | 20.3   | 0.493 U  | 242    |  |
|                           |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 1.01                       | 4.93    | 11.8     | 56.2 J+ | 116   | 0.276   | 17.7   | 0.500 U  | 180    |  |
|                           |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 0.497 U                    | 4.48    | 11.6     | 45.9 J+ | 89.7  | 0.154   | 18.0   | 0.497 U  | 109    |  |
|                           | DU-22         | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 2.89                       | 6.48    | 19.0     | 82.3    | 129   | 0.592   | 21.0   | 0.530 U  | 167    |  |
|                           |               |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 2.79                       | 5.77    | 18.0     | 86.7    | 148   | 0.602   | 21.4   | 0.506 U  | 169    |  |
|                           |               |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 2.03                       | 5.83    | 19.6     | 96.6    | 190   | 0.430   | 23.2   | 0.538 U  | 178    |  |
|                           |               |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 0.922 J                    | 4.41    | 17.4     | 31.7    | 47.8  | 0.231   | 21.1   | 0.494 U  | 125 J- |  |
|                           |               |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 2.63                       | 4.33    | 16.1     | 47.4    | 72.3  | 0.349   | 20.8   | 0.512 U  | 109    |  |
|                           |               |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 2.04                       | 4.53    | 18.8     | 44.8    | 65.4  | 0.161   | 22.6   | 0.497 U  | 164    |  |
|                           |               |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 0.731 J                    | 4.45    | 17.2     | 29.4    | 51.9  | 0.190   | 20.2   | 0.499 U  | 96.5   |  |
|                           |               |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 0.839 J                    | 4.43    | 18.0     | 54.0    | 57.5  | 0.376   | 21.4   | 0.509 U  | 98.6   |  |
|                           |               |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 1.09 J                     | 3.92    | 16.0     | 32.6    | 43.4  | 0.355   | 20.8   | 0.557 U  | 123    |  |
|                           |               |             | 0-1                     | DU-22 (0-1) M | --          | 2.57                       | 6.03    | 18.9     | 88.5    | 156   | 0.541   | 21.9   | 0.538 U  | 171    |  |
|                           |               |             | 1-2                     | DU-22 (1-2) M | --          | 1.86 J                     | 4.42    | 17.4     | 41.3    | 61.8  | 0.247   | 21.5   | 0.512 U  | 133 J  |  |
|                           |               |             | 2-3                     | DU-22 (2-3) M | --          | 0.887 J                    | 4.27    | 17.1     | 38.7    | 50.9  | 0.307   | 20.8   | 0.557 U  | 106    |  |
|                           | DU-23         | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 1.62                       | 5.99    | 22.1     | 150     | 276   | 1.02    | 22.9   | 0.497 U  | 184    |  |
|                           |               |             | 1-2                     | DU-23 (1-2)   | 10/12/2022  | 0.61 J                     | 4.63    | 18.4     | 69.5    | 70.9  | 0.545   | 20.5   | 0.518 U  | 127    |  |
|                           |               |             | 2-3                     | DU-23 (2-3)   | 10/12/2022  | 0.498 J                    | 3.82    | 15.6     | 41.9    | 82.2  | 0.426   | 18.8   | 0.488 U  | 99     |  |
|                           | DU-24         | ISM         | 0-1                     | DU-24 (0-1)   | 09/21/2022  | 0.546 U                    | 4.16    | 15.5     | 39.9    | 48.8  | 0.276   | 19.2   | 0.546 U  | 117    |  |
|                           |               |             | 1-2                     | DU-24 (1-2)   | 09/21/2022  | 0.496 U                    | 3.56    | 15.0     | 31.1    | 23.2  | 0.175   | 20.6   | 0.496 U  | 124    |  |
|                           |               |             | 2-3                     | DU-24 (2-3)   | 09/21/2022  | 0.501 U                    | 2.84    | 10.9     | 17.6    | 13.8  | 0.0928  | 18.5   | 0.501 U  | 83.1   |  |
|                           | DU-25         | ISM         | 0-1                     | DU-25 (0-1)   | 09/23/2022  | 0.822 J                    | 5.24    | 20.2     | 226     | 144   | 0.762   | 21.3   | 0.491 U  | 242    |  |
|                           |               |             | 1-2                     | DU-25 (1-2)   | 09/23/2022  | 0.493 U                    | 3.29    | 14.5     | 48.5    | 113   | 0.213   | 19.6   | 0.493 U  | 202    |  |
|                           |               |             | 2-3                     | DU-25 (2-3)   | 09/23/2022  | 0.496 U                    | 3.17    | 12.6     | 30.0    | 43.2  | 0.116   | 18.7   | 0.496 U  | 138    |  |

Please see notes at end of table.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |         |       |         |        |          |      |      |
|------------------------------|----------------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|---------|-------|---------|--------|----------|------|------|
|                              |                      |             |                         |               |             | Concentrations in mg/kg    |         |          |         |       |         |        |          |      |      |
|                              |                      |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper  | Lead  | Mercury | Nickel | Selenium | Zinc |      |
| Human Health ISM PRG         |                      |             |                         |               |             | 24.3                       | 8.8     | --       | 11,000  | 400   | --      | --     | --       | --   |      |
| Human Health ISM Hot Spot    |                      |             |                         |               |             | 243                        | 140     | --       | 110,000 | 4,000 | --      | --     | --       | --   |      |
| Central Parcel               | DU-26                | ISM         | 0-1                     | DU-26 (0-1)A  | 11/09/2022  | 3.22                       | 9.50    | 18.8     | 152     | 330   | 1.95    | 20.7   | 0.605    | J    | 260  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)B  | 11/09/2022  | 4.79                       | 9.01    | 17.1     | 129     | 302   | 1.28    | 19.4   | 0.502    | J    | 244  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)C  | 11/09/2022  | 3.61                       | 6.81    | 19.1     | 105     | 292   | 1.53    | 20.4   | 0.522    | J    | 235  |
|                              |                      |             | 1-2                     | DU-26 (1-2)A  | 11/10/2022  | 1.4                        | 5.16    | 14.7     | 80.7    | 151   | 0.944   | 18.3   | 0.511    | U    | 206  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)B  | 11/10/2022  | 0.728                      | J 4.61  | 13.2     | 48.5    | 121   | 0.397   | 17.2   | 0.558    | J    | 182  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)C  | 11/10/2022  | 1.06                       | 11.6    | 15.5     | 79.8    | 143   | 1.25    | 19.9   | 0.532    | U    | 186  |
|                              |                      |             | 2-3                     | DU-26 (2-3)A  | 11/11/2022  | 0.491                      | U 3.92  | 14.6     | 36.1    | 65.2  | 0.258   | 18.1   | 0.491    | U    | 112  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)B  | 11/11/2022  | 0.521                      | U 4.33  | 12.4     | 41.6    | 59.8  | 0.820   | 18.3   | 0.521    | U    | 108  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)C  | 11/11/2022  | 0.529                      | J 4.75  | 13.3     | 39.6    | 76.1  | 0.537   | 17.5   | 0.512    | U    | 138  |
|                              |                      |             | 0-1                     | DU-26 (0-1) M | --          | 3.87                       | 8.44    | 18.3     | 129     | 308   | 1.59    | 20.2   | 0.543    | J    | 246  |
|                              |                      |             | 1-2                     | DU-26 (1-2) M | --          | 1.06                       | J 7.12  | 14.5     | 69.7    | 138   | 0.864   | 18.5   | 0.534    | J    | 191  |
|                              |                      |             | 2-3                     | DU-26 (2-3) M | --          | 0.514                      | J 4.33  | 13.4     | 39.1    | 67.0  | 0.538   | 18.0   | 0.521    | U    | 119  |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)   | 11/30/2022  | 0.512                      | U 4.38  | 17.8     | 36.3    | 53.3  | 0.226   | 23.3   | 0.531    | J    | 126  |
|                              |                      |             | 1-2                     | DU-42 (1-2)   | 11/30/2022  | 0.667                      | J 4.11  | 18.4     | 25.4    | 30.3  | 0.186   | 22.6   | 0.549    | U    | 109  |
|                              |                      |             | 2-3                     | DU-42 (2-3)   | 11/30/2022  | 0.531                      | U 3.76  | 17.4     | 21.1    | 20.1  | 0.125   | 20.7   | 0.531    | U    | 87.0 |
| East Parcel                  | DU-27                | ISM         | 0-1                     | DU-27 (0-1)   | 10/05/2022  | 1.3                        | 14.5    | 19.8     | 204     | 46.1  | 0.184   | 21.1   | 0.583    | J    | 173  |
|                              |                      |             | 1-2                     | DU-27 (1-2)   | 10/05/2022  | 0.488                      | U 8.72  | 16.9     | 81.2    | 39.1  | 0.0555  | J 21.3 | 0.488    | U    | 130  |
|                              |                      |             | 2-3                     | DU-27 (2-3)   | 10/05/2022  | 1.15                       | 15.8    | 15.5     | 45.6    | 55.4  | 0.0643  | J 18.4 | 0.512    | U    | 139  |
|                              | DU-28                | ISM         | 0-1                     | DU-28 (0-1)   | 09/14/2022  | 2.32                       | 10.5    | 16.4     | 184     | 78.1  | 0.649   | 17.9   | 0.513    | U    | 267  |
|                              |                      |             | 1-2                     | DU-28 (1-2)   | 09/14/2022  | 2.87                       | 13.3    | 17.3     | 327     | 74.1  | 0.706   | 17.2   | 0.493    | U    | 231  |
|                              |                      |             | 2-3                     | DU-28 (2-3)   | 09/14/2022  | 4.79                       | 7.40    | 16.9     | 229     | 113   | 0.207   | 19.6   | 0.522    | U    | 275  |
|                              | DU-29                | ISM         | 0-1                     | DU-29 (0-1)   | 09/15/2022  | 1.08                       | 6.95    | 12.1     | 69.3    | J 103 | 0.0595  | J 18.1 | 0.518    | U    | 164  |
|                              |                      |             | 1-2                     | DU-29 (1-2)   | 09/15/2022  | 1.02                       | J 5.08  | 10.4     | 44.3    | 41.1  | 0.0436  | U 15.3 | 0.545    | U    | 100  |
|                              |                      |             | 2-3                     | DU-29 (2-3)   | 09/15/2022  | 0.511                      | U 3.60  | 10.0     | 27.8    | 45.7  | 0.0409  | U 15.2 | 0.511    | U    | 92.7 |
|                              | DU-30                | ISM         | 0-1                     | DU-30 (0-1)   | 09/16/2022  | 1.66                       | 4.22    | 14.5     | 63.4    | 131   | 0.0829  | 18.3   | 0.500    | U    | 179  |
|                              |                      |             | 1-2                     | DU-30 (1-2)   | 09/16/2022  | 2.09                       | 3.72    | 13.9     | 79.8    | 202   | 0.05    | J 17.7 | 0.512    | U    | 228  |
|                              |                      |             | 2-3                     | DU-30 (2-3)   | 09/16/2022  | 6.81                       | 4.14    | 11.6     | 86.6    | 220   | 0.159   | 15.7   | 0.501    | U    | 152  |
|                              | DU-31                | ISM         | 0-1                     | DU-31 (0-1)   | 11/03/2022  | 1.85                       | 6.09    | 14.5     | 35.4    | 44.8  | 0.0479  | J 16.5 | 0.491    | U    | 116  |
|                              |                      |             | 1-2                     | DU-31 (1-2)   | 11/03/2022  | 0.743                      | J 4.98  | 12.6     | 49.2    | 34.1  | 0.067   | J 17.0 | 0.516    | U    | 140  |
|                              |                      |             | 2-3                     | DU-31 (2-3)   | 11/03/2022  | 0.735                      | J 5.96  | 12.9     | 68.2    | 25    | 0.0415  | U 16.7 | 0.519    | U    | 109  |

Please see notes at end of table.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location            | Decision Unit           | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |         |        |          |        |          |      |  |  |
|----------------------------|-------------------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|---------|--------|----------|--------|----------|------|--|--|
|                            |                         |             |                         |               |             | Concentrations in mg/kg    |         |          |         |        |          |        |          |      |  |  |
|                            |                         |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper  | Lead   | Mercury  | Nickel | Selenium | Zinc |  |  |
| Human Health ISM PRG       |                         |             |                         |               |             | 24.3                       | 8.8     | --       | 11,000  | 400    | --       | --     | --       | --   |  |  |
| Human Health ISM Hot Spot  |                         |             |                         |               |             | 243                        | 140     | --       | 110,000 | 4,000  | --       | --     | --       | --   |  |  |
| East Parcel                | DU-32                   | ISM         | 0-1                     | DU-32 (0-1)   | 09/22/2022  | 0.879 J                    | 8.99    | 12.4     | 31.6    | 28.9   | 0.0428 U | 15.7   | 0.535 U  | 118  |  |  |
|                            |                         |             | 1-2                     | DU-32 (1-2)   | 09/22/2022  | 0.535 U                    | 7.10    | 11.1     | 23.4    | 20.9   | 0.0428 U | 15.3   | 0.535 U  | 104  |  |  |
|                            |                         |             | 2-3                     | DU-32 (2-3)   | 09/22/2022  | 0.492 U                    | 3.56    | 9.91     | 20.1    | 34.1   | 0.0394 U | 14.2   | 0.492 U  | 90.2 |  |  |
|                            | DU-33                   | ISM         | 0-1                     | DU-33 (0-1)   | 09/20/2022  | 2.31                       | 6.62    | 9.85     | 79.8    | 88.8   | 0.0435 J | 14.9   | 0.491 U  | 290  |  |  |
|                            |                         |             | 1-2                     | DU-33 (1-2)   | 09/20/2022  | 1.84                       | 9.60    | 12.3     | 96.6    | 66.2   | 0.0413 U | 17.8   | 0.516 U  | 354  |  |  |
|                            |                         |             | 2-3                     | DU-33 (2-3)   | 09/20/2022  | 0.666 J                    | 5.35    | 10.3     | 52.6    | 42.8   | 0.0423 U | 16.4   | 0.529 U  | 234  |  |  |
|                            | DU-34                   | ISM         | 0-1                     | DU-34 (0-1)   | 09/27/2022  | 1.05                       | 5.13    | 14.0     | 32.6    | 41.4   | 0.044 J  | 22.0   | 0.523 U  | 182  |  |  |
|                            |                         |             | 1-2                     | DU-34 (1-2)   | 09/27/2022  | 0.557 J                    | 4.95    | 14.6     | 33.2    | 31.9   | 0.0447 J | 24.3   | 0.498 U  | 177  |  |  |
|                            |                         |             | 2-3                     | DU-34 (2-3)   | 09/27/2022  | 0.537 U                    | 3.69    | 12.1     | 33.1    | 25.9   | 0.043 U  | 20.1   | 0.537 U  | 222  |  |  |
|                            | DU-35                   | ISM         | 0-1                     | DU-35 (0-1)   | 10/07/2022  | 0.512 U                    | 4.40    | 14.5     | 52.9    | 22.6   | 0.0415 J | 17.8   | 0.512 U  | 174  |  |  |
|                            |                         |             | 1-2                     | DU-35 (1-2)   | 10/07/2022  | 0.531 U                    | 3.81    | 12.3     | 29.1    | 19.0   | 0.0425 U | 15.3   | 0.531 U  | 168  |  |  |
|                            |                         |             | 2-3                     | DU-35 (2-3)   | 10/07/2022  | 0.524 U                    | 3.37    | 9.45     | 27.8    | 12.4   | 0.042 U  | 14.2   | 0.524 U  | 141  |  |  |
|                            | DU-36                   | ISM         | 0-1                     | DU-36 (0-1)   | 11/01/2022  | 3.77 J+                    | 5.03    | 20.1     | 57.9    | 73.2   | 0.0398 U | 22.6   | 0.498 U  | 266  |  |  |
|                            |                         |             | 1-2                     | DU-36 (1-2)   | 11/01/2022  | 3.44                       | 4.23    | 17.3     | 56.7    | 130    | 0.0606 J | 19.0   | 0.52 U   | 222  |  |  |
|                            |                         |             | 2-3                     | DU-36 (2-3)   | 11/01/2022  | 3.62                       | 4.12    | 14.4     | 46.3    | 63.3   | 0.0449 J | 18.3   | 0.526 U  | 190  |  |  |
|                            | DU-38                   | ISM         | 0-1                     | DU-38 (0-1)A  | 11/14/2022  | 1.31                       | 3.69    | 13.1     | 27.7    | 30.5   | 0.039 J  | 16.5   | 0.486 U  | 109  |  |  |
|                            |                         |             | 0-1 FR                  | DU-38 (0-1)B  | 11/14/2022  | 0.959 J                    | 3.71    | 11.9     | 22.8    | 25.8   | 0.0454 J | 15.0   | 0.534 U  | 107  |  |  |
|                            |                         |             | 0-1 FR                  | DU-38 (0-1)C  | 11/14/2022  | 0.629 J                    | 3.66    | 12.4     | 23.2    | 27.1   | 0.0431 J | 16.3   | 0.536 U  | 110  |  |  |
|                            |                         |             | 1-2                     | DU-38 (1-2)A  | 11/16/2022  | 0.661 J                    | 3.20    | 10.7     | 18.3    | 19.3   | 0.0415 U | 13.7   | 0.519 U  | 84.4 |  |  |
|                            |                         |             | 1-2 FR                  | DU-38 (1-2)B  | 11/16/2022  | 4.88                       | 3.76    | 10.9     | 56.0    | 76.7   | 0.0407 U | 15.3   | 0.508 U  | 102  |  |  |
|                            |                         |             | 1-2 FR                  | DU-38 (1-2)C  | 11/16/2022  | 1.84                       | 3.35    | 12.3     | 23.0    | 31.4   | 0.0411 U | 16.0   | 0.514 U  | 94.6 |  |  |
|                            |                         |             | 2-3                     | DU-38 (2-3)A  | 11/17/2022  | 0.998                      | 3.58    | 13.5     | 30.3    | 19.9   | 0.0396 U | 17.1   | 0.495 U  | 83.3 |  |  |
|                            |                         |             | 2-3 FR                  | DU-38 (2-3)B  | 11/17/2022  | 3.71                       | 3.63    | 12.7     | 51.4    | 51.3   | 0.039 U  | 16.5   | 0.487 U  | 108  |  |  |
|                            |                         |             | 2-3 FR                  | DU-38 (2-3)C  | 11/17/2022  | 0.921 J                    | 4.06    | 13.6     | 26.0    | 22.1   | 0.0421 U | 16.8   | 0.527 U  | 107  |  |  |
|                            |                         |             | 0-1                     | DU-38 (0-1) M | --          | 0.966 J                    | 3.69    | 12.5     | 24.6    | 27.8   | 0.043 J  | 15.9   | 0.536 U  | 109  |  |  |
|                            |                         |             | 1-2                     | DU-38 (1-2) M | --          | 2.46 J                     | 3.44    | 11.3     | 32.4 J  | 42.5 J | 0.042 U  | 15.0   | 0.519 U  | 93.7 |  |  |
|                            |                         |             | 2-3                     | DU-38 (2-3) M | --          | 1.88 J                     | 3.76    | 13.3     | 35.9    | 31.1   | 0.042 U  | 16.8   | 0.527 U  | 99.4 |  |  |
| East Parcel Concrete Slabs | DU-37                   | Composite   | 0-1                     | DU-37 (0-1)   | 11/28/2022  | 0.495 U                    | 3.72    | 17.4     | 26.1    | 39.3   | 0.0396 U | 18.6   | 0.572 J  | 74.4 |  |  |
|                            |                         |             | 1-2                     | DU-37 (1-2)   | 11/28/2022  | 0.495 U                    | 3.00    | 14.9     | 21.4    | 12.6   | 0.043 J  | 18.8   | 0.537 J  | 61.5 |  |  |
|                            |                         |             | 2-3                     | DU-37 (2-3)   | 11/28/2022  | 0.513 U                    | 2.85    | 13.4     | 16.9    | 8.96   | 0.0411 U | 17.1   | 0.513 U  | 52.2 |  |  |
|                            | DU-39                   | Composite   | 0-1                     | DU-39 (0-1)   | 11/29/2022  | 0.534 U                    | 2.69    | 13.4     | 21.3    | 6.09   | 0.0427 U | 16.0   | 0.534 U  | 62.8 |  |  |
|                            |                         |             | 1-2                     | DU-39 (1-2)   | 11/29/2022  | 0.56 U                     | 3.24    | 15.1     | 17.9    | 5.11   | 0.0448 U | 18.3   | 0.615 J  | 57.4 |  |  |
|                            |                         |             | 2-3                     | DU-39 (2-3)   | 11/29/2022  | 0.525 U                    | 3.44    | 16       | 18.4    | 6.88   | 0.042 U  | 19.2   | 0.525 U  | 54.3 |  |  |
|                            | DU-40                   | Composite   | 0-1                     | DU-40 (0-1)   | 11/18/2022  | 0.509 U                    | 2.88    | 12.9     | 16.2    | 3.75   | 0.0407 U | 16.3   | 0.509 U  | 44.3 |  |  |
|                            |                         |             | 1-2                     | DU-40 (1-2)   | 11/18/2022  | 0.513 U                    | 3.40    | 13.4     | 15.4    | 3.47   | 0.0411 U | 17.7   | 0.513 U  | 44.7 |  |  |
|                            |                         |             | 2-3                     | DU-40 (2-3)   | 11/18/2022  | 0.525 U                    | 3.13    | 13.7     | 16.6    | 3.1    | 0.042 U  | 18.2   | 0.525 U  | 45.1 |  |  |
|                            | DU-43<br>(Within DU-31) | Composite   | 0-1                     | DU-43 (0-1)   | 11/21/2022  | 0.503 U                    | 2.92    | 13.8     | 18.8    | 5.42 J | 0.0402 U | 16.9   | 0.522 J  | 53.9 |  |  |
|                            |                         |             | 1-2                     | DU-43 (1-2)   | 11/21/2022  | 0.536 U                    | 2.89    | 14.0     | 18.7    | 9.65 J | 0.0429 U | 18.5   | 0.536 U  | 56.4 |  |  |
|                            |                         |             | 2-3                     | DU-43 (2-3)   | 11/21/2022  | 0.523 U                    | 3.06    | 13.8     | 16.3    | 4.35 J | 0.0418 U | 18.4   | 0.523 U  | 46.0 |  |  |
|                            | DU-44<br>(Within DU-36) | Composite   | 0-1                     | DU-44 (0-1)   | 12/01/2022  | 0.619 J                    | 3.12    | 14.0     | 17.9    | 13.0   | 0.039 U  | 17.7   | 0.492 U  | 83.7 |  |  |
|                            |                         |             | 1-2                     | DU-44 (1-2)   | 12/01/2022  | 0.486 U                    | 3.24    | 14.3     | 15.7    | 6.23   | 0.039 U  | 17.2   | 0.486 U  | 51.3 |  |  |
|                            |                         |             | 2-3                     | DU-44 (2-3)   | 12/01/2022  | 0.505 U                    | 3.06    | 13.2     | 15.0    | 5.94   | 0.040 U  | 16.0   | 0.505 U  | 45.9 |  |  |

Please see notes at end of table.

Table 2b  
Soil Results - Metals - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Metals by EPA Method 6020B |         |          |         |       |          |        |          |      |  |  |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|----------------------------|---------|----------|---------|-------|----------|--------|----------|------|--|--|
|                           |               |             |                         |               |             | Concentrations in mg/kg    |         |          |         |       |          |        |          |      |  |  |
|                           |               |             |                         |               |             | Antimony                   | Arsenic | Chromium | Copper  | Lead  | Mercury  | Nickel | Selenium | Zinc |  |  |
| Human Health ISM PRG      |               |             |                         |               |             | 24.3                       | 8.8     | --       | 11,000  | 400   | --       | --     | --       | --   |  |  |
| Human Health ISM Hot Spot |               |             |                         |               |             | 243                        | 140     | --       | 110,000 | 4,000 | --       | --     | --       | --   |  |  |
| East Parcel Soil Berms    | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 0.695 J                    | 5.65    | 16.9     | 52.5    | 83.8  | 0.0558 J | 16.0   | 0.492 U  | 104  |  |  |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 1.68                       | 12.2    | 16.8     | 67.5    | 78.4  | 0.0934   | 15.9   | 0.531 U  | 138  |  |  |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 2.81                       | 50.1    | 16.3     | 78.6    | 75.4  | 0.262    | 16.5   | 0.491 U  | 139  |  |  |
|                           |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 2.39                       | 10.6    | 20.7     | 62.0    | 129   | 0.108    | 18.4   | 0.509 U  | 147  |  |  |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 1.4                        | 11.1    | 18.1     | 52.4    | 112   | 0.105    | 17.7   | 0.501 U  | 165  |  |  |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 1.88                       | 14.1    | 18.5     | 71.1    | 126   | 0.0878   | 18.3   | 0.514 U  | 157  |  |  |
|                           |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 1.49                       | 19.6    | 21.7     | 43.6    | 107   | 0.0732 J | 21.1   | 0.505 U  | 161  |  |  |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 1.29                       | 10.7    | 20.1     | 42.0    | 47.5  | 0.0523 J | 21.3   | 0.505 U  | 160  |  |  |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 1.69                       | 11.6    | 21.4     | 45.2    | 109   | 0.0528 J | 21.7   | 0.511 U  | 182  |  |  |
|                           |               |             | 0-1                     | DU-41 (0-1) M | --          | 1.73 J                     | 22.7 J  | 16.7     | 66.2    | 79.2  | 0.137 J  | 16.1   | 0.531 U  | 127  |  |  |
|                           |               |             | 1-2                     | DU-41 (1-2) M | --          | 1.89                       | 11.9    | 19.1     | 61.8    | 122   | 0.100    | 18.1   | 0.514 U  | 156  |  |  |
|                           |               |             | 2-3                     | DU-41 (2-3) M | --          | 1.49                       | 14.0    | 21.1     | 43.6    | 87.8  | 0.059 J  | 21.4   | 0.511 U  | 168  |  |  |

## Notes:

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

mg/kg = Milligrams per kilogram (parts per million).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

U = Analyte was not detected.

J = Result is estimated.

J- = Result is estimated and may be biased low.

J+ = Result is estimated and may be biased high.

Table 3a  
Soil Results - Dioxins/Furans - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |         |              |                 |                 |                   |                   |                   |                   |                   |                     |      |         |         |      |       |         |         |            |             |             |             |            |             |             |             |                        |
|-------------------------|---------------|-------------|-------------------------|--------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|---------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|---------|---------|------|-------|---------|---------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|
|                         |               |             |                         |              |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |         |              |                 |                 |                   |                   |                   |                   |                   |                     |      |         |         |      |       |         |         | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |
|                         |               |             |                         |              |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD    | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF |         |         |      |       |         |         |            |             |             |             |            |             |             |             |                        |
| Ecological ISM PRG      |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --      | --      | --   | --    | --      | --      | 6.1        |             |             |             |            |             |             |             |                        |
| Ecological ISM Hot Spot |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --      | --      | --   | --    | --      | --      | --         | 61          |             |             |            |             |             |             |                        |
| West Parcel             | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 0.833                              | 4.53            | 3.96              | 31.3              | 17.9              | 407                 | 3,690   | 1.36         | 2.77            | 7.95            | 8.16              | 5.85              | 8.48              | 2.13 U            | 118               | 4.69                | 340  | 9.14 JN | 30.4 JN | 218  | 985   | 72.5 JN | 88.3 JN | 171        | 393         | 22.1        |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 0.826                              | 2.27 J          | 4.64              | 27.8              | 9.16              | 644                 | 6,310 J | 1.38         | 4.05            | 8.17            | 14.4              | 8.37              | 8.87              | 3.83              | 337               | 11.2                | 924  | 8.79 JN | 21.1 JN | 155  | 1,150 | 48.3 JN | 65.7 JN | 333        | 1,090       | 25.6 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 0.439                              | 0.941 U         | 2.06 J            | 12.1              | 4.35              | 305                 | 3,060   | 1.14         | 1.18 J          | 3.5             | 5.57              | 2.75              | 3.62              | 1.56 J            | 126               | 6.31                | 458  | 3.52    | 2.77    | 66.1 | 543   | 21.1 JN | 30.1 JN | 125 JN     | 423         | 10.7 J      |             |            |             |             |             |                        |
|                         | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 0.424 U                            | 1.50 J          | 1.49 U            | 9.03              | 4.55              | 157                 | 1,310   | 1.14         | 1.97 J          | 2.45 J          | 3.45              | 1.65 J            | 0.795 U           | 0.822 U           | 30.4              | 1.96 J              | 78.9 | 3.03    | 11.0    | 62.0 | 325   | 27.6 JN | 28.7 JN | 36.4       | 90.2        | 6.95 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 0.338 U                            | 0.698 U         | 1.21 U            | 6.62              | 1.10 U            | 73.5                | 700     | 0.895        | 1.22 U          | 1.76 J          | 2.09 J            | 1.06 U            | 1.29 U            | 1.27 U            | 15.4              | 1.13 U              | 58.7 | 1.15    | 0.698 U | 17.5 | 118   | 17.4 JN | 15.7 JN | 16.6       | 48.6        | 3.44 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 0.352 U                            | 0.67 U          | 1.63 U            | 2.63              | 1.52 U            | 46.7                | 384     | 0.605        | 1.13 J          | 1.21 J          | 1.26 U            | 1.26 U            | 1.53 U            | 1.52 U            | 15.1              | 1.02 U              | 40.8 | 0.667   | 0.670 U | 16.1 | 80.3  | 17.7 JN | 14.9 JN | 13.5       | 42.1        | 2.42 J      |             |            |             |             |             |                        |
|                         | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 0.673                              | 6.12            | 5.17              | 38.7              | 13.0              | 805                 | 5,360 J | 0.752        | 2.27 U          | 4.8             | 5.94              | 2.72              | 6.33              | 2.03 U            | 87.5              | 3.75                | 290  | 3.00    | 25.0    | 220  | 1,380 | 13.2    | 61.0    | 136        | 260         | 26.3 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 0.354 U                            | 1.16 U          | 2.00 U            | 11.4              | 4.92              | 327                 | 2,780   | 0.322 U      | 0.807 U         | 1.62 J          | 1.09 U            | 0.991 U           | 1.22 U            | 1.29 U            | 40.4              | 2.06 U              | 221  | 1.06    | 4.02    | 66.8 | 526   | 6.38    | 24.9    | 38.7       | 144         | 7.82 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 0.227 U                            | 1.53 U          | 1.77 U            | 5.71              | 1.94 J            | 163                 | 1,520   | 0.298 U      | 1.07 U          | 1.02 U          | 0.928 U           | 0.86 U            | 1.05 U            | 1.45 U            | 30.2              | 2.11 U              | 151  | 0.227 U | 1.53 U  | 41.4 | 270   | 3.01    | 7.87    | 23.8       | 129         | 4.57 J      |             |            |             |             |             |                        |
|                         | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 0.565                              | 4.67            | 3.89              | 44.0              | 19.4              | 458                 | 3,340   | 0.734        | 2.18 U          | 3.08            | 3.73              | 2.55              | 3.52              | 2.44 U            | 102               | 5.06                | 447  | 3.99    | 30.4    | 252  | 925   | 12.3 JN | 40.1    | 94.7       | 354         | 20.9        |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 0.486 J                            | 3.44            | 2.15 J            | 30.3              | 8.41              | 405                 | 3,280   | 0.784        | 1.17 J          | 3.75            | 5.27              | 3.03              | 3.92              | 1.21 U            | 97.7              | 3.95                | 5.14 | 2.24    | 17.6    | 149  | 700   | 19.3 JN | 50.3    | 101        | 374         | 16.6 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 0.469 J                            | 1.87 J          | 0.887 U           | 18.1              | 5.97              | 458                 | 4,160 J | 0.694        | 1.96 U          | 4.02            | 4.98              | 3.34              | 3.98              | 0.831 U           | 120               | 5.94                | 689  | 3.27    | 8.66    | 105  | 808   | 27.8 JN | 63.5    | 126        | 489         | 14.7 J      |             |            |             |             |             |                        |
|                         | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 0.561                              | 1.75 J          | 1.55 U            | 9.28              | 3.95              | 209                 | 1,910   | 4.10         | 7.53            | 5.27            | 13.8              | 4.99              | 3.01              | 3.02              | 60.6              | 4.63                | 127  | 4.02    | 12.2    | 58.8 | 402   | 38.5 JN | 54.5 JN | 84.1       | 164         | 11.8 J      |             |            |             |             |             |                        |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 0.746                              | 2.02 J          | 1.17 U            | 8.24              | 4.35              | 258                 | 2,360   | 6.93         | 14.9            | 8.86            | 24.3              | 8.24              | 4.53              | 3.49              | 76.9              | 6.57                | 153  | 7.49    | 10.4    | 73.8 | 517   | 58.0 JN | 80.3 JN | 107        | 202         | 16.1 J      |             |            |             |             |             |                        |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 0.565                              | 2.07 J          | 2.74              | 12.5              | 6.70              | 256                 | 2,310   | 5.96         | 11.1            | 7.26            | 19.9              | 9.07              | 4.20              | 3.29              | 214               | 4.99                | 189  | 4.00    | 9.27    | 81.1 | 500   | 44.6 JN | 72.2 JN | 171        | 435         | 17.1 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 0.508                              | 0.652 U         | 1.94 J            | 7.31              | 1.99 J            | 207                 | 2,060   | 5.26         | 10.2            | 7.54            | 17.6              | 6.59              | 4.78              | 2.16 J            | 76.0              | 5.78                | 154  | 3.89    | 2.89    | 48.4 | 377   | 72.7 JN | 85.4 JN | 101        | 202         | 11.7 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 0.422 J                            | 0.726 U         | 2.23 U            | 7.99              | 3.89              | 264                 | 2,630   | 7.10         | 10.8            | 9.02            | 16.6              | 6.21              | 4.50              | 4.38              | 67.1              | 6.59                | 187  | 3.33    | 5.41    | 55.2 | 515   | 82.9 JN | 93.1 JN | 99.7       | 214         | 13.2 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 0.427 U                            | 1.26 J          | 1.97 J            | 8.63              | 3.01              | 255                 | 2,460   | 5.28         | 8.81            | 7.08            | 16.5              | 11.0              | 5.14              | 2.84              | 255               | 6.43                | 240  | 2.82    | 7.02    | 55.4 | 465   | 50.3 JN | 73.7 JN | 197        | 525         | 15.3 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 1.28                               | 1.57 J          | 1.38 J            | 7.87              | 3.99              | 260                 | 2,560   | 5.58         | 9.36            | 9.89            | 16.2              | 6.36              | 4.88              | 2.83              | 89.7              | 7.69                | 192  | 5.54    | 7.35    | 57.8 | 464   | 74.4 JN | 104 JN  | 112        | 241         | 15.4 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 0.511                              | 1.59 U          | 1.91 J            | 6.43              | 3.28              | 246                 | 2,360   | 4.85         | 8.14            | 8.47            | 14.1              | 5.85              | 4.63              | 2.95              | 57.5              | 5.83                | 151  | 4.18    | 7.54    | 58.3 | 581   | 89.7 JN | 92.4 JN | 90.1       | 179         | 12.3 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 0.535                              | 1.49 J          | 1.83 J            | 11.5              | 3.90              | 295                 | 3,160   | 5.77         | 11.4            | 7.90            | 25.2              | 21.2              | 7.95              | 6.06              | 610               | 9.63                | 408  | 4.02    | 4.76    | 67.1 | 519   | 49.6 JN | 89.0    | 392        | 1,130       | 23.3 J      |             |            |             |             |             |                        |
|                         |               |             | 0-1                     | DU-5 (0-1) M | --          | 0.624                              | 1.95 J          | 1.82              | 10.0              | 5.00              | 241                 | 2,193   | 5.66         | 11.2            | 7.13            | 19.3              | 7.43              | 3.91              | 3.27              | 117 J             | 5.40                | 156  | 5.17    | 10.6    | 71.2 | 473   | 47.0 JN | 69.0 JN | 121        | 267         | 15.0 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-5 (1-2) M | --          | 0.452 J                            | 0.879 J         | 2.05 J            | 7.98              | 2.96 J            | 242                 | 2,383   | 5.88         | 9.94            | 7.88            | 16.9              | 7.93              | 4.81              | 3.13 J            | 133 J             | 6.27                | 194  | 3.35    | 5.11    | 53.0 | 452   | 68.6 JN | 84.1 JN | 133        | 314         | 13.4 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-5 (2-3) M | --          | 0.775                              | 1.55 J          | 1.71 J            | 8.60              | 3.72              | 267                 | 2,693   | 5.40         | 9.63            | 8.75            | 18.5              | 11.1 J            | 5.82              | 3.95              | 252 J             | 7.72                | 250  | 4.58    | 6.55    | 61.1 | 521   | 71.2 JN | 95.1 J  | 198 J      | 517 J       | 17.0 J      |             |            |             |             |             |                        |
|                         | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 0.376 U                            | 0.895 U         | 1.60 U            | 8.53              | 3.65              | 212 J               | 2,130   | 7.64         | 13.7            | 7.52            | 22.1              | 6.65              | 4.02              | 3.92              | 56.9              | 5.77                | 130  | 3.54    | 3.87    | 59.1 | 413   | 52.4 JN | 70.4 JN | 96.0       | 166         | 10.4 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 0.708                              | 3.76            | 6.07              | 19.1              | 9.26              | 271                 | 2,430   | 9.46         | 17.5            | 15.3            | 33.1              | 13.6              | 13.1              | 6.83              | 92.1              | 9.48                | 178  | 69.0    | 146     | 272  | 535   | 142 JN  | 172 JN  | 181        | 239         | 25.1 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 0.296                              | 1.21 J          | 1.53 U            | 7.57              | 3.28              | 224                 | 2,290   | 4.88         | 9.40            | 5.86            | 15.8              | 5.84              | 3.25              | 2.23 J            | 52.0              | 5.29                | 126  | 3.60    | 8.87    | 52.2 | 438   | 48.2 JN | 62.0 JN | 83.1       | 146         | 11.4 J      |             |            |             |             |             |                        |
|                         | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 0.605                              | 1.30 J          | 2.57              | 11.8              | 4.39              | 236                 | 2,410   | 9.02         | 17.3            | 10.5            | 30.6              | 11.4              | 4.81              | 4.67              | 72.7              | 8.50                | 139  | 4.69    | 9.39    | 72.7 | 458   | 103 JN  | 125 JN  | 134        | 201         | 17.4 J      |             |            |             |             |             |                        |
|                         |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 0.377 J                            | 0.835 U         | 1.23 J            | 7.72              | 2.98              | 187                 | 1,980   | 6.63         | 11.9            | 7.26            | 22.6              | 7.80              | 4.24              | 4.57              | 72.1              | 4.80                | 130  | 2.97    | 2.63    | 45.7 | 371   | 78.0 JN | 85.2 JN | 100        | 184         | 12.4 J      |             |            |             |             |             |                        |
|                         |               |             | 2-3                     | DU-7/        |             |                                    |                 |                   |                   |                   |                     |         |              |                 |                 |                   |                   |                   |                   |                   |                     |      |         |         |      |       |         |         |            |             |             |             |            |             |             |             |                        |

Table 3a  
Soil Results - Dioxins/Furans - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |      |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |
|-------------------------|---------------|-------------|-------------------------|-----------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|
|                         |               |             |                         |           |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |      |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |
|                         |               |             |                         |           |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF |
| Ecological ISM PRG      |               |             |                         |           | --          | --                                 | --              | --                | --                | --                | --                  | --   | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | 6.1        |             |             |             |
| Ecological ISM Hot Spot |               |             |                         |           | --          | --                                 | --              | --                | --                | --                | --                  | --   | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | 61          |             |             |

Please see notes at end of table.

Table 3a  
Soil Results - Dioxins/Furans - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |         |              |                 |                 |                   |                   |                   |                   |                   |                     |        |            |             |             |             |            |             |             |             |                        |  |  |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|---------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|--------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|--|--|
|                         |               |             |                         |               |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |         |              |                 |                 |                   |                   |                   |                   |                   |                     |        |            |             |             |             |            |             |             |             |                        |  |  |
|                         |               |             |                         |               |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD    | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF   | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |  |  |
| Ecological ISM PRG      |               |             |                         |               |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --     | --         | --          | --          | --          | --         | 6.1         |             |             |                        |  |  |
| Ecological ISM Hot Spot |               |             |                         |               |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --     | --         | --          | --          | --          | --         | --          | --          | 61          |                        |  |  |
| Central Parcel          | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 1.05                               | 21.5            | 8.89              | 152               | 84.6              | 576                 | 2,700   | 1.02         | 1.42 J          | 12.6            | 4.48              | 6.01              | 9.50              | 2.25 J            | 126               | 5.65                | 242    | 15.1       | 119         | 864         | 994         | 300 JN     | 273 JN      | 152         | 312         | 61.2 J                 |  |  |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 0.708                              | 13.8            | 6.11              | 96.5              | 54.4              | 642                 | 4,490   | 2.39         | 2.25 J          | 68.3            | 7.99              | 19.3              | 29.2              | 4.56              | 165               | 10.0                | 505    | 12.9       | 88.8        | 586         | 1,120       | 1,010 JN   | 1,300 JN    | 473         | 521         | 66.8 J                 |  |  |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 0.735                              | 13.6            | 6.09              | 86.2              | 47.2              | 479                 | 3,030   | 0.39 U       | 1.59 J          | 20.2            | 7.63              | 12.2              | 11.8              | 3.72              | 116               | 6.91                | 323    | 11.7       | 84.2        | 518         | 840         | 1,040      | 608         | 198         | 333         | 45.0 J                 |  |  |
|                         |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 0.399 J                            | 6.49            | 3.34              | 41.0              | 22.7              | 250                 | 1,530   | 0.854        | 0.918 J         | 9.37            | 3.18              | 4.37              | 5.33              | 1.31 J            | 59.6              | 2.38 J              | 178    | 7.07       | 39.0        | 254         | 445         | 164 JN     | 176 JN      | 99.5        | 175         | 21.6 J                 |  |  |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 0.453                              | 3.03            | 1.69 J            | 18.0              | 8.82              | 170                 | 1,270   | 2.04         | 1.20 J          | 21.6            | 2.19 J            | 5.17              | 8.27              | 1.54 J            | 44.8              | 3.12                | 179    | 2.99       | 19.7        | 116         | 290         | 329 JN     | 370 JN      | 130         | 158         | 17.4 J                 |  |  |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 0.250 U                            | 3.03            | 0.337 U           | 15.8              | 10.0              | 177                 | 1,280   | 0.264 U      | 1.59 U          | 5.61            | 1.80 J            | 2.61              | 3.68              | 0.509 U           | 41.5              | 2.39 J              | 167    | 1.54       | 18.2        | 112         | 310         | 102        | 98.6        | 56.7        | 139         | 10.9 J                 |  |  |
|                         |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 0.277 U                            | 4.47            | 1.74 J            | 22.9              | 13.5              | 106                 | 628     | 0.231 U      | 1.37 U          | 2.95            | 1.29 J            | 1.98 J            | 1.87 J            | 0.281 U           | 26.9              | 1.01 J              | 65.9   | 0.773      | 25.7        | 163         | 191         | 68.3 JN    | 57.5 JN     | 38.1        | 67.7        | 11.4 J                 |  |  |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 0.320                              | 4.17            | 1.67 J            | 24.4              | 13.4              | 162                 | 1,000   | 0.192 U      | 0.521 U         | 4.86            | 1.24 J            | 2.4 J             | 2.96              | 0.241 U           | 37.2              | 1.95 J              | 140    | 2.90       | 26.3        | 159         | 286         | 127 JN     | 103 JN      | 55.3        | 118         | 12.9 J                 |  |  |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 0.169 U                            | 2.79            | 1.67 J            | 15.8              | 9.57              | 116                 | 740     | 0.385        | 0.765 U         | 4.14            | 1.49 J            | 2.59              | 2.38 J            | 0.272 U           | 27.5              | 1.24 J              | 96.1   | 1.39       | 18.8        | 111         | 208         | 172 JN     | 110 JN      | 47.0        | 84.6        | 9.23 J                 |  |  |
|                         |               |             | 0-1                     | DU-18 (0-1) M | --          | 0.831                              | 16.3            | 7.03              | 112               | 62.1              | 566                 | 3,407 J | 1.27         | 1.75 J          | 33.7            | 6.70              | 12.5              | 16.8              | 3.51 J            | 136               | 7.52                | 357    | 13.2       | 97.3        | 656         | 985         | 783 J      | 727 J       | 274         | 389         | 57.7 J                 |  |  |
|                         |               |             | 1-2                     | DU-18 (1-2) M | --          | 0.367 J                            | 4.18            | 1.79 J            | 24.9              | 13.8              | 199                 | 1,360   | 1.05         | 1.24 J          | 12.2            | 2.39 J            | 4.05              | 5.76              | 1.12 J            | 48.6              | 2.63 J              | 175    | 3.87       | 25.6        | 161         | 348         | 198 J      | 215 J       | 95.4        | 157         | 16.6 J                 |  |  |
|                         |               |             | 2-3                     | DU-18 (2-3) M | --          | 0.255                              | 3.81            | 1.69 J            | 21.0              | 12.2              | 128                 | 789     | 0.269        | 1.37 U          | 3.98            | 1.34 J            | 2.32 J            | 2.40 J            | 0.281 U           | 30.5              | 1.40 J              | 101    | 1.69       | 23.6        | 144         | 228         | 122 JN     | 90.2 JN     | 46.8        | 90.1        | 11.2 J                 |  |  |
|                         | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 1.15                               | 20.5            | 10.4              | 169               | 76.1              | 659                 | 3,680   | 5.57         | 5.76            | 201             | 26.4              | 47.3              | 77.9              | 14.6              | 145               | 9.88                | 254    | 27.5       | 166         | 891         | 1,160       | 2,280 JN   | 3,590 JN    | 1,190       | 376         | 134                    |  |  |
|                         |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 0.409 U                            | 6.80            | 0.767 U           | 25.3              | 11.0              | 391                 | 2,850   | 4.69         | 1.11 U          | 179             | 20.1              | 38.9              | 71.2              | 12.4              | 81.0              | 7.02                | 200    | 15.6       | 82.2        | 237         | 693         | 2,360 JN   | 3,500 JN    | 1,090       | 236         | 84.8                   |  |  |
|                         |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 0.742                              | 5.52            | 3.18              | 13.6              | 5.27              | 103                 | 616     | 3.36         | 3.00            | 95.1            | 15.2              | 19.2              | 34.6              | 7.12              | 33.0              | 3.82                | 44.3   | 12.5       | 60.8        | 133         | 191         | 1,460 JN   | 1,680 JN    | 512         | 85.2        | 46.6                   |  |  |
|                         | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 0.841                              | 8.89            | 7.08              | 53.9              | 28                | 543                 | 3,150   | 1.25         | 2.01            | 19.7            | 5.83              | 7                 | 12.8              | 3.95              | 78.3              | 3.3                 | 125    | 12.7       | 58          | 329         | 949         | 266        | 344         | 217         | 198         | 34.9                   |  |  |
|                         |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 0.194 U                            | 0.713 U         | 0.676 U           | 7.55              | 3.81              | 138                 | 804     | 0.307 U      | 0.127 U         | 2.18            | 0.227 U           | 0.212 U           | 2.18              | 0.270 U           | 12.5              | 0.897 U             | 20.3   | 0.194 U    | 0.713 U     | 42.7        | 239         | 23.2       | 33.2        | 27.3        | 31.4        | 4.30                   |  |  |
|                         |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 0.284 U                            | 1               | 0.440 U           | 5.49              | 2.79              | 65.9                | 415     | 0.346 U      | 0.271 U         | 2.84            | 0.340 U           | 0.304 U           | 1.76              | 0.418 U           | 8.77              | 0.759 U             | 14.9   | 0.424      | 4.07        | 36          | 118         | 41.8       | 47          | 25.4        | 21.1        | 3.97                   |  |  |
|                         | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 1.32                               | 16.9            | 10.7              | 103               | 57.5              | 806                 | 5,130 J | 3.580        | 3.69            | 54.0            | 13.0              | 16.8              | 29.8              | 7.03              | 184               | 9.82                | 317    | 17.9       | 118         | 68.5        | 1,480       | 1,070      | 977         | 432         | 450         | 70.3 J                 |  |  |
|                         |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 0.540                              | 4.43            | 3.07              | 20.8              | 11.1              | 231                 | 1,360   | 1.340        | 1.65            | 20.2            | 5.54              | 6.85              | 11.6              | 2.25              | 48.8              | 2.85                | 75.1   | 5.78       | 34.8        | 157         | 418         | 327        | 360         | 160         | 114         | 20.6                   |  |  |
|                         |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 0.107 U                            | 2.08 J          | 0.314 U           | 13.3              | 5.30              | 118                 | 769     | 0.781        | 0.648 U         | 9.70            | 3.70              | 3.01              | 5.35              | 1.32 J            | 26.7              | 1.61 J              | 52.7   | 2.79       | 16.8        | 88.8        | 210         | 133        | 154         | 85.3        | 65.7        | 10.1 J                 |  |  |
|                         | DU-22         | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 0.846                              | 9.71            | 5.58              | 63.1              | 31.5              | 438                 | 2,810   | 1.26         | 1.88 J          | 12.5            | 4.09              | 3.68              | 8.59              | 2.24              | 79.1              | 3.27                | 209    | 6.11       | 59.0        | 390         | 776         | 164 J      | 201         | 141         | 223         | 32.5 J                 |  |  |
|                         |               |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 0.464 J                            | 4.68            | 3.91              | 42.0              | 17.3              | 543                 | 3,940   | 0.999        | 1.72 J          | 12.3            | 4.57              | 5.28              | 8.08              | 2.24 J            | 77.3              | 3.66                | 213    | 4.83       | 28.8        | 213         | 915         | 177        | 203         | 153         | 232         | 24.8 J                 |  |  |
|                         |               |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 0.525                              | 9.02            | 4.89              | 44.6              | 22.8              | 482                 | 3,150   | 1.76         | 2.54            | 14.2            | 5.09              | 5.96              | 10.5              | 2.23 J            | 79.5              | 3.44                | 174    | 7.22       | 42.7        | 285         | 929         | 188        | 235         | 156         | 202         | 30.3 J                 |  |  |
|                         |               |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 0.234 U                            | 1.41            | 0.342 U           | 6.02              | 3.06              | 57.7                | 382     | 0.451 U      | 1.05 U          | 3.06            | 0.187 U           | 0.165 U           | 1.84              | 0.191 U           | 23.2              | 0.740 U             | 45.2   | 0.817      | 4.79        | 39.5        | 102         | 60.3       | 53.4        | 37.3        | 69.6        | 4.56                   |  |  |
|                         |               |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 0.196 U                            | 2.25            | 2.21              | 27.4              | 5.92              | 300                 | 2,130   | 0.492        | 2.29 U          | 4.73            | 2.72              | 2.36              | 3.24              | 0.212 U           | 36.2              | 1.92                | 97     | 0.96       | 8.8         | 105         | 507         | 43         | 70.3        | 78.3        | 115         | 12.3                   |  |  |
|                         |               |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 0.201 U                            | 1.55            | 1.54              | 11                | 3.68              | 186                 | 1,270   | 0.461        | 1.97 U          | 3.29            | 1.94              | 1.65              | 2.79              | 0.196 U           | 22.1              | 0.810 U             | 54.4   | 0.432      | 5.57        | 54.6        | 313         | 46.8       | 54          | 48.8        | 64.5        | 7.47                   |  |  |
|                         |               |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 0.217 U                            | 1.31 U          | 0.367 U           | 9.52              | 3.99              | 77.4                | 475     | 0.494 U      | 0.339 U         | 2.83            | 0.571 U           | 0.496 U           | 1.75              | 0.705 U           | 14.4              | 1.51 U              | 37.5   | 0.217 U    | 1.95        | 55.8        | 132         | 38.5       | 47.3        | 25.5        | 37          | 4.35                   |  |  |
|                         |               |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 0.247 U                            | 1.07 U          | 0.527 U           | 8.95              | 3.56              | 228                 | 1,900   | 0.422 U      | 0.389 U         | 6.26            | 1.53              | 2.46              | 4.04              | 0.886 U           | 31.7              | 2.42                | 164    | 0.247 U    | 1.48        | 48.1        | 403         | 73.1       | 98.1        | 70.1        | 124         | 7.93                   |  |  |
|                         |               |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 0.266 U                            | 1.19 U          | 0.411 U           | 7.44              | 3.75              | 102                 | 727     | 0.445 U      | 0.273 U         | 3.47            | 0.489 U           | 1.72              | 2.22              | 0.582 U           | 15.3              | 1.02 U              | 44.9   | 0.266 U    | 1.19 U      | 44.5        | 177         | 61.8       | 68.6        | 36.1        | 49.1        | 4.79                   |  |  |
|                         |               |             | 0-1                     | DU-22 (0-1) M | --          | 0.612 J                            | 7.80            | 4.79              | 49.9              | 23.9              | 488                 | 3,300   | 1.34         | 2.05 J          | 13.0            | 4.58              | 4.97              | 9.06              | 2.24 J            | 78.6              | 3.46                | 199    | 6.05       | 43.5        | 296         | 873         | 176 J      | 213         | 150         | 219         | 29.2 J                 |  |  |
|                         |               |             | 1-2                     | DU-22 (1-2) M | --          | 0.234 U                            | 1.74            | 1.36 J            | 14.8 J            | 4.22              | 181 J               | 1,261 J | 0.468        | 2.29 U          | 3.69            | 1.62 J            | 1.39 J            | 2.62              | 0.212 U           | 27.2              | 1.16                | 65.5   | 0.736      | 6.39        | 66.4        | 307 J       | 50.0       | 59.2        | 54.8        | 83.0        | 8.11                   |  |  |
|                         |               |             | 2-3                     | DU-22 (2-3) M | --          | 0.266 U                            | 1.31 U          | 0.527 U           | 8.64              | 3.77              | 136                 | 1,034 J | 0.494 U      | 0.389 U         | 4.19            | 0.863 J           | 1.56 J            | 2.67              | 0.886 U           | 20.5              | 1.65                | 82.1 J | 0.266 U    | 1.54        | 49.5        | 237         | 57.8       | 71.3        | 43.9        | 70.0 J      | 5.69                   |  |  |
|                         | DU-23         | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 1.05                               | 8.20            | 7.23              | 44.2              | 23.5              | 570                 | 3,570   | 2.15         | 3.52            | 34.6            | 9.20              | 14.1              | 20.2              | 3.80              | 96.8              | 6.09                | 230    | 15.6       | 61.1        | 299         | 1,040       | 558 JN     | 627 JN      | 323         | 255         | 40.0                   |  |  |
|                         |               |             | 1-2                     | DU-23 (1-2)   | 10/12/2022  | 0.219 U                            | 1.75 J          | 1.84 J            | 9.33              | 4.96              | 123                 | 799     | 0.932        | 0.576 U         |                 |                   |                   |                   |                   |                   |                     |        |            |             |             |             |            |             |             |             |                        |  |  |

Table 3a  
Soil Results - Dioxins/Furans - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |         |            |             |             |             |            |             |             |             |                        |  |  |
|------------------------------|----------------------|-------------|-------------------------|--------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|----------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|--|--|
|                              |                      |             |                         |              |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |         |            |             |             |             |            |             |             |             |                        |  |  |
|                              |                      |             |                         |              |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD     | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF    | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |  |  |
| Ecological ISM PRG           |                      |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --      | --         | --          | --          | --          | --         | 6.1         |             |             |                        |  |  |
| Ecological ISM Hot Spot      |                      |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --      | --         | --          | --          | --          | --         | --          | 61          |             |                        |  |  |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)  | 11/30/2022  | 1.1                                | 28.3            | 9.54              | 158               | 91.5              | 302                 | 368      | 0.215 U      | 0.723 U         | 1.31 J          | 2.36 J            | 2.56              | 3.21              | 0.417 U           | 104               | 1.20 U              | 49.4    | 13.2       | 159         | 1,050       | 598         | 10.6       | 25.4        | 49.1        | 162         | 60.7 J                 |  |  |
|                              |                      |             | 1-2                     | DU-42 (1-2)  | 11/30/2022  | 0.49 J                             | 10.7            | 3.13              | 65.1              | 30.6              | 110                 | 154 J+   | 0.148 U      | 0.374 U         | 0.357 U         | 0.243 U           | 0.217 U           | 0.259 U           | 0.309 U           | 36.4              | 0.856 U             | 20.5    | 2.62       | 58.1        | 364         | 216         | 3.05       | 7.21        | 13.5        | 57.3        | 22.7 J                 |  |  |
|                              |                      |             | 2-3                     | DU-42 (2-3)  | 11/30/2022  | 0.267 U                            | 3.93            | 0.51 U            | 22.3              | 11.7              | 47.9                | 81 J+    | 0.227 U      | 0.23 U          | 0.219 U         | 0.327 U           | 0.295 U           | 0.354 U           | 0.423 U           | 15.4              | 0.893 U             | 8.28    | 0.267 U    | 21.8        | 95.9        | 1.06        | 2.25       | 5.35        | 24.3        | 8.27 J      |                        |  |  |
| East Parcel                  | DU-27                | ISM         | 0-1                     | DU-27 (0-1)  | 10/05/2022  | 1.11                               | 17.8            | 25.7              | 161               | 63.7              | 3,150 J             | 21,000 J | 2.37         | 7.99            | 22.1            | 33.8              | 19.3              | 27.6              | 14.5              | 422               | 28.4                | 998     | 10.8       | 74.3        | 744         | 5,340       | 87.4       | 310         | 605         | 1,280       | 103 J                  |  |  |
|                              |                      |             | 1-2                     | DU-27 (1-2)  | 10/05/2022  | 0.833                              | 7.86            | 14.6              | 95.0              | 33.8              | 2,250 J             | 18,100 J | 1.91         | 5.41            | 20.1            | 29.3              | 17.7              | 22.6              | 10.8              | 389               | 30.6                | 1,100   | 7.66       | 45.0        | 417         | 3,850       | 139 JN     | 298 JN      | 494         | 1,190       | 69.9 J                 |  |  |
|                              | 2-3                  | DU-27 (2-3) | 10/05/2022              | 0.414 J      | 2.70        | 4.19                               | 28.9            | 9.80              | 652               | 5,280 J           | 1.64                | 2.70     | 13.1         | 11.9            | 6.05            | 10.2              | 4.43              | 90.2              | 7.35              | 221               | 3.18                | 17.4    | 141        | 1,130       | 94.6 JN     | 174 JN      | 181        | 287         | 24.0 J      |             |                        |  |  |
|                              | DU-28                | ISM         | 0-1                     | DU-28 (0-1)  | 09/14/2022  | 0.217 U                            | 1.94 J          | 3.45              | 20.7              | 7.68              | 717                 | 6,260 J  | 1.01         | 1.16 J          | 4.30            | 7.82              | 2.97              | 4.06              | 2.31 J            | 140               | 8.12                | 622     | 2.86       | 6.89        | 106         | 1,240       | 19.5       | 41.8        | 143         | 553         | 19.1 J                 |  |  |
|                              |                      |             | 1-2                     | DU-28 (1-2)  | 09/14/2022  | 0.541                              | 4.77            | 6.61              | 46.8              | 18.0              | 1,060               | 8,530    | 2.02         | 2.37            | 7.07            | 10.5              | 5.65              | 7.56              | 4.71              | 161               | 9.93                | 537     | 7.05       | 29.1        | 218         | 1,790       | 32.3       | 73.2        | 209         | 540         | 32.7 J                 |  |  |
|                              | 2-3                  | DU-28 (2-3) | 09/14/2022              | 0.513        | 2.64        | 4.37                               | 14.8            | 6.06              | 468               | 3,910             | 1.14                | 1.08     | 3.41         | 6.70            | 1.97            | 2.89              | 2.16              | 72.9              | 5.63              | 283               | 11.7                | 34.1    | 127        | 871         | 12.9        | 27.9        | 99.2       | 271         | 14.9        |             |                        |  |  |
|                              | DU-29                | ISM         | 0-1                     | DU-29 (0-1)  | 09/15/2022  | 0.731                              | 8.83            | 10.7              | 115               | 40.9              | 1,110               | 7,610 J  | 1.62         | 3.27            | 8.89            | 12.0              | 7.25              | 11.3              | 5.91              | 343               | 5.42                | 221     | 17.0       | 72.3        | 577         | 1,960       | 56.7 JN    | 125 JN      | 383         | 672         | 49.7 J                 |  |  |
|                              |                      |             | 1-2                     | DU-29 (1-2)  | 09/15/2022  | 0.176 U                            | 1.63 J          | 4.00              | 24.7              | 6.77              | 473                 | 3,380    | 0.697        | 1.58 U          | 4.59            | 4.77              | 2.43 J            | 4.21              | 2.01 J            | 139               | 2.72                | 98.7    | 2.17       | 4.00        | 106         | 820         | 28.9 JN    | 65.5        | 149         | 282         | 15.3 J                 |  |  |
|                              | 2-3                  | DU-29 (2-3) | 09/15/2022              | 0.151 U      | 0.445 U     | 4.19                               | 24.0            | 6.82              | 509               | 3,860             | 0.658               | 0.80 U   | 5.84         | 6.69            | 3.22            | 5.12              | 2.77              | 152               | 4.16              | 139               | 2.84                | 3.92    | 111        | 863         | 41.3 JN     | 84.0 JN     | 177        | 321         | 15.3 J      |             |                        |  |  |
|                              | DU-30                | ISM         | 0-1                     | DU-30 (0-1)  | 09/16/2022  | 1.210                              | 8.87            | 11.5              | 78.5              | 27.1              | 1,460               | 10,100 J | 1.97         | 3.63            | 14.3            | 11.1              | 9.87              | 13.9              | 7.99              | 201               | 9.86                | 238     | 12.0       | 43.4        | 418         | 2,960       | 139 JN     | 237 JN      | 366         | 502         | 50.5 J                 |  |  |
|                              |                      |             | 1-2                     | DU-30 (1-2)  | 09/16/2022  | 0.463 U                            | 3.22            | 5.00              | 40.4              | 10.4              | 676                 | 4,950 J  | 0.836        | 1.61 U          | 7.19            | 6.54              | 5.14              | 6.83              | 0.870 U           | 89.8              | 4.13                | 108     | 4.71       | 13.7        | 175         | 1,200       | 72.2 JN    | 121 JN      | 176         | 210         | 22.4 J                 |  |  |
|                              | 2-3                  | DU-30 (2-3) | 09/16/2022              | 0.135 U      | 2.46 J      | 3.67                               | 23.6            | 8.49              | 448               | 3,030             | 0.900               | 1.09 J   | 3.68         | 3.78            | 2.95            | 4.83              | 0.444 U           | 42.0              | 2.55              | 56.5              | 3.29                | 12.9    | 127        | 795         | 56.1 JN     | 95.7 JN     | 112        | 111         | 14.4 J      |             |                        |  |  |
|                              | DU-31                | ISM         | 0-1                     | DU-31 (0-1)  | 11/03/2022  | 0.638                              | 9.32            | 12.5              | 104               | 34.2              | 1,840               | 12,000 J | 2.5          | 4.88            | 12              | 14.6              | 12.1              | 16.2              | 9.35              | 192               | 11.8                | 281     | 7.06       | 43.5        | 404         | 2,920       | 46.8       | 147         | 382         | 540         | 58.4 J                 |  |  |
|                              |                      |             | 1-2                     | DU-31 (1-2)  | 11/03/2022  | 0.318 U                            | 3.03            | 3.52              | 27.1              | 8.14              | 624                 | 4,430 J  | 1.04         | 2.21            | 4.31            | 5.27              | 4.77              | 6.36              | 3.09              | 84.3              | 5.55                | 182     | 3.35       | 10.6        | 125         | 994         | 25.1       | 57.5        | 134         | 243         | 19.0 J                 |  |  |
|                              | 2-3                  | DU-31 (2-3) | 11/03/2022              | 0.288 U      | 1.67        | 2.36                               | 16.3            | 4.87              | 357               | 2,580             | 0.642               | 0.985    | 2.3          | 3.19            | 2.73            | 3.37              | 2.34              | 42.7              | 2.67              | 105               | 3.4                 | 6.7     | 76.1       | 570         | 16.2        | 28.5        | 74.2       | 122         | 10.9        |             |                        |  |  |
|                              | DU-32                | ISM         | 0-1                     | DU-32 (0-1)  | 09/22/2022  | 0.16 U                             | 5.43            | 6.79              | 55.1              | 15.6              | 1,130               | 8,240 J  | 2.92         | 3.28            | 8.65            | 9.74              | 6.97              | 10.2              | 7.18              | 123               | 8.53                | 204     | 4.79       | 25.2        | 240         | 1,800       | 32.9 JN    | 79.0        | 262         | 349         | 34.8 J                 |  |  |
|                              |                      |             | 1-2                     | DU-32 (1-2)  | 09/22/2022  | 0.136 U                            | 0.364 U         | 0.546 U           | 11.1              | 3.21              | 296                 | 2,240    | 2.88         | 1.53 J          | 3.17            | 3.11              | 2.00 J            | 0.397 U           | 0.391 U           | 34.0              | 0.816 U             | 61.1    | 1.72       | 1.71        | 61.6        | 474         | 20.8       | 28.6        | 61.3        | 91.7        | 7.54 J                 |  |  |
|                              | 2-3                  | DU-32 (2-3) | 09/22/2022              | 0.122 U      | 0.328 U     | 0.504 U                            | 13.7            | 4.28              | 282               | 1,980             | 1.70                | 1.02 J   | 2.43 J       | 2.71            | 1.72 J          | 2.33 J            | 1.78 J            | 30.8              | 1.71 J            | 49.3              | 1.32                | 0.328 U | 59.6       | 447         | 13.3        | 19.9        | 62.5       | 83.1        | 7.59 J      |             |                        |  |  |
|                              | DU-33                | ISM         | 0-1                     | DU-33 (0-1)  | 09/20/2022  | 0.670                              | 5.6             | 8.21              | 54.0              | 20.6              | 876                 | 6,150    | 7.25         | 4.50            | 18.0            | 11.4              | 14.1              | 11.9              | 6.38              | 101               | 6.90                | 149     | 18.8       | 48.3        | 296         | 1,490       | 328 JN     | 347 JN      | 259         | 266         | 36.9 J                 |  |  |
|                              |                      |             | 1-2                     | DU-33 (1-2)  | 09/20/2022  | 0.254                              | 2.64            | 4.09              | 22.5              | 8.87              | 493                 | 3,340    | 3.92         | 2.49 J          | 5.79            | 5.75              | 3.98              | 4.11              | 2.73              | 46.6              | 2.57                | 58.1    | 8.22       | 18.6        | 122         | 813         | 100 JN     | 87.2 JN     | 121         | 122         | 16.7 J                 |  |  |
|                              | 2-3                  | DU-33 (2-3) | 09/20/2022              | 0.379        | 2.19 J      | 1.40 J                             | 15.3            | 4.01              | 321               | 1,970             | 3.86                | 2.86     | 4.85         | 4.28            | 3.26            | 3.86              | 2.67              | 34.9              | 1.32 J            | 38.0              | 7.36                | 12.4    | 88.8       | 553         | 73.3 JN     | 70.6 JN     | 94.1       | 91.1        | 12.1 J      |             |                        |  |  |
|                              | DU-34                | ISM         | 0-1                     | DU-34 (0-1)  | 09/27/2022  | 0.637                              | 9.19            | 14.6              | 105               | 31.2              | 1,910               | 12,200 J | 2.70         | 6.22            | 14.3            | 17.6              | 12.6              | 16.3              | 10.8              | 195               | 10.7                | 194     | 21.0       | 55.0        | 467         | 3,010       | 75.1 JN    | 175 JN      | 439         | 515         | 60.3 J                 |  |  |
|                              |                      |             | 1-2                     | DU-34 (1-2)  | 09/27/2022  | 0.459 J                            | 4.31            | 6.86              | 48.9              | 16.9              | 873                 | 5,940 J  | 2.06         | 2.44 J          | 6.56            | 7.33              | 5.12              | 7.38              | 4.20              | 95.0              | 5.02                | 120     | 9.02       | 22.3        | 201         | 1,370       | 62.0 JN    | 96.8 JN     | 211         | 248         | 28.2 J                 |  |  |
|                              | 2-3                  | DU-34 (2-3) | 09/27/2022              | 0.16 U       | 1.10 J      | 2.43 J                             | 18.5            | 5.31              | 342               | 2,160             | 0.882               | 1.21 J   | 2.49 J       | 3.39            | 2.61            | 3.48              | 2.01              | 36.0              | 0.388 U           | 43.7              | 5.2                 | 10.5    | 78.6       | 538         | 29.0 JN     | 39.8 JN     | 78.5       | 91.4        | 30.2 J      |             |                        |  |  |
|                              | DU-35                | ISM         | 0-1                     | DU-35 (0-1)  | 10/07/2022  | 0.468                              | 4.95            | 8.91              | 67.0              | 18.7              | 1,340               | 10,400 J | 5.27         | 4.65            | 9.97            | 10.3              | 8.81              | 11.3              | 7.82              | 143               | 8.93                | 230     | 10.1       | 30.5        | 258         | 2,520       | 56.4       | 104         | 287         | 419         | 40.5 J                 |  |  |
|                              |                      |             | 1-2                     | DU-35 (1-2)  | 10/07/2022  | 0.211 U                            | 1.71 J          | 3.15              | 21.8              | 6.44              | 423                 | 2,990    | 3.27         | 2.03 J          | 3.38            | 3.73              | 2.64              | 3.23              | 2.05 J            | 41.5              | 2.41 J              | 74.4    | 5.86       | 11.1        | 93.5        | 710         | 31.0 JN    | 37.8 JN     | 85.7        | 122         | 13.1 J                 |  |  |
|                              | 2-3                  | DU-35 (2-3) | 10/07/2022              | 0.197 U      | 1.25 J      | 2.01 J                             | 16.0            | 4.76              | 347               | 2,640             | 2.09                | 1.23 J   | 2.25 J       | 3.03            | 1.83 J          | 2.66              | 1.86 J            | 37.5              | 2.12 J            | 60.5              | 3.62                | 3.66    | 75.0       | 590         | 17.8 JN     | 25.7 JN     | 77.5       | 105         | 10.2 J      |             |                        |  |  |
|                              | DU-36                | ISM         | 0-1                     | DU-36 (0-1)  | 11/01/2022  | 0.738                              | 7.39            | 8.54              | 59.9              | 24.2              | 1,210               | 8,990 J  | 7.12         | 5.53            | 11.3            | 10.1              | 13.1              | 11.1              | 5.74              | 146               | 11.9                | 323     | 16         | 47.3        | 276         | 1,990       | 117        | 166         | 269         | 420         | 42.1 J                 |  |  |
|                              |                      |             | 1-2                     | DU-36 (1-2)  | 11/01/2022  | 0.695                              | 6.02            | 7.34              | 48.5              | 18.2              | 1,160               | 8,400 J  | 6.6          | 4.81            | 9.47            | 9.95              | 13.1              | 9.59              | 5.5               | 112               | 8.75                | 259     | 14         | 39.9        | 255         | 2,090       | 322        | 312         | 224         | 354         | 37.0 J                 |  |  |
|                              | 2-3                  | DU-36 (2-3) | 11/01/2022              | 1.15         | 5.8         | 6.67                               | 33.5            | 13                | 661               | 4,640 J           | 11.2                | 6.08     | 9.55         | 7.25            | 7.18            | 8.45              | 3.56              | 80.3              | 5.81              | 144               | 24.3                | 48      | 169        | 1,090       | 126         | 118         | 154        | 222         | 28.0 J      |             |                        |  |  |
|                              | DU-38                | ISM         | 0-1                     | DU-38 (0-1)A | 11          |                                    |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |         |            |             |             |             |            |             |             |             |                        |  |  |

Table 3a  
Soil Results - Dioxins/Furans - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |  |  |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|----------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|--|--|
|                         |               |             |                         |               |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |  |  |
|                         |               |             |                         |               |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD     | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |  |  |
| Ecological ISM PRG      |               |             |                         |               | --          | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | 6.1         |             |             |                        |  |  |
| Ecological ISM Hot Spot |               |             |                         |               | --          | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | --          | 61          |             |                        |  |  |
| East Parcel Soil Berms  | DU-41         | ISM         | 0-1 FR                  | DU-41 (0-1)A  | 10/24/2022  | 2.75                               | 44.9            | 81.2              | 421               | 175               | 8,440 J             | 51100 J  | 4.13         | 16.8            | 43.8            | 59.1              | 40.9              | 59.6              | 23.8              | 642               | 39.1                | 858  | 23.1       | 169         | 2,080       | 15,200      | 190        | 732         | 1,250       | 1,830       | 255 J                  |  |  |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 2.36                               | 33.4            | 56.8              | 315               | 123               | 6,450 J             | 40400 J  | 4.47         | 14.2            | 40.3            | 46.9              | 28.5              | 51.4              | 20.6              | 546               | 35.3                | 849  | 22.7       | 138         | 1,510       | 11,800      | 208        | 643         | 1,080       | 1,530       | 196 J                  |  |  |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 2.47                               | 35.6            | 63.1              | 342               | 140               | 7,200               | 43900    | 3.79         | 14.9            | 35.3            | 50.2              | 33.4              | 54.6              | 21.3              | 573               | 35.3                | 828  | 22.8       | 146         | 1,690       | 13,200      | 195        | 618         | 1,190       | 1,640       | 211                    |  |  |
|                         |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 2.09                               | 39.2            | 71.2              | 390               | 161               | 7,780 J             | 43,600 J | 3.44         | 14.6            | 50.4            | 53.7              | 40.1              | 58.2              | 20.4              | 627               | 39.1                | 946  | 21.1       | 162         | 1,790       | 13,100      | 417        | 942         | 1,390       | 1,730       | 234 J                  |  |  |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 1.73                               | 33.2            | 59                | 316               | 125               | 6,570 J             | 37,900 J | 3.55         | 13.4            | 44.7            | 43.6              | 32.7              | 49.9              | 19                | 569               | 33.6                | 849  | 20         | 127         | 1,570       | 11,600      | 374        | 860         | 1,210       | 1,580       | 197 J                  |  |  |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 2.66                               | 42.5            | 72.1              | 413               | 166               | 7,870 J             | 43,500 J | 3.94         | 15.9            | 49              | 53.5              | 36.7              | 59.2              | 24.2              | 630               | 34.4                | 770  | 23.9       | 164         | 1,900       | 13,100      | 334        | 833         | 1,350       | 1,670       | 242 J                  |  |  |
|                         |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 1.33                               | 26.2            | 49.4              | 276               | 98.4              | 4,960 J             | 29,300 J | 2.52         | 10.4            | 32.9            | 31.5              | 26.5              | 39.6              | 14.8              | 416               | 24.5                | 660  | 12         | 100         | 1,130       | 8,280       | 252        | 600         | 857         | 1,180       | 155 J                  |  |  |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 1.11                               | 16.8            | 32.1              | 187               | 68.4              | 3,390 J             | 21,600 J | 1.8          | 7.44            | 22.2            | 26.7              | 19                | 26.9              | 12.1              | 305               | 19.5                | 598  | 9.68       | 66.2        | 764         | 5,720       | 158        | 390         | 625         | 928         | 106 J                  |  |  |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 1.23                               | 22.6            | 42                | 235               | 85                | 4,350 J             | 27,100 J | 2.57         | 9.55            | 26.9            | 32.1              | 21.7              | 34.3              | 14.3              | 375               | 23.3                | 563  | 11.4       | 88.5        | 979         | 7,330       | 205        | 484         | 785         | 1,050       | 135 J                  |  |  |
|                         |               |             | 0-1                     | DU-41 (0-1) M | --          | 2.53                               | 38.0            | 67.0              | 359               | 146               | 7,363 J             | 45,133 J | 4.13         | 15.3            | 39.8            | 52.1              | 34.3              | 55.2              | 21.9              | 587               | 36.6                | 845  | 22.9       | 151         | 1,760       | 13,400      | 198        | 664         | 1,173       | 1,667       | 221 J                  |  |  |
|                         |               |             | 1-2                     | DU-41 (1-2) M | --          | 2.16                               | 38.3            | 67.4              | 373               | 151               | 7,407 J             | 41,667 J | 3.64         | 14.6            | 48.0            | 50.3              | 36.5              | 55.8              | 21.2              | 609               | 35.7                | 855  | 21.7       | 151         | 1,753       | 12,600      | 375        | 878         | 1,317       | 1,660       | 224 J                  |  |  |
|                         |               |             | 2-3                     | DU-41 (2-3) M | --          | 1.22                               | 21.9            | 41.2              | 233               | 83.9              | 4,233 J             | 26,000 J | 2.30         | 9.13            | 27.3            | 30.1              | 22.4              | 33.6              | 13.7              | 365.3             | 22.4                | 607  | 11.0       | 84.9        | 957.7       | 7,110       | 205        | 491         | 756         | 1,053       | 132                    |  |  |

Notes:  
ISM = Incremental Sampling Methodology.  
bgs = Below ground surface.  
EPA = United States Environmental Protection Agency.  
M = Mean. These results are the mean of the field replicates collected at this decision unit.  
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.  
pg/g = Picograms per gram (parts per trillion).  
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent  
Bolded values exceed the Preliminary Remediation Goal (PRG).  
Shaded values exceed the hot spot level.  
*Italicized* values represent a method detection limit that is above one or more applicable screening levels.  
U = Analyte was not detected.  
J = Result is estimated.  
JN = The analyte was tentatively identified and did not meet method criteria for confirmation. The reported result is an estimated maximum possible concentration (EMPC).  
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).  
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 3b  
Soil Results - Dioxins/Furans - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |       |              |                 |                   |                   |                   |                   |                   |                   |                     |      |       |       |      |       |      |      |       |      |            |             |             |             |            |             |             |             |                        |      |      |      |      |   |
|---------------------------|---------------|-------------|-------------------------|--------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|-------|--------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|-------|-------|------|-------|------|------|-------|------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|------|------|------|------|---|
|                           |               |             |                         |              |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |       |              |                 |                   |                   |                   |                   |                   |                   |                     |      |       |       |      |       |      |      |       | OCDF | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |      |      |      |      |   |
|                           |               |             |                         |              |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD  | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 1,2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF |      |       |       |      |       |      |      |       |      |            |             |             |             |            |             |             |             |                        |      |      |      |      |   |
| Human Health ISM PRG      |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --    | --           | --              | --                | --                | --                | --                | --                | --                | --                  | --   | --    | --    | --   | --    | --   | --   | --    | --   | 15         |             |             |             |            |             |             |             |                        |      |      |      |      |   |
| Human Health ISM Hot Spot |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --    | --           | --              | --                | --                | --                | --                | --                | --                | --                  | --   | --    | --    | --   | --    | --   | --   | --    | --   | 1,500      |             |             |             |            |             |             |             |                        |      |      |      |      |   |
| West Parcel               | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 0.833                              | 4.53            | 3.96              | 31.3              | 17.9              | 407                 | 3,690 | 1.36         | 2.77            | 7.95              | 8.16              | 5.85              | 8.48              | 2.13              | U                 | 118                 | 4.69 | 340   | 9.14  | JN   | 30.4  | JN   | 218  | 985   | 72.5 | JN         | 88.3        | JN          | 171         | 393        | 22.1        | J           |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 0.826                              | 2.27            | J                 | 4.64              | 27.8              | 9.16                | 644   | 6,310        | J               | 1.38              | 4.05              | 8.17              | 14.4              | 8.37              | 3.83              | 337                 | 11.2 | 924   | 8.79  | JN   | 21.1  | JN   | 155  | 1,150 | 48.3 | JN         | 65.7        | 333         | 1,090       | 25.6       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 0.439                              | 0.941           | U                 | 2.06              | J                 | 12.1                | 4.35  | 305          | 3,060           | J                 | 1.14              | 1.18              | J                 | 3.5               | 5.57              | 2.75                | 3.62 | 1.56  | J     | 126  | 6.31  | 458  | 3.52 | 2.77  | JN   | 66.1       | 543         | 21.1        | JN          | 30.1       | JN          | 125         | JN          | 423                    | 10.7 | J    |      |      |   |
|                           | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 0.424                              | U               | 1.50              | J                 | 1.49              | U                   | 9.03  | 4.55         | 157             | 1,310             | 1.14              | 1.97              | J                 | 2.45              | J                 | 3.45                | 1.65 | J     | 0.795 | U    | 0.822 | U    | 30.4 | 1.96  | J    | 78.9       | 3.03        | 11.0        | 62.0        | 325        | 27.6        | JN          | 28.7        | JN                     | 36.4 | 90.2 | 6.95 | J    |   |
|                           |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 0.338                              | U               | 0.698             | U                 | 1.21              | U                   | 6.62  | 1.10         | U               | 73.5              | 700               | 0.895             | 1.22              | U                 | 1.76              | J                   | 2.09 | J     | 1.06  | U    | 1.29  | U    | 15.4 | 1.13  | U    | 58.7       | 1.15        | 0.698       | U           | 17.5       | 118         | 17.4        | JN          | 15.7                   | JN   | 16.6 | 48.6 | 3.44 | J |
|                           |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 0.352                              | U               | 0.67              | U                 | 1.63              | U                   | 2.63  | 1.52         | U               | 46.7              | 384               | 0.605             | 1.13              | J                 | 1.21              | J                   | 1.26 | U     | 1.53  | U    | 1.52  | U    | 15.1 | 1.02  | U    | 40.8       | 0.667       | 0.670       | U           | 16.1       | 80.3        | 17.7        | JN          | 14.9                   | JN   | 13.5 | 42.1 | 2.42 | J |
|                           | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 0.673                              | 6.12            | 5.17              | 38.7              | 13.0              | 805                 | 5,360 | J            | 0.752           | 2.27              | U                 | 4.8               | 5.94              | 2.72              | 6.33              | 2.03                | U    | 87.5  | 3.75  | 290  | 3.00  | 25.0 | 220  | 1,380 | 13.2 | 61.0       | 136         | 260         | 26.3        | J          |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 0.354                              | U               | 1.16              | U                 | 2.00              | U                   | 11.4  | 4.92         | 327             | 2,780             | 0.322             | U                 | 0.807             | U                 | 1.62              | J                   | 1.09 | U     | 0.991 | U    | 1.22  | U    | 1.29 | U     | 40.4 | 4.02       | 66.8        | 526         | 6.38        | 24.9       | 38.7        | 444         | 7.82        | J                      |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 0.227                              | U               | 1.53              | U                 | 1.77              | U                   | 5.71  | 1.94         | J               | 163               | 1,520             | 0.298             | U                 | 1.07              | U                 | 1.02                | U    | 0.928 | U     | 0.86 | U     | 1.05 | U    | 30.2  | 2.11 | U          | 151         | 0.227       | U           | 1.53       | U           | 41.4        | 270         | 3.01                   | 7.87 | 23.8 | 129  | 4.57 | J |
|                           | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 0.565                              | 4.67            | 3.89              | 44.0              | 19.4              | 458                 | 3,340 | 0.734        | 2.18            | U                 | 3.08              | 3.73              | 2.55              | 3.52              | 2.44              | U                   | 102  | 5.06  | 447   | 3.99 | 30.4  | 252  | 925  | 12.3  | JN   | 40.1       | 94.7        | 354         | 20.9        |            |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 0.486                              | J               | 3.44              | 2.15              | J                 | 30.3                | 8.41  | 405          | 3,280           | 0.784             | 1.17              | J                 | 3.75              | 5.27              | 3.03              | 3.92                | 1.21 | U     | 97.7  | 5.14 | 2.24  | 17.6 | 149  | 700   | 19.3 | JN         | 50.3        | 101         | 374         | 16.6       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 0.469                              | J               | 1.87              | J                 | 0.887             | U                   | 18.1  | 5.97         | 458             | 4,160             | J                 | 0.694             | 1.96              | U                 | 4.02              | 4.98                | 3.34 | 3.98  | 0.831 | U    | 120   | 5.94 | 689  | 3.27  | 8.66 | 105        | 808         | 27.8        | JN          | 63.5       | 126         | 489         | 14.7        | J                      |      |      |      |      |   |
|                           | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 0.561                              | 1.75            | J                 | 1.55              | U                 | 9.28                | 3.95  | 209          | 0.910           | 4.10              | 7.53              | 5.27              | 13.8              | 4.99              | 3.01              | 3.02                | 60.6 | 4.63  | 127   | 4.02 | 12.2  | 58.8 | 402  | 38.5  | JN   | 54.5       | JN          | 84.1        | 164         | 11.8       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 0.746                              | 2.02            | J                 | 1.17              | U                 | 8.24                | 4.35  | 258          | 2,360           | 6.93              | 14.9              | 8.86              | 24.3              | 8.24              | 4.53              | 3.49                | 76.9 | 6.57  | 153   | 7.49 | 10.4  | 73.8 | 517  | 58.0  | JN   | 80.3       | JN          | 107         | 202         | 16.1       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 0.565                              | 2.07            | J                 | 2.74              | U                 | 12.5                | 6.70  | 256          | 2,310           | 5.96              | 11.1              | 7.26              | 19.9              | 9.07              | 4.20              | 3.29                | 214  | 4.99  | 189   | 4.00 | 9.27  | 81.1 | 500  | 44.6  | JN   | 72.2       | JN          | 171         | 435         | 17.1       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 0.508                              | 0.652           | U                 | 1.94              | J                 | 7.31                | 1.99  | J            | 207             | 2,060             | 5.26              | 10.2              | 7.54              | 17.6              | 6.59              | 4.78                | 2.16 | J     | 76.0  | 5.78 | 154   | 3.89 | 2.89 | 48.4  | 377  | 72.7       | JN          | 85.4        | JN          | 101        | 202         | 11.7        | J           |                        |      |      |      |      |   |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 0.422                              | J               | 0.726             | U                 | 2.23              | U                   | 7.99  | 3.89         | 264             | 2,630             | 7.10              | 10.8              | 9.02              | 16.6              | 6.21              | 4.50                | 4.38 | 67.1  | 6.59  | 187  | 3.33  | 5.41 | 55.2 | 515   | 82.9 | JN         | 93.1        | JN          | 99.7        | 214        | 13.2        | J           |             |                        |      |      |      |      |   |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 0.427                              | U               | 1.26              | J                 | 1.97              | J                   | 8.63  | 3.01         | 255             | 2,460             | 5.28              | 11.0              | 8.81              | 16.5              | 11.0              | 5.14                | 2.84 | 255   | 6.43  | 240  | 2.82  | 7.02 | 55.4 | 465   | 50.3 | JN         | 73.7        | JN          | 197         | 525        | 15.3        | J           |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 1.28                               | 1.57            | J                 | 1.38              | J                 | 7.87                | 3.99  | 260          | 2,560           | 5.58              | 9.36              | 9.89              | 16.2              | 6.36              | 4.88              | 2.83                | 89.7 | 7.69  | 192   | 5.54 | 7.35  | 57.8 | 464  | 74.4  | JN   | 104        | JN          | 112         | 241         | 15.4       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 0.511                              | 1.59            | U                 | 1.91              | J                 | 6.43                | 3.28  | 246          | 2,360           | 4.85              | 8.14              | 8.47              | 14.1              | 5.85              | 4.63              | 2.95                | 57.5 | 5.83  | 151   | 4.18 | 7.54  | 58.3 | 581  | 89.7  | JN   | 92.4       | JN          | 90.1        | 179         | 12.3       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 0.535                              | 1.49            | J                 | 1.83              | J                 | 11.5                | 3.90  | 295          | 3,160           | 5.77              | 11.4              | 7.90              | 25.2              | 21.2              | 7.95              | 6.06                | 610  | 9.63  | 408   | 4.02 | 4.76  | 67.1 | 519  | 49.6  | JN   | 89.0       | JN          | 392         | 1,130       | 23.3       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 0-1                     | DU-5 (0-1) M | --          | 0.624                              | 1.95            | J                 | 1.82              | U                 | 10.0                | 5.00  | 241          | 2,193           | 5.66              | 11.2              | 7.13              | 19.3              | 7.43              | 3.91              | 3.27                | 117  | J     | 5.40  | 156  | 5.17  | 10.6 | 71.2 | 473   | 47.0 | JN         | 69.0        | JN          | 121         | 267        | 14.98       | J           |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-5 (1-2) M | --          | 0.452                              | J               | 0.879             | J                 | 2.05              | J                   | 7.98  | 2.96         | J               | 242               | 2,383             | 5.88              | 9.94              | 7.88              | 16.9              | 7.35                | 3.13 | J     | 133   | J    | 194   | 3.35 | 5.11 | 53.0  | 452  | 68.6       | JN          | 84.1        | JN          | 133        | 314         | 13.4        | J           |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-5 (2-3) M | --          | 0.775                              | 1.55            | J                 | 1.71              | J                 | 8.60                | 3.72  | 267          | 2,693           | 5.40              | 9.63              | 8.75              | 18.5              | 11.1              | J                 | 5.82                | 3.95 | 252   | J     | 7.72 | 250   | 4.58 | 6.55 | 61.1  | 521  | 71.2       | JN          | 95.1        | J           | 198        | J           | 517         | J           | 17.0                   | J    |      |      |      |   |
|                           | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 0.376                              | U               | 0.895             | U                 | 1.60              | U                   | 8.53  | 3.65         | 2.12            | J                 | 2,130             | 7.64              | 13.7              | 7.52              | 22.1              | 6.65                | 4.02 | 3.92  | 56.9  | 3.54 | 3.87  | 59.1 | 413  | 52.4  | JN   | 70.4       | J           | 96.0        | 166         | 10.4       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 0.708                              | 3.76            | 6.07              | 19.1              | 9.26              | 271                 | 2,430 | 9.46         | 17.5            | 15.3              | 33.1              | 13.6              | 13.1              | 6.83              | 92.1              | 9.48                | 178  | 69.0  | 146   | 272  | 535   | 142  | JN   | 172   | JN   | 181        | 239         | 25.1        | J           |            |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 0.296                              | 1.21            | J                 | 1.53              | U                 | 7.57                | 3.28  | 224          | 2,290           | 4.88              | 9.40              | 5.86              | 15.8              | 5.84              | 3.25              | 2.23                | J    | 52.0  | 5.29  | 126  | 3.60  | 8.87 | 52.2 | 438   | 48.2 | JN         | 62.0        | JN          | 83.1        | 146        | 11.4        | J           |             |                        |      |      |      |      |   |
|                           | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 0.605                              | 1.30            | J                 | 2.57              | 11.8              | 4.39                | 236   | 2,410        | 9.02            | 17.3              | 10.5              | 30.6              | 11.4              | 4.81              | 4.67              | 72.7                | 8.50 | 139   | 4.69  | 9.39 | 72.7  | 458  | 103  | JN    | 125  | JN         | 134         | 201         | 17.4        | J          |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 0.377                              | J               | 0.835             | U                 | 1.23              | J                   | 7.72  | 2.98         | 187             | 1,980             | 6.63              | 11.9              | 7.72              | 22.6              | 7.80              | 4.24                | 4.57 | 72.1  | 4.80  | 2.97 | 2.63  | 45.7 | 371  | 78.0  | JN   | 85.2       | JN          | 100         | 184         | 12.4       | J           |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-7 (2-3)   | 07/29/2022  | 0.315                              | U               | 1.35              | U                 | 2.04              | U                   | 4.24  | 2.17         | J               | 122               | 1,430             | 4.48              | 8.45              | 4.15              | 15.3              | 5.43                | 3.38 | 2.41  | U     | 38.8 | 5.24  | 130  | 2.48 | 249   | 40.1 | JN         | 45.1        | JN          | 66.3        | 115        | 8.17        | J           |             |                        |      |      |      |      |   |
|                           | DU-8          | ISM         | 0-1                     | DU-8 (0-1)   | 08/05/2022  | 1.03                               | 2.98            | 2.34              | J                 | 16.6              | 8.25                | 371   | 3,990        | 8.93            | 15.8              | 10.5              | 38.2              | 13.3              | 7.21              | 4.80              | 88.6                | 10.2 | 277   | 7.68  | 19.3 | 111   | 6.87 | 44.5 | JN    | 97.3 | 176        | 282         | 23.6        | J           |            |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-8 (1-2)   | 08/05/2022  | 0.847                              | 2.47            | J                 | 4.20              | 16.1              | 8.08                | 389   | 4,190        | J               | 10.6              | 19.9              | 11.8              | 41.1              | 12.5              | 8.05              | 6.10                | 109  | 13.1  | 288   | 6.99 | 16.3  | 120  | 762  | 48.4  | JN   | 111        | 194         | 328         | 24.6        | J          |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-8 (2-3)   | 08/05/2022  | 1.15                               | 1.79            | J                 | 2.12              | J                 | 12.3                | 5.33  | 406          | 4,530           | J                 | 10.1              | 19.7              | 11.9              | 41.2              | 12.8              | 6.52                | 5.66 | 103   | 12.6  | 310  | 5.88  | 14.4 | 105  | 7.68  | 43.5 | JN         | 108         | 194         | 313         | 23.4       | J           |             |             |                        |      |      |      |      |   |
|                           | DU-9          | ISM         | 0-1                     | DU-9 (0-1)   | 08/08/2022  | 0.685                              | 2.33            | J                 | 1.58              | U                 | 13.8                | 5.91  | 344          | 3,170           | 7.00              | 12.0              | 8.32              | 23.8              | 7.20              | 3.50              | 87.7                | 8.23 | 177   | 7.96  | 19.1 | 104   | 642  | 35.3 | 71.4  | 120  | 247        | 17.8        | J           |             |            |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-9 (1-2)   | 08/08/2022  | 0.532                              | 1.46            | U                 | 2.21              | U                 | 8.01                | 2.51  | 233          | 2,550           | 5.32              | 10.7              | 6.81              | 20.3              | 7.44              | 4.87              | 2.75                | 71.5 | 7.04  | 193   | 3.76 | 3.17  | 71.9 | 470  | 32.8  | JN   | 66.6       | 110         | 216         | 12.8        | J          |             |             |             |                        |      |      |      |      |   |
|                           |               |             | 2-3                     | DU-9 (2-3)   | 08/08/2022  | 0.569                              | 1.20            | U                 | 1.47              | U                 | 6.77                | 2.34  | J            | 228             | 2,520             | 5.97              | 10.5              | 6.80              | 21.9              | 7.34              | 2.94                | 65.2 | 6.61  | 157   | 3.07 | 3.04  | 58.2 | 460  | 30.9  | JN   | 62.2       | 104         | 178         | 12.3        | J          |             |             |             |                        |      |      |      |      |   |
|                           | DU-10         | ISM         | 0-1                     | DU-10 (0-1)  | 08/12/2022  | 0.533                              | 5.87            | 0.599             | U                 | 34.0              | 19.2                | 308   | 1,830        | 0.767           | 0.939             | U                 | 2.22              | J                 | 1.79              | J                 | 1.47                | J    | 0.321 | U     | 74.6 | 0.943 | U    | 276  | 6.56  | 32.8 | 219        | 584         | 28.5        | JN          | 29.1       | 55.7        | 264         | 17.3        | J                      |      |      |      |      |   |
|                           |               |             | 1-2                     | DU-10 (1-2)  | 08/12/2022  | 0.135                              | U               | 0.551             | U                 | 0.822             | U                   | 9.79  | 3.71         |                 |                   |                   |                   |                   |                   |                   |                     |      |       |       |      |       |      |      |       |      |            |             |             |             |            |             |             |             |                        |      |      |      |      |   |

Table 3b  
Soil Results - Dioxins/Furans - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID                  | Sample Date              | Dioxins/Furans by EPA Method 1613B |                 |                    |                   |                   |                     |                 |                    |                    |                 |                    |                    |                   |                    |                   |                     |              |                    |                 |             |             |                 |                 |              |              |                        |
|---------------------------|---------------|-------------|-------------------------|----------------------------|--------------------------|------------------------------------|-----------------|--------------------|-------------------|-------------------|---------------------|-----------------|--------------------|--------------------|-----------------|--------------------|--------------------|-------------------|--------------------|-------------------|---------------------|--------------|--------------------|-----------------|-------------|-------------|-----------------|-----------------|--------------|--------------|------------------------|
|                           |               |             |                         |                            |                          | Concentrations in pg/g             |                 |                    |                   |                   |                     |                 |                    |                    |                 |                    |                    |                   |                    |                   |                     |              |                    |                 |             |             |                 |                 |              |              |                        |
|                           |               |             |                         |                            |                          | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD  | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD            | 2,3,7,8-TCDF       | 1,2,3,7,8-PeCDF    | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF  | 1,2,3,6,7,8-HxCDF  | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF  | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF         | Total TCDD         | Total PeCDD     | Total HxCDD | Total HpCDD | Total TCDF      | Total PeCDF     | Total HxCDF  | Total HpCDF  | Total D/F TEQ (Mammal) |
| Human Health ISM PRG      |               |             |                         |                            |                          | --                                 | --              | --                 | --                | --                | --                  | --              | --                 | --                 | --              | --                 | --                 | --                | --                 | --                | --                  | --           | --                 | --              | --          | --          | --              | 15              |              |              |                        |
| Human Health ISM Hot Spot |               |             |                         |                            |                          | --                                 | --              | --                 | --                | --                | --                  | --              | --                 | --                 | --              | --                 | --                 | --                | --                 | --                | --                  | --           | --                 | --              | --          | --          | --              | --              | 1,500        |              |                        |
|                           | DU-17         | ISM         | 1-2<br>2-3              | DU-17 (1-2)<br>DU-17 (2-3) | 09/02/2022<br>09/02/2022 | 0.171 U<br>0.140 U                 | 0.400 U<br>3.97 | 0.453 U<br>0.709 J | 3.38<br>13.7      | 1.77 J<br>6.37    | 92.1<br>65.8        | 1,010<br>290 J+ | 0.110 U<br>0.164 U | 0.833 U<br>0.488 U | 3.32<br>1.96 J  | 0.365 U<br>0.271 U | 0.324 U<br>0.238 U | 1.40 J<br>1.56 J  | 0.476 U<br>0.370 U | 14.4<br>13.8      | 0.591 U<br>0.636 U  | 83.5<br>19.2 | 0.171 U<br>0.140 U | 0.400 U<br>15.1 | 28.0<br>105 | 180<br>120  | 29.5 JN<br>8.24 | 52.7 JN<br>22.9 | 30.1<br>18.4 | 57.3<br>32.6 | 3.43 J<br>7.81 J       |

Please see notes at end of table.

Table 3b  
Soil Results - Dioxins/Furans - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |         |              |                 |                   |                   |                   |                   |                   |                   |                     |        |            |             |             |             |            |             |             |             |                        |  |  |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|---------|--------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|--------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|--|--|
|                           |               |             |                         |               |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |         |              |                 |                   |                   |                   |                   |                   |                   |                     |        |            |             |             |             |            |             |             |             |                        |  |  |
|                           |               |             |                         |               |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD    | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 1,2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF   | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |  |  |
| Human Health ISM PRG      |               |             |                         |               |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --                | --                | --                | --                | --                | --                | --                  | --     | --         | --          | --          | --          | --         | --          | 15          |             |                        |  |  |
| Human Health ISM Hot Spot |               |             |                         |               |             | --                                 | --              | --                | --                | --                | --                  | --      | --           | --              | --                | --                | --                | --                | --                | --                | --                  | --     | --         | --          | --          | --          | --         | --          | --          | 1,500       |                        |  |  |
| Central Parcel            | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 1.05                               | 21.5            | 8.89              | 152               | 84.6              | 576                 | 2,700   | 1.02         | 1.42 J          | 12.6              | 4.48              | 6.01              | 9.50              | 2.25 J            | 126               | 5.65                | 242    | 15.1       | 119         | 864         | 994         | 300 JN     | 273 JN      | 152         | 312         | 61.2 J                 |  |  |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 0.708                              | 13.8            | 6.11              | 96.5              | 54.4              | 642                 | 4,490 J | 2.39         | 2.25 J          | 68.3              | 7.99              | 19.3              | 29.2              | 4.56              | 165               | 10.0                | 505    | 12.9       | 88.8        | 586         | 1,120       | 1,010 JN   | 1,300 JN    | 473         | 521         | 66.8 J                 |  |  |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 0.735                              | 13.6            | 6.09              | 86.2              | 47.2              | 479                 | 3,030   | 0.39 U       | 1.59 J          | 20.2              | 7.63              | 12.2              | 11.8              | 3.72              | 116               | 6.91                | 323    | 11.7       | 84.2        | 518         | 840         | 1,040      | 608         | 198         | 333         | 45.0 J                 |  |  |
|                           |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 0.399 J                            | 6.49            | 3.34              | 41.0              | 22.7              | 250                 | 1,530   | 0.854        | 0.918 J         | 9.37              | 3.18              | 4.37              | 5.33              | 1.31 J            | 59.6              | 2.38 J              | 178    | 7.07       | 39.0        | 254         | 445         | 164 JN     | 176 JN      | 99.5        | 175         | 21.6 J                 |  |  |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 0.453                              | 3.03            | 1.69 J            | 18.0              | 8.82              | 170                 | 1,270   | 2.04         | 1.20 J          | 21.6              | 2.19 J            | 5.17              | 8.27              | 1.54 J            | 44.8              | 3.12                | 179    | 2.99       | 19.7        | 116         | 290         | 329 JN     | 370 JN      | 130         | 158         | 17.4 J                 |  |  |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 0.250 U                            | 3.03            | 0.337 U           | 15.8              | 10.0              | 177                 | 1,280   | 0.264 U      | 1.59 U          | 5.61              | 1.80 J            | 2.61              | 3.68              | 0.509 U           | 41.5              | 2.39 J              | 167    | 1.54       | 18.2        | 112         | 310         | 102        | 98.6        | 56.7        | 139         | 10.9 J                 |  |  |
|                           |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 0.277 U                            | 4.47            | 1.74 J            | 22.9              | 13.5              | 106                 | 628     | 0.231 U      | 1.37 U          | 2.95              | 1.29 J            | 1.98 J            | 1.87 J            | 0.281 U           | 26.9              | 1.01 J              | 65.9   | 0.773      | 25.7        | 163         | 191         | 68.3 JN    | 57.5 JN     | 38.1        | 67.7        | 11.4 J                 |  |  |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 0.320                              | 4.17            | 1.67 J            | 24.4              | 13.4              | 162                 | 1,000   | 0.192 U      | 0.521 U         | 4.86              | 1.24 J            | 2.4 J             | 2.96              | 0.241 U           | 37.2              | 1.95 J              | 140    | 2.90       | 26.3        | 159         | 286         | 127 JN     | 103 JN      | 55.3        | 118         | 12.9 J                 |  |  |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 0.169 U                            | 2.79            | 1.67 J            | 15.8              | 9.57              | 116                 | 740     | 0.385        | 0.765 U         | 4.14              | 1.49 J            | 2.59              | 2.38 J            | 0.272 U           | 27.5              | 1.24 J              | 96.1   | 1.39       | 18.8        | 111         | 208         | 172 JN     | 110 JN      | 47.0        | 84.6        | 9.23 J                 |  |  |
|                           |               |             | 0-1                     | DU-18 (0-1) M | --          | 0.831                              | 16.3            | 7.03              | 112               | 62.1              | 566                 | 3,407 J | 1.27 J       | 1.75 J          | 33.7 J            | 6.70              | 12.5              | 16.8 J            | 3.51 J            | 136               | 7.52                | 357    | 13.2       | 97.3        | 656         | 985         | 783 J      | 727 J       | 274 J       | 389         | 57.7 J                 |  |  |
|                           |               |             | 1-2                     | DU-18 (1-2) M | --          | 0.367 J                            | 4.18            | 1.79 J            | 24.9              | 13.8              | 199                 | 1,360   | 1.05 J       | 1.24 J          | 12.2 J            | 2.39 J            | 4.05              | 5.76              | 1.12 J            | 48.6              | 2.63 J              | 175    | 3.87 J     | 25.6        | 161         | 348         | 198 J      | 215 J       | 95.4        | 157         | 16.6 J                 |  |  |
|                           |               |             | 2-3                     | DU-18 (2-3) M | --          | 0.255                              | 3.81            | 1.69 J            | 21.0              | 12.2              | 128                 | 789     | 0.269        | 1.37 U          | 3.98              | 1.34 J            | 2.32 J            | 2.40 J            | 0.281 U           | 30.5              | 1.40 J              | 101    | 1.69 J     | 23.6        | 144         | 228         | 122 JN     | 90.2 JN     | 46.8        | 90.1        | 11.2 J                 |  |  |
|                           | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 1.15                               | 20.5            | 10.4              | 169               | 76.1              | 659                 | 3,680   | 5.57         | 5.76            | 201               | 26.4              | 47.3              | 77.9              | 14.6              | 145               | 9.88                | 254    | 27.5       | 166         | 891         | 1,160       | 2,280 JN   | 3,590 JN    | 1,190       | 376         | 134                    |  |  |
|                           |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 0.409 U                            | 6.80            | 0.767 U           | 25.3              | 11.0              | 391                 | 2,850   | 4.69         | 1.11 U          | 179               | 20.1              | 38.9              | 71.2              | 12.4              | 81.0              | 7.02                | 200    | 15.6       | 82.2        | 237         | 693         | 2,360 JN   | 3,500 JN    | 1,090       | 236         | 84.8                   |  |  |
|                           |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 0.742                              | 5.52            | 3.18              | 13.6              | 5.27              | 103                 | 616     | 3.36         | 3.00            | 95.1              | 15.2              | 19.2              | 34.6              | 7.12              | 33.0              | 3.82                | 44.3   | 12.5       | 60.8        | 133         | 191         | 1,460 JN   | 1,680 JN    | 512         | 85.2        | 46.6                   |  |  |
|                           | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 0.841                              | 8.89            | 7.08              | 53.9              | 28                | 543                 | 3,150   | 1.25         | 2.01            | 19.7              | 5.83              | 7                 | 12.8              | 3.95              | 78.3              | 3.3                 | 125    | 12.7       | 58          | 329         | 949         | 266        | 344         | 217         | 198         | 34.9                   |  |  |
|                           |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 0.194 U                            | 0.713 U         | 0.676 U           | 7.55              | 3.81              | 138                 | 804     | 0.307 U      | 0.127 U         | 2.18              | 0.227 U           | 2.18              | 0.270 U           | 0.212 U           | 12.5              | 0.897 U             | 20.3   | 0.194 U    | 0.713 U     | 42.7        | 239         | 23.2       | 33.2        | 27.3        | 31.4        | 4.30                   |  |  |
|                           |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 0.284 U                            | 1               | 0.440 U           | 5.49              | 2.79              | 65.9                | 415     | 0.346 U      | 0.271 U         | 2.84              | 0.340 U           | 1.76              | 0.304 U           | 8.77              | 0.418 U           | 14.9                | 0.424  | 4.07       | 36          | 118         | 41.8        | 47         | 25.4        | 21.1        | 3.97        |                        |  |  |
|                           | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 1.32                               | 16.9            | 10.7              | 103               | 57.5              | 806                 | 5,130 J | 3.580        | 3.69            | 54.0              | 13.0              | 16.8              | 29.8              | 7.03              | 184               | 9.82                | 317    | 17.9       | 118         | 68.5        | 1,480       | 1,070      | 977         | 432         | 450         | 70.3 J                 |  |  |
|                           |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 0.540                              | 4.43            | 3.07              | 20.8              | 11.1              | 231                 | 1,360   | 1.340        | 1.65            | 20.2              | 5.54              | 6.85              | 11.6              | 2.25              | 48.8              | 2.85                | 75.1   | 5.78       | 34.8        | 157         | 418         | 327        | 360         | 160         | 114         | 20.6                   |  |  |
|                           |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 0.107 U                            | 2.08 J          | 0.314 U           | 13.3              | 5.30              | 118                 | 769     | 0.781        | 0.648 U         | 9.70              | 3.70              | 3.01              | 5.35              | 1.32 J            | 26.7              | 1.61 J              | 52.7   | 2.79       | 16.8        | 88.8        | 210         | 133        | 154         | 85.3        | 65.7        | 10.1 J                 |  |  |
|                           | DU-22         | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 0.846                              | 9.71            | 5.58              | 63.1              | 31.5              | 438                 | 2,810   | 1.26         | 1.88 J          | 12.5              | 4.09              | 3.68              | 8.59              | 2.24              | 79.1              | 3.27                | 209    | 6.11       | 59.0        | 390         | 776         | 164 J      | 201         | 141         | 223         | 32.5 J                 |  |  |
|                           |               |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 0.464 J                            | 4.68            | 3.91              | 42.0              | 17.3              | 543                 | 3,940   | 0.999        | 1.72 J          | 12.3              | 4.57              | 5.28              | 8.08              | 2.24 J            | 77.3              | 3.66                | 213    | 4.83       | 28.8        | 213         | 915         | 177        | 203         | 153         | 232         | 24.8 J                 |  |  |
|                           |               |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 0.525                              | 9.02            | 4.89              | 44.6              | 22.8              | 482                 | 3,150   | 1.76         | 2.54            | 14.2              | 5.09              | 5.96              | 10.5              | 2.23 J            | 79.5              | 3.44                | 174    | 7.22       | 42.7        | 285         | 929         | 188        | 235         | 156         | 202         | 30.3 J                 |  |  |
|                           |               |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 0.234 U                            | 1.41            | 0.342 U           | 6.02              | 3.06              | 57.7                | 382     | 0.451 U      | 1.05 U          | 3.06              | 0.187 U           | 0.165 U           | 1.84              | 0.191 U           | 23.2              | 0.740 U             | 45.2   | 0.817      | 4.79        | 39.5        | 102         | 60.3       | 53.4        | 37.3        | 69.6        | 4.56                   |  |  |
|                           |               |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 0.196 U                            | 2.25            | 2.21              | 27.4              | 5.92              | 300                 | 2,130   | 0.492        | 2.29 U          | 4.73              | 2.72              | 2.36              | 3.24              | 0.212 U           | 36.2              | 1.92                | 97     | 0.96       | 8.8         | 105         | 507         | 43         | 70.3        | 78.3        | 115         | 12.3                   |  |  |
|                           |               |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 0.201 U                            | 1.55            | 1.54              | 11                | 3.68              | 186                 | 1,270   | 0.461        | 1.97 U          | 3.29              | 1.94              | 1.65              | 2.79              | 0.196 U           | 22.1              | 0.810 U             | 54.4   | 0.432      | 5.57        | 54.6        | 313         | 46.8       | 54          | 48.8        | 64.5        | 7.47                   |  |  |
|                           |               |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 0.217 U                            | 1.31 U          | 0.367 U           | 9.52              | 3.99              | 77.4                | 475     | 0.494 U      | 0.339 U         | 2.83              | 0.571 U           | 0.496 U           | 1.75              | 0.705 U           | 14.4              | 1.51 U              | 37.5   | 0.217 U    | 1.95        | 55.8        | 132         | 38.5       | 47.3        | 25.5        | 37          | 4.35                   |  |  |
|                           |               |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 0.247 U                            | 1.07 U          | 0.527 U           | 8.95              | 3.56              | 228                 | 1,900   | 0.422 U      | 0.389 U         | 6.26              | 1.53              | 2.46              | 4.04              | 0.886 U           | 31.7              | 2.42                | 164    | 0.247 U    | 1.48        | 48.1        | 403         | 73.1       | 98.1        | 70.1        | 124         | 7.93                   |  |  |
|                           |               |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 0.266 U                            | 1.19 U          | 0.411 U           | 7.44              | 3.75              | 102                 | 727     | 0.445 U      | 0.273 U         | 3.47              | 0.489 U           | 1.72              | 2.22              | 0.582 U           | 15.3              | 1.02 U              | 44.9   | 0.266 U    | 1.19 U      | 44.5        | 177         | 61.8       | 68.6        | 36.1        | 49.1        | 4.79                   |  |  |
|                           |               |             | 0-1                     | DU-22 (0-1) M | --          | 0.612 J                            | 7.80            | 4.79              | 49.9              | 23.9              | 488                 | 3,300   | 1.34         | 2.05 J          | 13.0              | 4.58              | 4.97              | 9.06              | 2.24 J            | 78.6              | 3.46                | 199    | 6.05       | 43.5        | 296         | 873         | 176 J      | 213         | 150         | 219         | 29.2 J                 |  |  |
|                           |               |             | 1-2                     | DU-22 (1-2) M | --          | 0.234 U                            | 1.74            | 1.36 J            | 14.8 J            | 4.22              | 181 J               | 1,261 J | 0.468        | 2.29 U          | 3.69              | 1.62 J            | 1.39 J            | 2.62              | 0.212 U           | 27.2              | 1.16                | 65.5   | 0.736      | 6.39        | 66.4        | 307 J       | 50.0       | 59.2        | 54.8        | 83.0        | 8.11                   |  |  |
|                           |               |             | 2-3                     | DU-22 (2-3) M | --          | 0.266 U                            | 1.31 U          | 0.527 U           | 8.64              | 3.77              | 136                 | 1,034 J | 0.494 U      | 0.389 U         | 4.19              | 0.863 J           | 1.56 J            | 2.67              | 0.886 U           | 20.5              | 1.65                | 82.1 J | 0.266 U    | 1.54        | 49.5        | 237         | 57.8       | 71.3        | 43.9        | 70.0 J      | 5.69                   |  |  |
|                           | DU-23         | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 1.05                               | 8.20            | 7.23              | 44.2              | 23.5              | 570                 | 3,570   | 2.15         | 3.52            | 34.6              | 9.20              | 14.1              | 20.2              | 3.80              | 96.8              | 6.09                | 230    | 15.6       | 61.1        | 299         | 1,040       | </         |             |             |             |                        |  |  |

Table 3b  
Soil Results - Dioxins/Furans - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |          |              |                 |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |  |  |
|---------------------------|---------------|-------------|-------------------------|--------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|----------|--------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|--|--|
|                           |               |             |                         |              |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |          |              |                 |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |  |  |
|                           |               |             |                         |              |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD     | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |  |  |
| Human Health ISM PRG      |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | 15          |             |             |                        |  |  |
| Human Health ISM Hot Spot |               |             |                         |              |             | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | --          | 1,500       |             |                        |  |  |
| East Parcel               | DU-27         | ISM         | 0-1                     | DU-27 (0-1)  | 10/05/2022  | 1.11                               | 17.8            | 25.7              | 161               | 63.7              | 3,150 J             | 21,000 J | 2.37         | 7.99            | 22.1            | 33.8            | 19.3              | 27.6              | 14.5              | 422               | 28.4              | 998                 | 10.8 | 74.3       | 744         | 5,340       | 87.4        | 310        | 605         | 1,280       | 103 J       |                        |  |  |
|                           |               |             | 1-2                     | DU-27 (1-2)  | 10/05/2022  | 0.833                              | 7.86            | 14.6              | 95.0              | 33.8              | 2,250 J             | 18,100 J | 1.91         | 5.41            | 20.1            | 29.3            | 17.7              | 22.6              | 10.8              | 389               | 30.6              | 1,100               | 7.66 | 45.0       | 417         | 3,850       | 139 JN      | 298 JN     | 494         | 1,190       | 69.9 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-27 (2-3)  | 10/05/2022  | 0.414 J                            | 2.70            | 4.19              | 28.9              | 9.80              | 652                 | 5,280 J  | 1.64         | 2.70            | 13.1            | 11.9            | 6.05              | 10.2              | 4.43              | 90.2              | 7.35              | 221                 | 3.18 | 17.4       | 141         | 1,130       | 94.6 JN     | 174 JN     | 181         | 287         | 24.0 J      |                        |  |  |
|                           | DU-28         | ISM         | 0-1                     | DU-28 (0-1)  | 09/14/2022  | 0.217 U                            | 1.94 J          | 3.45              | 20.7              | 7.68              | 717                 | 6,260 J  | 1.01         | 1.16 J          | 4.30            | 7.82            | 2.97              | 4.06              | 2.31 J            | 140               | 8.12              | 622                 | 2.86 | 6.89       | 106         | 1,240       | 19.5        | 41.8       | 143         | 553         | 19.1 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-28 (1-2)  | 09/14/2022  | 0.541                              | 4.77            | 6.61              | 46.8              | 18.0              | 1,060               | 8,530    | 2.02         | 2.37            | 7.07            | 10.5            | 5.65              | 7.56              | 4.71              | 161               | 9.93              | 537                 | 7.05 | 29.1       | 218         | 1,790       | 32.3        | 73.2       | 209         | 540         | 32.7 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-28 (2-3)  | 09/14/2022  | 0.513                              | 2.64            | 4.37              | 14.8              | 6.06              | 468                 | 3,910    | 1.14         | 1.08            | 3.41            | 6.70            | 1.97              | 2.89              | 2.16              | 72.9              | 5.63              | 283                 | 11.7 | 34.1       | 127         | 871         | 12.9        | 27.9       | 99.2        | 271         | 14.9        |                        |  |  |
|                           | DU-29         | ISM         | 0-1                     | DU-29 (0-1)  | 09/15/2022  | 0.731                              | 8.83            | 10.7              | 115               | 40.9              | 1,110               | 7,610 J  | 1.62         | 3.27            | 8.89            | 12.0            | 7.25              | 11.3              | 5.91              | 343               | 5.42              | 221                 | 17.0 | 72.3       | 577         | 1,960       | 56.7 JN     | 125 JN     | 383         | 672         | 49.7 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-29 (1-2)  | 09/15/2022  | 0.176 U                            | 1.63 J          | 4.00              | 24.7              | 6.77              | 473                 | 3,380    | 0.697        | 1.58 U          | 4.59            | 4.77            | 2.43 J            | 4.21              | 2.01 J            | 139               | 2.72              | 98.7                | 2.17 | 4.00       | 106         | 820         | 28.9 JN     | 65.5       | 149         | 282         | 15.3 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-29 (2-3)  | 09/15/2022  | 0.151 U                            | 0.445 U         | 4.19              | 24.0              | 6.82              | 509                 | 3,860    | 0.658        | 0.80 U          | 5.84            | 6.69            | 3.22              | 5.12              | 2.77              | 152               | 4.16              | 139                 | 2.84 | 3.92       | 111         | 863         | 41.3 JN     | 84.0 JN    | 177         | 321         | 15.3 J      |                        |  |  |
|                           | DU-30         | ISM         | 0-1                     | DU-30 (0-1)  | 09/16/2022  | 1.210                              | 8.87            | 11.5              | 78.5              | 27.1              | 1,460               | 10,100 J | 1.97         | 3.63            | 14.3            | 11.1            | 9.87              | 13.9              | 7.99              | 201               | 9.86              | 238                 | 12.0 | 43.4       | 418         | 2,960       | 139 JN      | 237 JN     | 366         | 502         | 50.5 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-30 (1-2)  | 09/16/2022  | 0.463 U                            | 3.22            | 5.00              | 40.4              | 10.4              | 676                 | 4,950 J  | 0.836        | 1.61 U          | 7.19            | 6.54            | 5.14              | 6.83              | 0.870 U           | 89.8              | 4.13              | 108                 | 4.71 | 13.7       | 175         | 1,200       | 72.2 JN     | 121 JN     | 176         | 210         | 22.4 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-30 (2-3)  | 09/16/2022  | 0.135 U                            | 2.46 J          | 3.67              | 23.6              | 8.49              | 448                 | 3,030    | 0.900        | 1.09 J          | 3.68            | 3.78            | 2.95              | 4.83              | 0.444 U           | 42.0              | 2.55              | 56.5                | 3.29 | 12.9       | 127         | 795         | 56.1 JN     | 95.7 JN    | 112         | 111         | 14.4 J      |                        |  |  |
|                           | DU-31         | ISM         | 0-1                     | DU-31 (0-1)  | 11/03/2022  | 0.638                              | 9.32            | 12.5              | 104               | 34.2              | 1,840               | 12,000 J | 2.5          | 4.88            | 12              | 14.6            | 12.1              | 16.2              | 9.35              | 192               | 11.8              | 281                 | 7.06 | 43.5       | 404         | 2,920       | 46.8        | 147        | 382         | 540         | 58.4 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-31 (1-2)  | 11/03/2022  | 0.318 U                            | 3.03            | 3.52              | 27.1              | 8.14              | 624                 | 4,430 J  | 1.04         | 2.21            | 4.31            | 5.27            | 4.77              | 6.36              | 3.09              | 84.3              | 5.55              | 182                 | 3.35 | 10.6       | 125         | 994         | 25.1        | 57.5       | 134         | 243         | 19.0 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-31 (2-3)  | 11/03/2022  | 0.288 U                            | 1.67            | 2.36              | 16.3              | 4.87              | 357                 | 2,580    | 0.642        | 0.985           | 2.3             | 3.19            | 2.73              | 3.37              | 2.34              | 42.7              | 2.67              | 105                 | 3.4  | 6.7        | 76.1        | 570         | 16.2        | 28.5       | 74.2        | 122         | 10.9        |                        |  |  |
|                           | DU-32         | ISM         | 0-1                     | DU-32 (0-1)  | 09/22/2022  | 0.16 U                             | 5.43            | 6.79              | 55.1              | 15.6              | 1,130               | 8,240 J  | 2.92         | 3.28            | 8.65            | 9.74            | 6.97              | 10.2              | 7.18              | 123               | 8.53              | 204                 | 4.79 | 25.2       | 240         | 1,800       | 32.9 JN     | 79.0       | 262         | 349         | 34.8 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-32 (1-2)  | 09/22/2022  | 0.136 U                            | 0.364 U         | 0.546 U           | 11.1              | 3.21              | 296                 | 2,240    | 2.88         | 1.53 J          | 3.17            | 3.11            | 2.00 J            | 0.397 U           | 0.391 U           | 34.0              | 0.816 U           | 61.1                | 1.72 | 1.71       | 61.6        | 474         | 20.8        | 28.6       | 61.3        | 91.7        | 7.54 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-32 (2-3)  | 09/22/2022  | 0.122 U                            | 0.328 U         | 0.504 U           | 13.7              | 4.28              | 282                 | 1,980    | 1.70         | 1.02 J          | 2.43 J          | 2.71            | 1.72 J            | 2.33 J            | 1.78 J            | 30.8              | 1.71 J            | 49.3                | 1.32 | 0.328 U    | 59.6        | 447         | 13.3        | 19.9       | 62.5        | 83.1        | 7.59 J      |                        |  |  |
|                           | DU-33         | ISM         | 0-1                     | DU-33 (0-1)  | 09/20/2022  | 0.670                              | 5.6             | 8.21              | 54.0              | 20.6              | 876                 | 6,150    | 7.25         | 4.50            | 18.0            | 11.4            | 14.1              | 11.9              | 6.38              | 101               | 6.90              | 149                 | 18.8 | 48.3       | 296         | 1,490       | 328 JN      | 347 JN     | 259         | 266         | 36.9        |                        |  |  |
|                           |               |             | 1-2                     | DU-33 (1-2)  | 09/20/2022  | 0.254                              | 2.64            | 4.09              | 22.5              | 8.87              | 493                 | 3,340    | 3.92         | 2.49 J          | 5.79            | 5.75            | 3.98              | 4.11              | 2.73              | 46.6              | 2.57              | 58.1                | 8.22 | 18.6       | 122         | 813         | 100 JN      | 87.2 JN    | 121         | 122         | 16.7 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-33 (2-3)  | 09/20/2022  | 0.379                              | 2.19 J          | 1.40 J            | 15.3              | 4.01              | 321                 | 1,970    | 3.86         | 2.86            | 4.85            | 4.28            | 3.26              | 3.86              | 2.67              | 34.9              | 1.32 J            | 38.0                | 7.36 | 12.4       | 88.8        | 553         | 73.3 JN     | 70.6 JN    | 94.1        | 91.1        | 12.1 J      |                        |  |  |
|                           | DU-34         | ISM         | 0-1                     | DU-34 (0-1)  | 09/27/2022  | 0.637                              | 9.19            | 14.6              | 105               | 31.2              | 1,910               | 12,200 J | 2.70         | 6.22            | 14.3            | 17.6            | 12.6              | 16.3              | 10.8              | 195               | 10.7              | 194                 | 21.0 | 55.0       | 467         | 3,010       | 75.1 JN     | 175 JN     | 439         | 515         | 60.3 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-34 (1-2)  | 09/27/2022  | 0.459 J                            | 4.31            | 6.86              | 48.9              | 16.9              | 873                 | 5,940 J  | 2.06         | 2.44 J          | 6.56            | 7.33            | 5.12              | 7.38              | 4.20              | 95.0              | 5.02              | 120                 | 9.02 | 22.3       | 201         | 1,370       | 62.0 JN     | 96.8 JN    | 211         | 248         | 28.2 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-34 (2-3)  | 09/27/2022  | 0.16 U                             | 1.10 J          | 2.43 J            | 18.5              | 5.31              | 342                 | 2,160    | 0.882        | 1.21 J          | 2.49 J          | 3.39            | 2.61              | 3.48              | 201               | 36.0              | 0.388 U           | 43.7                | 5.2  | 10.5       | 78.6        | 538         | 29.0 JN     | 39.8 JN    | 78.5        | 91.4        | 30.2 J      |                        |  |  |
|                           | DU-35         | ISM         | 0-1                     | DU-35 (0-1)  | 10/07/2022  | 0.468                              | 4.95            | 8.91              | 67.0              | 18.7              | 1,340               | 10,400 J | 5.27         | 4.65            | 9.97            | 10.3            | 8.81              | 11.3              | 7.82              | 143               | 8.93              | 230                 | 10.1 | 30.5       | 258         | 2,520       | 56.4        | 104        | 287         | 419         | 40.5 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-35 (1-2)  | 10/07/2022  | 0.211 U                            | 1.71 J          | 3.15              | 21.8              | 6.44              | 423                 | 2,990    | 3.27         | 2.03 J          | 3.38            | 3.73            | 2.64              | 3.23              | 2.05 J            | 41.5              | 2.41 J            | 74.4                | 5.86 | 11.1       | 93.5        | 710         | 31.0 JN     | 37.8 JN    | 85.7        | 122         | 13.1 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-35 (2-3)  | 10/07/2022  | 0.197 U                            | 1.25 J          | 2.01 J            | 16.0              | 4.76              | 347                 | 2,640    | 2.09         | 1.23 J          | 2.25 J          | 3.03            | 1.83 J            | 2.66              | 1.86 J            | 37.5              | 2.12 J            | 60.5                | 3.62 | 3.56       | 75.0        | 590         | 17.8 JN     | 25.7 JN    | 77.5        | 105         | 10.2 J      |                        |  |  |
|                           | DU-36         | ISM         | 0-1                     | DU-36 (0-1)  | 11/01/2022  | 0.738                              | 7.39            | 8.54              | 59.9              | 24.2              | 1,210               | 8,990 J  | 7.12         | 5.53            | 11.3            | 10.1            | 13.1              | 11.1              | 5.74              | 146               | 11.9              | 323                 | 16   | 47.3       | 276         | 1,990       | 117         | 166        | 269         | 420         | 42.1 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-36 (1-2)  | 11/01/2022  | 0.695                              | 6.02            | 7.34              | 48.5              | 18.2              | 1,160               | 8,400 J  | 6.6          | 4.81            | 9.47            | 9.95            | 13.1              | 9.59              | 5.5               | 112               | 8.75              | 259                 | 14   | 39.9       | 255         | 2,090       | 322         | 312        | 224         | 354         | 37.0 J      |                        |  |  |
|                           |               |             | 2-3                     | DU-36 (2-3)  | 11/01/2022  | 1.15                               | 5.8             | 6.67              | 33.5              | 13                | 661                 | 4,640 J  | 11.2         | 6.08            | 9.55            | 7.25            | 7.18              | 8.45              | 3.56              | 80.3              | 5.81              | 144                 | 24.3 | 48         | 169         | 1,090       | 126         | 118        | 154         | 222         | 28.0 J      |                        |  |  |
|                           | DU-38         | ISM         | 0-1                     | DU-38 (0-1)A | 11/14/2022  | 0.243 U                            | 5.05            | 5.91              | 46.9              | 16.1              | 836                 | 5,470 J  | 2.74         | 3.31            | 6.19            | 7.78            | 5.56              | 7.17              | 4.07              | 81.6              | 4.52              | 115                 | 3.5  | 22.1       | 193         | 1,350       | 45.5        | 74.3       | 174         | 241         | 27.6 J      |                        |  |  |
|                           |               |             | 0-1 FR                  | DU-38 (0-1)B | 11/14/2022  | 0.451 J                            | 4.31            | 6.37              | 46.4              | 15.2              | 876                 | 5,530 J  | 3.64         | 4.29            | 6.72            | 7.77            | 5.27              | 7.21              | 4.71              | 88.5              | 4.92              | 113                 | 6.48 | 26.9       | 204         | 1,420       | 44.5        | 76.1       | 179         | 245         | 27.9 J      |                        |  |  |
|                           |               |             | 0-1 FR                  | DU-38 (0-1)C | 11/14/2022  | 0.664                              | 5.52            | 7.25              | 45.5              | 17.1              | 881                 | 5,830 J  | 3.31         | 3.56            | 5.63            | 7.57            | 5.86              | 7.98              | 4.44              | 87.1              | 5.53              | 149                 | 9.91 | 38.2       | 223         | 1,430       | 46.3        | 72.9       | 176         | 250         | 29.4 J      |                        |  |  |
|                           |               |             | 1-2                     | DU-38 (1-2)A | 11/16/2022  | 0.259 U                            | 2.87            | 3.78              | 24.7              | 7.88              | 488                 | 3,210    | 2.41         | 2.02 J          | 3.56            | 4.45            |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |  |  |

Table 3b  
Soil Results - Dioxins/Furans - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | Dioxins/Furans by EPA Method 1613B |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|------------------------------------|-----------------|-------------------|-------------------|-------------------|---------------------|----------|--------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------------------|
|                           |               |             |                         |               |             | Concentrations in pg/g             |                 |                   |                   |                   |                     |          |              |                 |                 |                   |                   |                   |                   |                   |                     |      |            |             |             |             |            |             |             |             |                        |
|                           |               |             |                         |               |             | 2,3,7,8-TCDD                       | 1,2,3,7,8-PeCDD | 1,2,3,4,7,8-HxCDD | 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | 1,2,3,4,6,7,8-HpCDD | OCDD     | 2,3,7,8-TCDF | 1,2,3,7,8-PeCDF | 2,3,4,7,8-PeCDF | 1,2,3,4,7,8-HxCDF | 1,2,3,6,7,8-HxCDF | 2,3,4,6,7,8-HxCDF | 1,2,3,7,8,9-HxCDF | 1,2,3,4,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | OCDF | Total TCDD | Total PeCDD | Total HxCDD | Total HpCDD | Total TCDF | Total PeCDF | Total HxCDF | Total HpCDF | Total D/F TEQ (Mammal) |
| Human Health ISM PRG      |               |             |                         |               | --          | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | 15          |             |             |                        |
| Human Health ISM Hot Spot |               |             |                         |               | --          | --                                 | --              | --                | --                | --                | --                  | --       | --           | --              | --              | --                | --                | --                | --                | --                | --                  | --   | --         | --          | --          | --          | --         | --          | 1,500       |             |                        |
| East Parcel Soil Berms    | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 2.75                               | 44.9            | 81.2              | 421               | 175               | 8,440 J             | 51100 J  | 4.13         | 16.8            | 43.8            | 59.1              | 40.9              | 59.6              | 23.8              | 642               | 39.1                | 858  | 23.1       | 169         | 2,080       | 15,200      | 190        | 732         | 1,250       | 1,830       | 255 J                  |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 2.36                               | 33.4            | 56.8              | 315               | 123               | 6,450 J             | 40400 J  | 4.47         | 14.2            | 40.3            | 46.9              | 28.5              | 51.4              | 20.6              | 546               | 35.3                | 849  | 22.7       | 138         | 1,510       | 11,800      | 208        | 643         | 1,080       | 1,530       | 196 J                  |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 2.47                               | 35.6            | 63.1              | 342               | 140               | 7,200               | 43900    | 3.79         | 14.9            | 35.3            | 50.2              | 33.4              | 54.6              | 21.3              | 573               | 35.3                | 828  | 22.8       | 146         | 1,690       | 13,200      | 195        | 618         | 1,190       | 1,640       | 211                    |
|                           |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 2.09                               | 39.2            | 71.2              | 390               | 161               | 7,780 J             | 43,600 J | 3.44         | 14.6            | 50.4            | 53.7              | 40.1              | 58.2              | 20.4              | 627               | 39.1                | 946  | 21.1       | 162         | 1,790       | 13,100      | 417        | 942         | 1,390       | 1,730       | 234 J                  |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 1.73                               | 33.2            | 59                | 316               | 125               | 6,570 J             | 37,900 J | 3.55         | 13.4            | 44.7            | 43.6              | 32.7              | 49.9              | 19                | 569               | 33.6                | 849  | 20         | 127         | 1,570       | 11,600      | 374        | 860         | 1,210       | 1,580       | 197 J                  |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 2.66                               | 42.5            | 72.1              | 413               | 166               | 7,870 J             | 43,500 J | 3.94         | 15.9            | 49              | 53.5              | 36.7              | 59.2              | 24.2              | 630               | 34.4                | 770  | 23.9       | 164         | 1,900       | 13,100      | 334        | 833         | 1,350       | 1,670       | 242 J                  |
|                           |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 1.33                               | 26.2            | 49.4              | 276               | 98.4              | 4,960 J             | 29,300 J | 2.52         | 10.4            | 32.9            | 31.5              | 26.5              | 39.6              | 14.8              | 416               | 24.5                | 660  | 12         | 100         | 1,130       | 8,280       | 252        | 600         | 857         | 1,180       | 155 J                  |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 1.11                               | 16.8            | 32.1              | 187               | 68.4              | 3,390 J             | 21,600 J | 1.8          | 7.44            | 22.2            | 26.7              | 19                | 26.9              | 12.1              | 305               | 19.5                | 598  | 9.68       | 66.2        | 764         | 5,720       | 158        | 390         | 625         | 928         | 106 J                  |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 1.23                               | 22.6            | 42                | 235               | 85                | 4,350 J             | 27,100 J | 2.57         | 9.55            | 26.9            | 32.1              | 21.7              | 34.3              | 14.3              | 375               | 23.3                | 563  | 11.4       | 88.5        | 979         | 7,330       | 205        | 484         | 785         | 1,050       | 135 J                  |
|                           |               |             | 0-1                     | DU-41 (0-1) M | --          | 2.53                               | 38.0            | 67.0              | 359               | 146               | 7,363 J             | 45,133 J | 4.13         | 15.3            | 39.8            | 52.1              | 34.3              | 55.2              | 21.9              | 587               | 36.6                | 845  | 22.9       | 151         | 1,760       | 13,400      | 198        | 664         | 1,173       | 1,667       | 221 J                  |
|                           |               |             | 1-2                     | DU-41 (1-2) M | --          | 2.16                               | 38.3            | 67.4              | 373               | 151               | 7,407 J             | 41,667 J | 3.64         | 14.6            | 48.0            | 50.3              | 36.5              | 55.8              | 21.2              | 609               | 35.7                | 855  | 21.7       | 151         | 1,753       | 12,600      | 375        | 878         | 1,317       | 1,660       | 224 J                  |
|                           |               |             | 2-3                     | DU-41 (2-3) M | --          | 1.22                               | 21.9            | 41.2              | 233               | 83.9              | 4,233 J             | 26,000 J | 2.30         | 9.13            | 27.3            | 30.1              | 22.4              | 33.6              | 13.7              | 365.3             | 22.4                | 607  | 11.0       | 84.9        | 957.7       | 7,110       | 205        | 491         | 756         | 1,053       | 132 J                  |

Notes:  
ISM = Incremental Sampling Methodology.  
bgs = Below ground surface.  
EPA = United States Environmental Protection Agency.  
M = Mean. These results are the mean of the field replicates collected at this decision unit.  
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.  
pg/g = Picograms per gram (parts per trillion).  
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent  
Bolded values exceed the Preliminary Remediation Goal (PRG).  
Shaded values exceed the hot spot level.  
Italicized values represent a method detection limit that is above one or more applicable screening levels.  
U = Analyte was not detected.  
J = Result is estimated.  
JN = The analyte was tentatively identified and did not meet method criteria for confirmation. The reported result is an estimated maximum possible concentration (EMPC).  
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).  
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 4a  
Soil Results - PAHs and Dibenzofuran - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |         |            |            |                 |              |
|-------------------------|---------------|-------------|-------------------------|--------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|---------|------------|------------|-----------------|--------------|
|                         |               |             |                         |              |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |         | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |              |
|                         |               |             |                         |              |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene  |            |            |                 | Dibenzofuran |
| Ecological ISM PRG      |               |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 10          | 5,600        | 29,000  | --         |            |                 |              |
| Ecological ISM Hot Spot |               |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 100         | 56,000       | 290,000 | --         |            |                 |              |
| West Parcel             | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 14.1                                          | 33.9           | 48.5       | 187               | 308            | 394                  | 122 J                | 232                  | 293      | 53.3                  | 373          | 12       | 249                    | 15.9                | 24.5                | 18.9        | 185          | 449     | 7.76 J     | 2,660 J    | 337             | 446 J        |
|                         |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 9.66 U                                        | 46.3           | 49         | 164               | 286            | 342                  | 113 J                | 249                  | 266      | 35.8                  | 404          | 12.9     | 261                    | 28.4                | 32.9                | 43.2        | 235          | 502     | 10.2       | 2,620 J    | 424 J           | 400 J        |
|                         |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 8.52 J                                        | 35.2           | 40.9       | 136               | 234            | 279                  | 82 J                 | 187                  | 207      | 31.1                  | 331          | 9.12 J   | 202                    | 5.52 J              | 7.62 J              | 15.8        | 169          | 416     | 4.80 U     | 2,110 J    | 286 J           | 328 J        |
|                         | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 10.4                                          | 5.05 U         | 14.2       | 78.0              | 116            | 143                  | 49.3 J               | 103                  | 112      | 15.6                  | 144          | 6.68 J   | 106                    | 5.05 U              | 5.58 J              | 9.09 J      | 78.7         | 153     | 5.11 J     | 1,020 J    | 127 J           | 165 J        |
|                         |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 4.70 U                                        | 4.70 U         | 19.0       | 81.9              | 75.1           | 93.2                 | 35.0 J               | 50.3                 | 87.5     | 9.75                  | 158          | 4.70 U   | 56.7                   | 4.70 U              | 4.70 U              | 4.88 J      | 90.2         | 145     | 4.70 U     | 792 J      | 123 J           | 108 J        |
|                         |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 5.00 U                                        | 5.00 U         | 5.00 U     | 15.5              | 21.9           | 31.6                 | 11.0 J               | 27.0                 | 24.9     | 5.00 U                | 29.1         | 5.00 U   | 26.3                   | 5.00 U              | 5.00 U              | 5.00 U      | 12.5         | 33.2    | 5.00 U     | 223 J      | 27.5            | 31.9 J       |
|                         | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 5.54 J                                        | 4.99 J         | 13.2       | 65.5              | 105            | 138                  | 54.7 J               | 90.1                 | 110      | 16.4                  | 140          | 4.78 U   | 104                    | 4.78 U              | 6.89 J              | 11.0        | 76.8         | 152     | 4.78 U     | 976 J      | 121 J           | 153 J        |
|                         |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 5.10 U                                        | 9.18 J         | 8.37 J     | 56.7              | 90.1           | 116                  | 43.6 J               | 92.8                 | 99.7     | 11.5                  | 169          | 5.10 U   | 96.8                   | 5.10 U              | 5.10 U              | 8.24 J      | 87.1         | 208     | 5.10 U     | 984 J      | 121 J           | 129 J        |
|                         |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 4.95 U                                        | 6.86 J         | 8.05 J     | 43.3              | 73.4           | 96.1                 | 32.5 J               | 75.6                 | 78.2     | 7.59 J                | 116          | 4.95 U   | 79.3                   | 5.64 J              | 16.5                | 12.3        | 64.9         | 143     | 4.95 U     | 745 J      | 114 J           | 103 J        |
|                         | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 7.89 J                                        | 36.9           | 36.3       | 160               | 310            | 354                  | 107 J                | 255                  | 265      | 37.3                  | 319          | 9.26 J   | 277                    | 12.3                | 25.8                | 45.7        | 167          | 432     | 5.73 J     | 2,520 J    | 329 J           | 428 J        |
|                         |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 23.8 U                                        | 34.3 U         | 283        | 1460              | 1240           | 1140                 | 261 J                | 650                  | 2220     | 196                   | 1300         | 109      | 493                    | 53.6                | 96.4                | 59.0        | 2960         | 2940    | 33.4       | 11,900 J   | 3,540 J         | 1,750 J      |
|                         |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 6.77 J                                        | 91.5           | 54.5       | 223               | 561            | 657                  | 191 J                | 489                  | 448      | 62.0                  | 643          | 19.4     | 534                    | 13.3                | 20.9                | 47.7        | 393          | 844     | 9.42 J     | 4,650 J    | 634 J           | 767 J        |
|                         | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 7.41 J                                        | 9.82 J         | 14.5       | 109               | 168            | 239                  | 66.3                 | 119                  | 160      | 50.7 U                | 175          | 6.08 J   | 131                    | 5.90 J              | 8.66 J              | 10.0 J      | 82.2         | 207     | 5.07 U     | 1,400      | 139 J           | 242 J        |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 8.72 J                                        | 10.1           | 23.3       | 91.3              | 140            | 192                  | 66.5 J               | 87.7                 | 122      | 18.9                  | 162          | 6.66 J   | 108                    | 7.41 J              | 12.0                | 13.2        | 80.8         | 169     | 5.69 J     | 1,180 J    | 186 J           | 179 J        |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 10.9                                          | 13.1           | 31.1       | 106               | 172            | 233                  | 77.3 J               | 107                  | 156      | 21.8                  | 213          | 9.26 J   | 128                    | 6.95 J              | 10.6                | 12.6        | 113          | 226     | 7.34 J     | 1,240 J    | 173 J           | 192 J        |
|                         |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 8.16 J                                        | 13.2           | 29.8       | 91.2              | 126            | 174                  | 55.7 J               | 81.7                 | 132      | 16.9                  | 204          | 7.23 J   | 93.6                   | 7.06 J              | 10.0 J              | 11.1        | 107          | 208     | 5.04 J     | 1,160 J    | 155 J           | 199 J        |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 6.07 J                                        | 11.5           | 22.7       | 67.0              | 102            | 140                  | 38.6 J               | 73.5                 | 106      | 14.5                  | 142          | 6.30 J   | 82.9                   | 7.04 J              | 11.6                | 15.0        | 81.2         | 154     | 5.43 J     | 921 J      | 154 J           | 146 J        |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 9.53 J                                        | 24.6           | 28.9       | 114               | 193            | 265                  | 74.6 J               | 133                  | 182      | 24.7                  | 244          | 7.57 J   | 158                    | 8.21 J              | 13.1                | 20.1        | 113          | 289     | 6.09 J     | 1,120 J    | 147 J           | 177 J        |
|                         |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 6.04 J                                        | 15.8           | 29.7       | 95.0              | 134            | 172                  | 54.3 J               | 96.9                 | 150      | 20.1                  | 191          | 6.84 J   | 110                    | 5.74 J              | 9.36 J              | 12.6        | 92.2         | 218     | 5.00 U     | 1,440 J    | 201 J           | 241 J        |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 5.28 J                                        | 15.7           | 21.3       | 76.7              | 125            | 170                  | 50.5 J               | 88.5                 | 140      | 17.0                  | 151          | 5.07 J   | 101                    | 7.89 J              | 11.2                | 13.6        | 74.8         | 197     | 5.04 U     | 1,680 J    | 217 J           | 272 J        |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 18.0                                          | 21.8           | 86.9       | 226               | 292            | 378                  | 130 J                | 163                  | 310      | 34.2                  | 518          | 17.7     | 199                    | 10.2                | 12.5                | 16.3        | 374          | 629     | 9.88 J     | 2,880 J    | 547             | 408 J        |
|                         |               |             | 0-1                     | DU-5 (0-1) M | --          | 9.01 J                                        | 11.0 J         | 23.0       | 102               | 160            | 221                  | 70.0 J               | 105                  | 146      | 30.5                  | 183          | 7.33 J   | 122                    | 6.75 J              | 10.4 J              | 11.9 J      | 92.0         | 201     | 6.03 J     | 1,273 J    | 166 J           | 204 J        |
|                         |               |             | 1-2                     | DU-5 (1-2) M | --          | 7.92 J                                        | 16.4           | 27.1       | 90.7              | 140            | 193                  | 56.3 J               | 96.1                 | 140      | 18.7                  | 197          | 7.03 J   | 112                    | 7.44 J              | 11.6 J              | 15.4        | 100          | 217     | 5.52 J     | 1,067 J    | 152 J           | 174 J        |
|                         |               |             | 2-3                     | DU-5 (2-3) M | --          | 9.77 J                                        | 17.8           | 46.0 J     | 133 J             | 184            | 240                  | 78.3 J               | 116                  | 200      | 23.8                  | 287 J        | 9.87 J   | 137                    | 7.94 J              | 11.0 J              | 14.2        | 180 J        | 348 J   | 6.64 J     | 2,000 J    | 322 J           | 307 J        |
|                         | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 8.01 J                                        | 6.03 J         | 12.2       | 84.2              | 134            | 176                  | 61.8 J               | 94.6                 | 116      | 16.3                  | 152          | 5.01 U   | 111                    | 5.01 U              | 9.32 J              | 13.4        | 68.9         | 154     | 5.18 J     | 1,100 J    | 120 J           | 188 J        |
|                         |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 13.4                                          | 8.14 J         | 18.7       | 95.2              | 143            | 194                  | 61.8 J               | 115                  | 134      | 18.7                  | 190          | 8.86 J   | 130                    | 6.64 J              | 14.1                | 18.6        | 109          | 211     | 9.02 J     | 1,290 J    | 191 J           | 204 J        |
|                         |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 15.2                                          | 9.17 J         | 20.1       | 98.9              | 159            | 210                  | 72.4 J               | 125                  | 151      | 21.0                  | 212          | 11.2     | 142                    | 8.42 J              | 14.8                | 22.6        | 123          | 238     | 11.0       | 1,430 J    | 216 J           | 226 J        |
|                         | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 5.50 J                                        | 5.06 U         | 9.35 J     | 55.4              | 89.6           | 122                  | 39.8 J               | 64.3                 | 83.3     | 11.2                  | 103          | 5.06 U   | 75.5                   | 5.06 U              | 9.21 J              | 9.30 J      | 50.1         | 107     | 5.06 U     | 751 J      | 88.5 J          | 127 J        |
|                         |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 5.02 U                                        | 5.02 J         | 7.63 J     | 30.7              | 49.4           | 67.2                 | 22.9 J               | 47.0                 | 47.8     | 6.59 J                | 56.3         | 5.02 U   | 50.5                   | 5.02 U              | 7.90 J              | 11.0        | 33.9         | 61.8    | 5.02 U     | 440 J      | 70.5 J          | 71.1 J       |
|                         |               |             | 2-3                     | DU-7 (2-3)   | 07/29/2022  | 5.03 U                                        | 5.03 U         | 6.11 J     | 22.5              | 34.5           | 47.4                 | 16.0 J               | 33.7                 | 35.2     | 5.03 U                | 40.6         | 5.03 U   | 36.2                   | 5.03 U              | 5.03 U              | 8.78 J      | 24.7         | 46.9    | 5.03 U     | 316 J      | 49.7 J          | 47.8 J       |
|                         | DU-8          | ISM         | 0-1                     | DU-8 (0-1)   | 08/05/2022  | 5.77 J                                        | 4.97 J         | 12.5       | 57.3              | 82.4           | 115                  | 39.3 J               | 65.2                 | 80.7     | 13.1                  | 113          | 4.77 U   | 77.4                   | 6.49 J              | 16.5                | 14.1        | 58.1         | 112     | 5.47 J     | 755 J      | 114 J           | 121 J        |
|                         |               |             | 1-2                     | DU-8 (1-2)   | 08/05/2022  | 4.84 U                                        | 5.98 J         | 11.7       | 36.7              | 49.0           | 79.0                 | 26.1 J               | 41.1                 | 55.6     | 7.41 J                | 73.9         | 4.84 U   | 48.0                   | 7.30 J              | 16.6                | 16.1        | 45.9         | 77.0    | 5.53 J     | 494 J      | 101 J           | 73.1 J       |
|                         |               |             | 2-3                     | DU-8 (2-3)   | 08/05/2022  | 5.02 J                                        | 5.57 J         | 14.4       | 45.3              | 57.0           | 91.1                 | 31.6 J               | 48.1                 | 66.7     | 7.94 J                | 92.1         | 5.02 U   | 56.9                   | 8.60 J              | 19.6                | 16.7        | 55.7         | 92.1    | 6.23 J     | 589 J      | 120 J           | 84.7 J       |
|                         | DU-9          | ISM         | 0-1                     | DU-9 (0-1)   | 08/08/2022  | 7.57 J                                        | 9.46 J         | 21.4       | 81.5              | 132            | 180                  | 56.3 J               | 94.8                 | 117      | 19.3                  | 160          | 5.33 J   | 109                    | 5.69 J              | 14.2                | 17.4        | 84.6         | 166     | 5.74 J     | 1,120 J    | 160 J           | 189 J        |
|                         |               |             | 1-2                     | DU-9 (1-2)   | 08/08/2022  | 4.79 U                                        | 5.27 J         | 8.43 J     | 34.2              | 54.6           | 76.4                 | 25.4 J               | 44.7                 | 47.9     | 6.14 J                | 66.0         | 4.79 U   | 49.6                   | 4.79 U              | 9.51 J              | 12.6        | 34.7         | 71.6    | 4.79 U     | 477 J      | 75.3 J          | 77.1 J       |
|                         |               |             | 2-3                     | DU-9 (2-3)   | 08/08/2022  |                                               |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |         |            |            |                 |              |

Table 4a  
Soil Results - PAHs and Dibenzofuran - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |         |              |            |            |                 |
|-------------------------|---------------|-------------|-------------------------|-------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|---------|--------------|------------|------------|-----------------|
|                         |               |             |                         |             |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |         |              |            |            |                 |
|                         |               |             |                         |             |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene  | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |
| Ecological ISM PRG      |               |             |                         |             |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | 10                  | 5,600       | 29,000       | --      |              |            |            |                 |
| Ecological ISM Hot Spot |               |             |                         |             |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 100         | 56,000       | 290,000 | --           |            |            |                 |
|                         |               |             | 2-3                     | DU-15 (2-3) | 08/19/2022  | 4.88 U                                        | 7.35 J         | 11.7       | 64.4              | 69.5           | 93.5                 | 33.3 J               | 49                   | 77.7     | 9.1 J                 | 116          | 4.88 U   | 57.8                   | 4.88 U              | 7.05 J              | 10.9        | 44.9         | 121     | 4.88 U       | 691 J      | 86.8 J     | 101 J           |

Please see notes at end of table.

Table 4a  
Soil Results - PAHs and Dibenzofuran - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |       |       |       |      |       |       |      |      |      |      |      |      |      |   |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|---|
|                         |               |             |                         |               |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |       |       |       |      |       |       |      |      |      |      |      |      |      |   |
|                         |               |             |                         |               |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |       |       |       |      |       |       |      |      |      |      |      |      |      |   |
| Ecological ISM PRG      |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 10          | 5,600        | 29,000 | --           |            |            |                 |       |       |       |      |       |       |      |      |      |      |      |      |      |   |
| Ecological ISM Hot Spot |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | 100          | 56,000 | 290,000      | --         |            |                 |       |       |       |      |       |       |      |      |      |      |      |      |      |   |
| Central Parcel          | DU-16         | ISM         | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 15.2                                          | U              | 24.4       | U                 | 58.4           | 284                  | 337                  | 456                  | 157      | J                     | 229          | 393      | 58.7                   | 522                 | 21.3                | 247         | 279          | 317    | 204          | 347        | 540        | 77.6            | 3,220 | J     | 968   | 496  | J     |       |      |      |      |      |      |      |      |   |
|                         |               |             | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 10.2                                          | U              | 21.0       |                   | 33.8           | 195                  | 286                  | 387                  | 130      | J                     | 227          | 290      | 51.4                   | 350                 | 9.77                | J           | 243          | 44.0   | 51.6         | 49.1       | 183        | 373             | 20.4  | 2,530 | J     | 353  | 421   | J     |      |      |      |      |      |      |      |   |
|                         |               |             | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 14.0                                          | U              | 20.0       | U                 | 42.1           | 227                  | 300                  | 409                  | 138      | J                     | 237          | 317      | 54.5                   | 423                 | 16.9                | J           | 246          | 68.5   | 81.9         | 67.5       | 242        | 440             | 23.0  | 2,790 | J     | 467  | 444   | J     |      |      |      |      |      |      |      |   |
|                         |               |             | 0-1                     | DU-16 (0-1) M | --          | 15.2                                          | U              | 21.8       |                   | 44.8           | 235                  | 308                  | 417                  | 142      | J                     | 231          | 333      | 54.9                   | 432                 | 16.0                | J           | 245          | 131    | J            | 150        | J          | 107             | J     | 257   | 451   | 40.3 | J     | 2,847 | J    | 596  | 454  | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-16 (1-2)   | 11/07/2022  | 5                                             | U              | 13.3       |                   | 21.7           | 152                  | 169                  | 217                  | 83       | J                     | 131          | 212      | 25.7                   | J                   | 137                 | 19.6        | J            | 242    | 5.95         | J          | 29.7       | 107             | 7.51  | J     | 1,630 | J    | 207   | 246   | J    |      |      |      |      |      |      |   |
|                         |               |             | 2-3                     | DU-16 (2-3)   | 11/07/2022  | 5                                             | U              | 5          | U                 | 7.22           | J                    | 42.9                 | 38.7                 | 53       | J                     | 27.6         | 51.5     | 5.09                   | J                   | 70.9                | 5           | U            | 32.8   | 5            | U          | 5.34       | J               | 6.72  | J     | 35.6  | 74.7 | 5.00  | U     | 417  | J    | 62.4 | 56.9 | J    |      |      |   |
|                         | DU-17         | ISM         | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 5                                             | U              | 5          | U                 | 9.99           | U                    | 33.4                 | 40.9                 | 67.1     | 20.7                  | J            | 42.9     | 62.4                   | 8                   | J                   | 53.3        | 5            | U      | 42           | 7.14       | J          | 13.1            | 16.3  | 43.2  | 57.7  | 5.00 | U     | 428   | J    | 85.1 | 63.4 | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 5.04                                          | U              | 5.04       | U                 | 5.04           | U                    | 30.1                 | 32.5                 | 51.7     | 16.2                  | J            | 40.5     | 50.8                   | 6.94                | J                   | 48.7        | 5.04         | U      | 35.1         | 8.92       | J          | 14.5            | 12.9  | 48.4  | 50    | 5.04 | U     | 363   | J    | 85.9 | 51.3 | J    |      |      |      |   |
|                         |               |             | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 4.95                                          | U              | 4.95       | U                 | 4.95           | U                    | 21.3                 | 21                   | 30.2     | 10.1                  | J            | 22.5     | 26.3                   | 4.95                | U                   | 33.1        | 4.95         | U      | 21.4         | 4.95       | U          | 5.16            | J     | 5.68  | J     | 14.1 | 34    | 4.95  | U    | 222  | J    | 34.8 | 30.9 | J    |      |   |
|                         | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 5.08                                          | U              | 22.6       |                   | 25.5           | 78.4                 | 129                  | 205                  | 57.6     | J                     | 174          | 136      | 19.2                   |                     | 128                 | 5.08        | U            | 158    | 7.71         | J          | 12.3       | 25.4            | 65.5  | 151   | 5.64  | J    | 1,240 | J     | 156  |      | 193  | J    |      |      |      |   |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 5.08                                          | U              | 21.0       |                   | 27.8           | 95.4                 | 137                  | 211                  | 62.9     | J                     | 159          | 157      | 19.9                   |                     | 170                 | 6.01        | J            | 149    | 7.86         | J          | 12.5       | 24.4            | 93.3  | 193   | 6.94  | J    | 1,350 | J     | 188  | J    | 203  | J    |      |      |      |   |
|                         |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 5.97                                          | J              | 29.0       |                   | 39.5           | 125                  | 184                  | 250                  | 85.4     | J                     | 209          | 199      | 29.4                   |                     | 255                 | 8.19        | J            | 193    | 7.17         | J          | 11.0       | 24.5            | 145   | 279   | 6.67  | J    | 1,810 | J     | 263  | J    | 271  | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 4.80                                          | U              | 14.4       |                   | 16.6           | 65.0                 | 93.3                 | 143                  | 48.0     | J                     | 104          | 105      | 13.6                   |                     | 102                 | 5.48        | J            | 96.9   | 9.71         | J          | 11.9       | 19.2            | 67.9  | 123   | 4.80  | U    | 894   | J     | 138  | J    | 138  | J    |      |      |      |   |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 4.96                                          | U              | 8.03       | J                 | 11.1           | 58.9                 | 74.5                 | 115                  | 31.5     | J                     | 73.6         | 85.9     | 10.3                   |                     | 95.0                | 4.96        | U            | 70.9   | 4.96         | U          | 6.60       | J               | 13.2  | 38.5  | 107   | 4.96 | U     | 723   | J    | 82.4 | J    | 110  | J    |      |      |   |
|                         |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 5.03                                          | U              | 8.42       | J                 | 8.58           | J                    | 46.0                 | 57.5                 | 86.6     | 29.7                  | J            | 70.6     | 69.1                   | 9.24                | J                   | 77.9        | 5.03         | U      | 64.9         | 5.03       | U          | 5.56            | J     | 12.0  | 34.7  | 86.4 | 5.03  | U     | 598  | J    | 74.3 | J    | 86.9 | J    |      |   |
|                         |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 5.04                                          | U              | 5.04       | U                 | 5.04           | U                    | 22.4                 | 27.4                 | 42.4     | J                     | 12.9         | J        | 23.5                   | 31.4                | 5.04                | U           | 40.9         | 5.04   | U            | 26.4       | 5.04       | U               | 5.04  | U     | 17.5  | 47.5 | 5.04  | U     | 277  | J    | 32.6 |      | 39.2 | J    |      |   |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 5.06                                          | U              | 8.08       | J                 | 12.7           | 45.9                 | 59.3                 | 79.5                 | J        | 30.2                  | J            | 63.5     | 65.6                   | 7.99                | J                   | 83.7        | 5.06         | U      | 60.4         | 5.06       | U          | 5.06            | U     | 11.5  | 44.2  | 91.4 | 5.06  | U     | 587  | J    | 84.1 | J    | 86.2 | J    |      |   |
|                         |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 4.95                                          | U              | 6.27       | J                 | 8.20           | J                    | 41.6                 | 53.0                 | 78.3     | J                     | 23.5         | J        | 55.0                   | 59.8                | 7.29                | J           | 65.2         | 4.95   | U            | 53.6       | 4.95       | U               | 4.95  | U     | 8.66  | J    | 29.7  | 74.6  | 4.95 | U    | 512  | J    | 60.3 | J    | 77.9 | J |
|                         |               |             | 0-1                     | DU-18 (0-1) M | --          | 5.38                                          | J              | 24.2       |                   | 30.9           | 100                  | 150                  | 222                  | 68.6     | J                     | 181          | 164      | 22.8                   |                     | 184                 | 6.43        | J            | 167    | 7.58         | J          | 11.9       | 24.8            | 101   | 208   | 6.42  | J    | 1,467 | J     | 202  | J    | 222  | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-18 (1-2) M | --          | 5.03                                          | U              | 10.3       | J                 | 12.1           | J                    | 56.6                 | 75.1                 | 115      | 36.4                  | J            | 82.7     | 86.7                   | 11.0                | J                   | 91.6        | 5.16         | J      | 77.6         | 6.57       | J          | 8.02            | J     | 14.8  | 47.0  | 105  | 5.03  | U     | 738  | J    | 98.2 | J    | 112  | J    |      |   |
|                         |               |             | 2-3                     | DU-18 (2-3) M | --          | 5.06                                          | U              | 6.46       | J                 | 8.65           | J                    | 36.6                 | 46.6                 | 66.7     | J                     | 22.2         | J        | 47.3                   | 52.3                | 6.8                 | J           | 63.3         | 5.06   | U            | 46.8       | 5.06       | U               | 5.06  | U     | 8.40  | J    | 30.5  | 71.2  | 5.06 | U    | 459  | J    | 59.0 | J    | 68   | J |
|                         | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 5.93                                          | J              | 44.4       |                   | 38.2           | 163                  | 282                  | 356                  | 125      | J                     | 265          | 242      | 41.6                   |                     | 305                 | 10.4        |              | 259    | 13.7         |            | 17.9       | 39.2            | 187   | 335   | 12.1  |      | 2,370 | J     | 343  | J    | 403  | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 18.6                                          |                | 17.0       |                   | 48.0           | 155                  | 186                  | 253                  | 91.8     | J                     | 149          | 197      | 26.7                   |                     | 313                 | 25.3        |              | 155    | 11.9         |            | 16.1       | 25.4            | 234   | 294   | 17.4  |      | 1,820 | J     | 384  |      | 270  | J    |      |      |      |   |
|                         |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 5.07                                          | U              | 7.99       | J                 | 7.78           | J                    | 40.5                 | 53.7                 | 76.7     | 26.5                  | J            | 48.1     | 54.0                   | 8.25                | J                   | 69.5        | 5.07         | U      | 50.0         | 5.07       | U          | 5.07            | U     | 7.12  | J     | 32.2 | 86.5  | 5.07  | U    | 514  | J    | 62.7 | J    | 79.0 | J    |   |
|                         | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 4.81                                          | U              | 14.2       |                   | 10.1           | 51                   | 99                   | 164                  | 59.7     | J                     | 91.2         | 115      | 15.3                   |                     | 81.4                | 4.9         | J            | 86.8   | 5.34         | J          | 9.47       | J               | 13.9  | 42    | 129   | 4.81 | U     | 892   |      | 97.0 |      | 145  | J    |      |      |   |
|                         |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 4.93                                          | U              | 4.93       | U                 | 4.93           | U                    | 8.6                  | J                    | 7.86     | J                     | 11.4         | J        | 4.93                   | U                   | 7.39                | J           | 10.5         | 4.93   | U            | 7.95       | J          | 4.93            | U     | 4.93  | U     | 8.78 | J     | 14.9  | 4.93 | U    | 88.1 |      | 23.6 |      | 13.2 | J |
|                         |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 4.73                                          | U              | 4.73       | U                 | 4.73           | U                    | 13.7                 | 12.7                 | 17.2     | J                     | 7.52         | J        | 9.69                   | 16.5                | 4.73                | U           | 21.9         | 4.73   | U            | 10.4       | 4.73       | U               | 4.73  | U     | 10.5  | 23.2 | 4.73  | U     | 135  |      | 24.7 |      | 19.3 | J    |      |   |
|                         | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 9.34                                          | U              | 30.3       |                   | 49.9           | 132                  | 201                  | 346                  | 83.8     | J                     | 231          | 320      | 42.5                   |                     | 249                 | 18.8        |              | 212    | 36.7         |            | 61.5       | 53.3            | 246   | 273   | 18.7  |      | 2,090 | J     | 464  |      | 314  | J    |      |      |      |   |
|                         |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 4.98                                          | U              | 14.5       |                   | 18.2           | 86.8                 | 110                  | 169                  | 54.8     | J                     | 102          | 139      | 17.9                   |                     | 133                 | 4.98        | U            | 100    | 10.8         |            | 16.5       | 22.6            | 73.8  | 141   | 7.41  | J    | 1,050 | J     | 151  |      | 164  | J    |      |      |      |   |
|                         |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 4.68                                          | U              | 8.57       | J                 | 13             | 44.4                 | 57.1                 | 89.6                 | 27.6     | J                     | 62.7         | 89.2     | 11.3                   |                     | 92.9                | 5.57        | J            | 57.4   | 11.8         |            | 16.9       | 16.2            | 85.6  | 91.4  | 5.24  | J    | 624   | J     | 148  | J    | 87.9 | J    |      |      |      |   |
|                         | DU-22         | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 4.99                                          | U              | 7.18       | J                 | 11.1           | 36.6                 | 50.4                 | 88.3                 | 27.7     | J                     | 54.7         | 81.9     | 8.05                   | J                   | 80.2                | 4.99        | U            | 51.1   | 8.62         | J          | 16.9       | 50.3            | 58.5  | 86.2  | 5.49  | J    | 565   |       | 149  |      | 76.4 | J    |      |      |      |   |
|                         |               |             |                         |               |             |                                               |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |       |       |       |      |       |       |      |      |      |      |      |      |      |   |

Table 4a  
Soil Results - PAHs and Dibenzofuran - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location                            | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |               |              |            |            |                 |
|--------------------------------------------|----------------------|-------------|-------------------------|--------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|---------------|--------------|------------|------------|-----------------|
|                                            |                      |             |                         |              |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |               |              |            |            |                 |
|                                            |                      |             |                         |              |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene        | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |
| Ecological ISM PRG Ecological ISM Hot Spot |                      |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 10100       | 5,60056,000  | 29,000290,000 | --           |            |            |                 |
| Central Parcel Concrete Slab               | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)  | 11/30/2022  | 4.96 U                                        | 4.96 U         | 5.74 J     | 30.7              | 36.9           | 43.7 J               | 16.6 J               | 40.6                 | 37.3     | 4.96 U                | 49.7         | 4.96 U   | 36.9                   | 5.82 J              | 6.82 J              | 8.12 J      | 39.7         | 51.7          | 4.96 U       | 347        | 67.8       | 50.7 J          |
|                                            |                      |             | 1-2                     | DU-42 (1-2)  | 11/30/2022  | 4.76 U                                        | 4.76 U         | 4.76 U     | 20                | 21.4           | 27.8                 | 10.3 J               | 25.5                 | 23.9     | 4.76 U                | 33.3         | 4.76 U   | 22.1                   | 4.76 U              | 5.21 J              | 6.01 J      | 22.2         | 33.2          | 4.76 U       | 220        | 42.9       | 30.9 J          |
|                                            |                      |             | 2-3                     | DU-42 (2-3)  | 11/30/2022  | 4.96 U                                        | 4.96 U         | 4.96 U     | 16.1              | 15.4           | 18                   | 5.68 J               | 16.8                 | 17.5     | 4.96 U                | 23.1         | 4.96 U   | 15.8                   | 4.96 U              | 4.96 U              | 5.33 J      | 12           | 26.8          | 4.96 U       | 158        | 29.7       | 22.9 J          |
| East Parcel                                | DU-27                | ISM         | 0-1                     | DU-27 (0-1)  | 10/05/2022  | 5 U                                           | 21.7           | 55.8       | 70.2              | 130            | 250                  | 64.5 J               | 172                  | 170      | 29.4                  | 146          | 5 U      | 203                    | 5 U                 | 5 U                 | 12          | 61.9         | 160           | 5.00 U       | 1,400 J    | 159        | 213 J           |
|                                            |                      |             | 1-2                     | DU-27 (1-2)  | 10/05/2022  | 4.94 U                                        | 37.1           | 65.2       | 117               | 162            | 243                  | 69.4 J               | 165                  | 195      | 24.8                  | 304          | 12.5     | 180                    | 5.93 J              | 8.7 J               | 22.3        | 215          | 316           | 10.1         | 1,780 J    | 363 J      | 242 J           |
|                                            |                      |             | 2-3                     | DU-27 (2-3)  | 10/05/2022  | 5.02 U                                        | 12.1           | 22         | 39.6              | 65.5           | 100                  | 28.2 J               | 86.5                 | 75.5     | 9.64 J                | 81.7         | 5.02 U   | 78.4                   | 5.02 U              | 5.16 J              | 16          | 42.7         | 92            | 5.02 U       | 657 J      | 103 J      | 97.3 J          |
|                                            | DU-28                | ISM         | 0-1                     | DU-28 (0-1)  | 09/14/2022  | 4.95 U                                        | 39.1           | 76.8       | 112               | 303            | 415                  | 117 J                | 253                  | 236      | 45.8                  | 268          | 6.98 J   | 298                    | 4.95 U              | 7.73 J              | 19.8        | 108          | 312           | 7.02 J       | 2,360 J    | 261 J      | 433 J           |
|                                            |                      |             | 1-2                     | DU-28 (1-2)  | 09/14/2022  | 5.14 J                                        | 34.8           | 105        | 220               | 353            | 562                  | 137 J                | 269                  | 372      | 62.2                  | 424          | 8.53 J   | 330                    | 4.88 U              | 6.31 J              | 16.5        | 133          | 409           | 8.50 J       | 3,140 J    | 309 J      | 528 J           |
|                                            |                      |             | 2-3                     | DU-28 (2-3)  | 09/14/2022  | 5 U                                           | 36.1           | 95         | 97.4              | 235            | 345                  | 82.1 J               | 228                  | 204      | 44.7                  | 175          | 7.42 J   | 280                    | 10.5                | 15.4                | 18.4        | 63.4         | 194           | 8.38 J       | 1,890 J    | 238 J      | 353 J           |
|                                            | DU-29                | ISM         | 0-1                     | DU-29 (0-1)  | 09/15/2022  | 5.06 U                                        | 14.1           | 16         | 69.9              | 109            | 140                  | 46.3 J               | 103                  | 113      | 13.6                  | 142          | 5.06 U   | 102                    | 12.5                | 16.6                | 20.9        | 84.1         | 149           | 8.46 J       | 988 J      | 157        | 154 J           |
|                                            |                      |             | 1-2                     | DU-29 (1-2)  | 09/15/2022  | 5.05 U                                        | 6.51 J         | 7.61 J     | 44.7              | 49             | 63.6                 | 22.7 J               | 33.1                 | 51.7     | 5.94 J                | 83.9         | 5.05 U   | 37                     | 5.05 U              | 5.53 J              | 8.88 J      | 30.5         | 86.4          | 5.05 U       | 478 J      | 64.1 J     | 69.7 J          |
|                                            |                      |             | 2-3                     | DU-29 (2-3)  | 09/15/2022  | 5 U                                           | 5.26 J         | 6.88 J     | 27.8              | 41.3           | 56.1                 | 19.2 J               | 33.6                 | 40.1     | 5.22 J                | 57.4         | 5 U      | 36.8                   | 5 U                 | 5 U                 | 8.06 J      | 28.5         | 62.8          | 5.00 U       | 380 J      | 56.2 J     | 58.8 J          |
|                                            | DU-30                | ISM         | 0-1                     | DU-30 (0-1)  | 09/16/2022  | 5.01 U                                        | 34.8           | 34.1       | 140               | 283            | 347                  | 106 J                | 230                  | 208      | 40                    | 262          | 5.01 U   | 255                    | 7.51 J              | 13.7                | 21          | 94.2         | 276           | 7.17 J       | 2,150 J    | 203        | 398 J           |
|                                            |                      |             | 1-2                     | DU-30 (1-2)  | 09/16/2022  | 5 U                                           | 19.5           | 14.2       | 63.2              | 119            | 146                  | 50.5 J               | 108                  | 100      | 17.1                  | 135          | 5 U      | 115                    | 5 U                 | 8.62 J              | 18.3        | 53.9         | 147           | 5.00 U       | 1,000 J    | 120 J      | 169 J           |
|                                            |                      |             | 2-3                     | DU-30 (2-3)  | 09/16/2022  | 5.02 U                                        | 7.93 J         | 7.28 J     | 33.7              | 49.3           | 68.6                 | 20.7 J               | 42.6                 | 49.9     | 6.61 J                | 72.3         | 5.02 U   | 44.9                   | 5.02 U              | 5.12 J              | 9.29 J      | 33.5         | 76.2          | 5.02 U       | 465 J      | 68.1 J     | 70.9 J          |
|                                            | DU-31                | ISM         | 0-1                     | DU-31 (0-1)  | 11/03/2022  | 4.93 U                                        | 16.6           | 16         | 68.9              | 82.4           | 132                  | 40.5 J               | 80                   | 101      | 12.7                  | 128          | 4.93 U   | 79.9                   | 4.93 U              | 6.02 J              | 15.2        | 57.6         | 129           | 5.00 J       | 854        | 116        | 124 J           |
|                                            |                      |             | 1-2                     | DU-31 (1-2)  | 11/03/2022  | 5.02 U                                        | 21             | 14.6       | 57.4              | 79.8           | 120                  | 41.3 J               | 79.8                 | 86.9     | 13.1                  | 106          | 5.02 U   | 78.5                   | 5.02 U              | 6.09 J              | 17.8        | 62.2         | 105           | 5.38 J       | 768        | 127        | 119 J           |
|                                            |                      |             | 2-3                     | DU-31 (2-3)  | 11/03/2022  | 4.99 U                                        | 13.1           | 12.9       | 52.5              | 62             | 92.4                 | 28.2 J               | 56.7                 | 72.9     | 9.5 J                 | 110          | 4.99 U   | 55.8                   | 4.99 U              | 4.99 U              | 12.2        | 64.3         | 109           | 4.99 U       | 649        | 110        | 91.9 J          |
|                                            | DU-32                | ISM         | 0-1                     | DU-32 (0-1)  | 09/22/2022  | 4.75 U                                        | 16.3           | 12.5       | 56.4              | 78.4           | 125                  | 44.2 J               | 70.4                 | 87.5     | 10.4                  | 118          | 4.75 U   | 75.9                   | 4.75 U              | 7.23 J              | 17.3        | 63.5         | 110           | 6.29 J       | 776 J      | 122 J      | 115 J           |
|                                            |                      |             | 1-2                     | DU-32 (1-2)  | 09/22/2022  | 4.68 U                                        | 9.57           | 8.09 J     | 35.5              | 51.3           | 74.3                 | 25.2 J               | 59.8                 | 57.3     | 7.29 J                | 61.2         | 4.68 U   | 55.2                   | 4.68 U              | 4.68 U              | 10.5        | 33.2         | 64.1          | 4.68 U       | 491 J      | 68.4 J     | 75.4 J          |
|                                            |                      |             | 2-3                     | DU-32 (2-3)  | 09/22/2022  | 5.7 J                                         | 87.1           | 71.7       | 297               | 409            | 477                  | 184 J                | 253                  | 368      | 48.4                  | 657          | 42.9     | 287                    | 16                  | 26.6                | 94.8        | 417          | 545           | 40.5         | 3,530 J    | 746 J      | 566 J           |
|                                            | DU-33                | ISM         | 0-1                     | DU-33 (0-1)  | 09/20/2022  | 4.74 U                                        | 7.78 J         | 8.94 J     | 34.1              | 38.3           | 64                   | 18.4 J               | 38.8                 | 53.3 J   | 4.74 U                | 65.9 J       | 4.74 U   | 35                     | 8.49 J              | 13.5                | 25          | 44.5         | 63.9 J        | 8.13 J       | 414 J      | 104 J      | 54.2 J          |
|                                            |                      |             | 1-2                     | DU-33 (1-2)  | 09/20/2022  | 4.91 U                                        | 10.5           | 10.2       | 36                | 36.6           | 61.1                 | 17.9 J               | 33.9                 | 61.7     | 4.91 U                | 85.5         | 4.91 U   | 29.1                   | 4.91 J              | 9.28 J              | 27.7        | 65.3         | 86.5          | 6.56 J       | 451 J      | 128 J      | 51.9 J          |
|                                            |                      |             | 2-3                     | DU-33 (2-3)  | 09/20/2022  | 4.87 U                                        | 5.05 J         | 7.41 J     | 37.8              | 40.6           | 53.8                 | 16.1 J               | 34.1                 | 46.3     | 4.87 U                | 66.4         | 4.87 U   | 31.1                   | 4.87 U              | 5.59 J              | 11.5        | 30.6         | 72.4          | 4.87 U       | 401 J      | 65.0 J     | 55.5 J          |
|                                            | DU-34                | ISM         | 0-1                     | DU-34 (0-1)  | 09/27/2022  | 6.51 J                                        | 60.9           | 41.7       | 130               | 175            | 259                  | 97.2 J               | 140                  | 190      | 23.8                  | 298          | 16.8     | 144                    | 9.77 J              | 19.3                | 52          | 199          | 260           | 17.8         | 1,720 J    | 396 J      | 253 J           |
|                                            |                      |             | 1-2                     | DU-34 (1-2)  | 09/27/2022  | 5.07 U                                        | 40.6           | 23.9       | 95.3              | 126            | 185                  | 59 J                 | 102                  | 132      | 18.7                  | 181          | 7.87 J   | 102                    | 5.44 J              | 10.9                | 28.9        | 95.6         | 185           | 9.78 J       | 1,190 J    | 210        | 184 J           |
|                                            |                      |             | 2-3                     | DU-34 (2-3)  | 09/27/2022  | 4.79 U                                        | 16.7           | 12.2       | 48.5              | 66.5           | 102                  | 33.9 J               | 54.1                 | 74.7     | 9.69                  | 102          | 4.79 U   | 56.3                   | 4.79 U              | 7.4 J               | 15.7        | 59.1         | 103           | 5.14 J       | 651 J      | 116 J      | 97.3 J          |
|                                            | DU-35                | ISM         | 0-1                     | DU-35 (0-1)  | 10/07/2022  | 4.88 U                                        | 12.9           | 13.9       | 46.8              | 63.5           | 95.8                 | 30.9 J               | 60.9                 | 76.7     | 9.03 J                | 86.7         | 4.88 U   | 59.3                   | 4.88 U              | 7.41 J              | 15.3        | 50           | 86.6          | 5.27 J       | 616        | 104        | 93.1 J          |
|                                            |                      |             | 1-2                     | DU-35 (1-2)  | 10/07/2022  | 5.03 U                                        | 19             | 15.6       | 52.8              | 81.8           | 114                  | 34.9 J               | 74.9                 | 74.5     | 12.1                  | 88.1         | 5.03 U   | 77                     | 5.03 U              | 6.35 J              | 14.1        | 45.8         | 94.2          | 5.03 U       | 704        | 106        | 119 J           |
|                                            |                      |             | 2-3                     | DU-35 (2-3)  | 10/07/2022  | 4.86 U                                        | 4.86 U         | 4.86 U     | 19.8              | 24.1           | 42.1 J               | 13.4 J               | 25.8                 | 32.8     | 4.86 U                | 30.8         | 4.86 U   | 26.4                   | 4.86 U              | 4.86 U              | 5.83 J      | 15.4         | 32.7          | 4.86 U       | 250        | 33.4       | 35.5 J          |
|                                            | DU-36                | ISM         | 0-1                     | DU-36 (0-1)  | 11/01/2022  | 5.04 U                                        | 5.4 J          | 7.26 J     | 42.6              | 52.8           | 89.2                 | 33.1 J               | 76.2                 | 78.5     | 9.76 J                | 86.3         | 5.04 U   | 61.2                   | 5.04 U              | 8.38 J              | 17.3        | 45.8         | 87.6          | 5.99 J       | 617        | 89.2       | 82.3 J          |
|                                            |                      |             | 1-2                     | DU-36 (1-2)  | 11/01/2022  | 4.99 U                                        | 9.87 J         | 18.3       | 55.3              | 68             | 107                  | 36.2 J               | 86.3                 | 91.5     | 10.9                  | 116          | 4.99 U   | 74.6                   | 6.15 J              | 12.3                | 22.9        | 61.1         | 131           | 8.23 J       | 777        | 129        | 103 J           |
|                                            |                      |             | 2-3                     | DU-36 (2-3)  | 11/01/2022  | 5.04 U                                        | 5.04 U         | 5.04 U     | 23.1              | 25.9           | 42.3                 | 13.2 J               | 33.6                 | 37.9     | 5.04 U                | 43.9         | 5.04 U   | 28                     | 5.04 U              | 6.54 J              | 14.7        | 25.1         | 44.2          | 5.04 U       | 295        | 56.4       | 37.9 J          |
|                                            | DU-38                | ISM         | 0-1                     | DU-38 (0-1)A | 11/14/2022  | 4.88 U                                        | 5.9 J          | 7 J        | 36.5              | 33.1           | 59.4                 | 17.8 J               | 30.3                 | 49.8     | 4.94 J                | 66.9         | 4.88 U   | 29.1                   | 4.88 U              | 4.88 U              | 8.39 J      | 35.2         | 64.3          | 4.88 U       | 392        | 63.8       | 50.8 J          |
|                                            |                      |             | 0-1 FR                  | DU-38 (0-1)B | 11/14/2022  | 4.82 U                                        | 8.51 J         | 10.3       | 59.4              | 55.7           | 82.9 J               | 31.6 J               | 42.6                 | 74.2     | 7.97 J                | 99.6         | 4.82 U   | 44.8                   | 4.82 U              | 5.93 J              | 9.09 J      | 45.6         | 95.7          | 4.82 U       | 594        | 84.3       | 82.8 J          |
|                                            |                      |             | 0-1 FR                  | DU-38 (0-1)C | 11/14/2022  | 5.04 U                                        | 10.2           | 8.9 J      | 46.6              | 50             | 73.9                 | 26.4 J               | 40.7                 | 60.1     | 7.19 J                | 89.7         | 5.04 U   | 42.5                   | 5.04 U              | 6.31 J              | 13.2        | 48.3         | 78.8          | 5.56 J       | 516        | 92.0       | 73.8 J          |
|                                            |                      |             | 1-2                     | DU-38 (1-2)A | 11/16/2022  | 5 U                                           | 5.27 J         | 8.19 J     | 38.5              | 35.5           | 56.6 J               | 19.2 J               | 30.8                 | 55.6     | 5.05 J                | 77.4         | 5 U      | 29.6                   | 5 U                 | 7.08 J              | 14.8        | 37.2         | 73.2          | 5.00 U       | 421        | 77.5       | 53.3 J          |
|                                            |                      |             | 1-2 FR                  | DU-38 (1-2)B | 11/16/2022  | 5.08 U                                        | 5.5 J          | 8.84 J     | 42.2              | 34.6           | 54.3                 | 17.2 J               | 27.7                 | 54.1     | 5.08 U                | 74.6         | 5.08 U   | 25.5                   |                     |                     |             |              |               |              |            |            |                 |

Table 4a  
Soil Results - PAHs and Dibenzofuran - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |     |      |       |       |     |     |   |
|-------------------------|---------------|-------------|-------------------------|---------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|------|-----|------|-------|-------|-----|-----|---|
|                         |               |             |                         |               |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |     |      |       |       |     |     |   |
|                         |               |             |                         |               |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |      |     |      |       |       |     |     |   |
| Ecological ISM PRG      |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | 10          | 5,600        | 29,000 | --           |            |            |                 |      |     |      |       |       |     |     |   |
| Ecological ISM Hot Spot |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | 100          | 56,000 | 290,000      | --         |            |                 |      |     |      |       |       |     |     |   |
| East Parcel Soil Berms  | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 8.09                                          | J              | 34.2       | 51.6              | 142            | 196                  | J                    | 269                  | 106      | J                     | 214          | J        | 221                    | 24.1                | 331                 | 6.07        | J            | 209    | J            | 17.6       | 23         | 22.1            | 107  | 364 | 11.6 | 2,080 | 252   | 283 | J   |   |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 5.06                                          | J              | 41.7       | 50.4              | 128            | 233                  |                      | 326                  | 96.9     | J                     | 252          |          | 225                    | 30.8                | 267                 | 6.2         | J            | 252    |              | 21.5       | 26.9       | 35.4            | 122  | 301 | 13.1 | 2,110 | 288   | 336 | J   |   |
|                         |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 8.96                                          | J              | 31.6       | 60.5              | 112            | 172                  |                      | 271                  | 77.1     | J                     | 186          |          | 197                    | 25.4                | 261                 | 7.76        | J            | 183    |              | 10.3       | 15.7       | 23.9            | 164  | 268 | 18.4 | 1,750 | 312   | 255 | J   |   |
|                         |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 30.0                                          |                | 25.1       | 56.8              | 139            | 172                  |                      | 247                  | 97.1     | J                     | 188          |          | 226                    | 25.1                | 315                 | 23.4        |              | 173    |              | 80.3       | 92.6       | 70.1            | 274  | 354 | 42.7 | 1,940 | 559   | 254 | J   |   |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 14.2                                          | U              | 28.3       | 56.6              | 123            | 189                  |                      | 287                  | 92.3     | J                     | 190          |          | 235                    | 26.4                | 277                 | 13.7        |              | 183    |              | 101        | 115        | 83.8            | 254  | 319 | 37.1 | 1,920 | 544   | 276 | J   |   |
|                         |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 10.1                                          | U              | 22.2       | 27.0              | 86.1           | 134                  |                      | 212                  | 65.4     | J                     | 144          |          | 161                    | 18.9                | 194                 | 6.46        | J            | 135    |              | 55.9       | 62.8       | 56.4            | 138  | 215 | 21.6 | 1,370 | 307   | 197 | J   |   |
|                         |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 6.08                                          | J              | 12.0       | 20.6              | 69.0           | 90.1                 |                      | 135                  | 49.2     | J                     | 103          |          | 117                    | 12.9                | 147                 | 5.21        | J            | 97.6   |              | 23.1       | 28.9       | 30.7            | 98.3 | 159 | 10.8 | 980   | 202   | 134 | J   |   |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 4.94                                          | U              | 12.7       | 23.1              | 72.4           | 101                  |                      | 148                  | 52.0     | J                     | 102          |          | 123                    | 15.1                | 137                 | 4.94        | U            | 104    |              | 18.8       | 24.3       | 22.9            | 75.2 | 147 | 8.18 | J     | 1,000 | 163 | 149 | J |
|                         |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 7.48                                          | J              | 13.1       | 23.4              | 71.2           | 101                  |                      | 148                  | 53.1     | J                     | 106          |          | 124                    | 14.4                | 168                 | 6.68        | J            | 104    |              | 28.8       | 31.6       | 30.0            | 119  | 187 | 12.9 | 1,080 | 231   | 148 | J   |   |
|                         |               |             | 0-1                     | DU-41 (0-1) M | --          | 7.37                                          | J              | 35.8       | 54.2              | 127            | 200                  | J                    | 289                  | 93.3     | J                     | 217          | J        | 214                    | 26.8                | 286                 | 6.68        | J            | 215    | J            | 16.5       | 21.9       | 27.1            | 131  | 311 | 14.4 | 1,980 | 284   | 291 | J   |   |
|                         |               |             | 1-2                     | DU-41 (1-2) M | --          | 18.1                                          |                | 28.3       | 46.8              | 116            | 165                  |                      | 249                  | 84.9     | J                     | 174          |          | 207                    | 23.5                | 262                 | 14.5        | J            | 164    |              | 79.1       | 90.1       | 70.1            | 222  | 296 | 33.8 | 1,743 | 470   | 242 | J   |   |
|                         |               |             | 2-3                     | DU-41 (2-3) M | --          | 6.17                                          | J              | 12.6       | 22.4              | 70.9           | 97.4                 |                      | 144                  | 51.4     | J                     | 104          |          | 121                    | 14.1                | 151                 | 5.61        | J            | 102    |              | 23.6       | 28.3       | 27.9            | 97.5 | 164 | 10.6 | J     | 1,020 | 199 | 144 | J |

Notes:  
ISM = Incremental Sampling Methodology.  
bgs = Below ground surface.  
PAHs = Polycyclic aromatic hydrocarbons.  
EPA = United States Environmental Protection Agency.  
M = Mean. These results are the mean of the field replicates collected at this decision unit.  
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.  
µg/kg = Micrograms per kilogram (parts per billion).  
Bolded values exceed the Preliminary Remediation Goal (PRG).  
Shaded values exceed the hot spot level.  
Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.  
J = Result is estimated.  
PRG = Preliminary Remediation Goal: cleanup level adopted from the Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility (Apex, 2019).  
Hot spot level adopted from the Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility (Apex, 2019).

HPAH = High-molecular-weight polycyclic aromatic hydrocarbon  
LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon  
cPAHs = carcinogenic polycyclic aromatic hydrocarbon

Table 4b  
Soil Results - PAHs and Dibenzofuran - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |  |      |   |      |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |
|---------------------------|---------------|-------------|-------------------------|--------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|------|--|------|---|------|---|------|---|------|---|------|---|------|---|------|---|--------|---|-------|---|-------|---|-----|---|
|                           |               |             |                         |              |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |  |      |   |      |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |
|                           |               |             |                         |              |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |      |  |      |   |      |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |
| Human Health ISM PRG      |               |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 550          |            |            |                 |      |  |      |   |      |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |
| Human Health ISM Hot Spot |               |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 55,000       |            |            |                 |      |  |      |   |      |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |
| West Parcel               | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 14.1                                          |                | 33.9       |                   | 48.5           |                      | 187                  |                      | 308      |                       | 394          |          | 122                    | J                   | 232                 |             | 293          |        | 53.3         |            | 373        |                 | 12   |  | 249  |   | 15.9 |   | 24.5 |   | 18.9 |   | 185  |   | 449  |   | 7.76 | J | 2,660  | J | 337   |   | 446   | J |     |   |
|                           |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 9.66                                          | U              | 46.3       |                   | 49             |                      | 164                  |                      | 286      |                       | 342          |          | 113                    | J                   | 249                 |             | 266          |        | 35.8         |            | 404        |                 | 261  |  | 12.9 |   | 261  |   | 28.4 |   | 32.9 |   | 43.2 |   | 235  |   | 502  |   | 10.2   |   | 2,620 | J | 424   | J | 400 | J |
|                           |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 8.52                                          | J              | 35.2       |                   | 40.9           |                      | 136                  |                      | 234      |                       | 279          |          | 82                     | J                   | 187                 |             | 207          |        | 31.1         |            | 331        |                 | 202  |  | 9.12 | J | 202  |   | 5.52 | J | 7.62 | J | 15.8 |   | 169  |   | 416  |   | 4.80   | U | 2,110 | J | 286   | J | 328 | J |
|                           | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 10.4                                          |                | 5.05       | U                 | 14.2           |                      | 78.0                 |                      | 116      |                       | 143          |          | 49.3                   | J                   | 103                 |             | 112          |        | 15.6         |            | 144        |                 | 106  |  | 6.68 | J | 106  |   | 5.05 | U | 5.58 | J | 9.09 | J | 78.7 |   | 153  |   | 5.11   | J | 1,020 | J | 127   | J | 165 | J |
|                           |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 4.70                                          | U              | 4.70       | U                 | 19.0           |                      | 81.9                 |                      | 75.1     |                       | 93.2         |          | 35.0                   | J                   | 50.3                |             | 87.5         |        | 9.75         |            | 158        |                 | 56.7 |  | 4.70 | U | 56.7 |   | 4.70 | U | 4.70 | U | 4.88 | J | 90.2 |   | 145  |   | 4.70   | U | 792   | J | 123   | J | 108 | J |
|                           |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 5.00                                          | U              | 5.00       | U                 | 5.00           | U                    | 15.5                 |                      | 21.9     |                       | 31.6         |          | 11.0                   | J                   | 27.0                |             | 24.9         |        | 5.00         | U          | 29.1       |                 | 26.3 |  | 5.00 | U | 5.00 | U | 5.00 | U | 5.00 | U | 12.5 |   | 33.2 |   | 5.00 | U | 223    | J | 27.5  |   | 31.9  | J |     |   |
|                           | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 5.54                                          | J              | 4.99       | J                 | 13.2           |                      | 65.5                 |                      | 105      |                       | 138          |          | 54.7                   | J                   | 90.1                |             | 110          |        | 16.4         |            | 140        |                 | 104  |  | 4.78 | U | 104  |   | 4.78 | U | 6.89 | J | 11.0 |   | 76.8 |   | 152  |   | 4.78   | U | 976   | J | 121   | J | 153 | J |
|                           |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 5.10                                          | U              | 9.18       | J                 | 8.37           | J                    | 56.7                 |                      | 90.1     |                       | 116          |          | 43.6                   | J                   | 92.8                |             | 99.7         |        | 11.5         |            | 169        |                 | 96.8 |  | 5.10 | U | 96.8 |   | 5.10 | U | 5.10 | U | 8.24 | J | 87.1 |   | 208  |   | 5.10   | U | 984   | J | 121   | J | 129 | J |
|                           |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 4.95                                          | U              | 6.86       | J                 | 8.05           | J                    | 43.3                 |                      | 73.4     |                       | 96.1         |          | 32.5                   | J                   | 75.6                |             | 78.2         |        | 7.59         | J          | 116        |                 | 79.3 |  | 4.95 | U | 79.3 |   | 5.64 | J | 16.5 |   | 64.9 |   | 143  |   | 4.95 | U | 745    | J | 114   | J | 103   | J |     |   |
|                           | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 7.89                                          | J              | 36.9       |                   | 36.3           |                      | 160                  |                      | 310      |                       | 354          |          | 107                    | J                   | 255                 |             | 265          |        | 37.3         |            | 319        |                 | 277  |  | 9.26 | J | 277  |   | 12.3 |   | 25.8 |   | 45.7 |   | 167  |   | 432  |   | 5.73   | J | 2,520 | J | 329   | J | 428 | J |
|                           |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 23.8                                          | U              | 34.3       | U                 | 283            |                      | 1460                 |                      | 1240     |                       | 261          | J        | 650                    |                     | 2220                |             | 196          |        | 196          |            | 1300       |                 | 493  |  | 109  |   | 109  |   | 53.6 |   | 96.4 |   | 59.0 |   | 2960 |   | 33.4 |   | 11,900 | J | 3,540 | J | 1,750 | J |     |   |
|                           |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 6.77                                          | J              | 91.5       |                   | 54.5           |                      | 223                  |                      | 561      |                       | 657          |          | 191                    | J                   | 489                 |             | 448          |        | 62.0         |            | 643        |                 | 534  |  | 19.4 |   | 19.4 |   | 13.3 |   | 20.9 |   | 47.7 |   | 393  |   | 844  |   | 9.42   | J | 4,650 | J | 634   | J | 767 | J |
|                           | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 7.41                                          | J              | 9.82       | J                 | 14.5           |                      | 109                  |                      | 168      |                       | 239          |          | 66.3                   |                     | 119                 |             | 160          |        | 50.7         | U          | 175        |                 | 131  |  | 6.08 | J | 131  |   | 5.90 | J | 8.66 | J | 10.0 | J | 82.2 |   | 207  |   | 5.07   | U | 1,400 |   | 139   | J | 242 | J |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 8.72                                          | J              | 10.1       |                   | 23.3           |                      | 91.3                 |                      | 140      |                       | 192          |          | 66.5                   | J                   | 87.7                |             | 122          |        | 18.9         |            | 162        |                 | 108  |  | 6.66 | J | 108  |   | 7.41 | J | 12.0 |   | 13.2 |   | 80.8 |   | 169  |   | 5.69   | J | 1,180 | J | 186   | J | 179 | J |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 10.9                                          |                | 13.1       |                   | 31.1           |                      | 106                  |                      | 172      |                       | 233          |          | 77.3                   | J                   | 107                 |             | 156          |        | 21.8         |            | 213        |                 | 128  |  | 9.26 | J | 128  |   | 6.95 | J | 10.6 |   | 12.6 |   | 113  |   | 226  |   | 7.34   | J | 1,240 | J | 173   | J | 192 | J |
|                           |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 8.16                                          | J              | 13.2       |                   | 29.8           |                      | 91.2                 |                      | 126      |                       | 174          |          | 55.7                   | J                   | 81.7                |             | 132          |        | 16.9         |            | 204        |                 | 93.6 |  | 7.23 | J | 93.6 |   | 7.06 | J | 10.0 | J | 11.1 |   | 107  |   | 208  |   | 5.04   | J | 1,160 | J | 155   | J | 199 | J |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 6.07                                          | J              | 11.5       |                   | 22.7           |                      | 67.0                 |                      | 102      |                       | 140          |          | 38.6                   | J                   | 73.5                |             | 106          |        | 14.5         |            | 142        |                 | 82.9 |  | 6.30 | J | 82.9 |   | 7.04 | J | 11.6 |   | 15.0 |   | 81.2 |   | 154  |   | 5.43   | J | 921   | J | 154   | J | 146 | J |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 9.53                                          | J              | 24.6       |                   | 28.9           |                      | 114                  |                      | 193      |                       | 265          |          | 74.6                   | J                   | 133                 |             | 182          |        | 24.7         |            | 244        |                 | 158  |  | 7.57 | J | 158  |   | 8.21 | J | 13.1 |   | 20.1 |   | 113  |   | 289  |   | 6.09   | J | 1,120 | J | 147   | J | 177 | J |
|                           |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 6.04                                          | J              | 15.8       |                   | 29.7           |                      | 95.0                 |                      | 134      |                       | 172          |          | 54.3                   | J                   | 96.9                |             | 150          |        | 20.1         |            | 191        |                 | 110  |  | 6.84 | J | 110  |   | 5.74 | J | 9.36 | J | 12.6 |   | 92.2 |   | 218  |   | 5.00   | U | 1,440 | J | 201   | J | 241 | J |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 5.28                                          | J              | 15.7       |                   | 21.3           |                      | 76.7                 |                      | 125      |                       | 170          |          | 50.5                   | J                   | 88.5                |             | 140          |        | 17.0         |            | 151        |                 | 101  |  | 5.07 | J | 101  |   | 7.89 | J | 11.2 |   | 13.6 |   | 74.8 |   | 197  |   | 5.04   | U | 1,680 | J | 217   | J | 272 | J |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 18.0                                          |                | 21.8       |                   | 86.9           |                      | 226                  |                      | 292      |                       | 378          |          | 130                    | J                   | 163                 |             | 310          |        | 34.2         |            | 518        |                 | 199  |  | 17.7 |   | 17.7 |   | 10.2 |   | 12.5 |   | 16.3 |   | 374  |   | 629  |   | 9.88   | J | 2,880 | J | 547   |   | 408 | J |
|                           |               |             | 0-1                     | DU-5 (0-1) M | --          | 9.01                                          | J              | 11.0       | J                 | 23.0           |                      | 102                  |                      | 160      |                       | 221          |          | 70.0                   | J                   | 105                 |             | 146          |        | 30.5         |            | 183        |                 | 122  |  | 7.33 | J | 122  |   | 6.75 | J | 10.4 | J | 11.9 | J | 92.0 |   | 201  |   | 6.03   | J | 1,273 | J | 166   | J | 204 | J |
|                           |               |             | 1-2                     | DU-5 (1-2) M | --          | 7.92                                          | J              | 16.4       |                   | 27.1           |                      | 90.7                 |                      | 140      |                       | 193          |          | 56.3                   | J                   | 96.1                |             | 140          |        | 18.7         |            | 197        |                 | 112  |  | 7.03 | J | 112  |   | 7.44 | J | 11.6 | J | 15.4 |   | 100  |   | 5.52 | J | 1,067  | J | 152   | J | 174   | J |     |   |
|                           |               |             | 2-3                     | DU-5 (2-3) M | --          | 9.77                                          | J              | 17.8       |                   | 46.0           | J                    | 133                  | J                    | 184      |                       | 240          |          | 78.3                   | J                   | 116                 |             | 200          |        | 23.8         |            | 287        | J               | 137  |  | 9.87 | J | 137  |   | 7.94 | J | 11.0 | J | 14.2 |   | 180  | J | 348  | J | 6.64   | J | 2,000 | J | 322   | J | 307 | J |
|                           | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 8.01                                          | J              | 6.03       | J                 | 12.2           |                      | 84.2                 |                      | 134      |                       | 176          |          | 61.8                   | J                   | 94.6                |             | 116          |        | 16.3         |            | 152        |                 | 111  |  | 5.01 | U | 111  |   |      |   |      |   |      |   |      |   |      |   |        |   |       |   |       |   |     |   |

Table 4b  
Soil Results - PAHs and Dibenzofuran - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |
|---------------------------|---------------|-------------|-------------------------|-------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|
|                           |               |             |                         |             |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |
|                           |               |             |                         |             |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |
| Human Health ISM PRG      |               |             |                         |             |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 550          |            |            |                 |
| Human Health ISM Hot Spot |               |             |                         |             |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | --           | 55,000     |            |                 |
|                           |               |             | 2-3                     | DU-15 (2-3) | 08/19/2022  | 4.88 U                                        | 7.35 J         | 11.7       | 64.4              | 69.5           | 93.5                 | 33.3 J               | 49                   | 77.7     | 9.1 J                 | 116          | 4.88 U   | 57.8                   | 4.88 U              | 7.05 J              | 10.9        | 44.9         | 121    | 4.88 U       | 691 J      | 86.8 J     | 101 J           |

Please see notes at end of table.

Table 4b  
Soil Results - PAHs and Dibenzofuran - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|-------|---|------|---|------|---|
|                           |               |             |                         |               |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |
|                           |               |             |                         |               |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |
| Human Health ISM PRG      |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 550          |            |            |                 |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |
| Human Health ISM Hot Spot |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | --           | 55,000     |            |                 |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |
| Central Parcel            | DU-16         | ISM         | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 15.2                                          | U              | 24.4       | U                 | 58.4           |                      | 284                  |                      | 337      |                       | 456          |          | 157                    | J                   | 229                 |             | 393          |        | 58.7         |            | 522        |                 | 21.3 |   | 247  |   | 279  |   | 317  |   | 204  |   | 347  |   | 540  |   | 77.6 |   | 3,220 | J | 968  |   | 496  | J |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 10.2                                          | U              | 21.0       |                   | 33.8           |                      | 195                  |                      | 286      |                       | 387          |          | 130                    | J                   | 227                 |             | 290          |        | 51.4         |            | 350        |                 | 9.77 | J | 243  |   | 44.0 |   | 51.6 |   | 49.1 |   | 183  |   | 373  |   | 20.4 |   | 2,530 | J | 353  |   | 421  | J |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 14.0                                          | U              | 20.0       | U                 | 42.1           |                      | 227                  |                      | 300      |                       | 409          |          | 138                    | J                   | 237                 |             | 317          |        | 54.5         |            | 423        |                 | 16.9 |   | 246  |   | 68.5 |   | 81.9 |   | 67.5 |   | 242  |   | 440  |   | 23.0 |   | 2,790 | J | 467  |   | 444  | J |
|                           |               |             | 0-1                     | DU-16 (0-1) M | --          | 15.2                                          | U              | 21.8       |                   | 44.8           |                      | 235                  |                      | 308      |                       | 417          |          | 142                    | J                   | 231                 |             | 333          |        | 54.9         |            | 432        |                 | 16.0 | J | 245  |   | 131  | J | 150  | J | 107  | J | 257  |   | 451  |   | 40.3 | J | 2,847 | J | 596  |   | 454  | J |
|                           | DU-17         | ISM         | 1-2                     | DU-16 (1-2)   | 11/07/2022  | 5                                             | U              | 13.3       |                   | 21.7           |                      | 152                  |                      | 169      |                       | 217          |          | 83                     | J                   | 131                 |             | 212          |        | 25.7         |            | 242        |                 | 5.95 | J | 137  |   | 19.6 |   | 27.2 |   | 29.7 |   | 107  |   | 262  |   | 7.51 | J | 1,630 | J | 207  |   | 246  | J |
|                           |               |             | 2-3                     | DU-16 (2-3)   | 11/07/2022  | 5                                             | U              | 5          | U                 | 7.22           | J                    | 42.9                 |                      | 38.7     |                       | 53           | J        | 19.6                   | J                   | 27.6                |             | 51.5         |        | 5.09         | J          | 70.9       |                 | 5    | U | 32.8 |   | 5    | U | 5.34 | J | 6.72 | J | 35.6 |   | 74.7 |   | 5.00 | U | 417   | J | 62.4 |   | 56.9 | J |
|                           |               |             | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 5                                             | U              | 5          | U                 | 9.99           | U                    | 33.4                 |                      | 40.9     |                       | 67.1         |          | 20.7                   | J                   | 42.9                |             | 62.4         |        | 8            | J          | 53.3       |                 | 5    | U | 42   |   | 7.14 | J | 13.1 |   | 16.3 |   | 43.2 |   | 57.7 |   | 5.00 | U | 428   | J | 85.1 |   | 63.4 | J |
|                           |               |             | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 5.04                                          | U              | 5.04       | U                 | 5.04           | U                    | 30.1                 |                      | 32.5     |                       | 51.7         |          | 16.2                   | J                   | 40.5                |             | 50.8         |        | 6.94         | J          | 48.7       |                 | 5.04 | U | 35.1 |   | 8.92 | J | 14.5 |   | 12.9 |   | 48.4 |   | 50   |   | 5.04 | U | 363   | J | 85.9 |   | 51.3 | J |
|                           |               |             | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 4.95                                          | U              | 4.95       | U                 | 4.95           | U                    | 21.3                 |                      | 21       |                       | 30.2         |          | 10.1                   | J                   | 22.5                |             | 26.3         |        | 4.95         | U          | 33.1       |                 | 4.95 | U | 21.4 |   | 4.95 | U | 5.16 | J | 5.68 | J | 14.1 |   | 34   |   | 4.95 | U | 222   | J | 34.8 | J | 30.9 | J |
|                           | DU-18         | ISM         | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 5.08                                          | U              | 22.6       |                   | 25.5           |                      | 78.4                 |                      | 129      |                       | 205          |          | 57.6                   | J                   | 174                 |             | 136          |        | 19.2         |            | 128        |                 | 5.08 | U | 158  |   | 7.71 | J | 12.3 |   | 25.4 |   | 65.5 |   | 151  |   | 5.64 | J | 1,240 | J | 156  |   | 193  | J |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 5.08                                          | U              | 21.0       |                   | 27.8           |                      | 95.4                 |                      | 137      |                       | 211          |          | 62.9                   | J                   | 159                 |             | 157          |        | 19.9         |            | 170        |                 | 6.01 | J | 149  |   | 7.86 | J | 12.5 |   | 24.4 |   | 93.3 |   | 193  |   | 6.94 | J | 1,350 | J | 188  | J | 203  | J |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 5.97                                          | J              | 29.0       |                   | 39.5           |                      | 125                  |                      | 184      |                       | 250          |          | 85.4                   | J                   | 209                 |             | 199          |        | 29.4         |            | 255        |                 | 8.19 | J | 193  |   | 7.17 | J | 11.0 |   | 24.5 |   | 145  |   | 279  |   | 6.67 | J | 1,810 | J | 263  | J | 271  | J |
|                           |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 4.80                                          | U              | 14.4       |                   | 16.6           |                      | 65.0                 |                      | 93.3     |                       | 143          |          | 48.0                   | J                   | 104                 |             | 105          |        | 13.6         |            | 102        |                 | 5.48 | J | 96.9 |   | 9.71 |   | 11.9 |   | 19.2 |   | 67.9 |   | 123  |   | 4.80 | U | 894   | J | 138  | J | 138  | J |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 4.96                                          | U              | 8.03       | J                 | 11.1           |                      | 58.9                 |                      | 74.5     |                       | 115          |          | 31.5                   | J                   | 73.6                |             | 85.9         |        | 10.3         |            | 95.0       |                 | 4.96 | U | 70.9 |   | 4.96 | U | 6.60 | J | 13.2 |   | 38.5 |   | 107  |   | 4.96 | U | 723   | J | 82.4 | J | 110  | J |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 5.03                                          | U              | 8.42       | J                 | 8.58           | J                    | 46.0                 |                      | 57.5     |                       | 86.6         |          | 29.7                   | J                   | 70.6                |             | 69.1         |        | 9.24         | J          | 77.9       |                 | 5.03 | U | 64.9 |   | 5.03 | U | 5.56 | J | 12.0 |   | 34.7 |   | 86.4 |   | 5.03 | U | 598   | J | 74.3 | J | 86.9 | J |
|                           |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 5.04                                          | U              | 5.04       | U                 | 5.04           | U                    | 22.4                 |                      | 27.4     |                       | 42.4         | J        | 12.9                   | J                   | 23.5                |             | 31.4         |        | 5.04         | U          | 40.9       |                 | 5.04 | U | 26.4 |   | 5.04 | U | 5.04 | U | 5.04 | U | 17.5 |   | 47.5 |   | 5.04 | U | 277   | J | 32.6 |   | 39.2 | J |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 5.06                                          | U              | 8.08       | J                 | 12.7           |                      | 45.9                 |                      | 59.3     |                       | 79.5         | J        | 30.2                   | J                   | 63.5                |             | 65.6         |        | 7.99         | J          | 83.7       |                 | 5.06 | U | 60.4 |   | 5.06 | U | 5.06 | U | 11.5 |   | 44.2 |   | 91.4 |   | 5.06 | U | 587   | J | 84.1 | J | 86.2 | J |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 4.95                                          | U              | 6.27       | J                 | 8.20           | J                    | 41.6                 |                      | 53.0     |                       | 78.3         | J        | 23.5                   | J                   | 55.0                |             | 59.8         |        | 7.29         | J          | 65.2       |                 | 4.95 | U | 53.6 |   | 4.95 | U | 8.66 | J | 29.7 |   | 74.6 |   | 4.95 | U | 512  | J | 60.3  | J | 77.9 | J |      |   |
|                           |               |             | 0-1                     | DU-18 (0-1) M | --          | 5.38                                          | J              | 24.2       |                   | 30.9           |                      | 100                  |                      | 150      |                       | 222          |          | 68.6                   | J                   | 181                 |             | 164          |        | 22.8         |            | 184        |                 | 6.43 | J | 167  |   | 7.58 | J | 11.9 |   | 24.8 |   | 101  |   | 208  |   | 6.42 | J | 1,467 | J | 202  | J | 222  | J |
|                           |               |             | 1-2                     | DU-18 (1-2) M | --          | 5.03                                          | U              | 10.3       | J                 | 12.1           | J                    | 56.6                 |                      | 75.1     |                       | 115          |          | 36.4                   | J                   | 82.7                |             | 86.7         |        | 11.0         | J          | 91.6       |                 | 5.16 | J | 77.6 |   | 6.57 |   | 8.02 | J | 14.8 |   | 47.0 |   | 5.03 | U | 738  | J | 98.2  | J | 112  | J |      |   |
|                           |               |             | 2-3                     | DU-18 (2-3) M | --          | 5.06                                          | U              | 6.46       | J                 | 8.65           | J                    | 36.6                 |                      | 46.6     |                       | 66.7         | J        | 22.2                   | J                   | 47.3                |             | 52.3         |        | 6.8          | J          | 63.3       |                 | 5.06 | U | 46.8 |   | 5.06 | U | 5.06 | U | 8.40 | J | 30.5 |   | 71.2 |   | 5.06 | U | 459   | J | 59.0 | J | 68   | J |
|                           | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 5.93                                          | J              | 44.4       |                   | 38.2           |                      | 163                  |                      | 282      |                       | 356          |          | 125                    | J                   | 265                 |             | 242          |        | 41.6         |            | 305        |                 | 10.4 |   | 259  |   | 13.7 |   | 17.9 |   | 39.2 |   | 187  |   | 335  |   | 12.1 |   | 2,370 | J | 343  | J | 403  | J |
|                           |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 18.6                                          |                | 17.0       |                   | 48.0           |                      | 155                  |                      | 186      |                       | 253          |          | 91.8                   | J                   | 149                 |             | 197          |        | 26.7         |            | 313        |                 | 25.3 |   | 155  |   | 11.9 |   | 16.1 |   | 25.4 |   | 234  |   | 294  |   | 17.4 |   | 1,820 | J | 384  |   | 270  | J |
|                           |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 5.07                                          | U              | 7.99       | J                 | 7.78           | J                    | 40.5                 |                      | 53.7     |                       | 76.7         |          | 26.5                   | J                   | 48.1                |             | 54.0         |        | 8.25         | J          | 69.5       |                 | 5.07 | U | 50.0 |   | 5.07 | U | 5.07 | U | 7.12 | J | 32.2 |   | 86.5 |   | 5.07 | U | 514   | J | 62.7 | J | 79.0 | J |
|                           | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 4.81                                          | U              | 14.2       |                   | 10.1           |                      | 51                   |                      | 99       |                       | 164          |          | 59.7                   | J                   | 91.2                |             | 115          |        | 15.3         |            | 81.4       |                 | 4.9  | J | 86.8 |   | 5.34 | J | 9.47 | J | 13.9 |   | 42   |   | 129  |   | 4.81 | U | 892   |   | 97.0 |   | 145  | J |
|                           |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 4.93                                          | U              | 4.93       | U                 | 4.93           | U                    | 8.6                  | J                    | 7.86     | J                     | 11.4         | J        | 4.93                   | U                   | 7.39                | J           | 10.5         |        | 4.93         | U          | 14.6       |                 | 4.93 | U | 7.95 | J | 4.93 | U | 4.93 | U | 4.93 | U | 8.78 | J | 14.9 |   | 4.93 | U | 88.1  |   | 23.6 |   | 13.2 | J |
|                           |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 4.73                                          | U              | 4.73       | U                 | 4.73           | U                    | 13.7                 |                      | 12.7     |                       | 17.2         | J        | 7.52                   | J                   | 9.69                | J           | 16.5         |        |              |            |            |                 |      |   |      |   |      |   |      |   |      |   |      |   |      |   |      |   |       |   |      |   |      |   |

Table 4b  
Soil Results - PAHs and Dibenzofuran - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |
|------------------------------|----------------------|-------------|-------------------------|--------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|
|                              |                      |             |                         |              |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |
|                              |                      |             |                         |              |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |
| Human Health ISM PRG         |                      |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 550          |            |            |                 |
| Human Health ISM Hot Spot    |                      |             |                         |              |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | --           | 55,000     |            |                 |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)  | 11/30/2022  | 4.96 U                                        | 4.96 U         | 5.74 J     | 30.7              | 36.9           | 43.7 J               | 16.6 J               | 40.6                 | 37.3     | 4.96 U                | 49.7         | 4.96 U   | 36.9                   | 5.82 J              | 6.82 J              | 8.12 J      | 39.7         | 51.7   | 4.96 U       | 347        | 67.8       | 50.7 J          |
|                              |                      |             | 1-2                     | DU-42 (1-2)  | 11/30/2022  | 4.76 U                                        | 4.76 U         | 4.76 U     | 20                | 21.4           | 27.8                 | 10.3 J               | 25.5                 | 23.9     | 4.76 U                | 33.3         | 4.76 U   | 22.1                   | 4.76 U              | 5.21 J              | 6.01 J      | 22.2         | 33.2   | 4.76 U       | 220        | 42.9       | 30.9 J          |
|                              |                      |             | 2-3                     | DU-42 (2-3)  | 11/30/2022  | 4.96 U                                        | 4.96 U         | 4.96 U     | 16.1              | 15.4           | 18                   | 5.68 J               | 16.8                 | 17.5     | 4.96 U                | 23.1         | 4.96 U   | 15.8                   | 4.96 U              | 4.96 U              | 5.33 J      | 12           | 26.8   | 4.96 U       | 158        | 29.7       | 22.9 J          |
| East Parcel                  | DU-27                | ISM         | 0-1                     | DU-27 (0-1)  | 10/05/2022  | 5 U                                           | 21.7           | 55.8       | 70.2              | 130            | 250                  | 64.5 J               | 172                  | 170      | 29.4                  | 146          | 5 U      | 203                    | 5 U                 | 5 U                 | 12          | 61.9         | 160    | 5.00 U       | 1,400 J    | 159        | 213 J           |
|                              |                      |             | 1-2                     | DU-27 (1-2)  | 10/05/2022  | 4.94 U                                        | 37.1           | 65.2       | 117               | 162            | 243                  | 69.4 J               | 165                  | 195      | 24.8                  | 304          | 12.5     | 180                    | 5.93 J              | 8.7 J               | 22.3        | 215          | 316    | 10.1         | 1,780 J    | 363 J      | 242 J           |
|                              |                      |             | 2-3                     | DU-27 (2-3)  | 10/05/2022  | 5.02 U                                        | 12.1           | 22         | 39.6              | 65.5           | 100                  | 28.2 J               | 86.5                 | 75.5     | 9.64 J                | 81.7         | 5.02 U   | 78.4                   | 5.02 U              | 5.16 J              | 16          | 42.7         | 92     | 5.02 U       | 657 J      | 103 J      | 97.3 J          |
|                              | DU-28                | ISM         | 0-1                     | DU-28 (0-1)  | 09/14/2022  | 4.95 U                                        | 39.1           | 76.8       | 112               | 303            | 415                  | 117 J                | 253                  | 236      | 45.8                  | 268          | 6.98 J   | 298                    | 4.95 U              | 7.73 J              | 19.8        | 108          | 312    | 7.02 J       | 2,360 J    | 261 J      | 433 J           |
|                              |                      |             | 1-2                     | DU-28 (1-2)  | 09/14/2022  | 5.14 J                                        | 34.8           | 105        | 220               | 353            | 562                  | 137 J                | 269                  | 372      | 62.2                  | 424          | 8.53 J   | 330                    | 4.88 U              | 6.31 J              | 16.5        | 133          | 409    | 8.50 J       | 3,140 J    | 309 J      | 528 J           |
|                              |                      |             | 2-3                     | DU-28 (2-3)  | 09/14/2022  | 5 U                                           | 36.1           | 95         | 97.4              | 235            | 345                  | 82.1 J               | 228                  | 204      | 44.7                  | 175          | 10.5     | 280                    | 10.5                | 15.4                | 18.4        | 63.4         | 194    | 8.38 J       | 1,890 J    | 238 J      | 353 J           |
|                              | DU-29                | ISM         | 0-1                     | DU-29 (0-1)  | 09/15/2022  | 5.06 U                                        | 14.1           | 16         | 69.9              | 109            | 140                  | 46.3 J               | 103                  | 113      | 13.6                  | 142          | 5.06 U   | 102                    | 12.5                | 16.6                | 20.9        | 84.1         | 149    | 8.46 J       | 988 J      | 157        | 154 J           |
|                              |                      |             | 1-2                     | DU-29 (1-2)  | 09/15/2022  | 5.05 U                                        | 6.51 J         | 7.61 J     | 44.7              | 49             | 63.6                 | 22.7 J               | 33.1                 | 51.7     | 5.94 J                | 83.9         | 5.05 U   | 37                     | 5.05 U              | 5.53 J              | 8.88 J      | 30.5         | 86.4   | 5.05 U       | 478 J      | 64.1 J     | 69.7 J          |
|                              |                      |             | 2-3                     | DU-29 (2-3)  | 09/15/2022  | 5 U                                           | 5.26 J         | 6.88 J     | 27.8              | 41.3           | 56.1                 | 19.2 J               | 33.6                 | 40.1     | 5.22 J                | 57.4         | 5 U      | 36.8                   | 5 U                 | 5 U                 | 8.06 J      | 28.5         | 62.8   | 5.00 U       | 380 J      | 56.2 J     | 58.8 J          |
|                              | DU-30                | ISM         | 0-1                     | DU-30 (0-1)  | 09/16/2022  | 5.01 U                                        | 34.8           | 34.1       | 140               | 283            | 347                  | 106 J                | 230                  | 208      | 40                    | 262          | 5.01 U   | 255                    | 7.51 J              | 13.7                | 21          | 94.2         | 276    | 7.17 J       | 2,150 J    | 203        | 398 J           |
|                              |                      |             | 1-2                     | DU-30 (1-2)  | 09/16/2022  | 5 U                                           | 19.5           | 14.2       | 63.2              | 119            | 146                  | 50.5 J               | 108                  | 100      | 17.1                  | 135          | 5 U      | 115                    | 5 U                 | 8.62 J              | 18.3        | 53.9         | 147    | 5.00 U       | 1,000 J    | 120 J      | 169 J           |
|                              |                      |             | 2-3                     | DU-30 (2-3)  | 09/16/2022  | 5.02 U                                        | 7.93 J         | 7.28 J     | 33.7              | 49.3           | 68.6                 | 20.7 J               | 42.6                 | 49.9     | 6.61 J                | 72.3         | 5.02 U   | 44.9                   | 5.02 U              | 5.12 J              | 9.29 J      | 33.5         | 76.2   | 5.02 U       | 465 J      | 68.1 J     | 70.9 J          |
|                              | DU-31                | ISM         | 0-1                     | DU-31 (0-1)  | 11/03/2022  | 4.93 U                                        | 16.6           | 16         | 68.9              | 82.4           | 132                  | 40.5 J               | 80                   | 101      | 12.7                  | 128          | 4.93 U   | 79.9                   | 4.93 U              | 6.02 J              | 15.2        | 57.6         | 129    | 5.00 J       | 854        | 116        | 124 J           |
|                              |                      |             | 1-2                     | DU-31 (1-2)  | 11/03/2022  | 5.02 U                                        | 21             | 14.6       | 57.4              | 79.8           | 120                  | 41.3 J               | 79.8                 | 86.9     | 13.1                  | 106          | 5.02 U   | 78.5                   | 5.02 U              | 6.09 J              | 17.8        | 62.2         | 105    | 5.38 J       | 768        | 127        | 119 J           |
|                              |                      |             | 2-3                     | DU-31 (2-3)  | 11/03/2022  | 4.99 U                                        | 13.1           | 12.9       | 52.5              | 62             | 92.4                 | 28.2 J               | 56.7                 | 72.9     | 9.5 J                 | 110          | 4.99 U   | 55.8                   | 4.99 U              | 4.99 U              | 12.2        | 64.3         | 109    | 4.99 U       | 649        | 110        | 91.9 J          |
|                              | DU-32                | ISM         | 0-1                     | DU-32 (0-1)  | 09/22/2022  | 4.75 U                                        | 16.3           | 12.5       | 56.4              | 78.4           | 125                  | 44.2 J               | 70.4                 | 87.5     | 10.4                  | 118          | 4.75 U   | 75.9                   | 4.75 U              | 7.23 J              | 17.3        | 63.5         | 110    | 6.29 J       | 776 J      | 122 J      | 115 J           |
|                              |                      |             | 1-2                     | DU-32 (1-2)  | 09/22/2022  | 4.68 U                                        | 9.57           | 8.09 J     | 35.5              | 51.3           | 74.3                 | 25.2 J               | 59.8                 | 57.3     | 7.29 J                | 61.2         | 4.68 U   | 55.2                   | 4.68 U              | 4.68 U              | 10.5        | 33.2         | 64.1   | 4.68 U       | 491 J      | 68.4 J     | 75.4 J          |
|                              |                      |             | 2-3                     | DU-32 (2-3)  | 09/22/2022  | 5.7 J                                         | 87.1           | 71.7       | 297               | 409            | 477                  | 184 J                | 253                  | 368      | 48.4                  | 657          | 42.9     | 287                    | 16                  | 26.6                | 94.8        | 417          | 545    | 40.5         | 3,530 J    | 746 J      | 566 J           |
|                              | DU-33                | ISM         | 0-1                     | DU-33 (0-1)  | 09/20/2022  | 4.74 U                                        | 7.78 J         | 8.94 J     | 34.1              | 38.3           | 64                   | 18.4 J               | 38.8                 | 53.3 J   | 4.74 U                | 65.9 J       | 4.74 U   | 35                     | 8.49 J              | 13.5                | 25          | 44.5         | 63.9 J | 8.13 J       | 414 J      | 104 J      | 54.2 J          |
|                              |                      |             | 1-2                     | DU-33 (1-2)  | 09/20/2022  | 4.91 U                                        | 10.5           | 10.2       | 36                | 36.6           | 61.1                 | 17.9 J               | 33.9                 | 61.7     | 4.91 U                | 85.5         | 4.91 U   | 29.1                   | 4.91 J              | 9.28 J              | 27.7        | 65.3         | 86.5   | 6.56 J       | 451 J      | 128 J      | 51.9 J          |
|                              |                      |             | 2-3                     | DU-33 (2-3)  | 09/20/2022  | 4.87 U                                        | 5.05 J         | 7.41 J     | 37.8              | 40.6           | 53.8                 | 16.1 J               | 34.1                 | 46.3     | 4.87 U                | 66.4         | 4.87 U   | 31.1                   | 4.87 U              | 5.59 J              | 11.5        | 30.6         | 72.4   | 4.87 U       | 401 J      | 65.0 J     | 55.5 J          |
|                              | DU-34                | ISM         | 0-1                     | DU-34 (0-1)  | 09/27/2022  | 6.51 J                                        | 60.9           | 41.7       | 130               | 175            | 259                  | 97.2 J               | 140                  | 190      | 23.8                  | 298          | 16.8     | 144                    | 9.77 J              | 19.3                | 52          | 199          | 260    | 17.8         | 1,720 J    | 396 J      | 253 J           |
|                              |                      |             | 1-2                     | DU-34 (1-2)  | 09/27/2022  | 5.07 U                                        | 40.6           | 23.9       | 95.3              | 126            | 185                  | 59 J                 | 102                  | 132      | 18.7                  | 181          | 7.87 J   | 102                    | 5.44 J              | 10.9                | 28.9        | 95.6         | 185    | 9.78 J       | 1,190 J    | 210        | 184 J           |
|                              |                      |             | 2-3                     | DU-34 (2-3)  | 09/27/2022  | 4.79 U                                        | 16.7           | 12.2       | 48.5              | 66.5           | 102                  | 33.9 J               | 54.1                 | 74.7     | 9.69                  | 102          | 4.79 U   | 56.3                   | 4.79 U              | 7.4 J               | 15.7        | 59.1         | 103    | 5.14 J       | 651 J      | 116 J      | 97.3 J          |
|                              | DU-35                | ISM         | 0-1                     | DU-35 (0-1)  | 10/07/2022  | 4.88 U                                        | 12.9           | 13.9       | 46.8              | 63.5           | 95.8                 | 30.9 J               | 60.9                 | 76.7     | 9.03 J                | 86.7         | 4.88 U   | 59.3                   | 4.88 U              | 7.41 J              | 15.3        | 50           | 86.6   | 5.27 J       | 616        | 104        | 93.1 J          |
|                              |                      |             | 1-2                     | DU-35 (1-2)  | 10/07/2022  | 5.03 U                                        | 19             | 15.6       | 52.8              | 81.8           | 114                  | 34.9 J               | 74.9                 | 74.5     | 12.1                  | 88.1         | 5.03 U   | 77                     | 5.03 U              | 6.35 J              | 14.1        | 45.8         | 94.2   | 5.03 U       | 704        | 106        | 119 J           |
|                              |                      |             | 2-3                     | DU-35 (2-3)  | 10/07/2022  | 4.86 U                                        | 4.86 U         | 4.86 U     | 19.8              | 24.1           | 42.1 J               | 13.4 J               | 25.8                 | 32.8     | 4.86 U                | 30.8         | 4.86 U   | 26.4                   | 4.86 U              | 4.86 U              | 5.83 J      | 15.4         | 32.7   | 4.86 U       | 250        | 33.4       | 35.5 J          |
|                              | DU-36                | ISM         | 0-1                     | DU-36 (0-1)  | 11/01/2022  | 5.04 U                                        | 5.4 J          | 7.26 J     | 42.6              | 52.8           | 89.2                 | 33.1 J               | 76.2                 | 78.5     | 9.76 J                | 86.3         | 5.04 U   | 61.2                   | 5.04 U              | 8.38 J              | 17.3        | 45.8         | 87.6   | 5.99 J       | 617        | 89.2       | 82.3 J          |
|                              |                      |             | 1-2                     | DU-36 (1-2)  | 11/01/2022  | 4.99 U                                        | 9.87 J         | 18.3       | 55.3              | 68             | 107                  | 36.2 J               | 86.3                 | 91.5     | 10.9                  | 116          | 4.99 U   | 74.6                   | 6.15 J              | 12.3                | 22.9        | 61.1         | 131    | 8.23 J       | 777        | 129        | 103 J           |
|                              |                      |             | 2-3                     | DU-36 (2-3)  | 11/01/2022  | 5.04 U                                        | 5.04 U         | 5.04 U     | 23.1              | 25.9           | 42.3                 | 13.2 J               | 33.6                 | 37.9     | 5.04 U                | 43.9         | 5.04 U   | 28                     | 5.04 U              | 6.54 J              | 14.7        | 25.1         | 44.2   | 5.04 U       | 295        | 56.4       | 37.9 J          |
|                              | DU-38                | ISM         | 0-1                     | DU-38 (0-1)A | 11/14/2022  | 4.88 U                                        | 5.9 J          | 7 J        | 36.5              | 33.1           | 59.4                 | 17.8 J               | 30.3                 | 49.8     | 4.94 J                | 66.9         | 4.88 U   | 29.1                   | 4.88 U              | 4.88 U              | 8.39 J      | 35.2         | 64.3   | 4.88 U       | 392        | 63.8       | 50.8 J          |
|                              |                      |             | 0-1 FR                  | DU-38 (0-1)B | 11/14/2022  | 4.82 U                                        | 8.51 J         | 10.3       | 59.4              | 55.7           | 82.9 J               | 31.6 J               | 42.6                 | 74.2     | 7.97 J                | 99.6         | 4.82 U   | 44.8                   | 4.82 U              | 5.93 J              | 9.09 J      | 45.6         | 95.7   | 4.82 U       | 594        | 84.3       | 82.8 J          |
|                              |                      |             | 0-1 FR                  | DU-38 (0-1)C | 11/14/2022  | 5.04 U                                        | 10.2           | 8.9 J      | 46.6              | 50             | 73.9                 | 26.4 J               | 40.7                 | 60.1     | 7.19 J                | 89.7         | 5.04 U   | 42.5                   | 5.04 U              | 6.31 J              | 13.2        | 48.3         | 78.8   | 5.56 J       | 516        | 92.0       | 73.8 J          |
|                              |                      |             | 1-2                     | DU-38 (1-2)A | 11/16/2022  | 5 U                                           | 5.27 J         | 8.19 J     | 38.5              | 35.5           | 56.6 J               | 19.2 J               | 30.8                 | 55.6     | 5.05 J                | 77.4         | 5 U      | 29.6                   | 5 U                 | 7.08 J              | 14.8        | 37.2         | 73.2   | 5.00 U       | 421        | 77.5       | 53.3 J          |
|                              |                      |             | 1-2 FR                  | DU-38 (1-2)B | 11/16/2022  | 5.08 U                                        | 5.5 J          | 8.84 J     | 42.2              | 34.6           | 54.3                 |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |

Table 4b  
Soil Results - PAHs and Dibenzofuran - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PAHs and Dibenzofuran by EPA Method 8270E-SIM |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |      |     |      |       |       |     |     |   |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|-----------------------------------------------|----------------|------------|-------------------|----------------|----------------------|----------------------|----------------------|----------|-----------------------|--------------|----------|------------------------|---------------------|---------------------|-------------|--------------|--------|--------------|------------|------------|-----------------|------|------|-----|------|-------|-------|-----|-----|---|
|                           |               |             |                         |               |             | Concentrations in µg/kg                       |                |            |                   |                |                      |                      |                      |          |                       |              |          |                        |                     |                     |             |              |        |              |            |            |                 |      |      |     |      |       |       |     |     |   |
|                           |               |             |                         |               |             | Acenaphthene                                  | Acenaphthylene | Anthracene | Benz(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(g,h,i)perylene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Phenanthrene | Pyrene | Dibenzofuran | Total HPAH | Total LPAH | cPAHs (BaP Eq.) |      |      |     |      |       |       |     |     |   |
| Human Health ISM PRG      |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | 550          |            |            |                 |      |      |     |      |       |       |     |     |   |
| Human Health ISM Hot Spot |               |             |                         |               |             | --                                            | --             | --         | --                | --             | --                   | --                   | --                   | --       | --                    | --           | --       | --                     | --                  | --                  | --          | --           | --     | --           | 55,000     |            |                 |      |      |     |      |       |       |     |     |   |
| East Parcel Soil Berms    | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 8.09                                          | J              | 34.2       |                   | 51.6           | 142                  | 196                  | J                    | 269      | 106                   | J            | 214      | J                      | 221                 | 24.1                | 331         | 6.07         | J      | 209          | J          | 17.6       | 23              | 22.1 | 107  | 364 | 11.6 | 2,080 | 252   | 283 | J   |   |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 5.06                                          | J              | 41.7       |                   | 50.4           | 128                  | 233                  |                      | 326      | 96.9                  | J            | 252      |                        | 225                 | 30.8                | 267         | 6.2          | J      | 252          |            | 21.5       | 26.9            | 35.4 | 122  | 301 | 13.1 | 2,110 | 288   | 336 | J   |   |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 8.96                                          | J              | 31.6       |                   | 60.5           | 112                  | 172                  |                      | 271      | 77.1                  | J            | 186      |                        | 197                 | 25.4                | 261         | 7.76         | J      | 183          |            | 10.3       | 15.7            | 23.9 | 164  | 268 | 18.4 | 1,750 | 312   | 255 | J   |   |
|                           |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 30.0                                          |                | 25.1       | U                 | 56.8           | 139                  | 172                  |                      | 247      | 97.1                  | J            | 188      |                        | 226                 | 25.1                | 315         | 23.4         |        | 173          |            | 80.3       | 92.6            | 70.1 | 274  | 354 | 42.7 | 1,940 | 559   | 254 | J   |   |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 14.2                                          | U              | 28.3       | U                 | 56.6           | 123                  | 189                  |                      | 287      | 92.3                  | J            | 190      |                        | 235                 | 26.4                | 277         | 13.7         |        | 183          |            | 101        | 115             | 83.8 | 254  | 319 | 37.1 | 1,920 | 544   | 276 | J   |   |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 10.1                                          | U              | 22.2       | U                 | 27.0           | 86.1                 | 134                  |                      | 212      | 65.4                  | J            | 144      |                        | 161                 | 18.9                | 194         | 6.46         | J      | 135          |            | 55.9       | 62.8            | 56.4 | 138  | 215 | 21.6 | 1,370 | 307   | 197 | J   |   |
|                           |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 6.08                                          | J              | 12.0       |                   | 20.6           | 69.0                 | 90.1                 |                      | 135      | 49.2                  | J            | 103      |                        | 117                 | 12.9                | 147         | 5.21         | J      | 97.6         |            | 23.1       | 28.9            | 30.7 | 98.3 | 159 | 10.8 | 980   | 202   | 134 | J   |   |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 4.94                                          | U              | 12.7       |                   | 23.1           | 72.4                 | 101                  |                      | 148      | 52.0                  | J            | 102      |                        | 123                 | 15.1                | 137         | 4.94         | U      | 104          |            | 18.8       | 24.3            | 22.9 | 75.2 | 147 | 8.18 | J     | 1,000 | 163 | 149 | J |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 7.48                                          | J              | 13.1       |                   | 23.4           | 71.2                 | 101                  |                      | 148      | 53.1                  | J            | 106      |                        | 124                 | 14.4                | 168         | 6.68         | J      | 104          |            | 28.8       | 31.6            | 30.0 | 119  | 187 | 12.9 | 1,080 | 231   | 148 | J   |   |
|                           |               |             | 0-1                     | DU-41 (0-1) M | --          | 7.37                                          | J              | 35.8       |                   | 54.2           | 127                  | 200                  | J                    | 289      | 93.3                  | J            | 217      | J                      | 214                 | 26.8                | 286         | 6.68         | J      | 215          | J          | 16.5       | 21.9            | 27.1 | 131  | 311 | 14.4 | 1,980 | 284   | 291 | J   |   |
|                           |               |             | 1-2                     | DU-41 (1-2) M | --          | 18.1                                          |                | 28.3       | U                 | 46.8           | 116                  | 165                  |                      | 249      | 84.9                  | J            | 174      |                        | 207                 | 23.5                | 262         | 14.5         | J      | 164          |            | 79.1       | 90.1            | 70.1 | 222  | 296 | 33.8 | 1,743 | 470   | 242 | J   |   |
|                           |               |             | 2-3                     | DU-41 (2-3) M | --          | 6.17                                          | J              | 12.6       |                   | 22.4           | 70.9                 | 97.4                 |                      | 144      | 51.4                  | J            | 104      |                        | 121                 | 14.1                | 151         | 5.61         | J      | 102          |            | 23.6       | 28.3            | 27.9 | 97.5 | 164 | 10.6 | J     | 1,020 | 199 | 144 | J |

Notes:  
ISM = Incremental Sampling Methodology.  
bgs = Below ground surface.  
PAHs = Polycyclic aromatic hydrocarbons.  
EPA = United States Environmental Protection Agency.  
M = Mean. These results are the mean of the field replicates collected at this decision unit.  
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.  
µg/kg = Micrograms per kilogram (parts per billion).  
Bolded values exceed the Preliminary Remediation Goal (PRG).  
Shaded values exceed the hot spot level.  
Italicized values represent a method detection limit that is above one or more applicable screening levels.  
U = Analyte was not detected.

J = Result is estimated.  
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).  
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).  
HPAH = High-molecular-weight polycyclic aromatic hydrocarbon

LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon  
cPAHs = carcinogenic polycyclic aromatic hydrocarbon

Table 5a  
Soil Results - PCB Aroclors - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |     |  |
|-------------------------|---------------|-------------|-------------------------|--------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|-----|--|
|                         |               |             |                         |              |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |     |  |
|                         |               |             |                         |              |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |     |  |
| Ecological ISM PRG      |               |             |                         |              |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 98                 |     |  |
| Ecological ISM Hot Spot |               |             |                         |              |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --                 | 980 |  |
| West Parcel             | DU-1          | ISM         | 0-1                     | DU-1 (0-1)   | 07/20/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 407          | 5.00 U       | 5.00 U       | 5.00 U       | 427                |     |  |
|                         |               |             | 1-2                     | DU-1 (1-2)   | 07/20/2022  | 50.9 U                   | 50.9 U       | 50.9 U       | 50.9 U       | 50.9 U       | 2,550        | 50.9 U       | 50.9 U       | 50.9 U       | 2,750              |     |  |
|                         |               |             | 2-3                     | DU-1 (2-3)   | 07/20/2022  | 4.99 U                   | 4.99 U       | 27.3 U       | 4.99 U       | 11.1 U       | 4.99 U       | 75.9         | 4.99 U       | 4.99 U       | 110                |     |  |
|                         | DU-2          | ISM         | 0-1                     | DU-2 (0-1)   | 08/01/2022  | 5.09 U                   | 5.09 U       | 5.09 U       | 5.09 U       | 5.09 U       | 5.09 U       | 166          | 5.09 U       | 5.09 U       | 186                |     |  |
|                         |               |             | 1-2                     | DU-2 (1-2)   | 08/01/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 538          | 5.02 U       | 5.02 U       | 558                |     |  |
|                         |               |             | 2-3                     | DU-2 (2-3)   | 08/01/2022  | 4.68 U                   | 4.68 U       | 4.68 U       | 4.68 U       | 4.68 U       | 5.18 J       | 8.30 J       | 4.68 U       | 4.68 U       | 29.9 J             |     |  |
|                         | DU-3          | ISM         | 0-1                     | DU-3 (0-1)   | 08/03/2022  | 4.82 U                   | 4.82 U       | 4.82 U       | 4.82 U       | 4.82 U       | 4.82 U       | 5.74 J       | 4.82 U       | 4.82 U       | 25.0 J             |     |  |
|                         |               |             | 1-2                     | DU-3 (1-2)   | 08/03/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U             |     |  |
|                         |               |             | 2-3                     | DU-3 (2-3)   | 08/03/2022  | 4.79 U                   | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U             |     |  |
|                         | DU-4          | ISM         | 0-1                     | DU-4 (0-1)   | 08/04/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 6.06 J       | 8.35 J       | 4.94 U       | 4.94 U       | 31.7 J             |     |  |
|                         |               |             | 1-2                     | DU-4 (1-2)   | 08/04/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 5.27 J       | 4.81 U       | 4.81 U       | 24.5 J             |     |  |
|                         |               |             | 2-3                     | DU-4 (2-3)   | 08/04/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 11.0 J       | 6.62 J       | 4.99 U       | 4.99 U       | 35.1 J             |     |  |
|                         | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A  | 07/22/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 5.67 J       | 4.99 U       | 38.9 J       | 28.0 J       | 4.99 U       | 4.99 U       | 87.5 J             |     |  |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)B  | 07/22/2022  | 4.71 U                   | 4.71 U       | 4.71 U       | 4.71 U       | 4.71 U       | 23.9 J       | 32.5 J       | 4.71 U       | 4.71 U       | 72.9 J             |     |  |
|                         |               |             | 0-1 FR                  | DU-5 (0-1)C  | 07/22/2022  | 5.04 U                   | 10.1 U       | 5.04 U       | 5.04 U       | 5.04 U       | 116 J        | 41.0 J       | 5.04 U       | 5.04 U       | 177 J              |     |  |
|                         |               |             | 1-2                     | DU-5 (1-2)A  | 07/25/2022  | 4.84 U                   | 9.68 U       | 15.7 U       | 4.84 U       | 4.84 U       | 60.4 J       | 58.1 J       | 4.84 U       | 4.84 U       | 143 J              |     |  |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)B  | 07/25/2022  | 4.88 U                   | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 56.9 J       | 49.9 J       | 4.88 U       | 4.88 U       | 124 J              |     |  |
|                         |               |             | 1-2 FR                  | DU-5 (1-2)C  | 07/25/2022  | 4.81 U                   | 9.62 U       | 4.81 U       | 4.81 U       | 4.81 U       | 42.2 J       | 32.6 J       | 4.81 U       | 4.81 U       | 94.0 J             |     |  |
|                         |               |             | 2-3                     | DU-5 (2-3)A  | 07/26/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 51.3 J       | 27.0 J       | 4.91 U       | 4.91 U       | 95.5 J             |     |  |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)B  | 07/26/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 49.8 J       | 27.6 J       | 4.81 U       | 4.81 U       | 94.2 J             |     |  |
|                         |               |             | 2-3 FR                  | DU-5 (2-3)C  | 07/26/2022  | 4.92 U                   | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 367          | 4.92 U       | 4.92 U       | 387                |     |  |
|                         |               |             | 0-1                     | DU-5 (0-1) M | --          | 5.04 U                   | 10.1 U       | 5.04 U       | 5.14 J       | 5.04 U       | 59.6 J       | 33.8 J       | 5.04 U       | 5.04 U       | 112 J              |     |  |
|                         |               |             | 1-2                     | DU-5 (1-2) M | --          | 4.88 U                   | 9.68 U       | 15.7 U       | 4.88 U       | 4.88 U       | 53.2 J       | 46.9 J       | 4.88 U       | 4.88 U       | 120 J              |     |  |
|                         |               |             | 2-3                     | DU-5 (2-3) M | --          | 4.92 U                   | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 35.3 J       | 141 J        | 4.92 U       | 4.92 U       | 192 J              |     |  |
|                         | DU-6          | ISM         | 0-1                     | DU-6 (0-1)   | 07/28/2022  | 5.03 U                   | 10.1 U       | 5.03 U       | 5.03 U       | 5.03 U       | 18.3 J       | 24.1 J       | 5.03 U       | 5.03 U       | 62.5 J             |     |  |
|                         |               |             | 1-2                     | DU-6 (1-2)   | 07/28/2022  | 5.01 U                   | 10.0 U       | 5.01 U       | 5.01 U       | 5.01 U       | 28.5 J       | 62.0 J       | 5.01 U       | 5.01 U       | 111 J              |     |  |
|                         |               |             | 2-3                     | DU-6 (2-3)   | 07/28/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 147          | 5.05 U       | 5.05 U       | 167                |     |  |
|                         | DU-7          | ISM         | 0-1                     | DU-7 (0-1)   | 07/29/2022  | 5.07 U                   | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 10.1         | 24.9 J       | 5.07 U       | 5.07 U       | 52.7 J             |     |  |
|                         |               |             | 1-2                     | DU-7 (1-2)   | 07/29/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 13.3 J       | 25.8 J       | 5.04 U       | 5.04 U       | 56.7 J             |     |  |
|                         |               |             | 2-3                     | DU-7 (2-3)   | 07/29/2022  | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 12.8 J       | 19.7 J       | 5.06 U       | 5.06 U       | 50.2 J             |     |  |
|                         | DU-8          | ISM         | 0-1                     | DU-8 (0-1)   | 08/05/2022  | 5.09 U                   | 5.09 U       | 5.09 U       | 5.09 U       | 5.09 U       | 29.8 J       | 51.3 J       | 5.09 U       | 5.09 U       | 98.9 J             |     |  |
|                         |               |             | 1-2                     | DU-8 (1-2)   | 08/05/2022  | 5.09 U                   | 5.09 U       | 5.09 U       | 5.09 U       | 5.09 U       | 5.09 U       | 47.4 JN      | 5.09 U       | 5.09 U       | 67.8 J             |     |  |
|                         |               |             | 2-3                     | DU-8 (2-3)   | 08/05/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 78.5 JN      | 4.98 U       | 4.98 U       | 98.4 J             |     |  |
|                         | DU-9          | ISM         | 0-1                     | DU-9 (0-1)   | 08/08/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 11.7 J       | 34.7 J       | 5.04 U       | 5.04 U       | 64.0 J             |     |  |
|                         |               |             | 1-2                     | DU-9 (1-2)   | 08/08/2022  | 5.11 U                   | 5.11 U       | 5.11 U       | 5.11 U       | 5.11 U       | 5.11 U       | 14.9         | 5.11 U       | 5.11 U       | 35.3               |     |  |
|                         |               |             | 2-3                     | DU-9 (2-3)   | 08/08/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 10.7 J       | 19.4 J       | 5.05 U       | 5.05 U       | 47.8 J             |     |  |
| Central Parcel          | DU-10         | ISM         | 0-1                     | DU-10 (0-1)  | 08/12/2022  | 4.97 U                   | 4.97 U       | 4.97 U       | 4.97 U       | 4.97 U       | 8.58 J       | 7.73 J       | 4.97 U       | 4.97 U       | 33.7 J             |     |  |
|                         |               |             | 1-2                     | DU-10 (1-2)  | 08/12/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 6.07 J       | 5.03 U       | 5.03 U       | 5.03 U       | 26.2 J             |     |  |
|                         |               |             | 2-3                     | DU-10 (2-3)  | 08/12/2022  | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U             |     |  |
|                         | DU-11         | ISM         | 0-1                     | DU-11 (0-1)A | 08/10/2022  | 4.90 U                   | 4.90 U       | 4.90 U       | 4.90 U       | 4.90 U       | 8.89 J       | 10.9 J       | 4.90 U       | 4.90 U       | 36.9 J             |     |  |
|                         |               |             | 0-1 FR                  | DU-11 (0-1)B | 08/10/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 6.91 J       | 9.72 J       | 5.03 U       | 5.03 U       | 34.2 J             |     |  |
|                         |               |             | 0-1 FR                  | DU-11 (0-1)C | 08/10/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 6.55 J       | 9.95 J       | 4.98 U       | 4.98 U       | 33.9 J             |     |  |
|                         |               |             | 1-2                     | DU-11 (1-2)A | 08/10/2022  | 5.10 U                   | 5.10 U       | 5.10 U       | 5.10 U       | 5.10 U       | 8.13 J       | 11.2 J       | 5.10 U       | 5.10 U       | 37.2 J             |     |  |
|                         |               |             | 1-2 FR                  | DU-11 (1-2)B | 08/10/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 7.58 J       | 11.8 J       | 5.02 U       | 5.02 U       | 37.0 J             |     |  |
|                         |               |             | 1-2 FR                  | DU-11 (1-2)C | 08/10/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 6.06 J       | 10.5 J       | 4.94 U       | 4.94 U       | 33.9 J             |     |  |
|                         |               |             | 2-3                     | DU-11 (2-3)A | 08/10/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 8.30 J       | 13.4 J       | 4.91 U       | 4.91 U       | 38.9 J             |     |  |
|                         |               |             | 2-3 FR                  | DU-11 (2-3)B | 08/10/2022  | 4.90 U                   | 4.90 U       | 4.90 U       | 4.90 U       | 4.90 U       | 9.36 J       | 11.4 J       | 4.90 U       | 4.90 U       | 37.9 J             |     |  |
|                         |               |             | 2-3 FR                  | DU-11 (2-3)C | 08/10/2022  | 4.77 U                   | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 6.71 J       | 10.9 J       | 4.77 U       | 4.77 U       | 34.3 J             |     |  |
| 0-1                     |               |             | DU-11 (0-1) M           | --           | 5.03 U      | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 7.45 J       | 10.2 J       | 5.03 U       | 5.03 U       | 35.0 J       |                    |     |  |
| 1-2                     |               |             | DU-11 (1-2) M           | --           | 5.10 U      | 5.10 U                   | 5.10 U       | 5.10 U       | 5.10 U       | 7.26 J       | 11.2 J       | 5.10 U       | 5.10 U       | 36.0 J       |                    |     |  |
| 2-3                     |               |             | DU-11 (2-3) M           | --           | 4.91 U      | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 8.12 J       | 11.9 J       | 4.91 U       | 4.91 U       | 37.0 J       |                    |     |  |

Please see notes at end of table.

Table 5a  
Soil Results - PCB Aroclors - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type  | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |        |
|-------------------------|---------------|--------------|-------------------------|---------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|--------|
|                         |               |              |                         |               |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |        |
|                         |               |              |                         |               |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |        |
| Ecological ISM PRG      |               |              |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 98                 |        |
| Ecological ISM Hot Spot |               |              |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --                 | 980    |
| Central Parcel          | DU-12         | ISM          | 0-1                     | DU-12 (0-1)   | 08/16/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 21.3 J       | 14.4 J       | 5.01 U       | 5.01 U       | 53.2 J             |        |
|                         |               |              | 1-2                     | DU-12 (1-2)   | 08/16/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 6.52 J       | 8.04 J       | 4.91 U       | 4.91 U       | 31.7 J             |        |
|                         |               |              | 2-3                     | DU-12 (2-3)   | 08/16/2022  | 4.95 U                   | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       |                    |        |
|                         | DU-13         | ISM          | 0-1                     | DU-13 (0-1)A  | 08/29/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 23.5 J       | 9.40 J       | 5.02 U       | 5.02 U       | 50.5 J             |        |
|                         |               |              | 0-1 FR                  | DU-13 (0-1)B  | 08/29/2022  | 4.97 U                   | 4.97 U       | 4.97 U       | 4.97 U       | 4.97 U       | 39.5 J       | 13.2 J       | 4.97 U       | 4.97 U       | 70.1 J             |        |
|                         |               |              | 0-1 FR                  | DU-13 (0-1)C  | 08/29/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 28.2 J       | 12.2 J       | 4.99 U       | 4.99 U       | 57.9 J             |        |
|                         |               |              | 1-2                     | DU-13 (1-2)A  | 08/30/2022  | 4.90 U                   | 4.90 U       | 4.90 U       | 4.90 U       | 4.90 U       | 5.91 J       | 4.90 U       | 4.90 U       | 4.90 U       | 25.5 J             |        |
|                         |               |              | 1-2 FR                  | DU-13 (1-2)B  | 08/30/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 7.25 J       | 4.98 U       | 4.98 U       | 4.98 U       | 27.2 J             |        |
|                         |               |              | 1-2 FR                  | DU-13 (1-2)C  | 08/30/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 6.98 J       | 4.86 U       | 4.86 U       | 4.86 U       | 26.4 J             |        |
|                         |               |              | 2-3                     | DU-13 (2-3)A  | 08/31/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 10.8 J       | 4.93 U       | 4.93 U       | 4.93 U       | 30.5 J             |        |
|                         |               |              | 2-3 FR                  | DU-13 (2-3)B  | 08/31/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 13.0 J       | 5.01 U       | 5.01 U       | 5.01 U       | 33.0 J             |        |
|                         |               |              | 2-3 FR                  | DU-13 (2-3)C  | 08/31/2022  | 4.89 U                   | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 12.1 J       | 4.89 U       | 4.89 U       | 4.89 U       | 31.7 J             |        |
|                         |               |              | 0-1                     | DU-13 (0-1) M | --          | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 30.4 J       | 11.6 J       | 5.02 U       | 5.02 U       | 59.5 J             |        |
|                         |               |              | 1-2                     | DU-13 (1-2) M | --          | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 6.71 J       | 5.0 U        | 4.98 U       | 4.98 U       | 26.4 J             |        |
|                         |               |              | 2-3                     | DU-13 (2-3) M | --          | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 11.97 J      | 5.0 U        | 5.01 U       | 5.01 U       | 31.7 J             |        |
|                         | DU-14         | ISM          | 0-1                     | DU-14 (0-1)   | 08/17/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 5.96 J       | 5.02 J       | 4.94 U       | 4.94 U       | 28.3 J             |        |
|                         |               |              | 1-2                     | DU-14 (1-2)   | 08/17/2022  | 4.80 U                   | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U             |        |
|                         |               |              | 2-3                     | DU-14 (2-3)   | 08/17/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U             |        |
|                         | DU-15         | ISM          | 0-1                     | DU-15 (0-1)   | 08/19/2022  | 4.92 U                   | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 7.09 J       | 4.92 U       | 4.92 U       | 4.92 U       | 26.8 J             |        |
|                         |               |              | 1-2                     | DU-15 (1-2)   | 08/19/2022  | 4.77 U                   | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U             |        |
|                         |               |              | 2-3                     | DU-15 (2-3)   | 08/19/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U             |        |
|                         | DU-16         | ISM          | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 4.75 U                   | 4.75 U       | 4.75 U       | 4.75 U       | 4.75 U       | 7.47 J       | 7.39 J       | 4.75 U       | 4.75 U       | 31.5 J             |        |
|                         |               |              | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 4.79 U                   | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 6.65 J       | 5.69 J       | 4.79 U       | 4.79 U       | 29.1 J             |        |
|                         |               |              | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 8.66 J       | 8.33 J       | 5.02 U       | 5.02 U       | 34.6 J             |        |
|                         |               |              | 0-1                     | DU-16 (0-1) M | --          | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 5.68 J       | 5.66 J       | 4.81 U       | 4.81 U       | 13.7 J             |        |
|                         |               |              | 1-2                     | DU-16 (1-2)   | 11/07/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U             |        |
|                         | DU-17         | ISM          | 2-3                     | DU-16 (2-3)   | 11/07/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U             |        |
|                         |               |              | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.53 J       | 5.04 U       | 5.04 U       | 5.04 U       | 25.7 J             |        |
|                         |               |              | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U             |        |
|                         | DU-18         | ISM          | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U             | 4.86 U |
|                         |               |              | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 8.94 J       | 4.94 U       | 4.94 U       | 4.94 U       | 28.7 J             |        |
|                         |               |              | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 4.87 U                   | 4.87 U       | 4.87 U       | 4.87 U       | 4.87 U       | 38.9 JN      | 4.87 U       | 4.87 U       | 4.87 U       | 58.4 J             |        |
|                         |               |              | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 20.8 J       | 10.1 U       | 5.06 U       | 5.06 U       | 43.6 J             |        |
|                         |               |              | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 4.62 U                   | 4.62 U       | 4.62 U       | 4.62 U       | 4.62 U       | 12.2 J       | 5.19 J       | 4.62 U       | 4.62 U       | 33.6 J             |        |
|                         |               |              | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 4.68 U                   | 4.68 U       | 4.68 U       | 4.68 U       | 4.68 U       | 7.79 J       | 4.68 U       | 4.68 U       | 4.68 U       | 26.5 J             |        |
|                         |               |              | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 4.96 UJ                  | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ      | 4.96 UJ            |        |
|                         |               |              | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 5.92 J       | 4.93 U       | 4.93 U       | 4.93 U       | 25.6 J             |        |
|                         |               |              | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 4.89 U                   | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 10.1 J       | 4.89 U       | 4.89 U       | 4.89 U       | 29.7 J             |        |
|                         | 2-3 FR        | DU-18 (2-3)C | 10/03/2022              | 4.87 U        | 4.87 U      | 4.87 U                   | 4.87 U       | 4.87 U       | 12.1 J       | 4.87 U       | 4.87 U       | 4.87 U       | 31.6 J       |              |                    |        |

Please see notes at end of table.

Table 5a  
Soil Results - PCB Aroclors - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |        |  |  |  |
|------------------------------|----------------------|-------------|-------------------------|---------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|--------|--|--|--|
|                              |                      |             |                         |               |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |        |  |  |  |
|                              |                      |             |                         |               |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |        |  |  |  |
| Ecological ISM PRG           |                      |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 98                 |        |  |  |  |
| Ecological ISM Hot Spot      |                      |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 980                |        |  |  |  |
| Central Parcel               | DU-18                | ISM         | 0-1                     | DU-18 (0-1) M | --          | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 22.9 J       | 10.1 U       | 5.06 U       | 5.06 U       | 43.5 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-18 (1-2) M | --          | 4.75 U                   | 4.75 U       | 4.75 U       | 4.75 U       | 4.75 U       | 8.32 J       | 4.94 J       | 4.75 U       | 4.75 U       | 21.7 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-18 (2-3) M | --          | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 9.37 J       | 4.93 U       | 4.93 U       | 4.93 U       | 29.0 J             |        |  |  |  |
|                              | DU-19                | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 116          | 20.8 U       | 4.98 U       | 4.98 U       | 144                |        |  |  |  |
|                              |                      |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 8.64 J       | 10.0 U       | 5.00 U       | 5.00 U       | 31.1 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 16.3 J       | 22.8 J       | 5.05 U       | 5.05 U       | 56.8 J             |        |  |  |  |
|                              | DU-20                | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 11.1 J       | 10.5 J       | 4.98 U       | 4.98 U       | 39.0 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U             |        |  |  |  |
|                              | DU-21                | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 16.0 J       | 15.9 J       | 4.94 U       | 4.94 U       | 49.2 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 4.82 U                   | 4.82 U       | 4.82 U       | 4.82 U       | 4.82 U       | 6.73 J       | 12.8 J       | 4.82 U       | 4.82 U       | 36.4 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U             |        |  |  |  |
|                              | DU-22                | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 4.85 U                   | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U       | 4.85 U             | 4.85 U |  |  |  |
|                              |                      |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 4.97 U                   | 4.97 U       | 4.97 U       | 4.97 U       | 4.97 U       | 15.3 J       | 9.91 J       | 4.97 U       | 4.97 U       | 42.6 J             |        |  |  |  |
|                              |                      |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 9.15 J       | 17.1 J       | 5.01 U       | 5.01 U       | 43.8 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U             | 4.99 U |  |  |  |
|                              |                      |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 5.92 J       | 4.98 U       | 4.98 U       | 25.8 J             |        |  |  |  |
|                              |                      |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U             | 4.91 U |  |  |  |
|                              |                      |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U             | 5.03 U |  |  |  |
|                              |                      |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 4.79 U                   | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U             | 4.79 U |  |  |  |
|                              |                      |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U             | 5.00 U |  |  |  |
|                              |                      |             | 0-1                     | DU-22 (0-1) M | --          | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 9.77 J       | 10.6 J       | 5.01 U       | 5.01 U       | 30.4 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-22 (1-2) M | --          | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 5.27 J       | 4.99 U       | 4.99 U       | 11.9 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-22 (2-3) M | --          | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.0                |        |  |  |  |
|                              | DU-23                | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 22.1 J       | 19.3 J       | 5.05 U       | 5.05 U       | 59.1 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-23 (1-2)   | 10/12/2022  | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 6.63 J       | 4.96 U       | 4.96 U       | 26.5 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-23 (2-3)   | 10/12/2022  | 4.95 U                   | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U             |        |  |  |  |
|                              | DU-24                | ISM         | 0-1                     | DU-24 (0-1)   | 09/21/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 12.5         | 5.03 U       | 5.03 U       | 5.03 U       | 32.6               |        |  |  |  |
|                              |                      |             | 1-2                     | DU-24 (1-2)   | 09/21/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-24 (2-3)   | 09/21/2022  | 4.83 U                   | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U             |        |  |  |  |
|                              | DU-25                | ISM         | 0-1                     | DU-25 (0-1)   | 09/23/2022  | 4.95 U                   | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 32.1 J       | 15.9 J       | 4.95 U       | 4.95 U       | 65.3 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-25 (1-2)   | 09/23/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-25 (2-3)   | 09/23/2022  | 4.98 UJ                  | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ      | 4.98 UJ            |        |  |  |  |
|                              | DU-26                | ISM         | 0-1                     | DU-26 (0-1)A  | 11/09/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 122 J        | 4.93 U       | 45.9 J       | 185 J              |        |  |  |  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)B  | 11/09/2022  | 4.71 U                   | 4.71 U       | 4.71 U       | 4.71 U       | 4.71 U       | 20.8 J       | 46.7 J       | 4.71 U       | 4.71 U       | 84.0 J             |        |  |  |  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)C  | 11/09/2022  | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 23.6 J       | 48.1 J       | 4.96 U       | 4.96 U       | 89.1 J             |        |  |  |  |
|                              |                      |             | 1-2                     | DU-26 (1-2)A  | 11/10/2022  | 4.88 U                   | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 51           | 4.88 U       | 4.88 U       | 70.5               |        |  |  |  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)B  | 11/10/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 17.5 J       | 27.5 J       | 5.05 U       | 5.05 U       | 62.7 J             |        |  |  |  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)C  | 11/10/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 40.2         | 4.99 U       | 4.99 U       | 60.2               |        |  |  |  |
|                              |                      |             | 2-3                     | DU-26 (2-3)A  | 11/11/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 14.9         | 5.05 U       | 5.05 U       | 35.1               |        |  |  |  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)B  | 11/11/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 169          | 4.93 U       | 4.93 U       | 189                |        |  |  |  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)C  | 11/11/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 21.5         | 5.01 U       | 5.01 U       | 41.5               |        |  |  |  |
|                              |                      |             | 0-1                     | DU-26 (0-1) M | --          | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 16.4 J       | 72.3 J       | 4.96 U       | 18.5 J       | 119 J              |        |  |  |  |
|                              |                      |             | 1-2                     | DU-26 (1-2) M | --          | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 9.12 J       | 39.6 J       | 5.05 U       | 5.05 U       | 64.5 J             |        |  |  |  |
|                              |                      |             | 2-3                     | DU-26 (2-3) M | --          | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 68.5 J       | 5.05 U       | 5.05 U       | 88.5 J             |        |  |  |  |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)   | 11/30/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       |                    |        |  |  |  |
|                              |                      |             | 1-2                     | DU-42 (1-2)   | 11/30/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       |                    |        |  |  |  |
|                              |                      |             | 2-3                     | DU-42 (2-3)   | 11/30/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       |                    |        |  |  |  |

Please see notes at end of table.

Table 5a  
Soil Results - PCB Aroclors - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location         | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID    | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |      |      |      |      |      |      |      |    |      |    |
|-------------------------|---------------|-------------|-------------------------|--------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|------|------|------|------|------|------|------|----|------|----|
|                         |               |             |                         |              |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |      |      |      |      |      |      |      |    |      |    |
|                         |               |             |                         |              |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |      |      |      |      |      |      |      |    |      |    |
| Ecological ISM PRG      |               |             |                         |              |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 98                 |      |      |      |      |      |      |      |    |      |    |
| Ecological ISM Hot Spot |               |             |                         |              |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --                 | 980  |      |      |      |      |      |      |    |      |    |
| East Parcel             | DU-27         | ISM         | 0-1                     | DU-27 (0-1)  | 10/05/2022  | 4.97                     | U            | 4.97         | U            | 4.97         | U            | 27.6         | J            | 4.97         | U                  | 124  | J    | 19.9 | J    | 4.97 | U    | 4.97 | U  | 186  | J  |
|                         |               |             | 1-2                     | DU-27 (1-2)  | 10/05/2022  | 4.88                     | U            | 4.88         | U            | 4.88         | U            | 4.88         | U            | 148          | JN                 | 4.88 | U    | 4.88 | U    | 4.88 | U    | 168  | J  |      |    |
|                         |               |             | 2-3                     | DU-27 (2-3)  | 10/05/2022  | 4.92                     | U            | 4.92         | U            | 4.92         | U            | 4.92         | U            | 158          |                    | 4.92 | U    | 4.92 | U    | 4.92 | U    | 178  |    |      |    |
|                         | DU-28         | ISM         | 0-1                     | DU-28 (0-1)  | 09/14/2022  | 5.10                     | U            | 5.10         | U            | 5.10         | U            | 5.10         | U            | 5.10         | U                  | 79.9 |      | 5.10 | U    | 5.10 | U    | 5.10 | U  | 100  |    |
|                         |               |             | 1-2                     | DU-28 (1-2)  | 09/14/2022  | 5.09                     | U            | 5.09         | U            | 5.09         | U            | 5.09         | U            | 51.4         |                    | 5.09 | U    | 5.09 | U    | 5.09 | U    | 71.8 |    |      |    |
|                         |               |             | 2-3                     | DU-28 (2-3)  | 09/14/2022  | 5.10                     | U            | 5.10         | U            | 5.10         | U            | 5.10         | U            | 16.6         |                    | 5.10 | U    | 5.10 | U    | 5.10 | U    | 37.0 |    |      |    |
|                         | DU-29         | ISM         | 0-1                     | DU-29 (0-1)  | 09/15/2022  | 4.91                     | U            | 4.91         | U            | 4.91         | U            | 4.91         | U            | 4.91         | U                  | 4.91 | U    | 5.34 | J    | 4.91 | U    | 4.91 | U  | 25.0 | J  |
|                         |               |             | 1-2                     | DU-29 (1-2)  | 09/15/2022  | 4.73                     | U            | 4.73         | U            | 4.73         | U            | 4.73         | U            | 4.73         | U                  | 4.73 | U    | 4.73 | U    | 4.73 | U    | 4.73 | U  |      |    |
|                         |               |             | 2-3                     | DU-29 (2-3)  | 09/15/2022  | 4.93                     | U            | 4.93         | U            | 4.93         | U            | 4.93         | U            | 4.93         | U                  | 4.93 | U    | 4.93 | U    | 4.93 | U    | 4.93 | U  |      |    |
|                         | DU-30         | ISM         | 0-1                     | DU-30 (0-1)  | 09/16/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 5.05         | U            | 5.57         | J                  | 9.23 | J    | 5.05 | U    | 5.05 | U    | 5.05 | U  | 32.5 | J  |
|                         |               |             | 1-2                     | DU-30 (1-2)  | 09/16/2022  | 5.04                     | U            | 5.04         | U            | 5.04         | U            | 5.04         | U            | 5.04         | U                  | 5.04 | U    | 5.04 | U    | 5.04 | U    | 5.04 | U  |      |    |
|                         |               |             | 2-3                     | DU-30 (2-3)  | 09/16/2022  | 5.07                     | UJ           | 5.07         | UJ           | 5.07         | UJ           | 5.07         | UJ           | 5.07         | UJ                 | 5.07 | UJ   | 5.07 | UJ   | 5.07 | UJ   | 5.07 | UJ | 45.6 | UJ |
|                         | DU-31         | ISM         | 0-1                     | DU-31 (0-1)  | 11/03/2022  | 4.67                     | U            | 4.67         | U            | 4.67         | U            | 4.67         | U            | 7            | J                  | 4.67 | U    | 4.67 | U    | 4.67 | U    | 4.67 | U  | 25.7 | J  |
|                         |               |             | 1-2                     | DU-31 (1-2)  | 11/03/2022  | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 4.99         | U            | 9.85         | J                  | 4.99 | U    | 4.99 | U    | 4.99 | U    | 29.8 | J  |      |    |
|                         |               |             | 2-3                     | DU-31 (2-3)  | 11/03/2022  | 4.62                     | U            | 4.62         | U            | 4.62         | U            | 4.62         | U            | 8.51         | J                  | 4.62 | U    | 4.62 | U    | 4.62 | U    | 27.0 | J  |      |    |
|                         | DU-32         | ISM         | 0-1                     | DU-32 (0-1)  | 09/22/2022  | 4.84                     | U            | 4.84         | U            | 4.84         | U            | 4.84         | U            | 4.84         | U                  | 4.84 | U    | 4.84 | U    | 4.84 | U    | 4.84 | U  | 4.84 | U  |
|                         |               |             | 1-2                     | DU-32 (1-2)  | 09/22/2022  | 4.79                     | U            | 4.79         | U            | 4.79         | U            | 4.79         | U            | 4.79         | U                  | 4.79 | U    | 4.79 | U    | 4.79 | U    | 4.79 | U  |      |    |
|                         |               |             | 2-3                     | DU-32 (2-3)  | 09/22/2022  | 4.65                     | U            | 4.65         | U            | 4.65         | U            | 4.65         | U            | 4.65         | U                  | 4.65 | U    | 4.65 | U    | 4.65 | U    | 4.65 | U  |      |    |
|                         | DU-33         | ISM         | 0-1                     | DU-33 (0-1)  | 09/20/2022  | 4.98                     | U            | 4.98         | U            | 4.98         | U            | 4.98         | U            | 65.3         | JN                 | 4.98 | U    | 4.98 | U    | 4.98 | U    | 4.98 | U  | 85.2 | J  |
|                         |               |             | 1-2                     | DU-33 (1-2)  | 09/20/2022  | 4.77                     | U            | 4.77         | U            | 4.77         | U            | 4.77         | U            | 31.0         | JN                 | 4.77 | U    | 4.77 | U    | 4.77 | U    | 50.1 | J  |      |    |
|                         |               |             | 2-3                     | DU-33 (2-3)  | 09/20/2022  | 4.66                     | U            | 4.66         | U            | 4.66         | U            | 4.66         | U            | 39.3         | JN                 | 4.66 | U    | 4.66 | U    | 4.66 | U    | 57.9 | J  |      |    |
| East Parcel             | DU-34         | ISM         | 0-1                     | DU-34 (0-1)  | 09/27/2022  | 5.01                     | U            | 5.01         | U            | 5.01         | U            | 5.01         | U            | 13.0         | JN                 | 5.01 | U    | 5.01 | U    | 5.01 | U    | 5.01 | U  | 33.0 | J  |
|                         |               |             | 1-2                     | DU-34 (1-2)  | 09/27/2022  | 5.02                     | U            | 5.02         | U            | 5.02         | U            | 5.02         | U            | 20.0         | JN                 | 5.02 | UJ   | 5.02 | UJ   | 5.02 | UJ   | 47.6 | J  |      |    |
|                         |               |             | 2-3                     | DU-34 (2-3)  | 09/27/2022  | 4.98                     | U            | 4.98         | U            | 4.98         | U            | 4.98         | U            | 4.98         | U                  | 4.98 | U    | 4.98 | U    | 4.98 | U    | 4.98 | U  |      |    |
|                         | DU-35         | ISM         | 0-1                     | DU-35 (0-1)  | 10/07/2022  | 4.95                     | U            | 4.95         | U            | 4.95         | U            | 4.95         | U            | 4.95         | U                  | 8.55 | J    | 4.95 | U    | 4.95 | U    | 4.95 | U  | 28.4 | J  |
|                         |               |             | 1-2                     | DU-35 (1-2)  | 10/07/2022  | 5.01                     | U            | 5.01         | U            | 5.01         | U            | 5.01         | U            | 15.1         | J                  | 6.97 | J    | 5.01 | U    | 5.01 | U    | 39.6 | J  |      |    |
|                         |               |             | 2-3                     | DU-35 (2-3)  | 10/07/2022  | 5.04                     | U            | 5.04         | U            | 5.04         | U            | 5.04         | U            | 5.04         | U                  | 5.04 | U    | 5.04 | U    | 5.04 | U    | 5.04 | U  |      |    |
|                         | DU-36         | ISM         | 0-1                     | DU-36 (0-1)  | 11/01/2022  | 4.66                     | U            | 4.66         | U            | 4.66         | U            | 4.66         | U            | 6.34         | J                  | 5.21 | J    | 4.66 | U    | 4.66 | U    | 4.66 | U  | 27.9 | J  |
|                         |               |             | 1-2                     | DU-36 (1-2)  | 11/01/2022  | 4.96                     | U            | 4.96         | U            | 4.96         | U            | 4.96         | U            | 4.96         | U                  | 4.96 | U    | 4.96 | U    | 4.96 | U    | 4.96 | U  |      |    |
|                         |               |             | 2-3                     | DU-36 (2-3)  | 11/01/2022  | 5.06                     | U            | 5.06         | U            | 5.06         | U            | 5.06         | U            | 8.15         | J                  | 5.06 | U    | 5.06 | U    | 5.06 | U    | 28.4 | J  |      |    |
|                         | DU-38         | ISM         | 0-1                     | DU-38 (0-1)A | 11/14/2022  | 5.03                     | U            | 5.03         | U            | 5.03         | U            | 5.03         | U            | 10.3         | J                  | 9.57 | J    | 5.03 | U    | 5.03 | U    | 5.03 | U  | 37.5 | J  |
|                         |               |             | 0-1 FR                  | DU-38 (0-1)B | 11/14/2022  | 5.00                     | U            | 5.00         | U            | 5.00         | U            | 5.00         | U            | 10.7         | J                  | 13.0 | J    | 5.00 | U    | 5.00 | U    | 41.2 | J  |      |    |
|                         |               |             | 0-1 FR                  | DU-38 (0-1)C | 11/14/2022  | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 4.99         | U            | 10.5         | J                  | 13.1 | J    | 4.99 | U    | 4.99 | U    | 41.1 | J  |      |    |
|                         |               |             | 1-2                     | DU-38 (1-2)A | 11/16/2022  | 5.03                     | U            | 5.03         | U            | 5.03         | U            | 5.03         | U            | 14           | J                  | 12.8 | J    | 5.03 | U    | 5.03 | U    | 44.4 | J  |      |    |
|                         |               |             | 1-2 FR                  | DU-38 (1-2)B | 11/16/2022  | 5.02                     | U            | 5.02         | U            | 5.02         | U            | 5.02         | U            | 13.7         | J                  | 5.74 | J    | 5.02 | U    | 5.02 | U    | 37.0 | J  |      |    |
|                         |               |             | 1-2 FR                  | DU-38 (1-2)C | 11/16/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 5.05         | U            | 9.88         | J                  | 7.51 | J    | 5.05 | U    | 5.05 | U    | 35.1 | J  |      |    |
| 2-3                     |               |             | DU-38 (2-3)A            | 11/17/2022   | 5.05        | U                        | 5.05         | U            | 5.05         | U            | 5.05         | U            | 9.82         | J            | 5.05               | U    | 5.05 | U    | 5.05 | U    | 30.0 | J    |    |      |    |
| 2-3 FR                  |               |             | DU-38 (2-3)B            | 11/17/2022   | 4.96        | U                        | 4.96         | U            | 4.96         | U            | 4.96         | U            | 7.88         | J            | 4.96               | U    | 4.96 | U    | 4.96 | U    | 27.7 | J    |    |      |    |
| 2-3 FR                  |               |             | DU-38 (2-3)C            | 11/17/2022   | 5.07        | U                        | 5.07         | U            | 5.07         | U            | 5.07         | U            | 6.14         | J            | 5.07               | U    | 5.07 | U    | 5.07 | U    | 26.4 | J    |    |      |    |
| 0-1                     | DU-38 (0-1) M | --          | 5.03                    | U            | 5.03        | U                        | 5.03         | U            | 5.03         | U            | 10.5         | J            | 11.9         | J            | 5.03               | U    | 5.03 | U    | 39.9 | J    |      |      |    |      |    |
| 1-2                     | DU-38 (1-2) M | --          | 5.05                    | U            | 5.05        | U                        | 5.05         | U            | 5.05         | U            | 12.5         | J            | 8.68         | J            | 5.05               | U    | 5.05 | U    | 38.8 | J    |      |      |    |      |    |
| 2-3                     | DU-38 (2-3) M | --          | 5.07                    | U            | 5.07        | U                        | 5.07         | U            | 5.07         | U            | 7.95         | J            | 5.07         | U            | 5.07               | U    | 5.07 | U    | 28.1 | J    |      |      |    |      |    |

Please see notes at end of table.

Table 5a  
Soil Results - PCB Aroclors - Ecological Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit           | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |        |  |
|---------------------------|-------------------------|-------------|-------------------------|---------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|--------|--|
|                           |                         |             |                         |               |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |        |  |
|                           |                         |             |                         |               |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |        |  |
| Ecological ISM PRG        |                         |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 98                 |        |  |
| Ecological ISM Hot Spot   |                         |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --                 | 980    |  |
| East Parcel Concrete Slab | DU-37                   | Composite   | 0-1                     | DU-37 (0-1)   | 11/28/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U             | 4.93 U |  |
|                           |                         |             | 1-2                     | DU-37 (1-2)   | 11/28/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U             |        |  |
|                           |                         |             | 2-3                     | DU-37 (2-3)   | 11/28/2022  | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       |                    |        |  |
|                           | DU-39                   | Composite   | 0-1                     | DU-39 (0-1)   | 11/29/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U             |        |  |
|                           |                         |             | 1-2                     | DU-39 (1-2)   | 11/29/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       |                    |        |  |
|                           |                         |             | 2-3                     | DU-39 (2-3)   | 11/29/2022  | 4.9 U                    | 4.9 U        | 4.9 U        | 4.9 U        | 4.9 U        | 4.9 U        | 4.9 U        | 4.9 U        |              |                    |        |  |
|                           | DU-40                   | Composite   | 0-1                     | DU-40 (0-1)   | 11/18/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U             |        |  |
|                           |                         |             | 1-2                     | DU-40 (1-2)   | 11/18/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       |                    |        |  |
|                           |                         |             | 2-3                     | DU-40 (2-3)   | 11/18/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       |              |                    |        |  |
|                           | DU-43<br>(Within DU-31) | Composite   | 0-1                     | DU-43 (0-1)   | 11/21/2022  | 5.07 U                   | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U             |        |  |
|                           |                         |             | 1-2                     | DU-43 (1-2)   | 11/21/2022  | 5.07 U                   | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       | 5.07 U       |                    |        |  |
|                           |                         |             | 2-3                     | DU-43 (2-3)   | 11/21/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       |              |                    |        |  |
|                           | DU-44<br>(Within DU-36) | Composite   | 0-1                     | DU-44 (0-1)   | 12/01/2022  | 4.89 U                   | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U             |        |  |
|                           |                         |             | 1-2                     | DU-44 (1-2)   | 12/01/2022  | 4.88 U                   | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       |                    |        |  |
|                           |                         |             | 2-3                     | DU-44 (2-3)   | 12/01/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       |              |                    |        |  |
| East Parcel Soil Berms    | DU-41                   | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 14.5 J       | 12.5 J       | 5.03 U       | 5.03 U       | 44.6 J             |        |  |
|                           |                         |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 4.83 U                   | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 40.1 J       | 12.1 J       | 4.83 U       | 4.83 U       | 69.1 J             |        |  |
|                           |                         |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 4.88 U                   | 4.88 U       | 4.88 U       | 4.88 U       | 4.88 U       | 21.6 J       | 17.9 J       | 4.88 U       | 4.88 U       | 56.6 J             |        |  |
|                           |                         |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 4.83 U                   | 4.83 U       | 4.83 U       | 4.83 U       | 4.83 U       | 58.4 J       | 17.3 J       | 4.83 U       | 4.83 U       | 92.6 J             |        |  |
|                           |                         |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 4.79 U                   | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 12.8 J       | 10.8 J       | 4.79 U       | 4.79 U       | 40.4 J             |        |  |
|                           |                         |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 46.6 J       | 12.6 J       | 4.94 U       | 4.94 U       | 76.5 J             |        |  |
|                           |                         |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 9.84 J       | 7.82 J       | 5.05 U       | 5.05 U       | 35.3 J             |        |  |
|                           |                         |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 4.92 U                   | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 5.41 J       | 6.56 J       | 4.92 U       | 4.92 U       | 29.2 J             |        |  |
|                           |                         |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 4.90 U                   | 4.90 U       | 4.90 U       | 4.90 U       | 4.90 U       | 6.60 J       | 20.00 J      | 4.90 U       | 4.90 U       | 43.8 J             |        |  |
|                           |                         |             | 0-1                     | DU-41 (0-1) M | --          | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 25.4 J       | 14.2 J       | 5.03 U       | 5.03 U       | 56.8 J             |        |  |
| 1-2                       | DU-41 (1-2) M           | --          | 4.94 U                  | 4.94 U        | 4.94 U      | 4.94 U                   | 4.94 U       | 39.3 J       | 13.6 J       | 4.94 U       | 4.94 U       | 69.8 J       |              |              |                    |        |  |
| 2-3                       | DU-41 (2-3) M           | --          | 5.05 U                  | 5.05 U        | 5.05 U      | 5.05 U                   | 5.05 U       | 7.28 J       | 11.5 J       | 5.05 U       | 5.05 U       | 36.1 J       |              |              |                    |        |  |

## Notes:

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

PCBs = Polychlorinated biphenyls.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.

µg/kg = Micrograms per kilogram (parts per billion).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.

J = Result is estimated.

JN = The analyte was tentatively identified and did not meet method criteria for confirmation.

UU = The analyte was analyzed for but was not detected. However, the detection limit may be inaccurate or imprecise.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 5b  
Soil Results - PCB Aroclors - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |    |              |    |              |    |              |    |              |    |              |    |              |    |              |     |              |   |                    |   |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|--------------------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|-----|--------------|---|--------------------|---|
|                           |               |             |                         |               |             | Concentrations in µg/kg  |    |              |    |              |    |              |    |              |    |              |    |              |    |              |     |              |   |                    |   |
|                           |               |             |                         |               |             | Aroclor 1016             |    | Aroclor 1221 |    | Aroclor 1232 |    | Aroclor 1242 |    | Aroclor 1248 |    | Aroclor 1254 |    | Aroclor 1260 |    | Aroclor 1262 |     | Aroclor 1268 |   | Total PCB Aroclors |   |
| Human Health ISM PRG      |               |             |                         |               | --          |                          | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | 740 |              |   |                    |   |
| Human Health ISM Hot Spot |               |             |                         |               | --          |                          | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | --  | 40,000       |   |                    |   |
| West Parcel               | DU-1          | ISM         | 0-1                     | DU-1 (0-1)    | 07/20/2022  | 5.00                     | U  | 5.00         | U  | 5.00         | U  | 5.00         | U  | 5.00         | U  | 407          |    | 5.00         | U  | 5.00         | U   | 5.00         | U | 427                |   |
|                           |               |             | 1-2                     | DU-1 (1-2)    | 07/20/2022  | 50.9                     | U  | 50.9         | U  | 50.9         | U  | 50.9         | U  | 50.9         | U  | 2,550        |    | 50.9         | U  | 50.9         | U   | 50.9         | U | 2,750              |   |
|                           |               |             | 2-3                     | DU-1 (2-3)    | 07/20/2022  | 4.99                     | U  | 4.99         | U  | 27.3         | U  | 4.99         | U  | 11.1         | U  | 4.99         | U  | 75.9         |    | 4.99         | U   | 4.99         | U | 110                |   |
|                           | DU-2          | ISM         | 0-1                     | DU-2 (0-1)    | 08/01/2022  | 5.09                     | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 166          |    | 5.09         | U  | 5.09         | U   | 5.09         | U | 186                |   |
|                           |               |             | 1-2                     | DU-2 (1-2)    | 08/01/2022  | 5.02                     | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 538          |    | 5.02         | U  | 5.02         | U   | 5.02         | U | 558                |   |
|                           |               |             | 2-3                     | DU-2 (2-3)    | 08/01/2022  | 4.68                     | U  | 4.68         | U  | 4.68         | U  | 4.68         | U  | 5.18         | J  | 8.30         | J  | 4.68         | U  | 4.68         | U   | 29.9         | J |                    |   |
|                           | DU-3          | ISM         | 0-1                     | DU-3 (0-1)    | 08/03/2022  | 4.82                     | U  | 4.82         | U  | 4.82         | U  | 4.82         | U  | 4.82         | U  | 5.74         | J  | 4.82         | U  | 4.82         | U   | 4.82         | U | 25.0               | J |
|                           |               |             | 1-2                     | DU-3 (1-2)    | 08/03/2022  | 5.04                     | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U   | 5.04         | U | 5.04               | U |
|                           |               |             | 2-3                     | DU-3 (2-3)    | 08/03/2022  | 4.79                     | U  | 4.79         | U  | 4.79         | U  | 4.79         | U  | 4.79         | U  | 4.79         | U  | 4.79         | U  | 4.79         | U   | 4.79         | U | 4.79               | U |
|                           | DU-4          | ISM         | 0-1                     | DU-4 (0-1)    | 08/04/2022  | 4.94                     | U  | 4.94         | U  | 4.94         | U  | 4.94         | U  | 6.06         | J  | 8.35         | J  | 4.94         | U  | 4.94         | U   | 4.94         | U | 31.7               | J |
|                           |               |             | 1-2                     | DU-4 (1-2)    | 08/04/2022  | 4.81                     | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 5.27         | J  | 4.81         | U  | 4.81         | U   | 4.81         | U | 24.5               | J |
|                           |               |             | 2-3                     | DU-4 (2-3)    | 08/04/2022  | 4.99                     | U  | 4.99         | U  | 4.99         | U  | 4.99         | U  | 11.0         | J  | 6.62         | J  | 4.99         | U  | 4.99         | U   | 4.99         | U | 35.1               | J |
|                           | DU-5          | ISM         | 0-1                     | DU-5 (0-1)A   | 07/22/2022  | 4.99                     | U  | 4.99         | U  | 4.99         | U  | 5.67         | J  | 4.99         | U  | 38.9         | J  | 28.0         | J  | 4.99         | U   | 4.99         | U | 87.5               | J |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)B   | 07/22/2022  | 4.71                     | U  | 4.71         | U  | 4.71         | U  | 4.71         | U  | 23.9         | J  | 32.5         | J  | 4.71         | U  | 4.71         | U   | 4.71         | U | 72.9               | J |
|                           |               |             | 0-1 FR                  | DU-5 (0-1)C   | 07/22/2022  | 5.04                     | U  | 10.1         | U  | 5.04         | U  | 5.04         | U  | 116          | J  | 41.0         | J  | 5.04         | U  | 5.04         | U   | 5.04         | U | 177                | J |
|                           |               |             | 1-2                     | DU-5 (1-2)A   | 07/25/2022  | 4.84                     | U  | 9.68         | U  | 15.7         | U  | 4.84         | U  | 4.84         | J  | 58.1         | J  | 4.84         | U  | 4.84         | U   | 4.84         | U | 143                | J |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)B   | 07/25/2022  | 4.88                     | U  | 4.88         | U  | 4.88         | U  | 4.88         | U  | 56.9         | J  | 49.9         | J  | 4.88         | U  | 4.88         | U   | 4.88         | U | 124                | J |
|                           |               |             | 1-2 FR                  | DU-5 (1-2)C   | 07/25/2022  | 4.81                     | U  | 9.62         | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 42.2         | J  | 32.6         | J  | 4.81         | U   | 4.81         | U | 94.0               | J |
|                           |               |             | 2-3                     | DU-5 (2-3)A   | 07/26/2022  | 4.91                     | U  | 4.91         | U  | 4.91         | U  | 4.91         | U  | 51.3         | J  | 27.0         | J  | 4.91         | U  | 4.91         | U   | 4.91         | U | 95.5               | J |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)B   | 07/26/2022  | 4.81                     | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 49.8         | J  | 27.6         | J  | 4.81         | U  | 4.81         | U   | 4.81         | U | 94.2               | J |
|                           |               |             | 2-3 FR                  | DU-5 (2-3)C   | 07/26/2022  | 4.92                     | U  | 4.92         | U  | 4.92         | U  | 4.92         | U  | 4.92         | U  | 367          |    | 4.92         | U  | 4.92         | U   | 4.92         | U | 387                |   |
|                           |               |             | 0-1                     | DU-5 (0-1) M  | --          | 5.04                     | U  | 10.1         | U  | 5.04         | U  | 5.14         | J  | 5.04         | U  | 59.6         | J  | 33.8         | J  | 5.04         | U   | 5.04         | U | 112                | J |
|                           |               |             | 1-2                     | DU-5 (1-2) M  | --          | 4.88                     | U  | 9.68         | U  | 15.7         | U  | 4.88         | U  | 4.88         | U  | 53.2         | J  | 46.9         | J  | 4.88         | U   | 4.88         | U | 120                | J |
|                           |               |             | 2-3                     | DU-5 (2-3) M  | --          | 4.92                     | U  | 4.92         | U  | 4.92         | U  | 4.92         | U  | 35.3         | J  | 141          | J  | 4.92         | U  | 4.92         | U   | 4.92         | U | 192                | J |
|                           | DU-6          | ISM         | 0-1                     | DU-6 (0-1)    | 07/28/2022  | 5.03                     | U  | 10.1         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 18.3         | J  | 24.1         | J  | 5.03         | U   | 5.03         | U | 62.5               | J |
|                           |               |             | 1-2                     | DU-6 (1-2)    | 07/28/2022  | 5.01                     | U  | 10.0         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 28.5         | J  | 62.0         | J  | 5.01         | U   | 5.01         | U | 111                | J |
|                           |               |             | 2-3                     | DU-6 (2-3)    | 07/28/2022  | 5.05                     | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 147          |    | 5.05         | U  | 5.05         | U   | 5.05         | U | 167                |   |
|                           | DU-7          | ISM         | 0-1                     | DU-7 (0-1)    | 07/29/2022  | 5.07                     | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 10.1         |    | 24.9         | J  | 5.07         | U   | 5.07         | U | 52.7               | J |
|                           |               |             | 1-2                     | DU-7 (1-2)    | 07/29/2022  | 5.04                     | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 13.3         | J  | 25.8         | J  | 5.04         | U   | 5.04         | U | 56.7               | J |
|                           |               |             | 2-3                     | DU-7 (2-3)    | 07/29/2022  | 5.06                     | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 12.8         | J  | 19.7         | J  | 5.06         | U   | 5.06         | U | 50.2               | J |
|                           | DU-8          | ISM         | 0-1                     | DU-8 (0-1)    | 08/05/2022  | 5.09                     | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 29.8         | J  | 51.3         | J  | 5.09         | U   | 5.09         | U | 98.9               | J |
|                           |               |             | 1-2                     | DU-8 (1-2)    | 08/05/2022  | 5.09                     | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 5.09         | U  | 47.4         | JN | 5.09         | U   | 5.09         | U | 67.8               | J |
|                           |               |             | 2-3                     | DU-8 (2-3)    | 08/05/2022  | 4.98                     | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 78.5         | JN | 4.98         | U   | 4.98         | U | 98.4               | J |
|                           | DU-9          | ISM         | 0-1                     | DU-9 (0-1)    | 08/08/2022  | 5.04                     | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 11.7         | J  | 34.7         | J  | 5.04         | U  | 5.04         | U   | 5.04         | U | 64.0               | J |
|                           |               |             | 1-2                     | DU-9 (1-2)    | 08/08/2022  | 5.11                     | U  | 5.11         | U  | 5.11         | U  | 5.11         | U  | 5.11         | U  | 14.9         |    | 5.11         | U  | 5.11         | U   | 5.11         | U | 35.3               |   |
|                           |               |             | 2-3                     | DU-9 (2-3)    | 08/08/2022  | 5.05                     | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 10.7         | J  | 19.4         | J  | 5.05         | U   | 5.05         | U | 47.8               | J |
| Central Parcel            | DU-10         | ISM         | 0-1                     | DU-10 (0-1)   | 08/12/2022  | 4.97                     | U  | 4.97         | U  | 4.97         | U  | 4.97         | U  | 8.58         | J  | 7.73         | J  | 4.97         | U  | 4.97         | U   | 4.97         | U | 33.7               | J |
|                           |               |             | 1-2                     | DU-10 (1-2)   | 08/12/2022  | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 6.07         | J  | 5.03         | U  | 5.03         | U  | 5.03         | U   | 5.03         | U | 26.2               | J |
|                           |               |             | 2-3                     | DU-10 (2-3)   | 08/12/2022  | 5.06                     | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U   | 5.06         | U | 5.06               | U |
|                           | DU-11         | ISM         | 0-1                     | DU-11 (0-1)A  | 08/10/2022  | 4.90                     | U  | 4.90         | U  | 4.90         | U  | 4.90         | U  | 8.89         | J  | 10.9         | J  | 4.90         | U  | 4.90         | U   | 4.90         | U | 36.9               | J |
|                           |               |             | 0-1 FR                  | DU-11 (0-1)B  | 08/10/2022  | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 6.91         | J  | 9.72         | J  | 5.03         | U  | 5.03         | U   | 5.03         | U | 34.2               | J |
|                           |               |             | 0-1 FR                  | DU-11 (0-1)C  | 08/10/2022  | 4.98                     | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 6.55         | J  | 9.95         | J  | 4.98         | U  | 4.98         | U   | 4.98         | U | 33.9               | J |
|                           |               |             | 1-2                     | DU-11 (1-2)A  | 08/10/2022  | 5.10                     | U  | 5.10         | U  | 5.10         | U  | 5.10         | U  | 8.13         | J  | 11.2         | J  | 5.10         | U  | 5.10         | U   | 5.10         | U | 37.2               | J |
|                           |               |             | 1-2 FR                  | DU-11 (1-2)B  | 08/10/2022  | 5.02                     | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 7.58         | J  | 11.8         | J  | 5.02         | U  | 5.02         | U   | 5.02         | U | 37.0               | J |
|                           |               |             | 1-2 FR                  | DU-11 (1-2)C  | 08/10/2022  | 4.94                     | U  | 4.94         | U  | 4.94         | U  | 4.94         | U  | 6.06         | J  | 10.5         | J  | 4.94         | U  | 4.94         | U   | 4.94         | U | 33.9               | J |
|                           |               |             | 2-3                     | DU-11 (2-3)A  | 08/10/2022  | 4.91                     | U  | 4.91         | U  | 4.91         | U  | 4.91         | U  | 8.30         | J  | 13.4         | J  | 4.91         | U  | 4.91         | U   | 4.91         | U | 38.9               | J |
|                           |               |             | 2-3 FR                  | DU-11 (2-3)B  | 08/10/2022  | 4.90                     | U  | 4.90         | U  | 4.90         | U  | 4.90         | U  | 9.36         | J  | 11.4         | J  | 4.90         | U  | 4.90         | U   | 4.90         | U | 37.9               | J |
|                           |               |             | 2-3 FR                  | DU-11 (2-3)C  | 08/10/2022  | 4.77                     | U  | 4.77         | U  | 4.77         | U  | 4.77         | U  | 6.71         | J  | 10.9         | J  | 4.77         | U  | 4.77         | U   | 4.77         | U | 34.3               | J |
|                           |               |             | 0-1                     | DU-11 (0-1) M | --          | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 7.45         | J  | 10.2         | J  | 5.03         | U  | 5.03         | U   | 5.03         | U | 35.0               | J |
|                           |               |             | 1-2                     | DU-11 (1-2) M | --          | 5.10                     | U  | 5.10         | U  | 5.10         | U  | 5.10         | U  | 7.26         | J  | 11.2         | J  | 5.10         | U  | 5.10         | U   | 5.10         | U | 36.0               | J |
|                           |               |             | 2-3                     | DU-11 (2-3) M | --          | 4.91                     | U  | 4.91         | U  | 4.91         | U  | 4.91         | U  | 8.12         | J  | 11.9         | J  | 4.91         | U  | 4.91         | U   | 4.91         | U | 37.0               | J |

Please see notes at end of table.

Table 5b  
Soil Results - PCB Aroclors - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |        |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|--------|
|                           |               |             |                         |               |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |        |
|                           |               |             |                         |               |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |        |
| Human Health ISM PRG      |               |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 740                |        |
| Human Health ISM Hot Spot |               |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --                 | 40,000 |
| Central Parcel            | DU-12         | ISM         | 0-1                     | DU-12 (0-1)   | 08/16/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 21.3 J       | 14.4 J       | 5.01 U       | 5.01 U       | 53.2 J             |        |
|                           |               |             | 1-2                     | DU-12 (1-2)   | 08/16/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 6.52 J       | 8.04 J       | 4.91 U       | 4.91 U       | 31.7 J             |        |
|                           |               |             | 2-3                     | DU-12 (2-3)   | 08/16/2022  | 4.95 U                   | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U       | 4.95 U             |        |
|                           | DU-13         | ISM         | 0-1                     | DU-13 (0-1)A  | 08/29/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 23.5 J       | 9.40 J       | 5.02 U       | 5.02 U       | 50.5 J             |        |
|                           |               |             | 0-1 FR                  | DU-13 (0-1)B  | 08/29/2022  | 4.97 U                   | 4.97 U       | 4.97 U       | 4.97 U       | 4.97 U       | 39.5 J       | 13.2 J       | 4.97 U       | 4.97 U       | 70.1 J             |        |
|                           |               |             | 0-1 FR                  | DU-13 (0-1)C  | 08/29/2022  | 4.99 U                   | 4.99 U       | 4.99 U       | 4.99 U       | 4.99 U       | 28.2 J       | 12.2 J       | 4.99 U       | 4.99 U       | 57.9 J             |        |
|                           |               |             | 1-2                     | DU-13 (1-2)A  | 08/30/2022  | 4.90 U                   | 4.90 U       | 4.90 U       | 4.90 U       | 4.90 U       | 5.91 J       | 4.90 U       | 4.90 U       | 4.90 U       | 25.5 J             |        |
|                           |               |             | 1-2 FR                  | DU-13 (1-2)B  | 08/30/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 7.25 J       | 4.98 U       | 4.98 U       | 4.98 U       | 27.2 J             |        |
|                           |               |             | 1-2 FR                  | DU-13 (1-2)C  | 08/30/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 6.98 J       | 4.86 U       | 4.86 U       | 4.86 U       | 26.4 J             |        |
|                           |               |             | 2-3                     | DU-13 (2-3)A  | 08/31/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 10.8 J       | 4.93 U       | 4.93 U       | 4.93 U       | 30.5 J             |        |
|                           |               |             | 2-3 FR                  | DU-13 (2-3)B  | 08/31/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 13.0 J       | 5.01 U       | 5.01 U       | 5.01 U       | 33.0 J             |        |
|                           |               |             | 2-3 FR                  | DU-13 (2-3)C  | 08/31/2022  | 4.89 U                   | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 12.1 J       | 4.89 U       | 4.89 U       | 4.89 U       | 31.7 J             |        |
|                           |               |             | 0-1                     | DU-13 (0-1) M | --          | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 30.4 J       | 11.6 J       | 5.02 U       | 5.02 U       | 59.5 J             |        |
|                           |               |             | 1-2                     | DU-13 (1-2) M | --          | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 6.71 J       | 5.0 U        | 4.98 U       | 4.98 U       | 26.4 J             |        |
|                           |               |             | 2-3                     | DU-13 (2-3) M | --          | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 11.97 J      | 5.0 U        | 5.01 U       | 5.01 U       | 31.7 J             |        |
|                           | DU-14         | ISM         | 0-1                     | DU-14 (0-1)   | 08/17/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 5.96 J       | 5.02 J       | 4.94 U       | 4.94 U       | 28.3 J             |        |
|                           |               |             | 1-2                     | DU-14 (1-2)   | 08/17/2022  | 4.80 U                   | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U       | 4.80 U             |        |
|                           |               |             | 2-3                     | DU-14 (2-3)   | 08/17/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U             |        |
|                           | DU-15         | ISM         | 0-1                     | DU-15 (0-1)   | 08/19/2022  | 4.92 U                   | 4.92 U       | 4.92 U       | 4.92 U       | 4.92 U       | 7.09 J       | 4.92 U       | 4.92 U       | 4.92 U       | 26.8 J             |        |
|                           |               |             | 1-2                     | DU-15 (1-2)   | 08/19/2022  | 4.77 U                   | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U             |        |
|                           |               |             | 2-3                     | DU-15 (2-3)   | 08/19/2022  | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U             |        |
|                           | DU-16         | ISM         | 0-1                     | DU-16 (0-1)A  | 09/12/2022  | 4.75 U                   | 4.75 U       | 4.75 U       | 4.75 U       | 4.75 U       | 7.47 J       | 7.39 J       | 4.75 U       | 4.75 U       | 31.5 J             |        |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)B  | 09/12/2022  | 4.79 U                   | 4.79 U       | 4.79 U       | 4.79 U       | 4.79 U       | 6.65 J       | 5.69 J       | 4.79 U       | 4.79 U       | 29.1 J             |        |
|                           |               |             | 0-1 FR                  | DU-16 (0-1)C  | 09/12/2022  | 5.02 U                   | 5.02 U       | 5.02 U       | 5.02 U       | 5.02 U       | 8.66 J       | 8.33 J       | 5.02 U       | 5.02 U       | 34.6 J             |        |
|                           |               |             | 0-1                     | DU-16 (0-1) M | --          | 4.81 U                   | 4.81 U       | 4.81 U       | 4.81 U       | 4.81 U       | 5.68 J       | 5.66 J       | 4.81 U       | 4.81 U       | 13.7 J             |        |
|                           |               |             | 1-2                     | DU-16 (1-2)   | 11/07/2022  | 4.91 U                   | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U       | 4.91 U             |        |
|                           | DU-17         | ISM         | 2-3                     | DU-16 (2-3)   | 11/07/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U             |        |
|                           |               |             | 0-1                     | DU-17 (0-1)   | 09/02/2022  | 5.04 U                   | 5.04 U       | 5.04 U       | 5.04 U       | 5.04 U       | 5.53 J       | 5.04 U       | 5.04 U       | 5.04 U       | 25.7 J             |        |
|                           |               |             | 1-2                     | DU-17 (1-2)   | 09/02/2022  | 5.03 U                   | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U       | 5.03 U             |        |
|                           | DU-18         | ISM         | 2-3                     | DU-17 (2-3)   | 09/02/2022  | 4.86 U                   | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U       | 4.86 U             | 4.86 U |
|                           |               |             | 0-1                     | DU-18 (0-1)A  | 09/29/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 8.94 J       | 4.94 U       | 4.94 U       | 4.94 U       | 28.7 J             |        |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)B  | 09/29/2022  | 4.87 U                   | 4.87 U       | 4.87 U       | 4.87 U       | 4.87 U       | 38.9 JN      | 4.87 U       | 4.87 U       | 4.87 U       | 58.4 J             |        |
|                           |               |             | 0-1 FR                  | DU-18 (0-1)C  | 09/29/2022  | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 20.8 J       | 10.1 U       | 5.06 U       | 5.06 U       | 43.6 J             |        |
|                           |               |             | 1-2                     | DU-18 (1-2)A  | 09/30/2022  | 4.62 U                   | 4.62 U       | 4.62 U       | 4.62 U       | 4.62 U       | 12.2 J       | 5.19 J       | 4.62 U       | 4.62 U       | 33.6 J             |        |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)B  | 09/30/2022  | 4.68 U                   | 4.68 U       | 4.68 U       | 4.68 U       | 4.68 U       | 7.79 J       | 4.68 U       | 4.68 U       | 4.68 U       | 26.5 J             |        |
|                           |               |             | 1-2 FR                  | DU-18 (1-2)C  | 09/30/2022  | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U             |        |
|                           |               |             | 2-3                     | DU-18 (2-3)A  | 10/03/2022  | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 5.92 J       | 4.93 U       | 4.93 U       | 4.93 U       | 25.6 J             |        |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)B  | 10/03/2022  | 4.89 U                   | 4.89 U       | 4.89 U       | 4.89 U       | 4.89 U       | 10.1 J       | 4.89 U       | 4.89 U       | 4.89 U       | 29.7 J             |        |
|                           |               |             | 2-3 FR                  | DU-18 (2-3)C  | 10/03/2022  | 4.87 U                   | 4.87 U       | 4.87 U       | 4.87 U       | 4.87 U       | 12.1 J       | 4.87 U       | 4.87 U       | 4.87 U       | 31.6 J             |        |
|                           |               |             | 0-1                     | DU-18 (0-1) M | --          | 5.06 U                   | 5.06 U       | 5.06 U       | 5.06 U       | 5.06 U       | 22.9 J       | 10.1 U       | 5.06 U       | 5.06 U       | 43.5 J             |        |
|                           |               |             | 1-2                     | DU-18 (1-2) M | --          | 4.75 U                   | 4.75 U       | 4.75 U       | 4.75 U       | 4.75 U       | 8.32 J       | 4.94 J       | 4.75 U       | 4.75 U       | 21.7 J             |        |
|                           |               |             | 2-3                     | DU-18 (2-3) M | --          | 4.93 U                   | 4.93 U       | 4.93 U       | 4.93 U       | 4.93 U       | 9.37 J       | 4.93 U       | 4.93 U       | 4.93 U       | 29.0 J             |        |
|                           | DU-19         | ISM         | 0-1                     | DU-19 (0-1)   | 09/06/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 116          | 20.8 U       | 4.98 U       | 4.98 U       | 144                |        |
|                           |               |             | 1-2                     | DU-19 (1-2)   | 09/06/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 8.64 J       | 10.0 U       | 5.00 U       | 5.00 U       | 31.1 J             |        |
|                           |               |             | 2-3                     | DU-19 (2-3)   | 09/06/2022  | 5.05 U                   | 5.05 U       | 5.05 U       | 5.05 U       | 5.05 U       | 16.3 J       | 22.8 J       | 5.05 U       | 5.05 U       | 56.8 J             |        |
|                           | DU-20         | ISM         | 0-1                     | DU-20 (0-1)   | 10/18/2022  | 4.98 U                   | 4.98 U       | 4.98 U       | 4.98 U       | 4.98 U       | 11.1 J       | 10.5 J       | 4.98 U       | 4.98 U       | 39.0 J             |        |
|                           |               |             | 1-2                     | DU-20 (1-2)   | 10/18/2022  | 4.96 U                   | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U       | 4.96 U             |        |
|                           |               |             | 2-3                     | DU-20 (2-3)   | 10/18/2022  | 5.01 U                   | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U       | 5.01 U             |        |
|                           | DU-21         | ISM         | 0-1                     | DU-21 (0-1)   | 09/08/2022  | 4.94 U                   | 4.94 U       | 4.94 U       | 4.94 U       | 4.94 U       | 16.0 J       | 15.9 J       | 4.94 U       | 4.94 U       | 49.2 J             |        |
|                           |               |             | 1-2                     | DU-21 (1-2)   | 09/08/2022  | 4.82 U                   | 4.82 U       | 4.82 U       | 4.82 U       | 4.82 U       | 6.73 J       | 12.8 J       | 4.82 U       | 4.82 U       | 36.4 J             |        |
|                           |               |             | 2-3                     | DU-21 (2-3)   | 09/08/2022  | 5.00 U                   | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U       | 5.00 U             |        |

Please see notes at end of table.

Table 5b  
Soil Results - PCB Aroclors - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location              | Decision Unit        | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |     |                    |    |
|------------------------------|----------------------|-------------|-------------------------|---------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----|--------------------|----|
|                              |                      |             |                         |               |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |     | Total PCB Aroclors |    |
|                              |                      |             |                         |               |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 |     |                    |    |
| Human Health ISM PRG         |                      |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 740 |                    |    |
| Human Health ISM Hot Spot    |                      |             |                         |               |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | --  | 40,000             |    |
| Central Parcel               | DU-22                | ISM         | 0-1                     | DU-22 (0-1)A  | 10/13/2022  | 4.85                     | U            | 4.85         | U            | 4.85         | U            | 4.85         | U            | 4.85         | U   | 4.85               | U  |
|                              |                      |             | 0-1 FR                  | DU-22 (0-1)B  | 10/13/2022  | 4.97                     | U            | 4.97         | U            | 4.97         | U            | 15.3         | J            | 9.91         | J   | 4.97               | U  |
|                              |                      |             | 0-1 FR                  | DU-22 (0-1)C  | 10/13/2022  | 5.01                     | U            | 5.01         | U            | 5.01         | U            | 9.15         | J            | 17.1         | J   | 5.01               | U  |
|                              |                      |             | 1-2                     | DU-22 (1-2)A  | 10/14/2022  | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 4.99         | U            | 4.99         | U   | 4.99               | U  |
|                              |                      |             | 1-2 FR                  | DU-22 (1-2)B  | 10/14/2022  | 4.98                     | U            | 4.98         | U            | 4.98         | U            | 4.98         | U            | 5.92         | J   | 4.98               | U  |
|                              |                      |             | 1-2 FR                  | DU-22 (1-2)C  | 10/14/2022  | 4.91                     | U            | 4.91         | U            | 4.91         | U            | 4.91         | U            | 4.91         | U   | 4.91               | U  |
|                              |                      |             | 2-3                     | DU-22 (2-3)A  | 10/14/2022  | 5.03                     | U            | 5.03         | U            | 5.03         | U            | 5.03         | U            | 5.03         | U   | 5.03               | U  |
|                              |                      |             | 2-3 FR                  | DU-22 (2-3)B  | 10/14/2022  | 4.79                     | U            | 4.79         | U            | 4.79         | U            | 4.79         | U            | 4.79         | U   | 4.79               | U  |
|                              |                      |             | 2-3 FR                  | DU-22 (2-3)C  | 10/14/2022  | 5.00                     | U            | 5.00         | U            | 5.00         | U            | 5.00         | U            | 5.00         | U   | 5.00               | U  |
|                              |                      |             | 0-1                     | DU-22 (0-1) M | --          | 5.01                     | U            | 5.01         | U            | 5.01         | U            | 5.01         | U            | 9.77         | J   | 10.6               | J  |
|                              |                      |             | 1-2                     | DU-22 (1-2) M | --          | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 4.99         | U            | 5.27         | J   | 4.99               | U  |
|                              |                      |             | 2-3                     | DU-22 (2-3) M | --          | 5.03                     | U            | 5.03         | U            | 5.03         | U            | 5.03         | U            | 5.03         | U   | 5.03               | U  |
|                              | DU-23                | ISM         | 0-1                     | DU-23 (0-1)   | 10/12/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 22.1         | J            | 19.3         | J   | 5.05               | U  |
|                              |                      |             | 1-2                     | DU-23 (1-2)   | 10/12/2022  | 4.96                     | U            | 4.96         | U            | 4.96         | U            | 4.96         | U            | 6.63         | J   | 4.96               | U  |
|                              |                      |             | 2-3                     | DU-23 (2-3)   | 10/12/2022  | 4.95                     | U            | 4.95         | U            | 4.95         | U            | 4.95         | U            | 4.95         | U   | 4.95               | U  |
|                              | DU-24                | ISM         | 0-1                     | DU-24 (0-1)   | 09/21/2022  | 5.03                     | U            | 5.03         | U            | 5.03         | U            | 12.5         |              | 5.03         | U   | 5.03               | U  |
|                              |                      |             | 1-2                     | DU-24 (1-2)   | 09/21/2022  | 4.91                     | U            | 4.91         | U            | 4.91         | U            | 4.91         | U            | 4.91         | U   | 4.91               | U  |
|                              |                      |             | 2-3                     | DU-24 (2-3)   | 09/21/2022  | 4.83                     | U            | 4.83         | U            | 4.83         | U            | 4.83         | U            | 4.83         | U   | 4.83               | U  |
|                              | DU-25                | ISM         | 0-1                     | DU-25 (0-1)   | 09/23/2022  | 4.95                     | U            | 4.95         | U            | 4.95         | U            | 32.1         | J            | 15.9         | J   | 4.95               | U  |
|                              |                      |             | 1-2                     | DU-25 (1-2)   | 09/23/2022  | 5.04                     | U            | 5.04         | U            | 5.04         | U            | 5.04         | U            | 5.04         | U   | 5.04               | U  |
|                              |                      |             | 2-3                     | DU-25 (2-3)   | 09/23/2022  | 4.98                     | UJ           | 4.98         | UJ           | 4.98         | UJ           | 4.98         | UJ           | 4.98         | UJ  | 4.98               | UJ |
|                              | DU-26                | ISM         | 0-1                     | DU-26 (0-1)A  | 11/09/2022  | 4.93                     | U            | 4.93         | U            | 4.93         | U            | 4.93         | U            | 122          | J   | 4.93               | U  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)B  | 11/09/2022  | 4.71                     | U            | 4.71         | U            | 4.71         | U            | 20.8         | J            | 46.7         | J   | 4.71               | U  |
|                              |                      |             | 0-1 FR                  | DU-26 (0-1)C  | 11/09/2022  | 4.96                     | U            | 4.96         | U            | 4.96         | U            | 23.6         | J            | 48.1         | J   | 4.96               | U  |
|                              |                      |             | 1-2                     | DU-26 (1-2)A  | 11/10/2022  | 4.88                     | U            | 4.88         | U            | 4.88         | U            | 4.88         | U            | 51           |     | 4.88               | U  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)B  | 11/10/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 17.5         | J            | 27.5         | J   | 5.05               | U  |
|                              |                      |             | 1-2 FR                  | DU-26 (1-2)C  | 11/10/2022  | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 4.99         | U            | 40.2         |     | 4.99               | U  |
|                              |                      |             | 2-3                     | DU-26 (2-3)A  | 11/11/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 5.05         | U            | 14.9         |     | 5.05               | U  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)B  | 11/11/2022  | 4.93                     | U            | 4.93         | U            | 4.93         | U            | 4.93         | U            | 169          |     | 4.93               | U  |
|                              |                      |             | 2-3 FR                  | DU-26 (2-3)C  | 11/11/2022  | 5.01                     | U            | 5.01         | U            | 5.01         | U            | 5.01         | U            | 21.5         |     | 5.01               | U  |
|                              |                      |             | 0-1                     | DU-26 (0-1) M | --          | 4.96                     | U            | 4.96         | U            | 4.96         | U            | 16.4         | J            | 72.3         | J   | 4.96               | U  |
|                              |                      |             | 1-2                     | DU-26 (1-2) M | --          | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 9.12         | J            | 39.6         | J   | 5.05               | U  |
|                              |                      |             | 2-3                     | DU-26 (2-3) M | --          | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 5.05         | U            | 68.5         | J   | 5.05               | U  |
| Central Parcel Concrete Slab | DU-42 (Within DU-16) | Composite   | 0-1                     | DU-42 (0-1)   | 11/30/2022  | 5.00                     | U            | 5.00         | U            | 5.00         | U            | 5.00         | U            | 5.00         | U   | 5.00               | U  |
|                              |                      |             | 1-2                     | DU-42 (1-2)   | 11/30/2022  | 5.00                     | U            | 5.00         | U            | 5.00         | U            | 5.00         | U            | 5.00         | U   | 5.00               | U  |
|                              |                      |             | 2-3                     | DU-42 (2-3)   | 11/30/2022  | 4.91                     | U            | 4.91         | U            | 4.91         | U            | 4.91         | U            | 4.91         | U   | 4.91               | U  |
| East Parcel                  | DU-27                | ISM         | 0-1                     | DU-27 (0-1)   | 10/05/2022  | 4.97                     | U            | 4.97         | U            | 4.97         | U            | 124          | J            | 19.9         | J   | 4.97               | U  |
|                              |                      |             | 1-2                     | DU-27 (1-2)   | 10/05/2022  | 4.88                     | U            | 4.88         | U            | 4.88         | U            | 148          | JN           | 4.88         | U   | 4.88               | U  |
|                              |                      |             | 2-3                     | DU-27 (2-3)   | 10/05/2022  | 4.92                     | U            | 4.92         | U            | 4.92         | U            | 158          |              | 4.92         | U   | 4.92               | U  |
|                              | DU-28                | ISM         | 0-1                     | DU-28 (0-1)   | 09/14/2022  | 5.10                     | U            | 5.10         | U            | 5.10         | U            | 79.9         |              | 5.10         | U   | 5.10               | U  |
|                              |                      |             | 1-2                     | DU-28 (1-2)   | 09/14/2022  | 5.09                     | U            | 5.09         | U            | 5.09         | U            | 51.4         |              | 5.09         | U   | 5.09               | U  |
|                              |                      |             | 2-3                     | DU-28 (2-3)   | 09/14/2022  | 5.10                     | U            | 5.10         | U            | 5.10         | U            | 16.6         |              | 5.10         | U   | 5.10               | U  |
|                              | DU-29                | ISM         | 0-1                     | DU-29 (0-1)   | 09/15/2022  | 4.91                     | U            | 4.91         | U            | 4.91         | U            | 4.91         | U            | 5.34         | J   | 4.91               | U  |
|                              |                      |             | 1-2                     | DU-29 (1-2)   | 09/15/2022  | 4.73                     | U            | 4.73         | U            | 4.73         | U            | 4.73         | U            | 4.73         | U   | 4.73               | U  |
|                              |                      |             | 2-3                     | DU-29 (2-3)   | 09/15/2022  | 4.93                     | U            | 4.93         | U            | 4.93         | U            | 4.93         | U            | 4.93         | U   | 4.93               | U  |
|                              | DU-30                | ISM         | 0-1                     | DU-30 (0-1)   | 09/16/2022  | 5.05                     | U            | 5.05         | U            | 5.05         | U            | 5.57         | J            | 9.23         | J   | 5.05               | U  |
|                              |                      |             | 1-2                     | DU-30 (1-2)   | 09/16/2022  | 5.04                     | U            | 5.04         | U            | 5.04         | U            | 5.04         | U            | 5.04         | U   | 5.04               | U  |
|                              |                      |             | 2-3                     | DU-30 (2-3)   | 09/16/2022  | 5.07                     | UJ           | 5.07         | UJ           | 5.07         | UJ           | 5.07         | UJ           | 5.07         | UJ  | 5.07               | UJ |
|                              | DU-31                | ISM         | 0-1                     | DU-31 (0-1)   | 11/03/2022  | 4.67                     | U            | 4.67         | U            | 4.67         | U            | 7            | J            | 4.67         | U   | 4.67               | U  |
|                              |                      |             | 1-2                     | DU-31 (1-2)   | 11/03/2022  | 4.99                     | U            | 4.99         | U            | 4.99         | U            | 9.85         | J            | 4.99         | U   | 4.99               | U  |
|                              |                      |             | 2-3                     | DU-31 (2-3)   | 11/03/2022  | 4.62                     | U            | 4.62         | U            | 4.62         | U            | 8.51         | J            | 4.62         | U   | 4.62               | U  |
|                              | DU-32                | ISM         | 0-1                     | DU-32 (0-1)   | 09/22/2022  | 4.84                     | U            | 4.84         | U            | 4.84         | U            | 4.84         | U            | 4.84         | U   | 4.84               | U  |
|                              |                      |             | 1-2                     | DU-32 (1-2)   | 09/22/2022  | 4.79                     | U            | 4.79         | U            | 4.79         | U            | 4.79         | U            | 4.79         | U   | 4.79               | U  |
|                              |                      |             | 2-3                     | DU-32 (2-3)   | 09/22/2022  | 4.65                     | U            | 4.65         | U            | 4.65         | U            | 4.65         | U            | 4.65         | U   | 4.65               | U  |
|                              |                      |             | 0-1                     | DU-33 (0-1)   | 09/20/2022  | 4.98                     | U            | 4.98         | U            | 4.98         | U            | 65.3         | JN           | 4.98         | U   | 4.98               | U  |

Table 5b  
 Soil Results - PCB Aroclors - Human Health Screening  
 Willamette Cove Upland Facility  
 Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID   | Sample Date | PCBs by EPA Method 8082A |              |              |              |              |              |              |              |              |                    |  |  |
|---------------------------|---------------|-------------|-------------------------|-------------|-------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|--|--|
|                           |               |             |                         |             |             | Concentrations in µg/kg  |              |              |              |              |              |              |              |              |                    |  |  |
|                           |               |             |                         |             |             | Aroclor 1016             | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Aroclor 1262 | Aroclor 1268 | Total PCB Aroclors |  |  |
| Human Health ISM PRG      |               |             |                         |             |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 740                |  |  |
| Human Health ISM Hot Spot |               |             |                         |             |             | --                       | --           | --           | --           | --           | --           | --           | --           | --           | 40,000             |  |  |
|                           | DU-33         | ISM         | 1-2                     | DU-33 (1-2) | 09/20/2022  | 4.77 U                   | 4.77 U       | 4.77 U       | 4.77 U       | 4.77 U       | 31.0 JN      | 4.77 U       | 4.77 U       | 4.77 U       | 50.1 J             |  |  |
|                           |               |             | 2-3                     | DU-33 (2-3) | 09/20/2022  | 4.66 U                   | 4.66 U       | 4.66 U       | 4.66 U       | 4.66 U       | 39.3 JN      | 4.66 U       | 4.66 U       | 4.66 U       | 57.9 J             |  |  |

Please see notes at end of table.

Table 5b  
Soil Results - PCB Aroclors - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit           | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |    |              |    |              |    |              |    |              |    |              |    |              |     |              |    |              |    |                    |   |
|---------------------------|-------------------------|-------------|-------------------------|---------------|-------------|--------------------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|-----|--------------|----|--------------|----|--------------------|---|
|                           |                         |             |                         |               |             | Concentrations in µg/kg  |    |              |    |              |    |              |    |              |    |              |    |              |     |              |    |              |    |                    |   |
|                           |                         |             |                         |               |             | Aroclor 1016             |    | Aroclor 1221 |    | Aroclor 1232 |    | Aroclor 1242 |    | Aroclor 1248 |    | Aroclor 1254 |    | Aroclor 1260 |     | Aroclor 1262 |    | Aroclor 1268 |    | Total PCB Aroclors |   |
| Human Health ISM PRG      |                         |             |                         |               | --          |                          | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | 740 |              |    |              |    |                    |   |
| Human Health ISM Hot Spot |                         |             |                         |               | --          |                          | -- |              | -- |              | -- |              | -- |              | -- |              | -- |              | --  | 40,000       |    |              |    |                    |   |
| East Parcel               | DU-34                   | ISM         | 0-1                     | DU-34 (0-1)   | 09/27/2022  | 5.01                     | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 13.0         | JN | 5.01         | U   | 5.01         | U  | 5.01         | U  | 33.0               | J |
|                           |                         |             | 1-2                     | DU-34 (1-2)   | 09/27/2022  | 5.02                     | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 20.0         | JN | 5.02         | UJ  | 5.02         | UJ | 5.02         | UJ | 47.6               | J |
|                           |                         |             | 2-3                     | DU-34 (2-3)   | 09/27/2022  | 4.98                     | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U   | 4.98         | U  | 4.98         | U  | 4.98               | U |
|                           | DU-35                   | ISM         | 0-1                     | DU-35 (0-1)   | 10/07/2022  | 4.95                     | U  | 4.95         | U  | 4.95         | U  | 4.95         | U  | 4.95         | U  | 4.95         | U  | 8.55         | J   | 4.95         | U  | 4.95         | U  | 28.4               | J |
|                           |                         |             | 1-2                     | DU-35 (1-2)   | 10/07/2022  | 5.01                     | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 15.1         | J  | 6.97         | J   | 5.01         | U  | 5.01         | U  | 39.6               | J |
|                           |                         |             | 2-3                     | DU-35 (2-3)   | 10/07/2022  | 5.04                     | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U  | 5.04         | U   | 5.04         | U  | 5.04         | U  | 5.04               | U |
|                           | DU-36                   | ISM         | 0-1                     | DU-36 (0-1)   | 11/01/2022  | 4.66                     | U  | 4.66         | U  | 4.66         | U  | 4.66         | U  | 4.66         | U  | 6.34         | J  | 5.21         | J   | 4.66         | U  | 4.66         | U  | 27.9               | J |
|                           |                         |             | 1-2                     | DU-36 (1-2)   | 11/01/2022  | 4.96                     | U  | 4.96         | U  | 4.96         | U  | 4.96         | U  | 4.96         | U  | 4.96         | U  | 4.96         | U   | 4.96         | U  | 4.96         | U  | 4.96               | U |
|                           |                         |             | 2-3                     | DU-36 (2-3)   | 11/01/2022  | 5.06                     | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 8.15         | J  | 5.06         | U   | 5.06         | U  | 5.06         | U  | 28.4               | J |
|                           | DU-38                   | ISM         | 0-1                     | DU-38 (0-1)A  | 11/14/2022  | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 10.3         | J  | 9.57         | J   | 5.03         | U  | 5.03         | U  | 37.5               | J |
|                           |                         |             | 0-1 FR                  | DU-38 (0-1)B  | 11/14/2022  | 5.00                     | U  | 5.00         | U  | 5.00         | U  | 5.00         | U  | 5.00         | U  | 10.7         | J  | 13.0         | J   | 5.00         | U  | 5.00         | U  | 41.2               | J |
|                           |                         |             | 0-1 FR                  | DU-38 (0-1)C  | 11/14/2022  | 4.99                     | U  | 4.99         | U  | 4.99         | U  | 4.99         | U  | 4.99         | U  | 10.5         | J  | 13.1         | J   | 4.99         | U  | 4.99         | U  | 41.1               | J |
|                           |                         |             | 1-2                     | DU-38 (1-2)A  | 11/16/2022  | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 14           | J  | 12.8         | J   | 5.03         | U  | 5.03         | U  | 44.4               | J |
|                           |                         |             | 1-2 FR                  | DU-38 (1-2)B  | 11/16/2022  | 5.02                     | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 5.02         | U  | 13.7         | J  | 5.74         | J   | 5.02         | U  | 5.02         | U  | 37.0               | J |
|                           |                         |             | 1-2 FR                  | DU-38 (1-2)C  | 11/16/2022  | 5.05                     | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 9.88         | J  | 7.51         | J   | 5.05         | U  | 5.05         | U  | 35.1               | J |
|                           |                         |             | 2-3                     | DU-38 (2-3)A  | 11/17/2022  | 5.05                     | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 9.82         | J  | 5.05         | U   | 5.05         | U  | 5.05         | U  | 30.0               | J |
|                           |                         |             | 2-3 FR                  | DU-38 (2-3)B  | 11/17/2022  | 4.96                     | U  | 4.96         | U  | 4.96         | U  | 4.96         | U  | 4.96         | U  | 7.88         | J  | 4.96         | U   | 4.96         | U  | 4.96         | U  | 27.7               | J |
|                           |                         |             | 2-3 FR                  | DU-38 (2-3)C  | 11/17/2022  | 5.07                     | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 6.14         | J  | 5.07         | U   | 5.07         | U  | 5.07         | U  | 26.4               | J |
|                           |                         |             | 0-1                     | DU-38 (0-1) M | --          | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 10.5         | J  | 11.9         | J   | 5.03         | U  | 5.03         | U  | 39.9               | J |
|                           |                         |             | 1-2                     | DU-38 (1-2) M | --          | 5.05                     | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 5.05         | U  | 12.5         | J  | 8.7          | J   | 5.05         | U  | 5.05         | U  | 38.8               | J |
|                           |                         |             | 2-3                     | DU-38 (2-3) M | --          | 5.07                     | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 7.95         | J  | 5.1          | U   | 5.07         | U  | 5.07         | U  | 28.1               | J |
| East Parcel Concrete Slab | DU-37                   | Composite   | 0-1                     | DU-37 (0-1)   | 11/28/2022  | 4.93                     | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U   | 4.93         | U  | 4.93         | U  | 4.93               | U |
|                           |                         |             | 1-2                     | DU-37 (1-2)   | 11/28/2022  | 4.98                     | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U  | 4.98         | U   | 4.98         | U  | 4.98         | U  | 4.98               | U |
|                           |                         |             | 2-3                     | DU-37 (2-3)   | 11/28/2022  | 5.06                     | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U  | 5.06         | U   | 5.06         | U  | 5.06         | U  | 5.06               | U |
|                           | DU-39                   | Composite   | 0-1                     | DU-39 (0-1)   | 11/29/2022  | 4.86                     | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U   | 4.86         | U  | 4.86         | U  | 4.86               | U |
|                           |                         |             | 1-2                     | DU-39 (1-2)   | 11/29/2022  | 4.86                     | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U  | 4.86         | U   | 4.86         | U  | 4.86         | U  | 4.86               | U |
|                           |                         |             | 2-3                     | DU-39 (2-3)   | 11/29/2022  | 4.9                      | U  | 4.9          | U  | 4.9          | U  | 4.9          | U  | 4.9          | U  | 4.9          | U  | 4.9          | U   | 4.9          | U  | 4.9          | U  | 4.90               | U |
|                           | DU-40                   | Composite   | 0-1                     | DU-40 (0-1)   | 11/18/2022  | 4.93                     | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U  | 4.93         | U   | 4.93         | U  | 4.93         | U  | 4.93               | U |
|                           |                         |             | 1-2                     | DU-40 (1-2)   | 11/18/2022  | 5.01                     | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U   | 5.01         | U  | 5.01         | U  | 5.01               | U |
|                           |                         |             | 2-3                     | DU-40 (2-3)   | 11/18/2022  | 5.01                     | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U  | 5.01         | U   | 5.01         | U  | 5.01         | U  | 5.01               | U |
|                           | DU-43<br>(Within DU-31) | Composite   | 0-1                     | DU-43 (0-1)   | 11/21/2022  | 5.07                     | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U   | 5.07         | U  | 5.07         | U  | 5.07               | U |
|                           |                         |             | 1-2                     | DU-43 (1-2)   | 11/21/2022  | 5.07                     | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U  | 5.07         | U   | 5.07         | U  | 5.07         | U  | 5.07               | U |
|                           |                         |             | 2-3                     | DU-43 (2-3)   | 11/21/2022  | 5.03                     | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U  | 5.03         | U   | 5.03         | U  | 5.03         | U  | 5.03               | U |
|                           | DU-44<br>(Within DU-36) | Composite   | 0-1                     | DU-44 (0-1)   | 12/01/2022  | 4.89                     | U  | 4.89         | U  | 4.89         | U  | 4.89         | U  | 4.89         | U  | 4.89         | U  | 4.89         | U   | 4.89         | U  | 4.89         | U  | 4.89               | U |
|                           |                         |             | 1-2                     | DU-44 (1-2)   | 12/01/2022  | 4.88                     | U  | 4.88         | U  | 4.88         | U  | 4.88         | U  | 4.88         | U  | 4.88         | U  | 4.88         | U   | 4.88         | U  | 4.88         | U  | 4.88               | U |
|                           |                         |             | 2-3                     | DU-44 (2-3)   | 12/01/2022  | 4.81                     | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 4.81         | U  | 4.81         | U   | 4.81         | U  | 4.81         | U  | 4.81               | U |

Please see notes at end of table.

Table 5b  
Soil Results - PCB Aroclors - Human Health Screening  
Willamette Cove Upland Facility  
Portland, Oregon

| Sample Location           | Decision Unit | Sample Type | Sample Depth (feet bgs) | Sample ID     | Sample Date | PCBs by EPA Method 8082A |   |              |   |              |   |              |   |              |   |              |   |              |   |              |     |              |        |                    |   |
|---------------------------|---------------|-------------|-------------------------|---------------|-------------|--------------------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|-----|--------------|--------|--------------------|---|
|                           |               |             |                         |               |             | Concentrations in µg/kg  |   |              |   |              |   |              |   |              |   |              |   |              |   |              |     |              |        |                    |   |
|                           |               |             |                         |               |             | Aroclor 1016             |   | Aroclor 1221 |   | Aroclor 1232 |   | Aroclor 1242 |   | Aroclor 1248 |   | Aroclor 1254 |   | Aroclor 1260 |   | Aroclor 1262 |     | Aroclor 1268 |        | Total PCB Aroclors |   |
| Human Health ISM PRG      |               |             |                         |               |             | --                       |   | --           |   | --           |   | --           |   | --           |   | --           |   | --           |   | --           | 740 |              |        |                    |   |
| Human Health ISM Hot Spot |               |             |                         |               |             | --                       |   | --           |   | --           |   | --           |   | --           |   | --           |   | --           |   | --           |     | --           | 40,000 |                    |   |
| East Parcel Soil Berms    | DU-41         | ISM         | 0-1                     | DU-41 (0-1)A  | 10/24/2022  | 5.03                     | U | 5.03         | U | 5.03         | U | 5.03         | U | 5.03         | U | 14.5         | J | 12.5         | J | 5.03         | U   | 5.03         | U      | 44.6               | J |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)B  | 10/24/2022  | 4.83                     | U | 4.83         | U | 4.83         | U | 4.83         | U | 4.83         | U | 40.1         | J | 12.1         | J | 4.83         | U   | 4.83         | U      | 69.1               | J |
|                           |               |             | 0-1 FR                  | DU-41 (0-1)C  | 10/24/2022  | 4.88                     | U | 4.88         | U | 4.88         | U | 4.88         | U | 4.88         | U | 21.6         | J | 17.9         | J | 4.88         | U   | 4.88         | U      | 56.6               | J |
|                           |               |             | 1-2                     | DU-41 (1-2)A  | 10/26/2022  | 4.83                     | U | 4.83         | U | 4.83         | U | 4.83         | U | 58.4         | J | 17.3         | J | 4.83         | U | 4.83         | U   | 92.6         | J      |                    |   |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)B  | 10/26/2022  | 4.79                     | U | 4.79         | U | 4.79         | U | 4.79         | U | 12.8         | J | 10.8         | J | 4.79         | U | 4.79         | U   | 40.4         | J      |                    |   |
|                           |               |             | 1-2 FR                  | DU-41 (1-2)C  | 10/26/2022  | 4.94                     | U | 4.94         | U | 4.94         | U | 4.94         | U | 46.6         | J | 12.6         | J | 4.94         | U | 4.94         | U   | 76.5         | J      |                    |   |
|                           |               |             | 2-3                     | DU-41 (2-3)A  | 10/28/2022  | 5.05                     | U | 5.05         | U | 5.05         | U | 5.05         | U | 9.84         | J | 7.82         | J | 5.05         | U | 5.05         | U   | 35.3         | J      |                    |   |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)B  | 10/28/2022  | 4.92                     | U | 4.92         | U | 4.92         | U | 4.92         | U | 5.41         | J | 6.56         | J | 4.92         | U | 4.92         | U   | 29.2         | J      |                    |   |
|                           |               |             | 2-3 FR                  | DU-41 (2-3)C  | 10/28/2022  | 4.90                     | U | 4.90         | U | 4.90         | U | 4.90         | U | 6.60         | J | 20.00        | J | 4.90         | U | 4.90         | U   | 43.8         | J      |                    |   |
|                           |               |             | 0-1                     | DU-41 (0-1) M | --          | 5.03                     | U | 5.03         | U | 5.03         | U | 5.03         | U | 25.4         | J | 14.2         | J | 5.03         | U | 5.03         | U   | 56.8         | J      |                    |   |
|                           |               |             | 1-2                     | DU-41 (1-2) M | --          | 4.94                     | U | 4.94         | U | 4.94         | U | 4.94         | U | 39.3         | J | 13.6         | J | 4.94         | U | 4.94         | U   | 69.8         | J      |                    |   |
|                           |               |             | 2-3                     | DU-41 (2-3) M | --          | 5.05                     | U | 5.05         | U | 5.05         | U | 5.05         | U | 7.28         | J | 11.5         | J | 5.05         | U | 5.05         | U   | 36.1         | J      |                    |   |

**Notes:**

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

PCBs = Polychlorinated biphenyls.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.

µg/kg = Micrograms per kilogram (parts per billion).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.

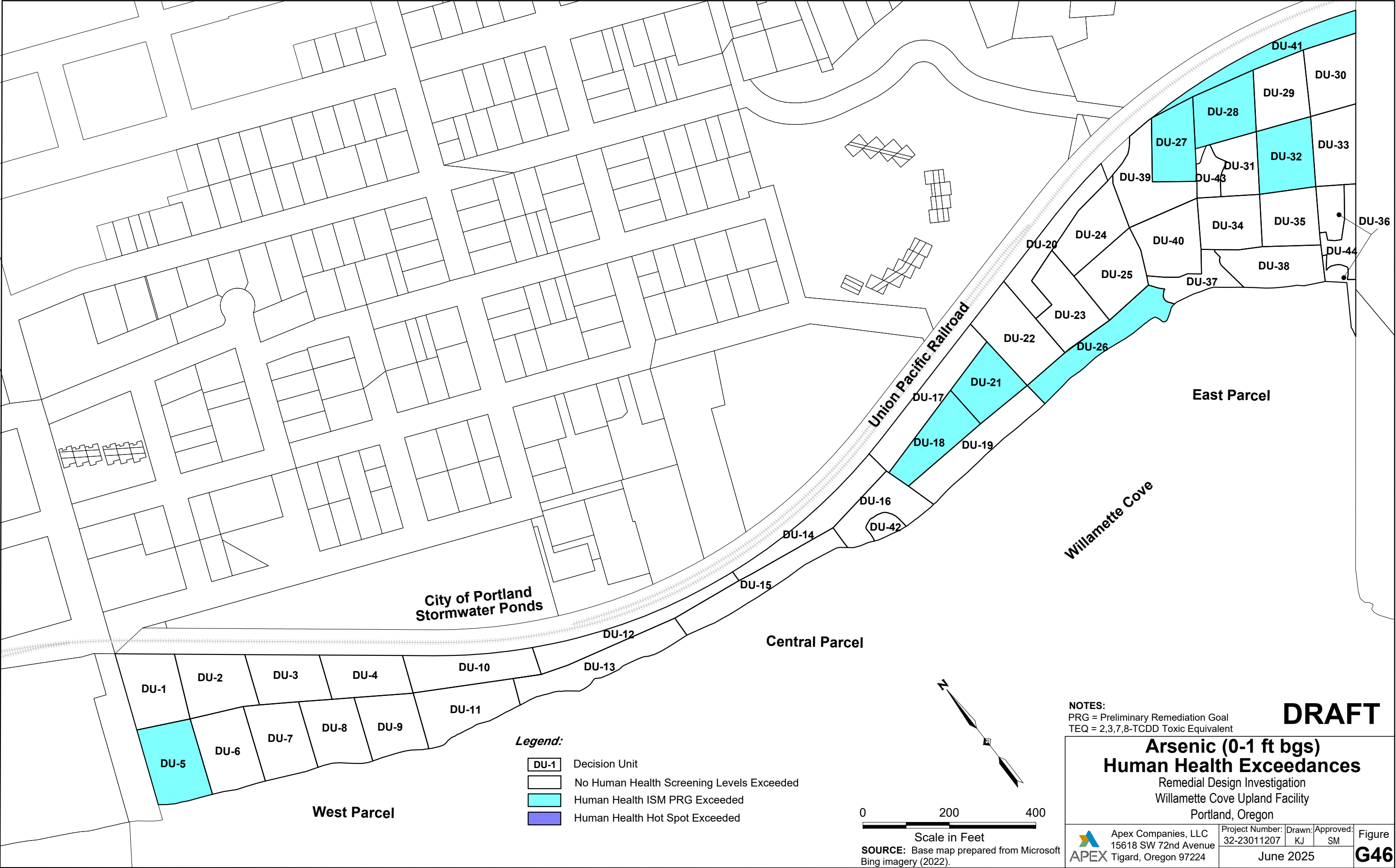
J = Result is estimated.

JN = The analyte was tentatively identified and did not meet method criteria for confirmation.

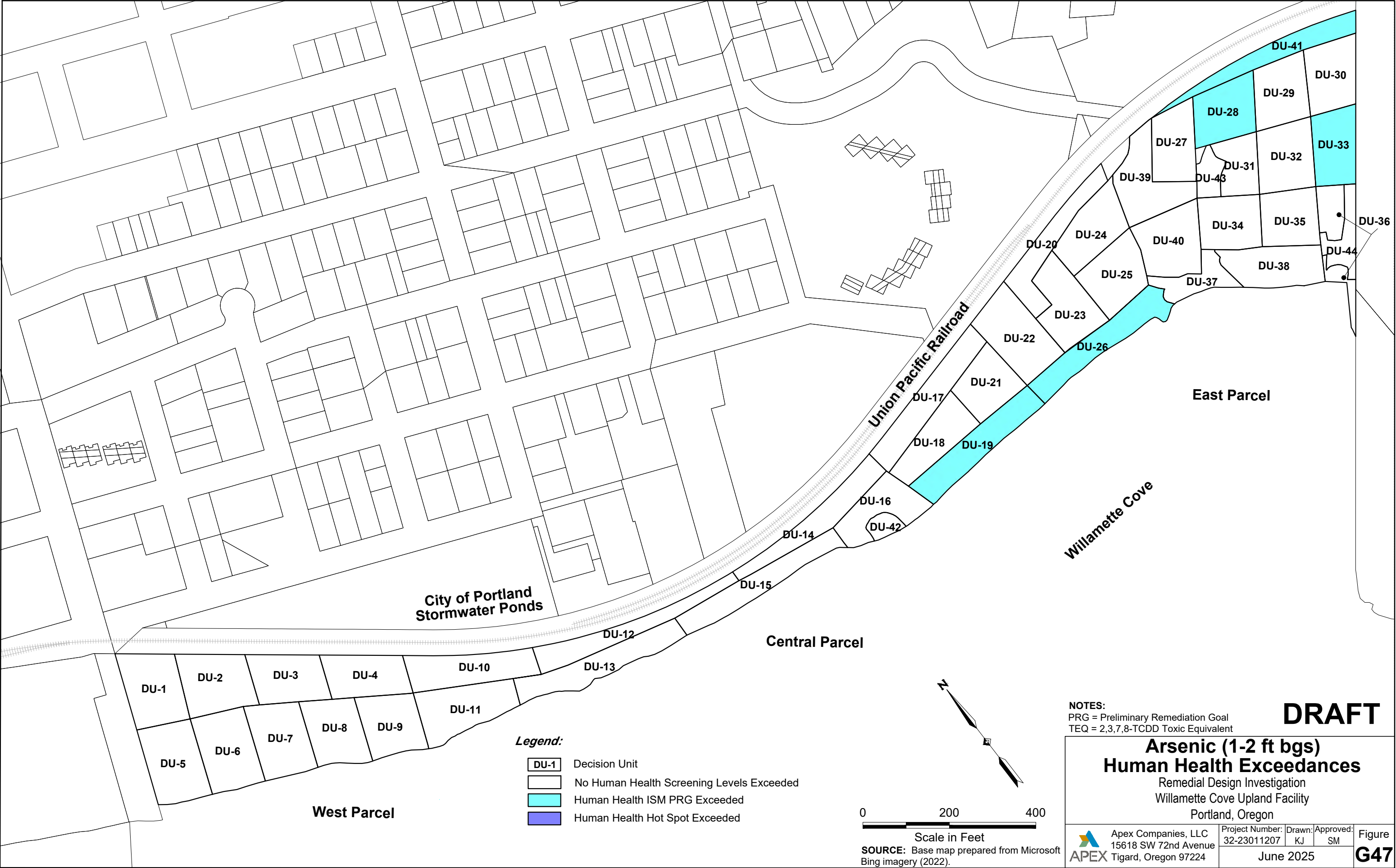
UJ = The analyte was analyzed for but was not detected. However, the detection limit may be inaccurate or imprecise.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

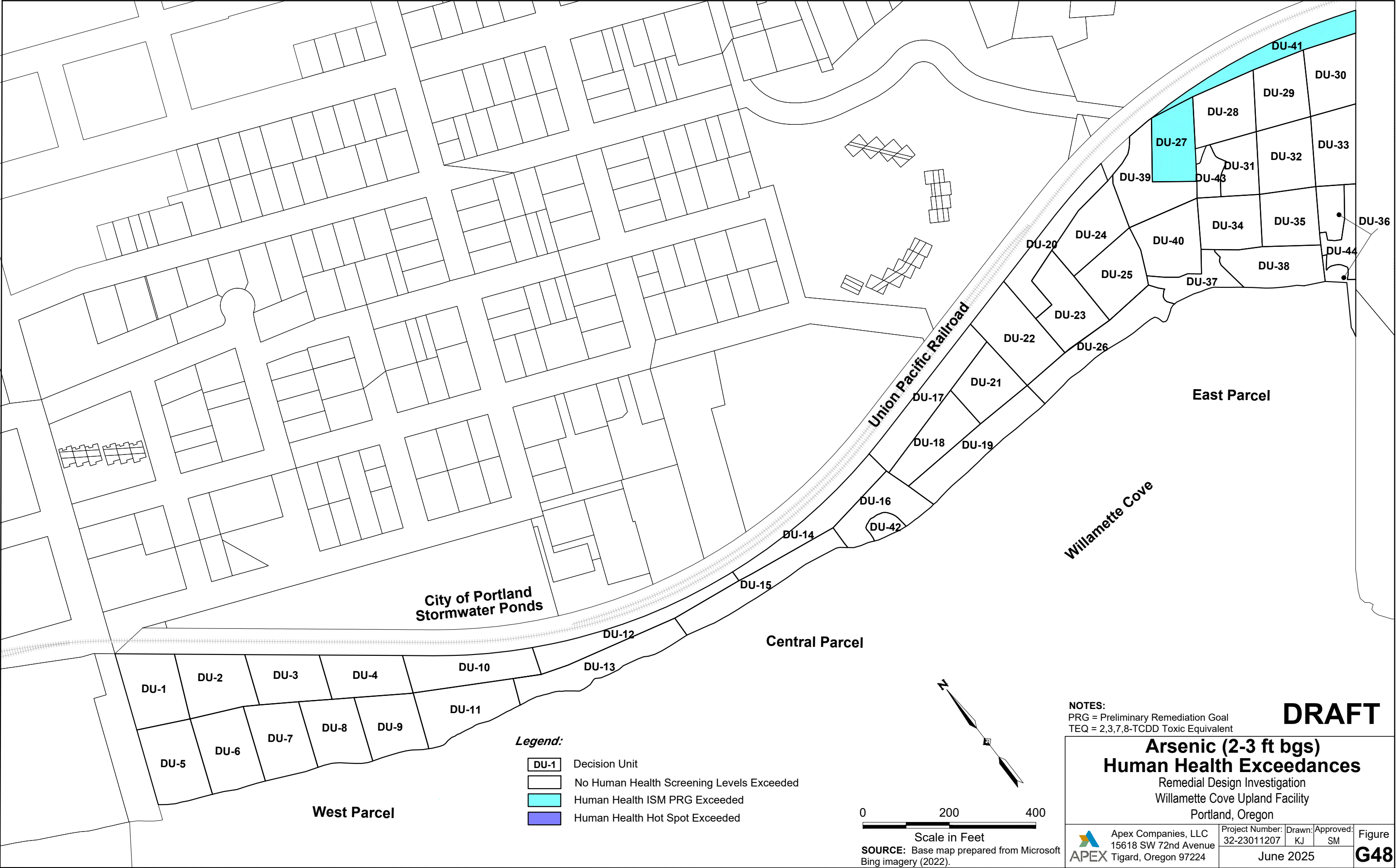
I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\29 Basis of Design Report\RD\ App G Update\RD\ Report - Appendix G46.dwg Modified 4/15/2025 by JPoorre



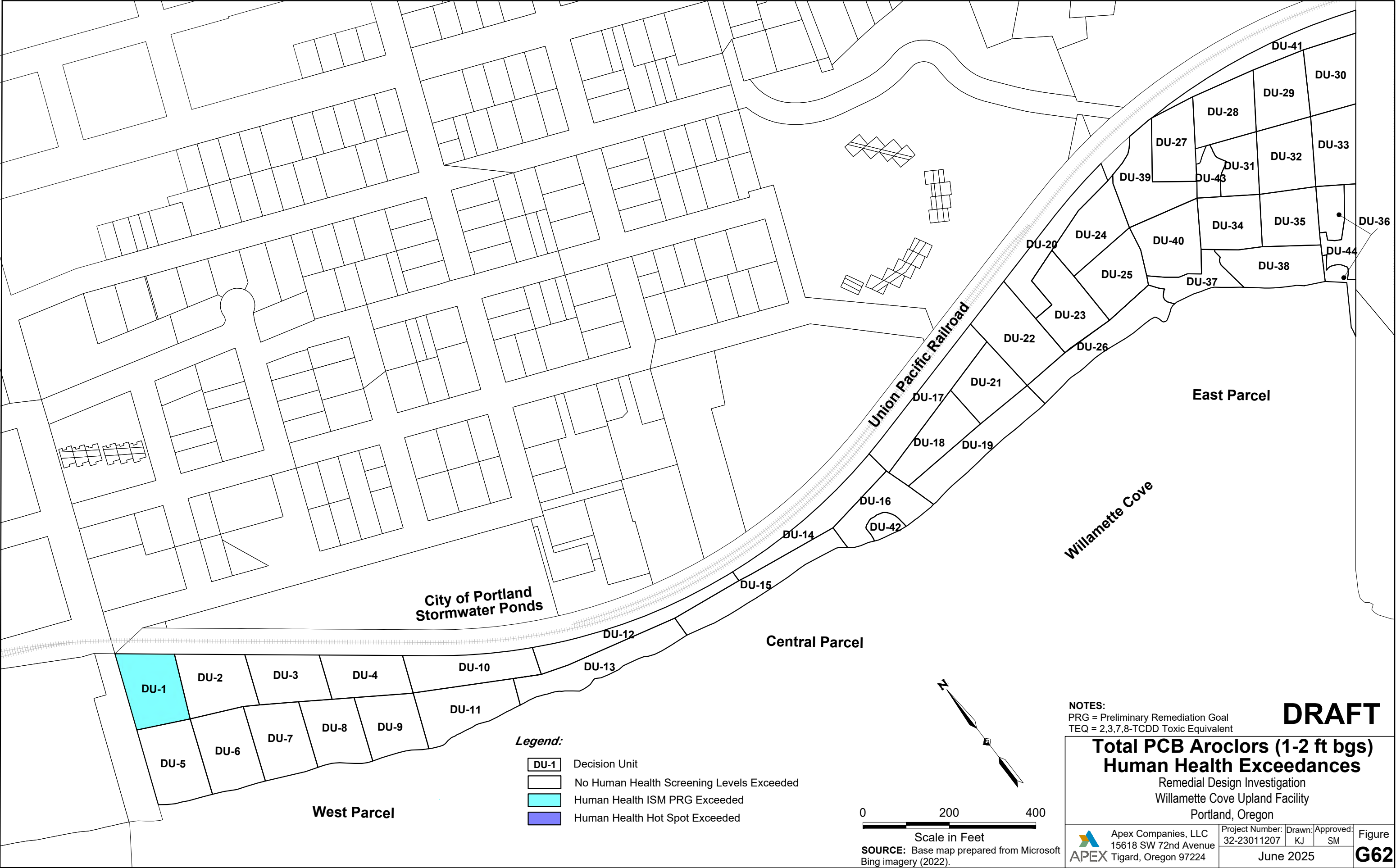
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I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\29 Basis of Design Report\RD\ App G Update\RD\ Report - Appendix G48.dwg Modified 4/15/2025 by JPoores



I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\29 Basis of Design Report\RD\ App G Update\RD\ Report - Appendix G62.dwg Modified 4/15/2025 by JPoorre

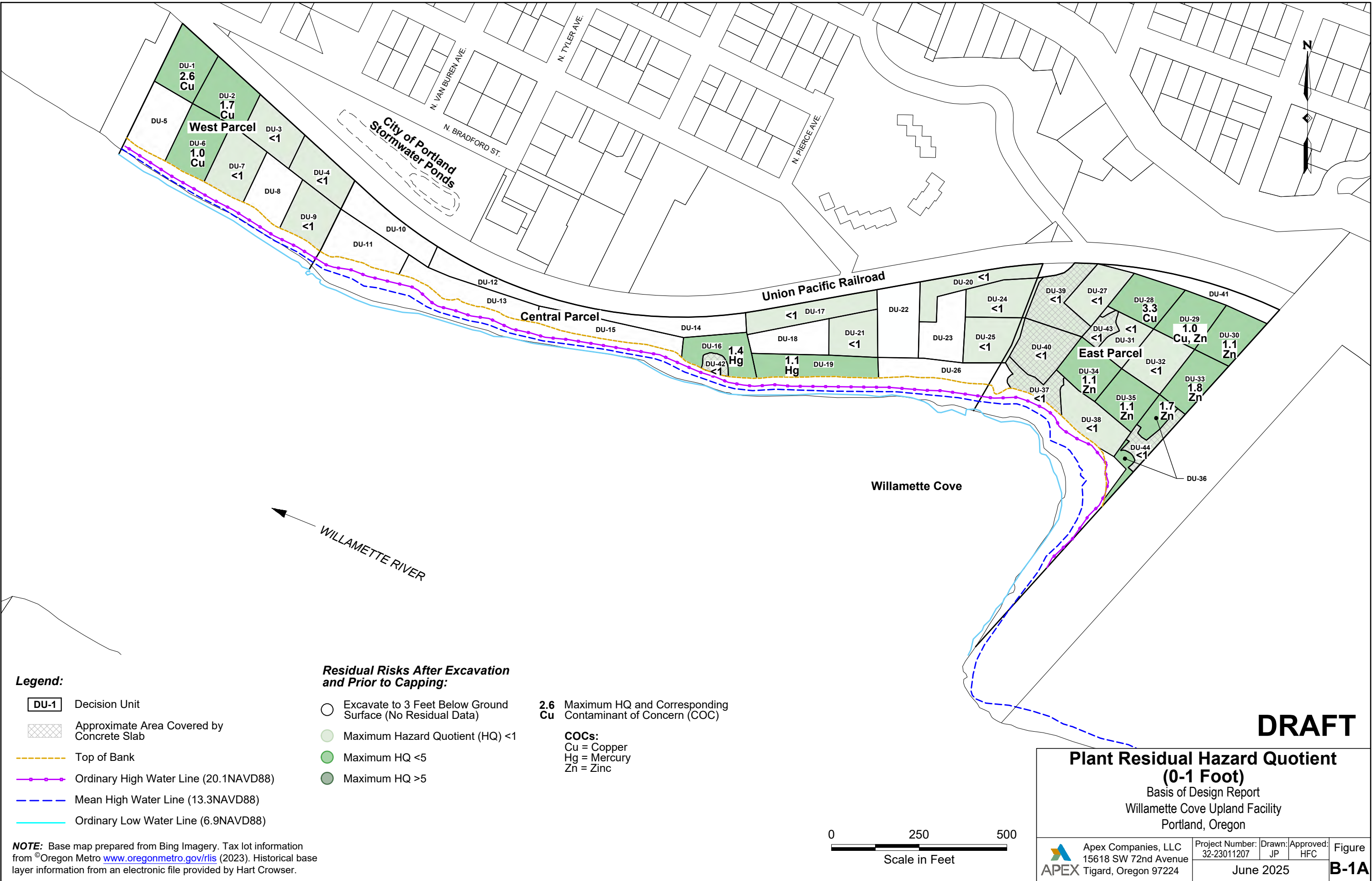


## ***Appendix B***

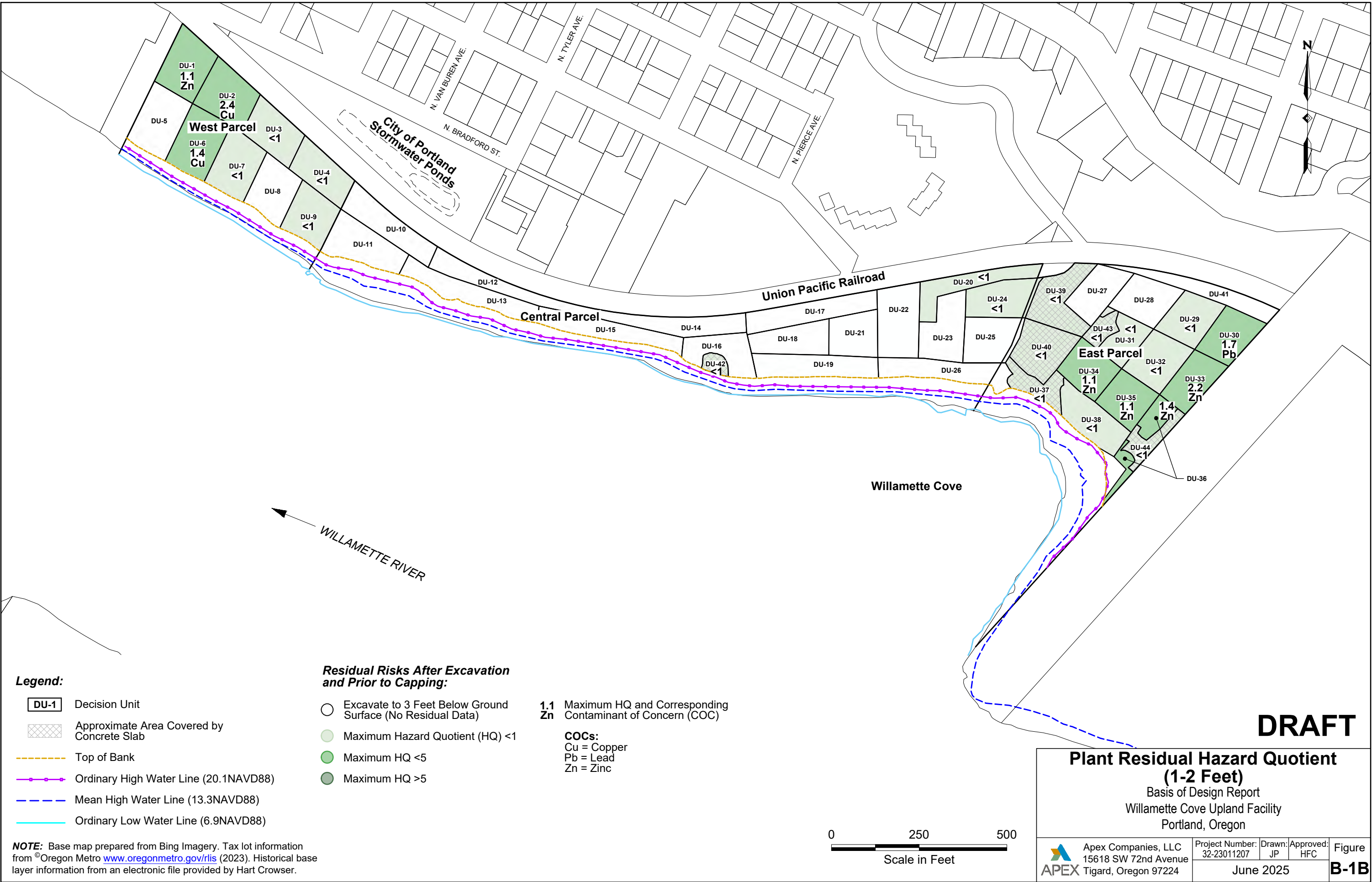
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### **Residual Hazard Quotients and Hazard Indexes for Ecological Receptors**

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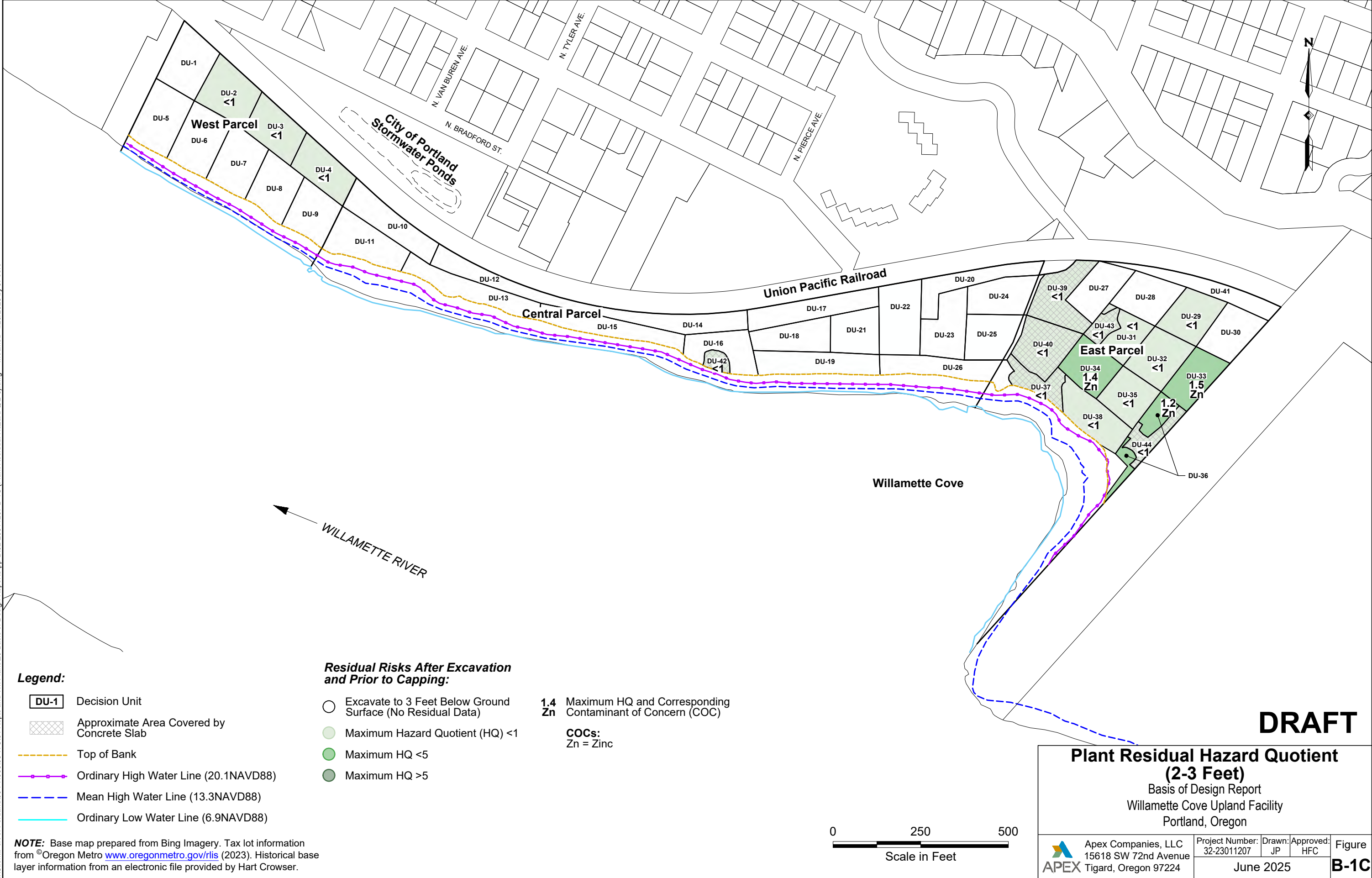
# DRAFT

## Plant Residual Hazard Quotient (1-2 Feet)

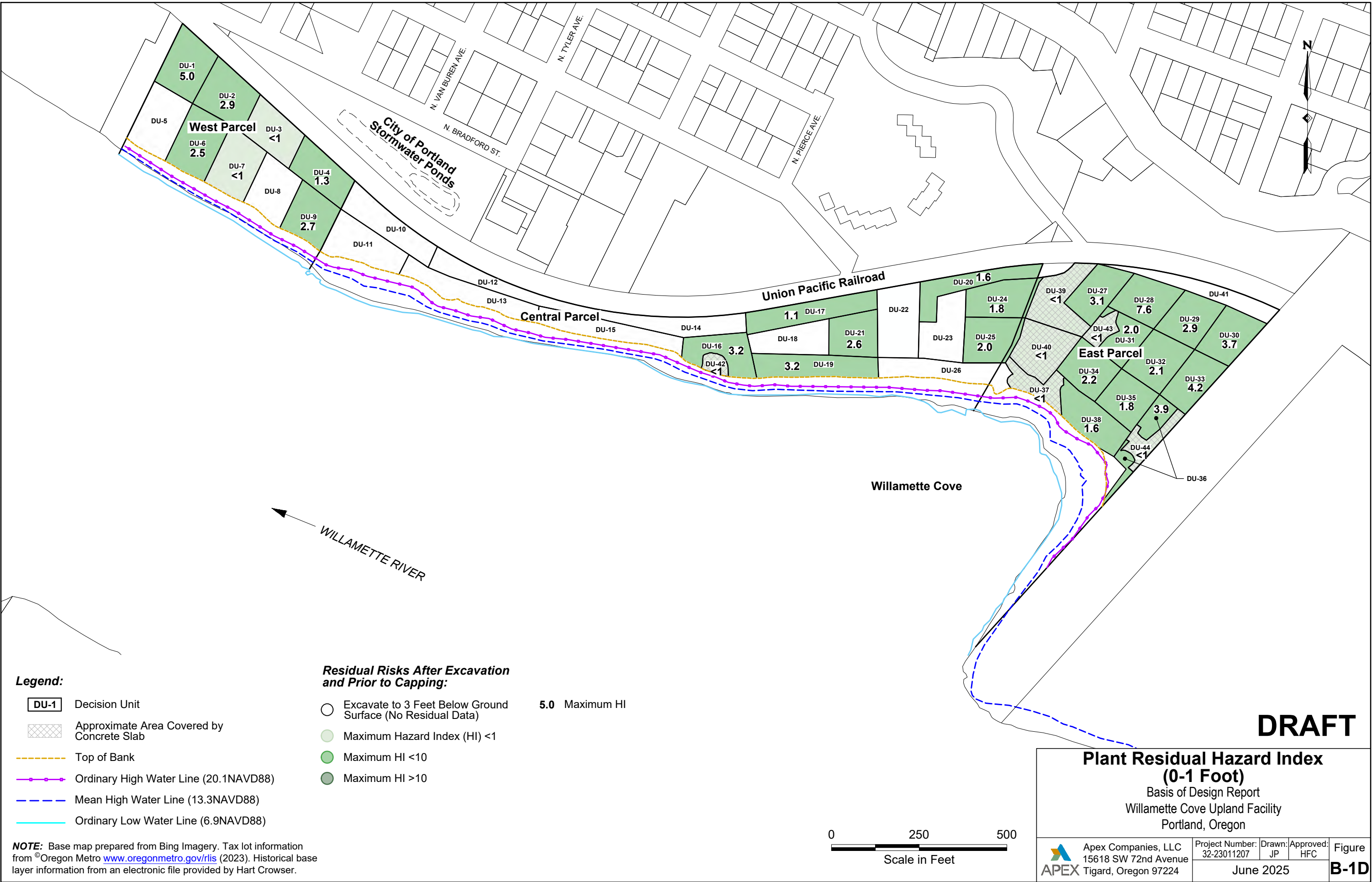
Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon

|                                                                     |                                |              |                  |                       |
|---------------------------------------------------------------------|--------------------------------|--------------|------------------|-----------------------|
| Apex Companies, LLC<br>15618 SW 72nd Avenue<br>Tigard, Oregon 97224 | Project Number:<br>32-23011207 | Drawn:<br>JP | Approved:<br>HFC | Figure<br><b>B-1B</b> |
|                                                                     | June 2025                      |              |                  |                       |

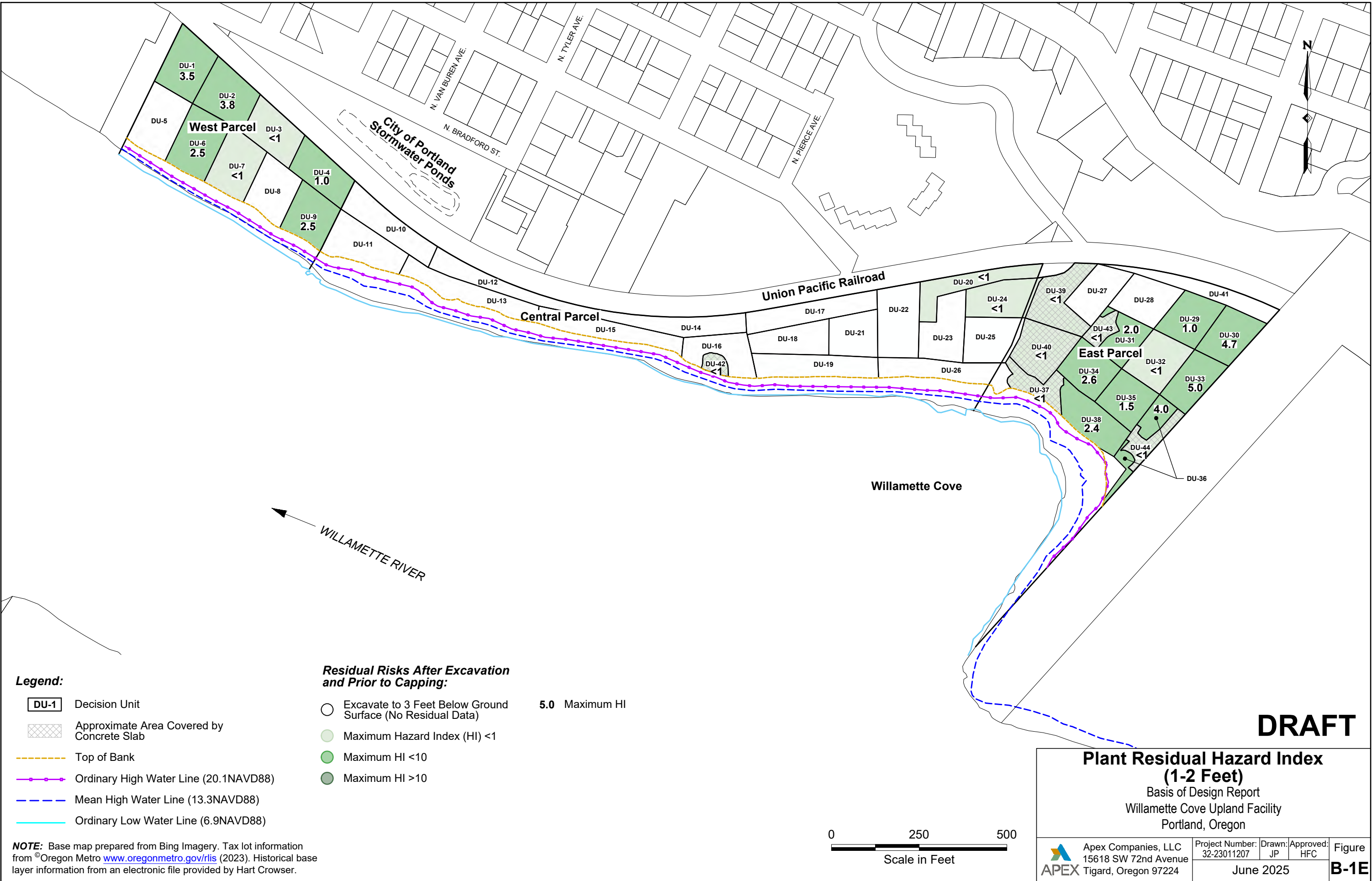
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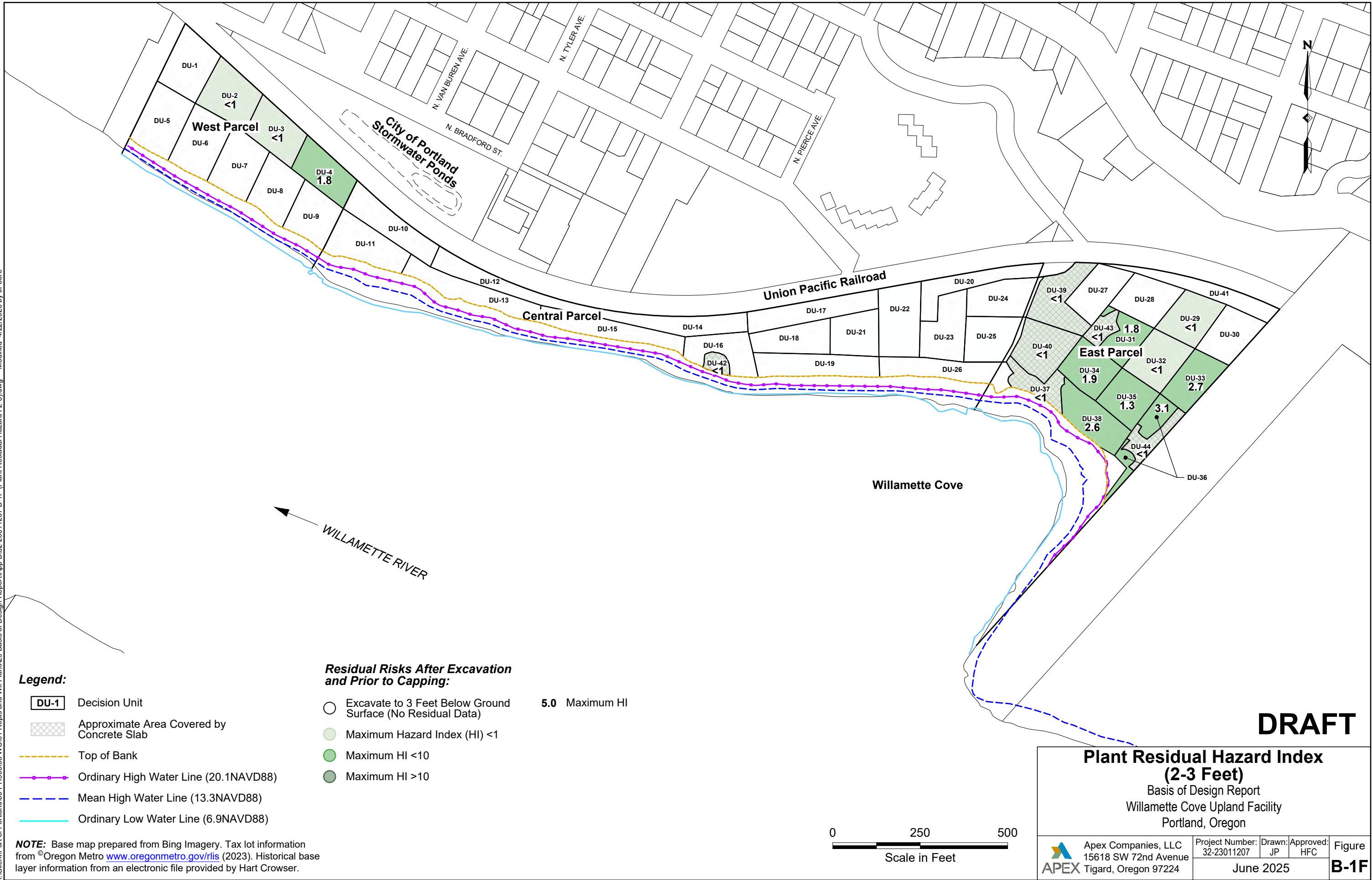
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I:\Client\Port of Portland\00-PH90505 WC\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-1E (Plant Residual Hazard) 1-2.dwg Modified: 4/25/2025 by JPoore



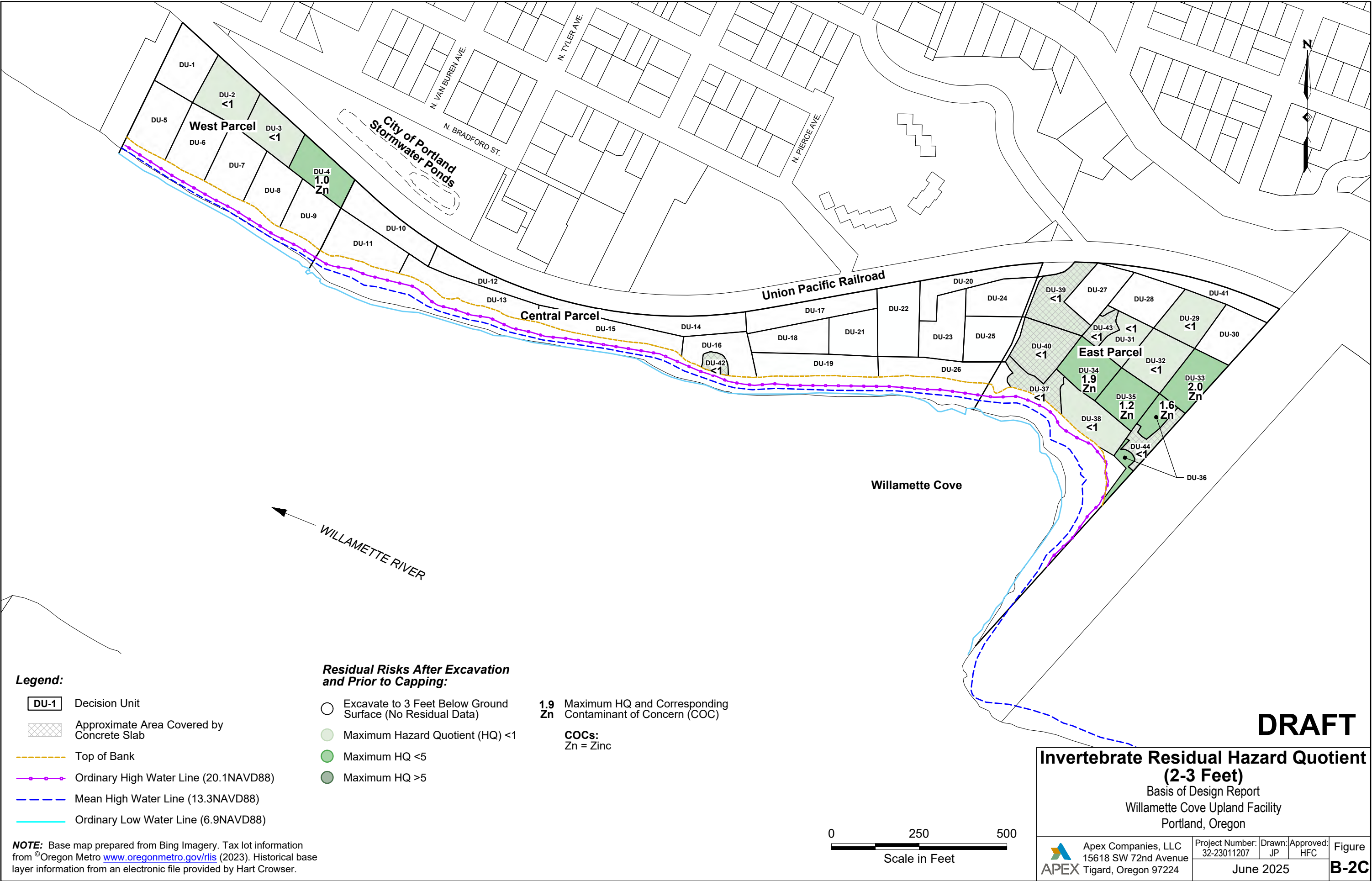
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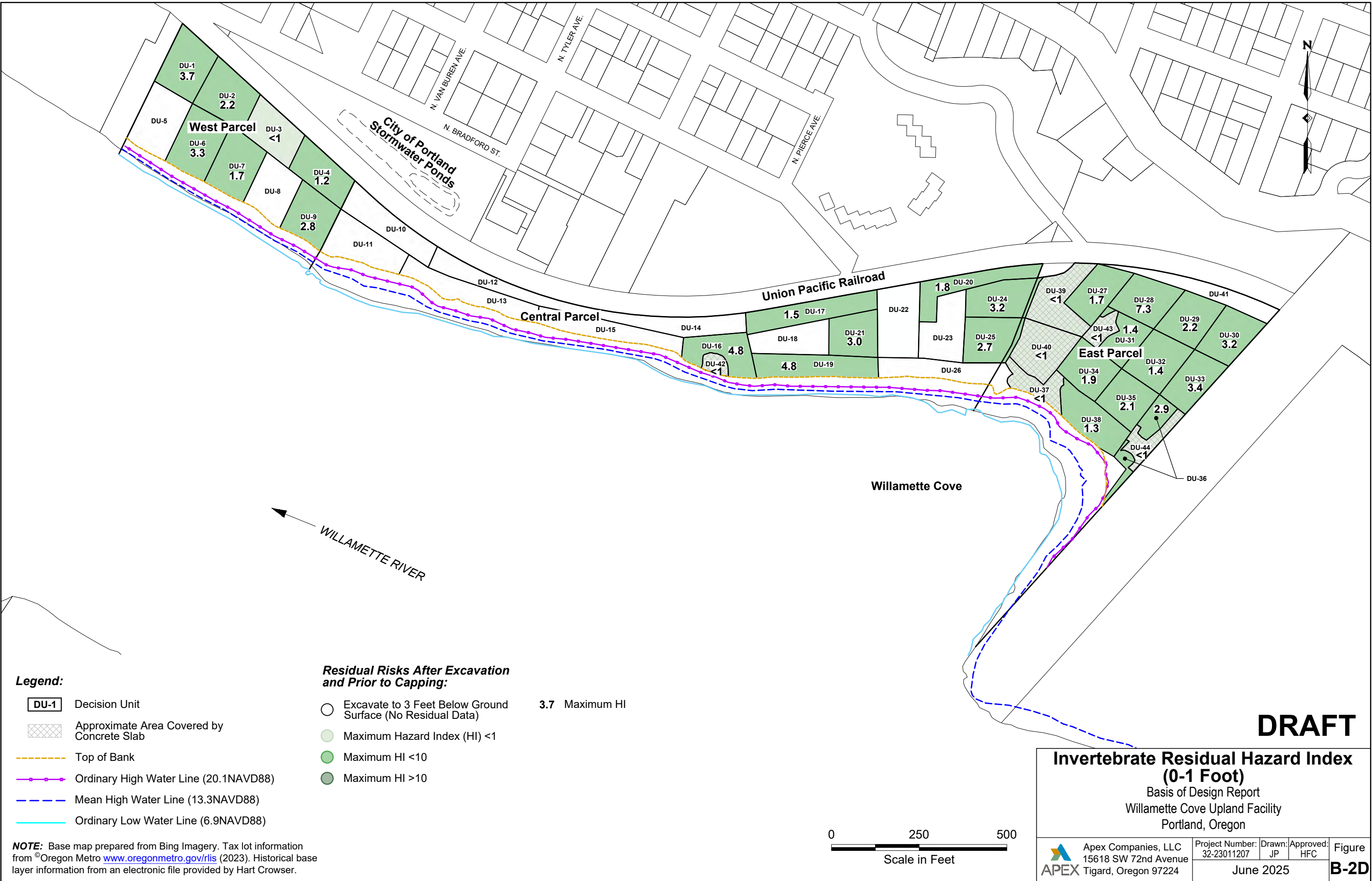




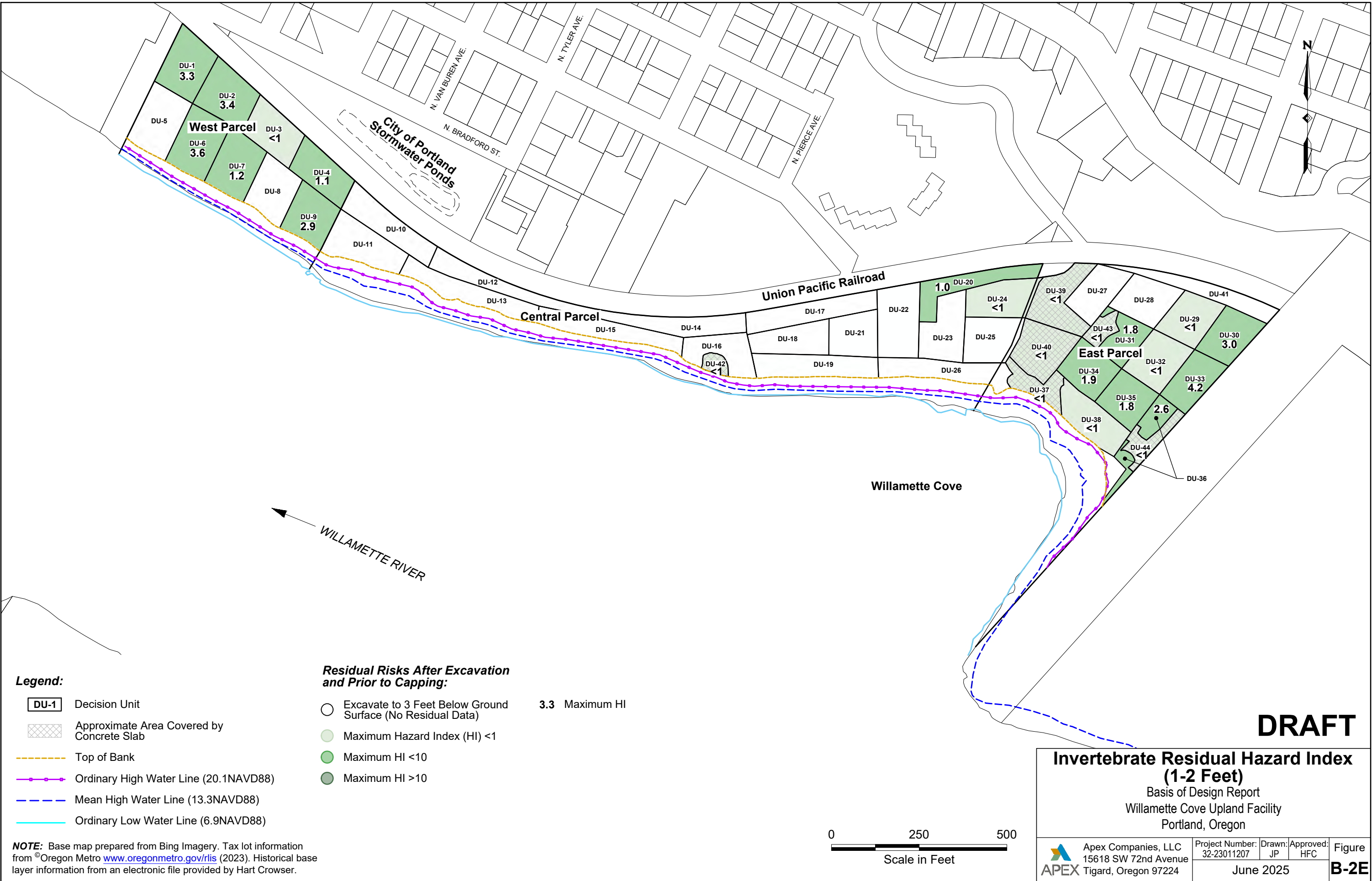
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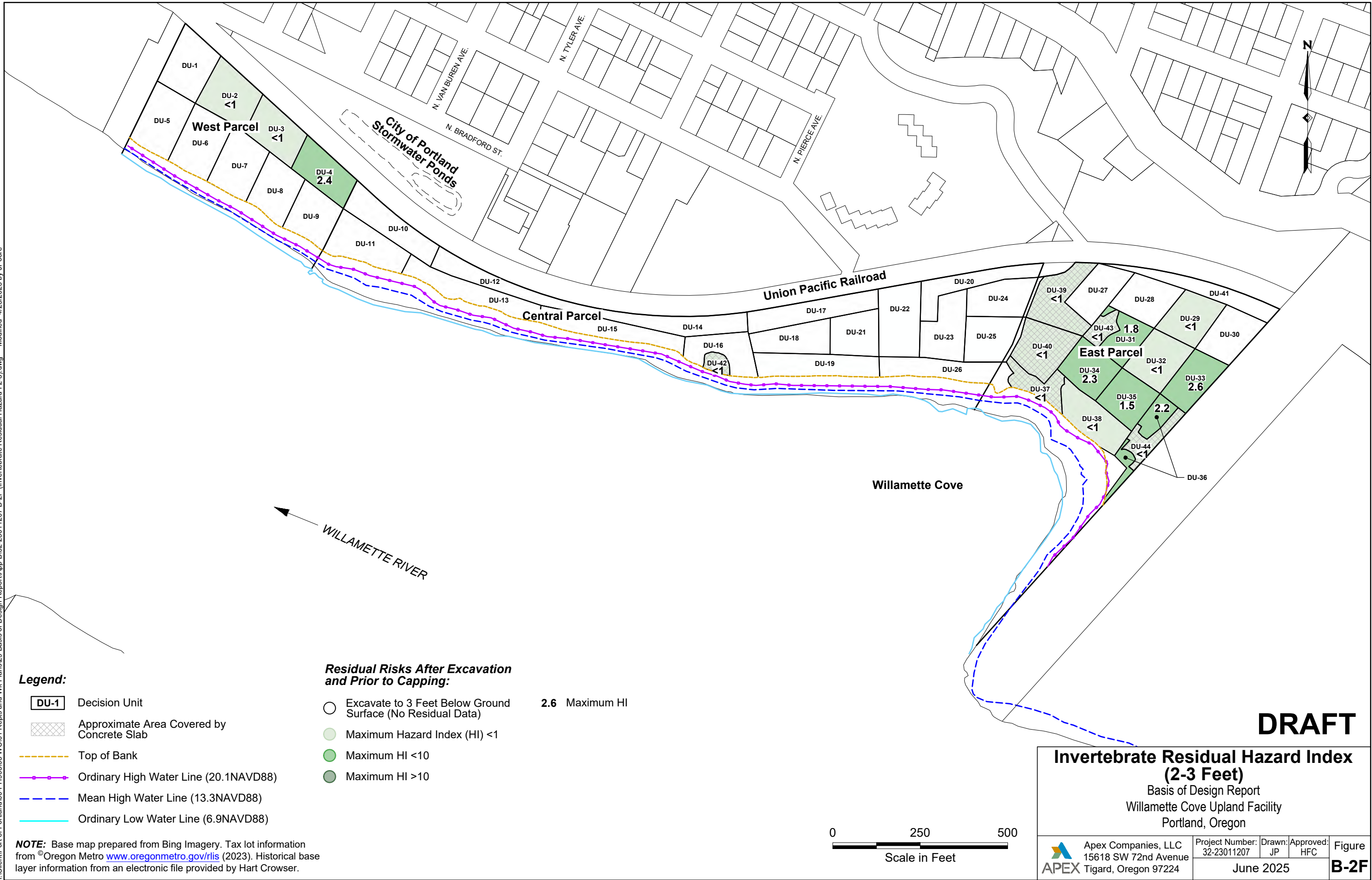
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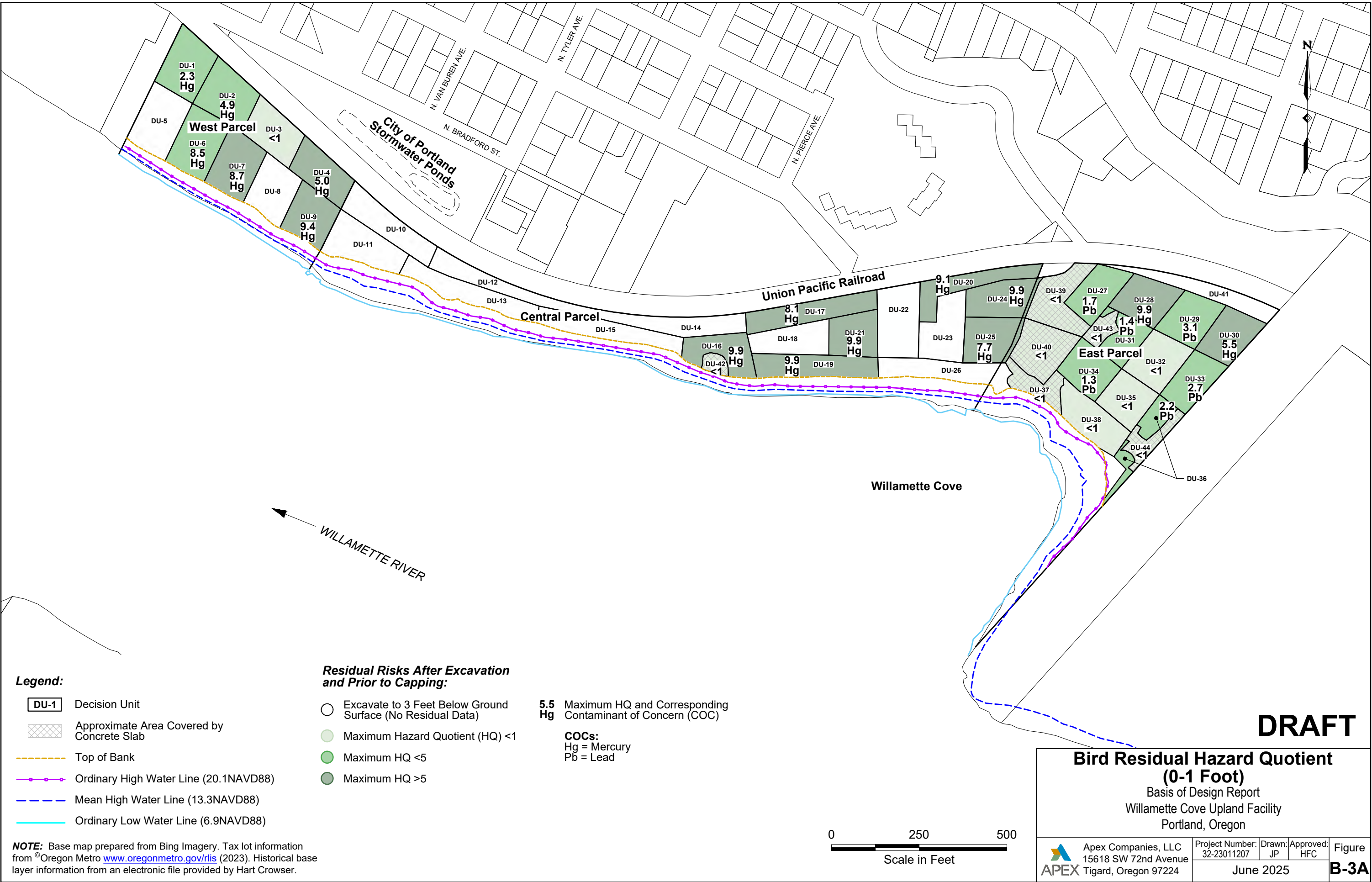
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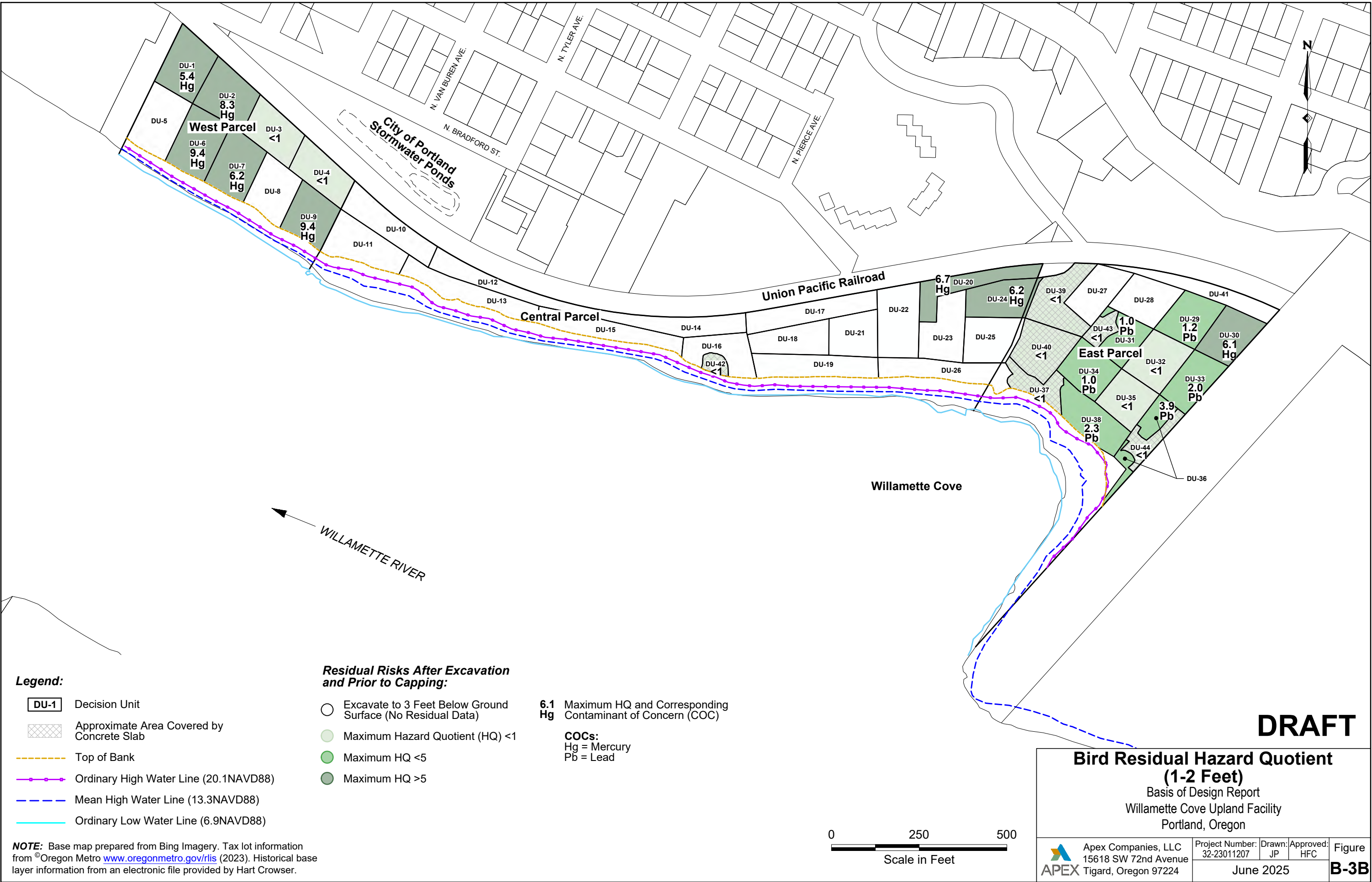
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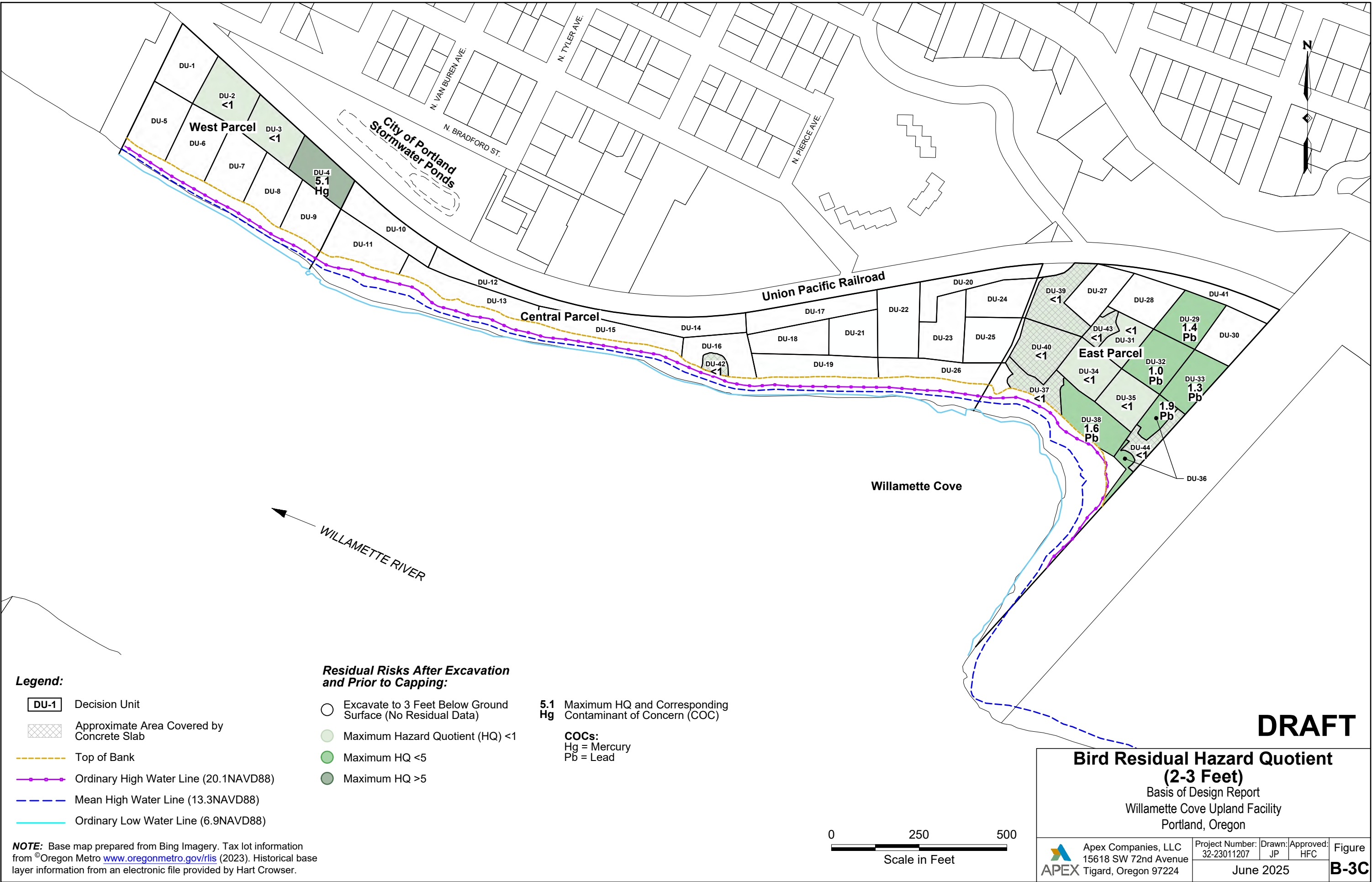
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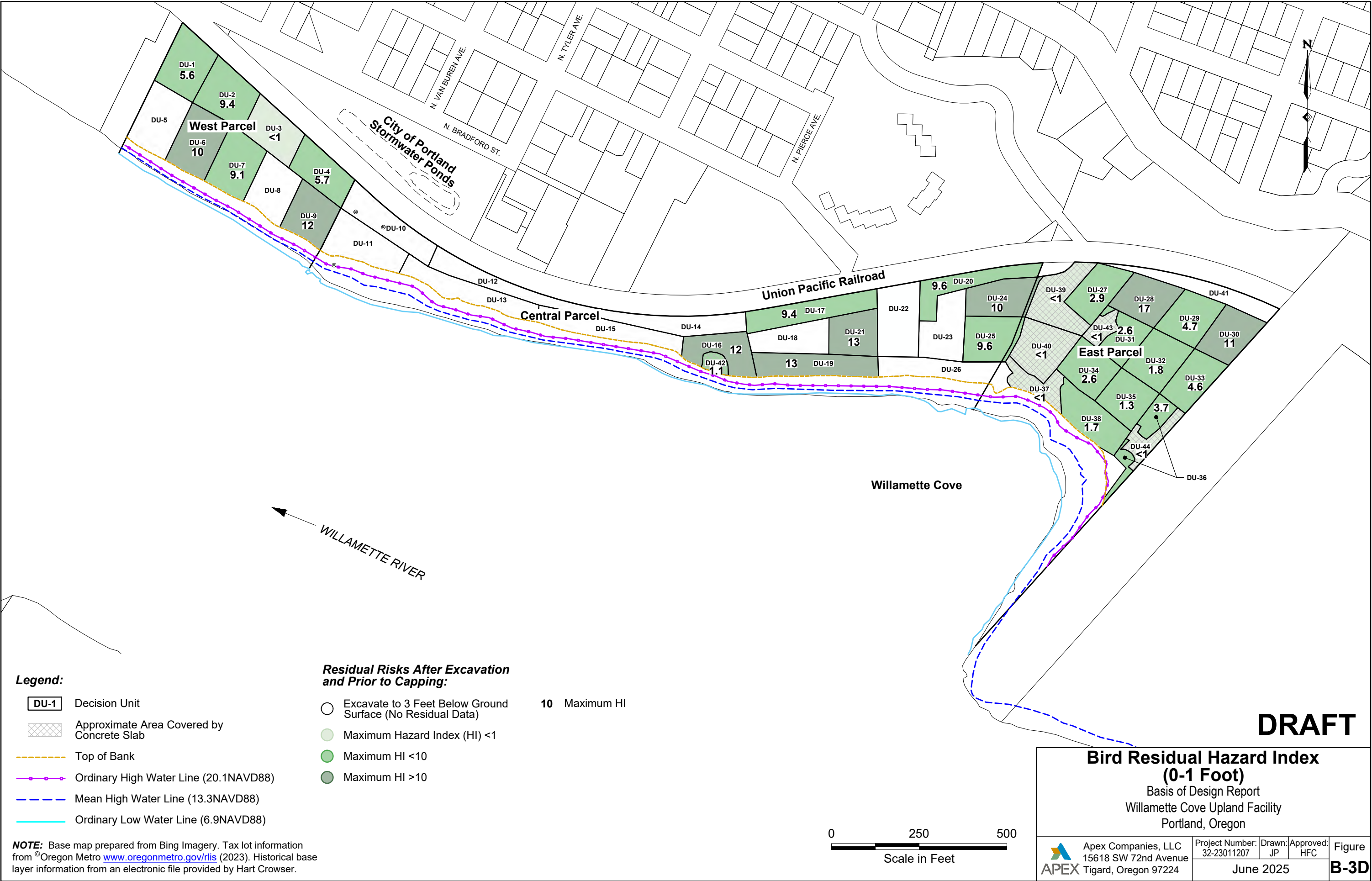
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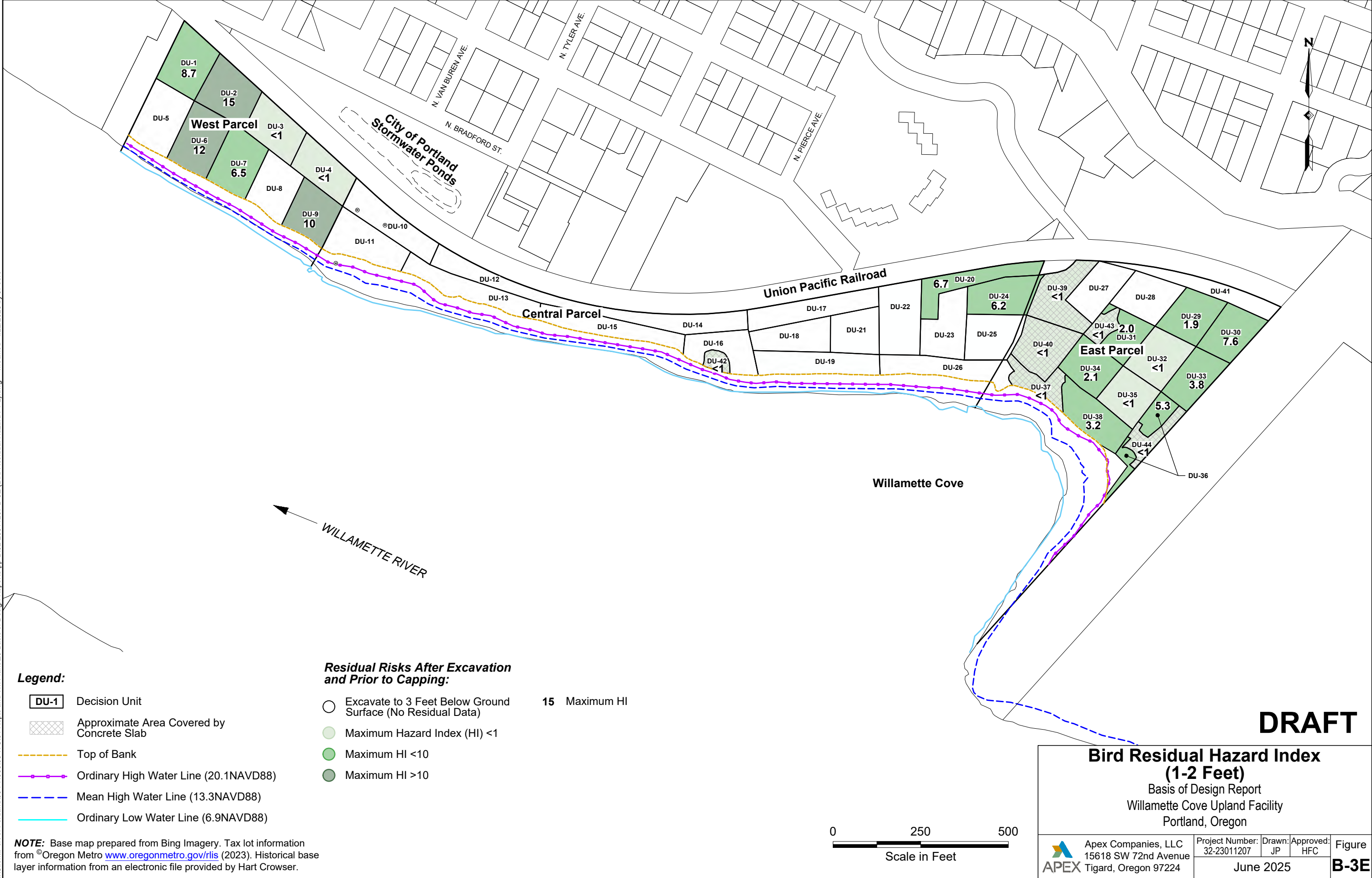
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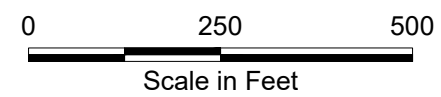
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**NOTE:** Base map prepared from Bing Imagery. Tax lot information from ©Oregon Metro [www.oregonmetro.gov/rliis](http://www.oregonmetro.gov/rliis) (2023). Historical base layer information from an electronic file provided by Hart Crowser.

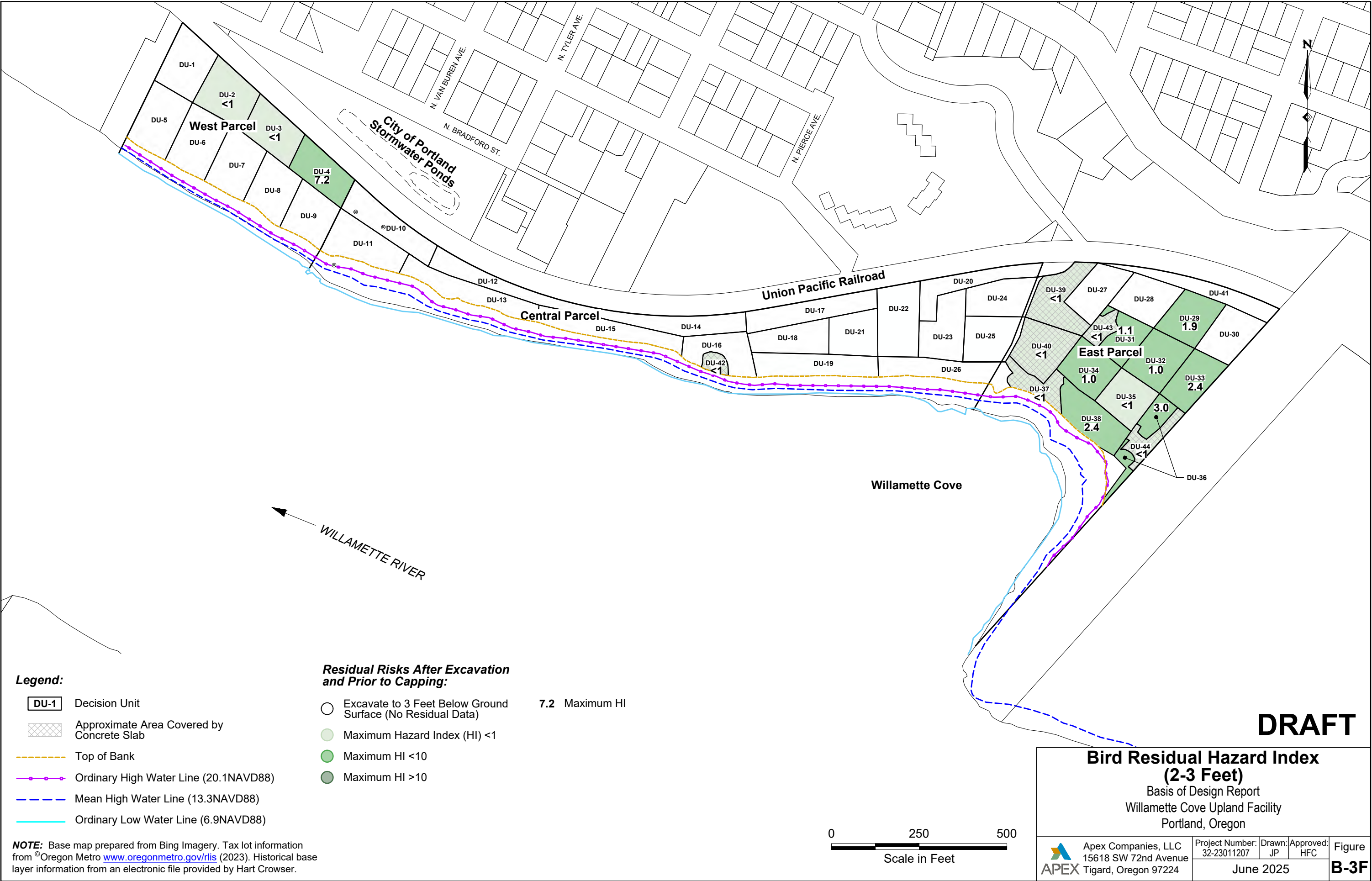


### Bird Residual Hazard Index (1-2 Feet)

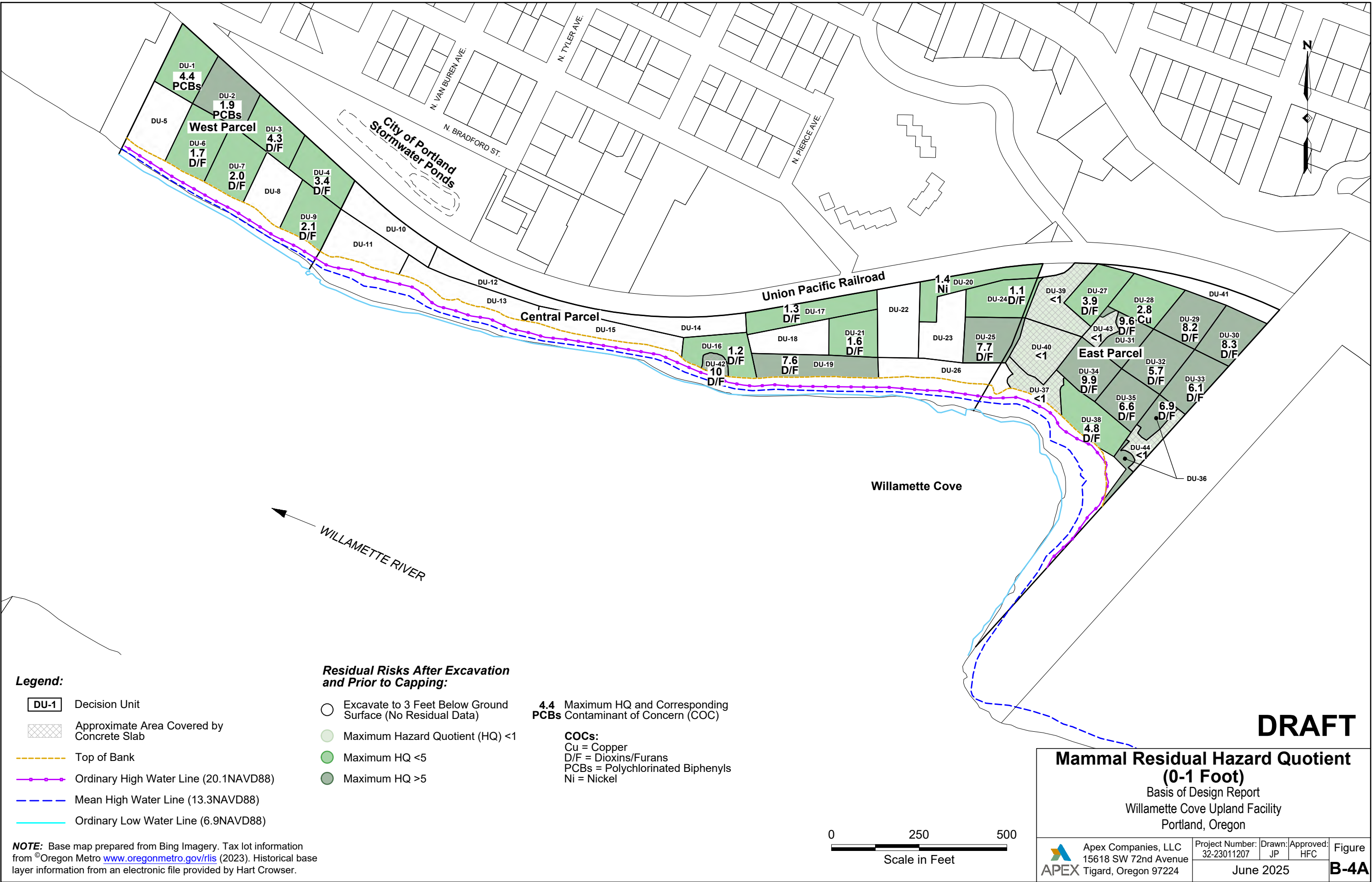
Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon

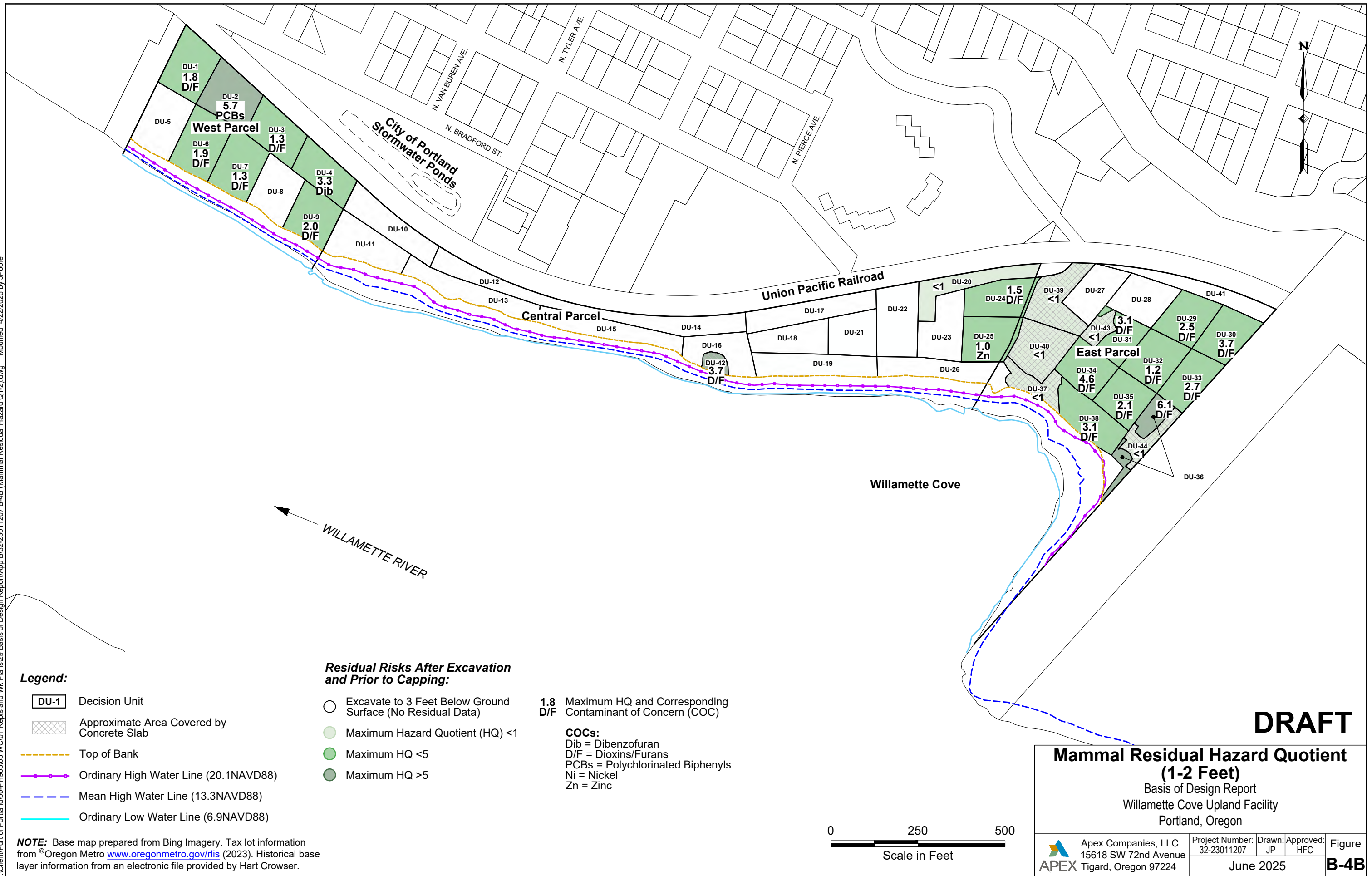
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|---------------------------------------------------------------------|--------------------------------|--------------|------------------|-----------------------|
| Apex Companies, LLC<br>15618 SW 72nd Avenue<br>Tigard, Oregon 97224 | Project Number:<br>32-23011207 | Drawn:<br>JP | Approved:<br>HFC | Figure<br><b>B-3E</b> |
|                                                                     | June 2025                      |              |                  |                       |

I:\Client\Port of Portland\00-PH90505 WC\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-3F (Bird Residual Hazard) 2-3.dwg Modified 4/22/2025 by JPoore



I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-4A Mammal Residual Hazard Q 0-1.dwg Modified: 4/22/2025 by JPoore





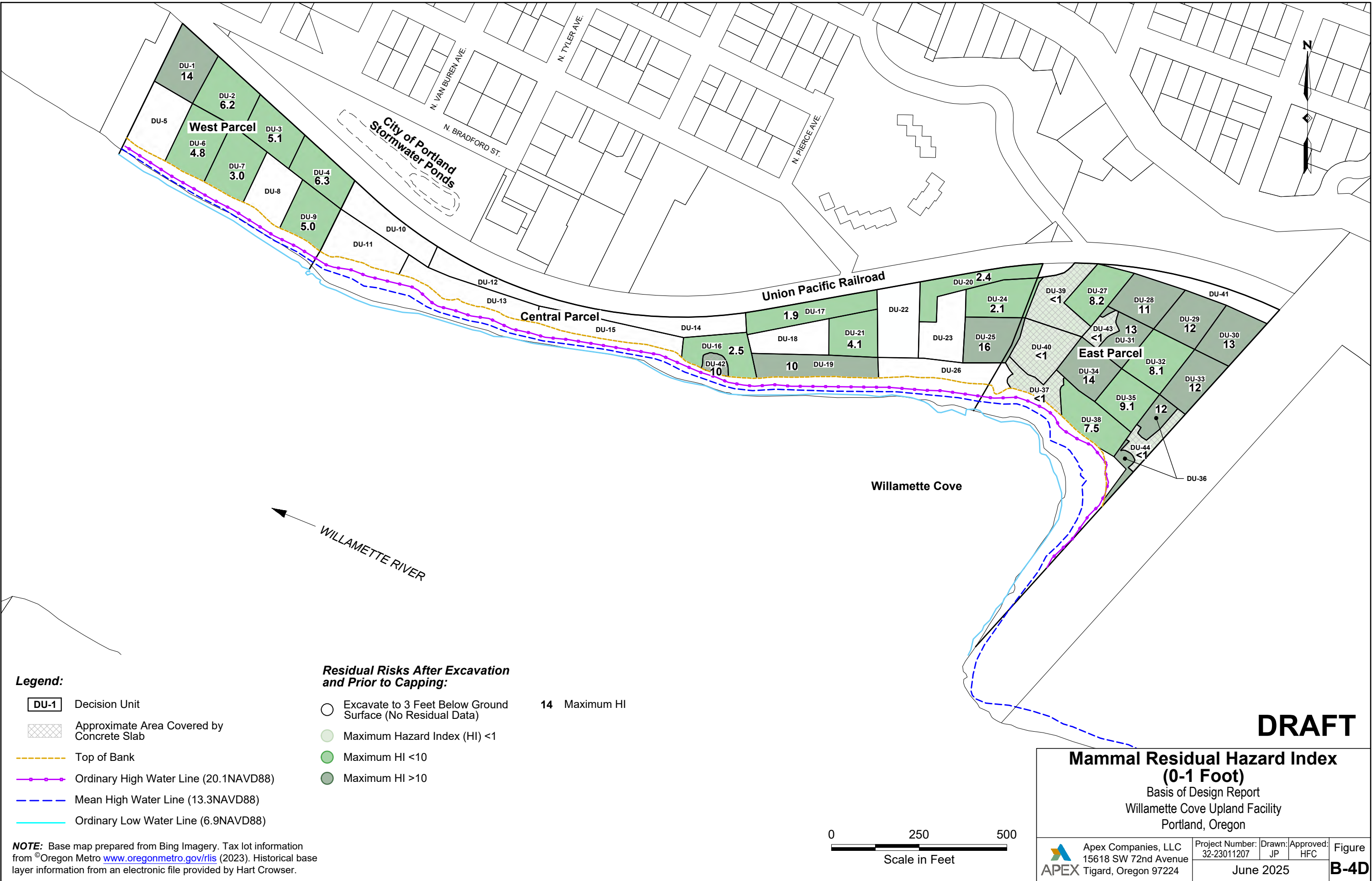
# Mammal Residual Hazard Quotient (1-2 Feet)

Basis of Design Report  
Willamette Cove Upland Facility  
Portland, Oregon

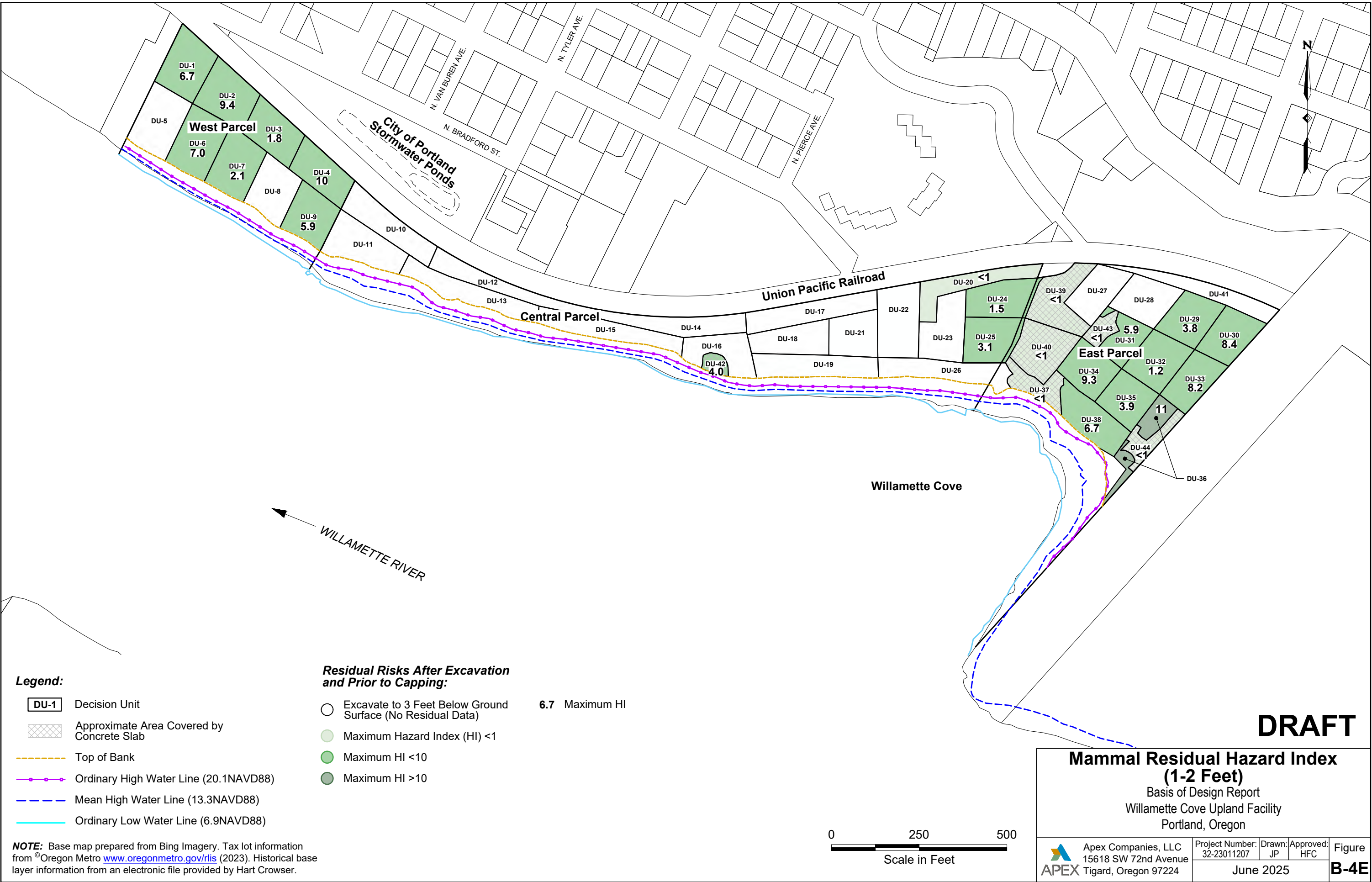
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|------------------|--------|
|  <p style="margin: 0;">Apex Companies, LLC<br/>15618 SW 72nd Avenue<br/>Tigard, Oregon 97224</p> | Project Number:<br>32-23011207 | Drawn:<br>JP | Approved:<br>HFC | Figure |
|                                                                                                                                                                                       | June 2025                      |              |                  | B-4B   |



I:\Client\Port of Portland\00-PH90505 WC\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-4D Mammal Residual Hazard (0-1).dwg Modified 4/25/2025 by JPoore



I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-4E Mammal Residual Hazard\1-2.dwg Modified 4/25/2025 by jPoore



I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\29 Basis of Design Report\Basis of Design Report\B-4F Mammal Residual Hazard\1 2-3.dwg Modified 4/22/2025 by JPoore

