MEMORANDUM

To:	Craig Rankine, RG, LHG Department of Ecology	Date:	May 24, 2016
From:	Phil Wiescher, PhD	Project:	9003.01.39
RE:	Off-Property Portion Phase 2 Remedial Investigation Approach		

On behalf of the Port of Ridgefield (the Port), Maul Foster & Alongi, Inc. (MFA) has prepared this memorandum describing the sampling approach for the off-property portion (OPP) Phase 2 remedial investigation (Phase 2 RI). The OPP is a residential neighborhood that is part of the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (see Figure 1).

Based on the results of previous investigations (Phase 1 RI sampling), polychlorinated dibenzo-p-dioxins and dibenzofurans (dioxins) in soils along and north of Maple Street are below the Model Toxics Control Act (MTCA) Method B cleanup level (CUL), defining the northern extent of impacts.[1] Soils west of Railroad Avenue (to the south of Division Street) were remediated as part of a previous cleanup action; therefore impacts are not present to the west of the OPP. The lateral extent of dioxin soil impacts to the east of Main Avenue and south of Mill Street is undetermined (MFA, 2016)[2]. Areas east of Main Avenue and south of Mill Street require further investigation and are described below.

EAST OF MAIN AVENUE INVESTIGATION AREA

Phase 1 RI sampling shows dioxin toxicity equivalent (TEQ) concentrations above the CUL in public right-of-ways (ROWs) on the east and west side of Main Avenue between Maple Street and Mill Street (see Figure 2). Phase 2 RI in public right-of-ways (ROWs) to the east of Main Avenue is therefore proposed to delineate the boundary of dioxin impacts (see Figure 3). Determining a final site boundary based on ROW sampling for the area is proposed for the following reasons:

- A site boundary is needed to determine where additional yard samples (which require public outreach and obtaining access agreements prior to sampling) may be necessary.

[1] An additional sample along Maple Street has been collected as part of interim action design activities to confirm northward extent.

[2] MFA. 2016. Off-Property Portion Interim Action Work Plan. Prepared for the Port of Ridgefield. April 4.

- A site boundary is needed to evaluate additional sampling and cleanup considerations, including projected timelines and costs.

- Previous investigation shows ROW samples provide a conservative measure of dioxin concentrations when compared to yards. That is, concentrations in ROWs are typically higher than in nearby yards, and in several cases are much higher (MFA, 2016). This pattern may reflect vehicle tracked dioxins since ROWs are adjacent to the streets.

The final site boundary will therefore be set upon receipt of ROW sample results. Yard samples that may be collected as part of subsequent Phase 2 RI activities would be used to inform the need for cleanup at those properties.

As shown in Figure 3, the area east of Main Avenue encompasses multiple city blocks. It is proposed that 36 surface samples throughout the area are collected as part of one sampling event to expedite determination of the final site boundary while minimizing mobilization events and analytical costs (approximately $800 per sample). The six Tier 1 samples would be analyzed upon collection whereas Tier 2 and 3 samples would be archived. Based on the results, the Tier 1 data would support one of the following conclusions and/or actions:

- The site boundary is established (e.g., the samples along 3rd Avenue and Mill Street are below the dioxin CUL).

- Tier 2 sample analysis is needed (e.g., the samples along 3rd Avenue and Mill Street are above the dioxin CUL).

- Analysis of a subset of Tier 2 samples is needed (e.g., the samples near 3rd Avenue and Division Street are above the dioxin CUL, while other samples along the Tier 1 boundary are below the CUL).

Upon receipt of Tier 2 results or results from a subset of Tier 2 samples (if needed), a similar evaluation could be conducted to determine whether any Tier 3 samples should be released for analysis. Tier 2 and/or Tier 3 samples to release for analysis will be determined in coordination with Ecology.

Assuming Tier 1 sampling is conducted in late-April and Tier 2 and 3 sample analysis is needed, all results would be available by late-July (laboratory turnaround time for dioxins is approximately one month). Following determination of the final site boundary, public outreach for yard sampling to potentially affected homeowners could be conducted as part of one event. This, rather than an iterative approach, would enable a complete and consistent outreach and yard sampling effort.

The proposed sampling locations and sampling tiers were selected in ROWs for the following reasons:

- To achieve sufficient sample density such that no data gaps remain and any additional ROW sampling is precluded to determine a final site boundary.

- The proposed locations are areas where soil is present (unpaved) and the ROW is not incorporated into a nearby homeowner's yard (e.g., in some cases fencing extends to the sidewalk and collecting a ROW sample would not be possible without accessing a privately owned gate).

Suspected historical sources of soil impacts include wood-treating chemicals and other substances that were used as part of wood-treating operations during PWT activities from 1964 to 1993. The specific operational activities leading to dioxin formation and the proximate source(s) are not established. Note that dioxins can also result from anthropogenic sources, which include vehicle/railway emissions, backyard trash burning, structure fires, vegetation treated with chlorinated pesticides, and other common events and activities. These sources may now release, or have historically released, dioxins to the environment (USEPA, 2006). The sampling approach was developed to include areas that may have been potentially affected as supported by a conceptual site model (CSM) that accounts for:

- Drippage from trucks transporting treated lumber. Historically trucks left the PWT site driving in a southeast direction, using primarily Division Street, 3rd Avenue (and possibly Main Street), and finally Pioneer Street. Trucks reportedly left the site with wood still dripping while completing a Vietnam era contract with the U.S. Department of Defense. Areas near Pioneer Street house commercial buildings and are predominantly paved, and PWT-related soil impacts are not expected in this area.

- Transport of particulates by wind. Wind transport would occur primarily in the driest months of the year (June through September). The weather station closest to the OPP is located at the Scappoose Airport, approximately 6 miles west of the site. Similar to the OPP, the Scappoose Airport is located in close proximity to the Columbia River and likely has similar wind patterns. Available wind data (from 1978 to 2016) were obtained from the National Oceanic and Atmospheric Administration National Climatic Data Center. Approximately 49 percent of the time wind direction was classified as "calm" or "variable." During the time when a significant wind speed was observed, wind with a north/northwest/west component was predominant (43 percent of the time). The database provides wind direction based on the direction from which the wind is blowing. Therefore, wind predominantly blows towards the south to southeast to east directions when present.

- Topography. Between 4th Avenue and 5th Avenue elevations increase by approximately 20 to 30 feet, according to the Clark County Maps Online database. Any surface deposition that potentially affected this area (e.g., via wind or via vehicles leaving the PWT site) would migrate back to the west if soil particulates were transported in stormwater.

For these reasons, PWT-related impacts outside of the proposed tiered investigation area and further expansion of the investigation area is not expected. The CSM is also supported by empirical data showing no dioxin impacts north of Maple Street; to the west, impacts related to former PWT operations have been remediated as part of a previous cleanup action (MFA, 2016).

If necessary, dioxin congener patterns may be evaluated using chemometric techniques to differentiate between PWT-related sources and other dioxin sources to support the site boundary delineation. The assumption underlying analysis of chemical patterns (i.e., chemometrics) is that every sample potentially reflects the combined effects from multiple sources of dioxins because many sources for dioxins in the environment have been identified. As an example, Ecology applied multivariate statistical techniques such as principal components analysis (PCA) to deduce source contributions to dioxins in soils as part of the Rayonier Mill off-property soil dioxin study (Ecology, 2011a)[1]. These evaluations focused on differentiating former mill operation sources, typical industrial point sources, and background sources that are ubiquitous in the environment. Ecology has also conducted studies in urban Seattle neighborhoods and Washington state parks to assess, in part, representative congener patterns in areas affected by background anthropogenic and non-anthropogenic dioxin sources (Ecology, 2011b; 2011c)[2]. These types of data could be evaluated in concert with PWT site investigation data to determine to what degree sources unrelated to former PWT operations have affected neighborhood soils.

Proposed sampling and analysis procedures for the Phase 2 RI sampling activities are provided in the draft site-specific sampling and analysis plan (SSAP) 2015-16 (see the attachment).

SOUTH OF MILL STREET INVESTIGATION AREA

Previous sampling shows dioxin TEQ concentrations above the CUL on the south side of the Mill Street ROW to the west, but not to the east of North 1st Avenue (see Figure 2). Phase 2 RI procedures for the areas to the south of Mill Street were previously provided in the Department of Ecology (Ecology)-approved SSAP 2015-14 (see the attachment). These properties are undeveloped lots owned by commercial entities. Access for sampling has to date been granted for one of three properties (AOI-041) and it is expected that obtaining access agreements for the other properties will continue to be difficult. MFA has not heard from the property owners regarding mailers sent, has been unable to directly contact the owners, and has been unable to identify alternative contact information

[1] Ecology. 2011a. Rayonier Mill Off-Property Soil Dioxin Study Final Project Report, Public Review Draft. June.
[2] Ecology. 2011b. Urban Seattle Area Soil Dioxin and PAH Concentrations Initial Summary Report. September.
Ecology. 2011c. Draft Washington State Background Soil Concentration Study Rural State Parks Washington State. June.

in a records search. However, property AOI-041 can be sampled as part of the proposed investigation event described above.

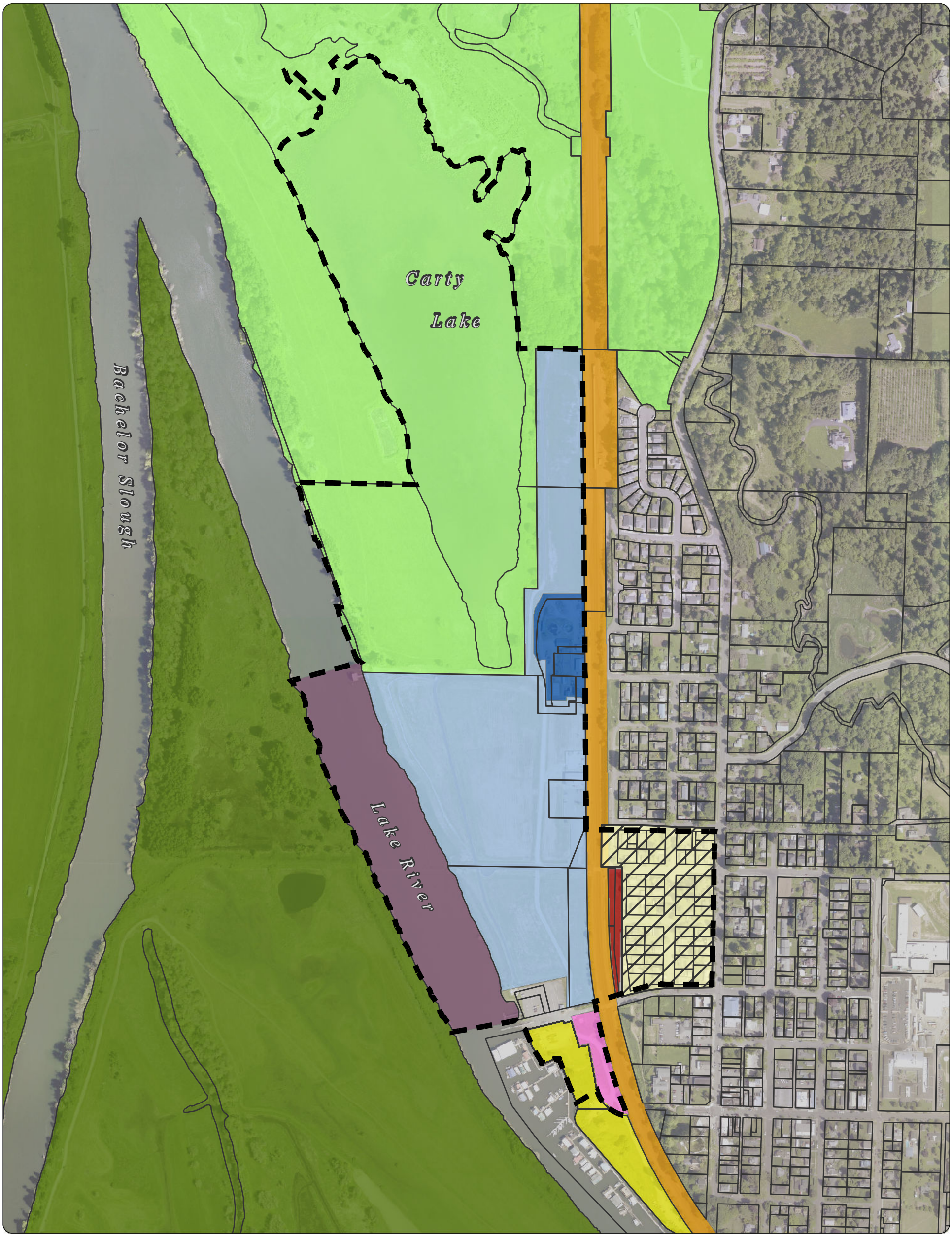
The CSM described above supports no further southward expansion of this area (beyond AOI-40 through AOI-42). There are no roads directly south of the proposed investigation area and potential wind deposition would likely be to the southeast (i.e., south of Mill Street and east of Main Avenue). The area south of Mill Street and east of Main Avenue will be sampled as part of the proposed Tier 2 and 3 sampling described above.

NEXT STEPS

The Port requests Ecology review the proposed approach. Phase 2 RI sampling could be conducted as early as mid-April. Following receipt of Tier 1 samples, additional sample analysis and/or site boundary delineations would be coordinated with Ecology. Upon delineation of the final site boundary, public outreach and yard sampling would be conducted as necessary.

Attachments: Figures 1 through 3
SSAP-16 (East of Main Avenue Investigation Area)
SSAP-14 (South of Mill Street Investigation Area)

FIGURES



Source: Aerial photograph (2014) and tax lots obtained from Clark County GIS.

Notes:
1. BNSF = Burlington Northern Sante Fe
2. LRIS = Lake River Industrial Site
3. Port = Port of Ridgefield
4. RNWR = Ridgefield National Wildlife Refuge
5. WWTP = wastewater treatment plant

Legend

- Pacific Wood Treating Site
- Off-Property Portion
- Clark County Tax Lots (2014)

Area Designations

LRIS
- Port-Owned
- City of Ridgefield WWTP

Port-Owned
- Railroad Avenue Property
- Marina Property
- Overpass Property

Upland Off-Property
- Residential; Low-Density
- McCuddy's Marina Property

Other
- RNWR-Carty Unit
- RNWR-River S Unit
- BNSF Railroad Property
- Lake River

Figure 1
Site and Off-Property Portion Diagram

Former PWT Site
Ridgefield, Washington

0 250 500
Feet

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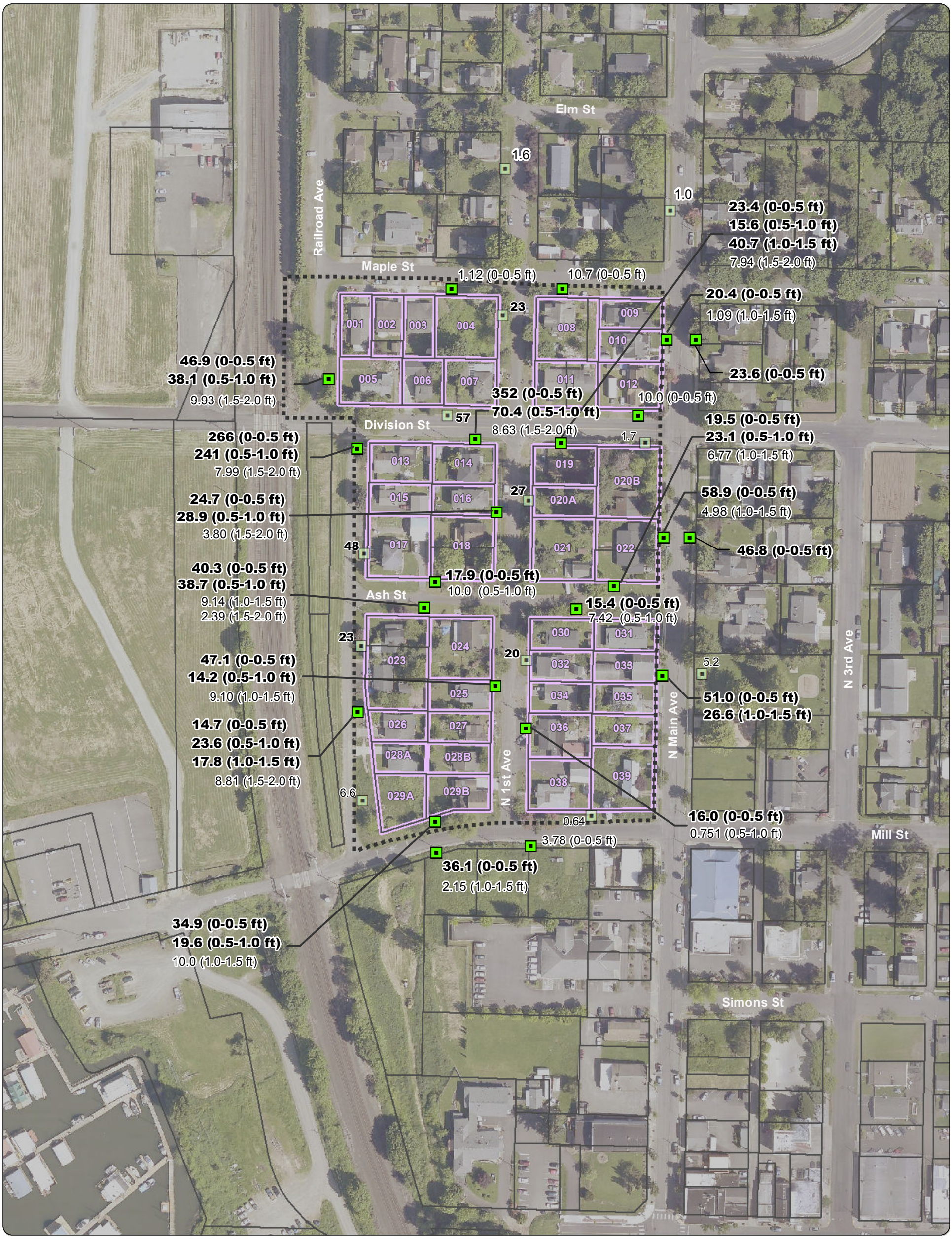
Print Date: 4/5/2016
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49



Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots dataset obtained from Clark County GIS.

Notes:
1. bgs = below ground surface
2. **Bold** values indicate dioxin TEQ (toxicity equivalent) concentrations above the MTCA B (Model Toxics Control Act Method B) CUL (cleanup level) of 13 ng/kg (nanograms per kilogram).
3. ROW = right-of-way

Legend

- 2015 ROW Sample
- 2010-2011 ROW Sample (0-0.5 ft bgs)
- Property Boundary
- Off-Property Portion
- Tax Lot

Figure 2
ROW Soil Sample Results

Former PWT Site
Ridgefield, Washington

0 75 150
Feet

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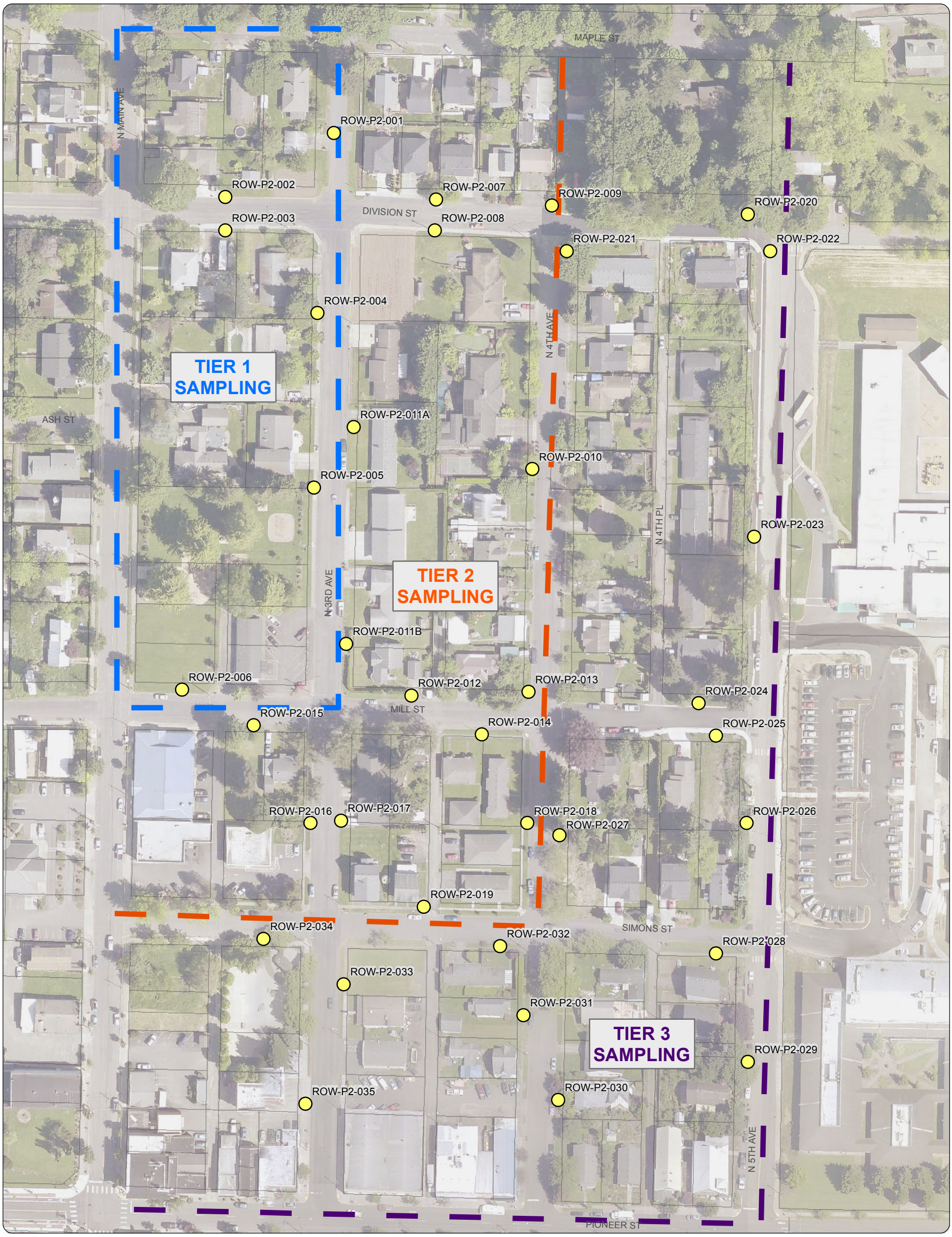

Source: Aerial photograph (2014) and tax lots (2014) obtained from Clark County GIS.

Note: ROW = right-of-way

Legend

- Proposed ROW Surface Sample Location (0-0.5 ft)
- Clark County Tax Lots (2014)

Figure 3
Proposed ROW Sample Locations

Former PWT Site
Ridgefield, Washington

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0 60 120
Feet

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Approved By: pwiescher
Produced By: jschane
Project: 9003.01.39

ATTACHMENT 1

SSAP-16 (EAST OF MAIN AVENUE INVESTIGATION AREA)

DRAFT SITE-SPECIFIC SAMPLING AND ANALYSIS PLAN
OFF-PROPERTY PORTION, FORMER PACIFIC WOOD TREATING CO. SITE
FACILITY ID 1019, CLEANUP SITE ID 3020
RIDGEFIELD, WASHINGTON

Introduction: On behalf of the Port of Ridgefield (the Port), Maul Foster & Alongi, Inc. (MFA) has prepared this site-specific sampling and analysis plan (SSAP) for the former Pacific Wood Treating Co. (PWT) site off-property portion (OPP) Phase 2 remedial investigation (Phase 2 RI) in Ridgefield, Washington (see Figure 1). The Phase 2 RI is being conducted to determine the extent of PWT-related impacts to the east of Main Avenue and south of Mill Street. The Washington State Department of Ecology (Ecology)-approved OPP Sampling and Analysis Plan (SAP) describes the general procedures for collection, preservation, and analysis of samples of soil (MFA, 2015). Per the SAP, sampling locations, sample types, and sample analyses are identified in this SSAP. All work is conducted under the authority of Agreed Order No. DE 11057 between the Port and Ecology. This SSAP (**Number 2015-16**) includes procedures for Phase 2 RI sampling activities needed to delineate the extent of impacts to the east of Main Avenue (see Figure 2). Sampling procedures for the areas to the south of Mill Street were previously provided (see SSAP 2015-14). Sampling procedures for the OPP Phase 1 RI investigation were provided in SSAPs 2015-1 through 13 and 2015-15.

Site Background: PWT operated a wood-treating facility from 1964 to 1993 at the Port's Lake River Industrial Site (LRIS); historical operations and other indeterminate sources may have resulted in impacts to neighborhood soils near the LRIS.

Problem Statement: The extent of dioxins in neighborhood surface soils to the east of Main Avenue requires investigation.

SSAP Objectives: The SAP describes methods that will be used for sampling soil. It includes procedures for collecting, analyzing, evaluating, and reporting the data. This SSAP specifies locations for collection of discrete right-of-way (ROW) surface samples. Sample locations are shown in Figure 2.

Plan Attachments: Figures 1 and 2.

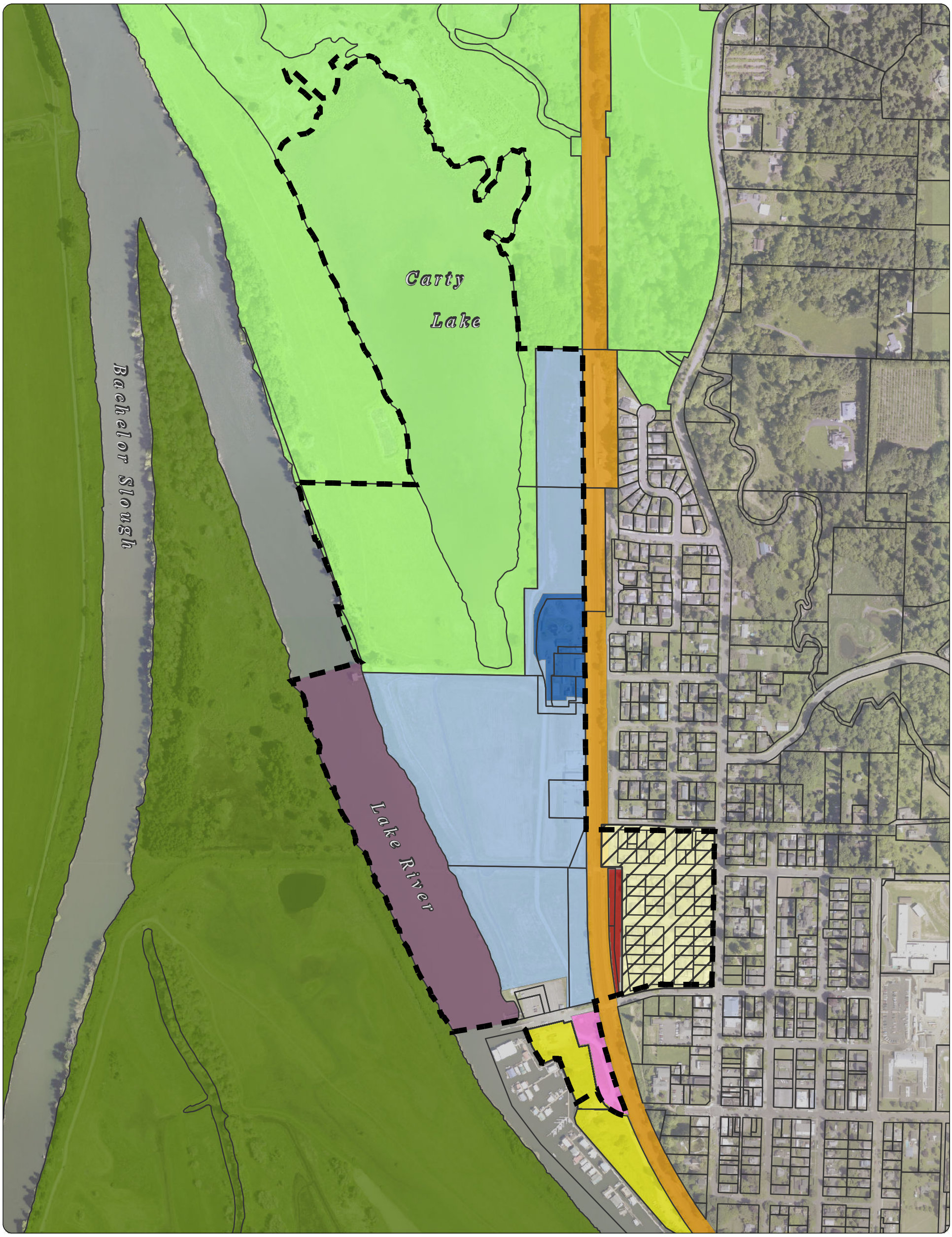
Project Manager: Madi Novak **Email:** mnovak@maulfoster.com **Phone:** 503-501-5212

Field Task Manager: Phil Wiescher **Email:** pwiescher@maulfoster.com **Phone:** 503-407-1036

Locations	Area	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
ROW-P2-001 through ROW-P2-006	Tier 1 Sample Area	DSS (0-0.5 foot bgs) (6) DSS (0-0.5 foot bgs) (1) (DUP)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Week of April 11th, 2016.	Accessible ROW locations were selected.
ROW-P2-007 through ROW-P2-019	Tier 2 Sample Area	DSS (0-0.5 foot bgs) (14) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Week of April 11th, 2016.	Accessible ROW locations were selected.
ROW-P2-020 through ROW-P2-035	Tier 3 Sample Area	DSS (0-0.5 foot bgs) (16) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Week of April 11th, 2016.	Accessible ROW locations were selected.

Field Quality Control Samples		
Type	Frequency	Analysis
Equipment Rinsate Blanks	One per every 20 samples	Dioxins by USEPA 1613B
Field Discrete Duplicate Samples	One total	Dioxins by USEPA 1613B, Total organic carbon by PSEP/SM 5310B

Notes:
This SSAP was designed to be used in conjunction with the SAP.
( ) = Indicates number of samples to be collected; (Archive) indicates samples to be archived.
DSS = discrete surface sample.
DUP = duplicate sample.
OPP = off-property portion.
PSEP = Puget Sound Estuary Program.
ROW = right of way sample.
SAP = Final Off-Property Portion Sampling and Analysis Plan, Former Pacific Wood Treating Co. Site, Facility ID 1019, Cleanup Site ID 3020. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. April 2, 2015.
SM = standard method.
USEPA = U.S. Environmental Protection Agency.



Source: Aerial photograph (2014) and tax lots obtained from Clark County GIS.

Notes:
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4. RNWR = Ridgefield National Wildlife Refuge
5. WWTP = wastewater treatment plant

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- Off-Property Portion
- Clark County Tax Lots (2014)

Area Designations

LRIS
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- City of Ridgefield WWTP

Port-Owned
- Railroad Avenue Property
- Marina Property
- Overpass Property

Upland Off-Property
- Residential; Low-Density
- McCuddy's Marina Property

Other
- RNWR-Carty Unit
- RNWR-River S Unit
- BNSF Railroad Property
- Lake River

Figure 1
Site and Off-Property Portion Diagram

Former PWT Site
Ridgefield, Washington

0 250 500
Feet

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Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49

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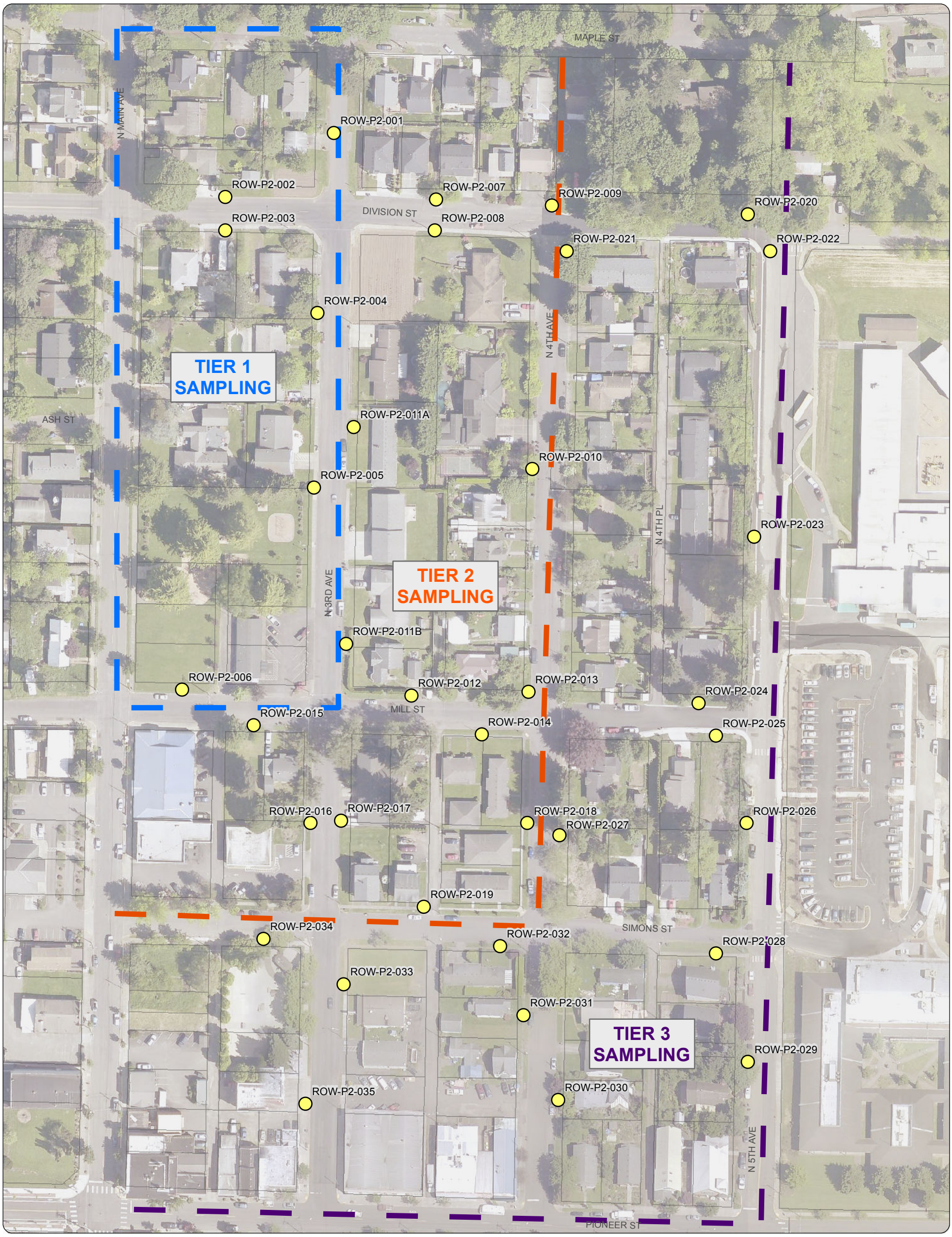

Source: Aerial photograph (2014) and tax lots (2014) obtained from Clark County GIS.

Note: ROW = right-of-way

Legend

- Proposed ROW Surface Sample Location (0-0.5 ft)
- Clark County Tax Lots (2014)

Figure 2
Proposed ROW Sample Locations

Former PWT Site
Ridgefield, Washington

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0 60 120
Feet

Print Date: 4/5/2016
Approved By: pwiescher
Produced By: jschane
Project: 9003.01.39

ATTACHMENT 2

SSAP-14 (SOUTH OF MILL STREET INVESTIGATION AREA)

DRAFT SITE-SPECIFIC SAMPLING AND ANALYSIS PLAN
OFF-PROPERTY PORTION, FORMER PACIFIC WOOD TREATING CO. SITE
FACILITY ID 1019, CLEANUP SITE ID 3020
RIDGEFIELD, WASHINGTON

Introduction: On behalf of the Port of Ridgefield (the Port), Maul Foster & Alongi, Inc. (MFA) has prepared this site-specific sampling and analysis plan (SSAP) for the off-property portion (OPP) of the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (see Figure 1). The Washington State Department of Ecology (Ecology)-approved OPP Sampling and Analysis Plan (SAP) describes the general procedures for collection, preservation, and analysis of samples of soil for OPP properties (MFA, 2015). The OPP properties identified for sampling are known as areas of investigation (AOIs). Per the SAP, sampling locations, sample types, and sample analyses are identified in this SSAP. All work is conducted under the authority of Agreed Order No. DE 11057 between the Port and Ecology. This SSAP (**Number 2015-14**) includes procedures for additional sampling in undeveloped properties south of Mill Street.

Site Background: PWT operated a wood-treating facility from 1964 to 1993 at the Port's Lake River Industrial Site; historical operations and other indeterminate sources may have resulted in impacts to soil on the OPP.

Problem Statement: The extent of dioxins in surface and subsurface soils in OPP properties requires investigation. Data are needed to assist in the completion of the OPP remedial investigation, risk assessment, and a feasibility study evaluating options for remediation, if necessary.

SSAP Objectives: The SAP describes methods that will be used for sampling soil. It includes procedures for collecting, analyzing, evaluating, and reporting the data.

Previous sampling completed is shown in gray in the Table below and includes 1) incremental sampling methodology (ISM) surface samples collected from zero to 0.5 foot below ground surface (bgs); 2) discrete subsurface (DSBS) samples collected from 0.5 to 1 foot bgs; 3) discrete ROW surface (zero to 0.5 foot bgs) and subsurface samples collected from the same location; and 4) composite soil samples (see property 001 and 004 described below). Subsurface ROW samples are archived and analyzed only if dioxin concentrations exceeding the MTCA Method B CUL (CUL) in the corresponding shallower sample are determined. The SAP identified several types of quality assurance samples for collection: two ISM triplicates (three sets of ten increment samples from differing locations), one duplicate DSBS sample, and rinsate blanks; in addition a field ISM duplicate (two sets of ten samples from the same locations) was collected. Locations sampled to date are shown in Figure 1.

This SSAP specifies procedures for collection of additional sampling in undeveloped properties south of Mill Street. Sampling procedures were previously provided (see SSAP-12) for properties 003 and 023. These properties have not yet been sampled as access agreements have not been obtained. Sample types and figures showing sample locations are attached.

Plan Attachments: Figures 1 and AOI-040 through 042.

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Field Task Manager: Phil Wiescher **Email:** pwiescher@maulfoster.com **Phone:** 503-407-1036

Location	Address	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
AOI-040	South of Mill Street and North 1st Avenue	ISM (1) DSS (3, Archive) ROW (2)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Following receipt of Access Agreement	This is an undeveloped lot that includes taxlots 67992000 and 67992005. An ISM sample will be collected and analyzed. Three discrete surface samples will be collected along a north-south transect and archived; the discrete samples may be released for analysis to further delineate impacts, in the event the ISM sample shows concentrations above the CUL. ROW samples (ROW-029B South and ROW-038 South, see below) were previously collected adjacent to the property. See Figure 1 for ROW sample locations.
AOI-041	South of Mill Street and Railroad Avenue	ISM (2) DSS (5, Archive) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Following receipt of Access Agreement	This is an undeveloped lot (taxlot 68002000). Two ISM samples will be collected and analyzed, one each for the northern and southern portions of the 0.8 acre lot. Five discrete surface samples will be collected along a north-south transect and archived; the discrete samples may be released for analysis to further delineate impacts, in the event an ISM sample shows concentrations above the CUL.
AOI-042	205 North Main Avenue	ISM (1) DSS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Following receipt of Access Agreement	This is lot (taxlot 68014000) that includes an undeveloped portion and a commercial building and parking lot. One ISM sample will be collected in the undeveloped portion of the taxlot.
AOI-003	7 Maple Street	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Following receipt of Access Agreement	The house was built in 1993. The property is flat, land to the east is elevated several feet, and a retaining wall is present along the eastern property boundary. This suggests that significant soil excavation was conducted to bring the property to level grade. In 2004 the yard consisted of a well-maintained lawn that appears to have been installed after construction. Current conditions are similar. Sampling figure was provided in SSAP-12.
AOI-023	5 Ash Street	ISM (1) DSBS (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Following receipt of Access Agreement	The property includes several structures (house and garages). The eastern portion of the yard was recently subject to significant soil disturbance: a long trench approximately 10 feet deep along the home was dug and soil appears to have been placed to the east of the trench in the side yard and in the eastern portion of the front yard; excavator track marks are present. These areas are not included in sampling area. ROW samples adjacent to property 022 on Ash Street were previously collected. See Figure 1 for location. Sampling figure was provided in SSAP-12.
AOI-035	313 North Main Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 1993. A shed was installed in the backyard ten years ago. In 2004 the yard consisted of a lawn that appears to have been installed after construction. According to the owner, new sod was installed approximately four years ago, and a site visit confirmed that a well-maintained, evenly graded lawn is currently present.

Location	Address	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
AOI-010	511 North Main Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 2000. A house was present on this property and the adjacent property 009 until at least 1996. In 2004 the yard consisted of a well-maintained lawn, and a large tree had been retained. Current conditions are similar.
AOI-022	403/405 North Main Avenue	ISM (1) DSBS (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The yard is primarily lawn with two large trees present in the front yard. ROW samples adjacent to property 023 on Ash Street and on Main Avenue were previously collected. See Figure 1 for location.
AOI-028A	311 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 1998. Aerial imagery indicates undeveloped property with vegetation and several large trees on the southern portion before that date. The large trees were removed between 2010 and 2011. In 2004 the yard consisted of a lawn that appears to have been installed after construction. Current conditions are similar.
AOI-028B	311 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Front yard and backyard largely undisturbed; some landscaping along the property boundary.
AOI-034	318 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built between 1993 (according the Clark County Maps Online) and 1995 (according to the property owner). In 2005 the yard consisted of a lawn that appears to have been installed after construction. According to the property owner, the current lawn and landscaping was installed two to five years ago, and a site visit confirmed that a well-maintained, evenly graded lawn is currently present.
AOI-001	512 Railroad Avenue	COMP (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 1994. In 2004, the yard consisted of a well-maintained lawn and several evenly spaced small trees that appear to have been installed after home construction. The entire yard has since been heavily re-landscaped. Several feet of soil, mulch and/or pea gravel were placed on top of geosynthetic fabric that separates the former lawn and the landscaping. The owner placed 64,000 pounds of pea gravel throughout property. No lawn remains and there is no exposed soil. Due to absence of exposed soil, a five point composite sample was collected from the top six inches of soil following removal of surface materials (e.g., mulching).
AOI-002	5 Maple Street	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 1996. In 2000 the yard consisted of a well-maintained lawn and small shrubs. Current conditions are similar. See Figure AOI-002 for ISM sample locations.
AOI-009	515 North Main Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The house was built in 2004. In 2004 the yard consisted of a well-maintained lawn, and one large tree had been retained. Current conditions are similar. See Figure AOI-009 for ISM sample locations.
AOI-037	309 North Main Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	According to the owner (stated during a site visit with Ecology and MFA on April 28, 2015) the entire yard has been re-landscaped in the last ten years. The yard consists primarily of lawn, shrubs, and trees. See Figure AOI-037 for ISM sample locations.
AOI-004	Intersection of North 1st Avenue and Maple Street	COMP (2) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Undeveloped lot overgrown with up to eight feet of blackberry bushes. Evidence of soil fill on the northwestern portion. Some wood debris present. Due to limited accessibility, a four point composite surface sample (0 to 0.5 foot bgs) and a four point composite subsurface sample (0.5 to 1 foot bgs) were identified for collection instead of ISM and DSBS samples. See Figure 1 for ROW sample location.
AOI-005	4 Division Street	ISM (1) DSBS (1) DUP (1) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (Archive) ROW (1.5-2.0 foot bgs) (1) ROW (2.0-2.5 foot bgs) (Archive) ROW (2.5-3.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Water line trench in northern portion of yard, as well as several piles indicating soil disturbance; these areas are not included in sampling area. DSBS sample in front yard. See Figure 1 for ROW sample location.
AOI-006	8 Division Street	ISM (1) DSBS (1) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Fire pit and recently constructed deck in northeastern portion of yard; these areas are not included in sampling area. DSBS sample in front yard.
AOI-007	14 Division Street	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Eastern portion of yard heavily landscaped/disturbed; western portion driveway includes imported fill; areas along southern property boundary have lumber reinforcements. These areas are not included in sampling area.

Location	Address	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
AOI-008	512 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Multiple areas of disturbance, treated wood storage, burn areas, soil/tree excavations, etc. The northwestern portion of the front yard and the northeastern portion of the backyard are least disturbed. See Figure 1 for ROW sample location.
AOI-011	100 Division Street	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The southwestern portion of the property consists of imported gravel and 2-3 inches of topsoil were removed/regraded in front- and side yard in 2014; these areas are not included in sampling area.
AOI-012	503 North Main Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Significant soil disturbance in backyard for construction of boat port; additional soil work conducted in backyard near home; front yard lawn and lawn along western property boundary in backyard undisturbed. Constructed gravel driveway leading to boat port. Some pavers removed along side yard and leading to front yard, adjacent to house. See Figure 1 for ROW sample location.
AOI-013	5 Division Street	ISM (2) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (Archive) ROW (1.5-2.0 foot bgs) (1) ROW (2.0-2.5 foot bgs) (Archive) ROW (2.5-3.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Water line present in backyard; imported garden bed soils; treated lumber supports in parking area. These areas are not included in sampling area. Evidence of debris/burning approximately 3 to 4 feet bgs, according to owner. Backyard physically separated from front by fencing and home. 2 ISM sampling areas (1 backyard, 1 front yard). ROW sample along Railroad Avenue and Division Street intersection. See Figure 1 for ROW sample location.
AOI-014	413 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (Archive) ROW (1.5-2.0 foot bgs) (1) ROW (2.0-2.5 foot bgs) (Archive) ROW (2.5-3.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Mostly lawn, with flower beds along edges; oil tank was decommissioned, likely present in right-of-way along eastside of property along North 1st Avenue; sewer line along southern property boundary. See Figure 1 for ROW sample location.
AOI-015	410 Railroad Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	No significant known soil disturbance in lawn areas; some areas of disturbance along fence line.
AOI-016	409 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (Archive) ROW (1.5-2.0 foot bgs) (1) ROW (2.0-2.5 foot bgs) (Archive) ROW (2.5-3.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Some minimal soil placement for re-seeding grass; a former burn pit is present in southwestern portion of backyard; otherwise there are no known significant disturbances. See Figure 1 for ROW sample location.
AOI-017	6 Ash Street	ISM (1) TRP (1) DSBS (1) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Significant soil disturbance in backyard: former asphalt driveway approximately 20 feet wide was removed; driveway installed along eastern property boundary. Front- and side yard relatively undisturbed, except for some landscaped areas (mulched, imported soil in flower/garden beds) and a small area of new sod along eastern edge of home.
AOI-018	405 North 1st Avenue	ISM (2) TRP (1) DSBS (1) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Soil disturbance/regrading along southeastern and northern portion of property; former burn pit to the south of home. These areas are not included in sampling area. Large front and backyard; 2 ISM sampling areas (1 backyard, 1 front yard). Triplicate samples in backyard sample area. DSBS sample in backyard. See Figure 1 for ROW sample location.
AOI-019	412 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	The two side-yards are primarily lawn. A small backyard includes large shed and brush/dirt areas. Front yard includes large paved driveway and rock garden installed 5 years ago. Otherwise yard is relatively undisturbed, according to owner. See Figure 1 for ROW sample location.

Location	Address	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
AOI-020B	411 North Main Avenue	ISM (1) DSBS (1) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Soil disturbance for tank removal/placement in two areas along home in northeastern property portion; significant soil disturbance along western property portion for septic work; some wood ash spread across side yard in northern property portion for gardening purposes; the front yard in the southeastern property portion is relatively undisturbed.
AOI-021	406 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B		Most of the front- and backyard were heavily disturbed as a bobcat was brought in to grade soil throughout much of the property; yard along the northwestern portion is most likely to be undisturbed, according to owner. This area is the former front-yard of a house that was demolished in the 1980s.
AOI-024	327 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Heavily landscaped/garden area along southeastern portion of property; the front- and side yard along northeastern property are likely undisturbed; the backyard has large burn pit, creosote ties that were removed, several buried pavers, and an area of mounded soil that was placed.
AOI-025	319 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Undisturbed front yard lawn; side yard along north was excavated for stormwater diversion ditch; water pipe is present along southern portion of home; backyard is somewhat undisturbed, except for a burn pit in the center of yard. Current owner noted that the previous resident left various debris buried in yard. See Figure 1 for ROW sample location.
AOI-026	314 Railroad Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Heavily disturbed yard; backyard soil was scraped and placed in front yard. A trench has been dug in front yard. Sampling was conducted September 21, 2015. See Figure 1 for ROW sample location.
AOI-027	315 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Heavily landscaped/disturbed front yard; backyard is primarily chicken coops/sheds with some undisturbed soil/grass paths around the coops, according to owner.
AOI-029A	305 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Vacant lot (primarily lawn/grasses) with some wood/debris piles along northeastern portion. Large bushes/trees in southwestern portion. Prior lot uses are not known, according to owner.
AOI-029B	305 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Mostly lawn in front- and backyard; no significant soil disturbance except for removal of 5 large trees, which had died. Some landscaping along property boundary and along home in backyard. See Figure 1 for ROW sample location.
AOI-030	101 Ash Street	ISM (1) DUP (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	No significant yard modifications in last 2 years, according to tenant- previous yard history unknown. A few sheds and manhole are present along eastern property, as well as an above-ground pool area in the southwest. Yard is primarily lawn. See Figure 1 for ROW sample location.
AOI-031	105 Ash Street	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Imported soil in garden beds along home and perhaps in parking strip; these areas are not included in sampling area. Small backyard and front yard and areas are combined into one ISM sampling area.
AOI-032	322 North 1st Avenue	ISM (1) DSBS (1) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Small lawn front- and backyard are undisturbed; tractor and other equipment in backyard along house.
AOI-036	314 North 1st Avenue	ISM (1) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Edge landscaping in front yard, lawn area undisturbed; significant landscaping in backyard, lawn area near home undisturbed; some subsurface debris along northern property boundary, up to approximately 5 feet below ground surface. See Figure 1 for ROW sample location.
AOI-038	304 North 1st Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Front yard is relatively undisturbed since owner purchased property in approximately 2005; northern side area is largely paved; some landscaping in front yard (e.g., roses, shrubs) and yard is primarily lawn. Backyard is likely partially disturbed as it includes a large former garden bed area, paved patio with grill, and a fire pit. In addition, a dog is present, prohibiting access.

Location	Address	Sample Type(s) and Number	Analysis		Sampling Schedule	Comments
AOI-039	305 North Main Avenue	ISM (1) DSBS (0) ROW (0)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	Backyard largely disturbed due to mechanical digging/re-working of soil (according to tenant), wood piles, lawn maintenance and other electrical equipment. Front yard is relatively undisturbed according to tenant. Yard is primarily lawn. Some vehicles (i.e., RV) and large blackberry patches are present in the southwestern portion of front yard and this area is inaccessible.
ROW-022	403 North Main Avenue	ISM (0) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample adjacent to property 022 on Ash Street. See Figure 1 for location.
ROW-023	5 Ash Street	ISM (0) DSBS (0) ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (1) ROW (1.0-1.5 foot bgs) (1) ROW (1.5-2.0 foot bgs) (1) ROW (2.0-2.5 foot bgs) (Archive) ROW (2.5-3.0 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample adjacent to property 023 on Ash Street. See Figure 1 for location.
ROW-010 West	511 North Main Avenue	ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample adjacent to property 010 on Main Avenue. The archive samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-010 East	511 North Main Avenue	ROW (0-0.5 foot bgs) (Archive) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample across Main Avenue from property 010. The 0 to 0.5 foot bgs sample will be analyzed if the ROW-010 West surface sample (0 to 0.5 foot bgs) exceeds the CUL. The deeper samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-022 West	403 North Main Avenue	ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample adjacent to property 022 on Main Avenue. The archive samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-022 East	403 North Main Avenue	ROW (0-0.5 foot bgs) (Archive) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample across Main Avenue from property 022. The 0 to 0.5 foot bgs sample will be analyzed if the ROW-022 West surface sample (0 to 0.5 foot bgs) exceeds the CUL. The deeper samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-033 West	319 North Main Avenue	ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample adjacent to property 033 on Main Avenue. The archive samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-038 South	304 North 1st Avenue	ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample across Mill Street from property 038. The archive samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.
ROW-029B South	305 North 1st Avenue	ROW (0-0.5 foot bgs) (1) ROW (0.5-1.0 foot bgs) (Archive) ROW (1.0-1.5 foot bgs) (Archive)	Dioxins by USEPA 1613B	Total organic carbon by PSEP/SM 5310B	Sampling completed.	This is a ROW sample across the Mill Street from property 029B. The archive samples will be analyzed if the shallower sample exceeds the CUL. See Figure 1 for location.

Field Quality Control Samples		
Type	Frequency	Analysis
Equipment Rinsate Blanks	One per every 20 samples	Dioxins by USEPA 1613B
ISM Replicates	Two total	Dioxins by USEPA 1613B, Total organic carbon by PSEP/SM 5310B
ISM Field Duplicate Sample	One total	Dioxins by USEPA 1613B, Total organic carbon by PSEP/SM 5310B
Field Discrete Duplicate Samples	One total	Dioxins by USEPA 1613B, Total organic carbon by PSEP/SM 5310B

Notes:
This SSAP was designed to be used in conjunction with the SAP.
Shaded boxes are properties for which sampling has been completed.
( ) = Indicates number of samples collected; (Archive) indicates sample was archived.
AOI = area of investigation.
COMP = Composite soil sample.
CUL = Method B CUL for dioxins.
DSBS = discrete subsurface sample.
DSS = discrete surface sample.
DUP = duplicate sample.
ISM = incremental sampling methodology.
NA = not applicable.
OPP = off-property portion.
PSEP = Puget Sound Estuary Program.
ROW = right of way sample.
SAP = Final Off-Property Portion Sampling and Analysis Plan, Former Pacific Wood Treating Co. Site, Facility ID 1019, Cleanup Site ID 3020. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. April 2, 2015.
SM = standard method.
TRP = ISM triplicate sample.
USEPA = U.S. Environmental Protection Agency.

Source: Aerial photograph (2014) obtained from Clark County GIS.

ISM = Incremental Sampling Methodology
ROW = right-of-way

One ISM sampling area was identified for each property, with the exception of 013 and 018. For these properties, a front yard (F) and backyard (B) sampling area was identified.

Legend

- 2015 ROW Sample
- 2010-2011 ROW Sample
- Discrete Subsurface Sample Location
- Composite Sample Location
- Composite Sampling Area
- ISM Sampling Area
- Front Yard ISM Sampling Area
- Backyard ISM Sampling Area
- Properties Sampled
- Properties Not Sampled
- Off-Property Portion

Figure 1
Off-Property Portion Sample Locations

Former PWT Site
Ridgefield, Washington

0 50 100
Feet

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Path: X:\9003.01 Port of Ridgefield\39\Off-Property Yard Sampling\Projects\SSAP 14\Fig1_Off-Property Portion Sampling Locations.mxd
Print Date: 1/6/2016
Approved By: P. Wiescher
Produced By: apadilla
Project: 9003.01.39

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots dataset obtained from Clark County GIS.

Legend

- ISM Sample Location
- Discrete Sample Location
- AOI-040 Sampling Boundary
- Tax Lot

Figure
Sampling Plan
AOI-040

Former PWT Site
Ridgefield, Washington

0 12.5 25
Feet

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Project: 9003.01.39 Produced By: jschane Approved By: P. Wiescher Print Date: 1/4/2016

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Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots dataset obtained from Clark County GIS.

Legend

- ISM Samples (A)
- ISM Samples (B)
- Discrete Sample Location
- AOI-041 Sampling Boundary
- Tax Lot

Figure
Sampling Plan
AOI-041

Former PWT Site
Ridgefield, Washington

0 12.5 25
Feet

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Project: 9003.01.39 Produced By: jschane Approved By: P. Wiescher Print Date: 1/4/2016

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots dataset obtained from Clark County GIS.

Legend

- ISM Sample Location
- AOI-042 Sampling Boundary
- Tax Lot

Figure
Sampling Plan
AOI-042

Former PWT Site
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0 12.5 25
Feet

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Print Date: 1/4/2016
Approved By: P. Wieschner
Produced By: jschane
Project: 9003.01.39