



Revised Remedial Investigation and Interim Action Work Plan

Former Fleischer Property
9109 and 9115 NE 94th Avenue
Vancouver, Washington
Ecology FSID 20708
Ecology CSID 2827
Ecology VCP ID SW1657

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July 16, 2020
Project No. 22875.000

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1.0 INTRODUCTION

PBS Engineering and Environmental, Inc. (PBS) has prepared this Remedial Investigation and Interim Action Work Plan (RI Work Plan) on behalf of Kirkland Development LLC (Kirkland) to provide the scope of work and objectives for the remedial investigation and interim remedial action at the Former Fleischer Property located at 9109 and 9115 NE 94th Avenue in Vancouver, Washington (Site; see Figure 1). Polychlorinated biphenyls (PCB) are present in Site soils as a result of clarifier solids deposited across portions of the Site. Concentrations of PCBs exceeding the Model Toxics Control Act (MTCA) Method A cleanup level for unrestricted land use of 1 milligrams per kilogram (mg/kg) have been reported in clarifier solids and Site soil samples from depths of up to 5.5 feet below ground surface (ft bgs) during previous investigations.

The RI and subsequent remedial actions will be conducted in accordance with the United States Environmental Protection Agency's (EPA) Toxic Substance Control Act (TSCA), Title 40 of the Code of Federal Regulations (CFR) part 761 and MTCA, Washington Administrative Code (WAC) 173-340.

Kirkland intends to develop a portion of the property as a paved recreational vehicle (RV) storage facility. The RV storage facility would be developed in Area A as described in Section 2.1 (Figure 2). Area B would be developed later but investigation of the entire Site, including off-property locations with PCB exceedances, would be conducted during the RI. Area A would be cleaned up as an interim action to complete cleanup earlier to facilitate site development. Following completion of work in Area A, remedial excavation and development of the southern tax lot (Area B) will be initiated to complete removal of soil that exceeds 10 mg/kg PCBs. Kirkland Development plans to utilize this tax lot for traditional industrial use allowed by Ecology, to be determined in the future.

1.1 Objective and Scope

The objective of the RI is to complete additional site characterization pursuant to the EPA April 8, 2019 request. The scope of work presented in the Work Plan is designed to characterize the nature and extent of PCBs in Site soil. The scope of work will identify the applicable or relevant and appropriate requirements (ARARs) for the Site to define the appropriate cleanup standards for a cleanup action.

1.2 Purpose of the Remedial Investigation Work Plan

The RI Work Plan describes the project objectives, functional activities, and quality assurance and quality control protocols that will be used to complete the RI. The purpose of the RI Work Plan is to:

- Provide a summary of previous investigations completed at the Site;
- Provide the rationale for the scope of work to be performed;
- Provide the detailed methods for sampling and analysis;
- Provide a schedule for the RI activities; and
- Provide a summary of the elements to be included in the RI Report.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 Site Location

The Site comprises approximately 9.5 acres consisting of three tax lots (tax account numbers 199861000, 199854000, and 199851000) located in the northwest quarter of Section 59, Township 2 North, Range 2 East, of the Willamette Meridian (Figure 1, Figure 2).

The Site's three tax lots and land use areas are shown on Figure 2. For the purposes of this RI Work Plan, the northern and western parcels will be defined as Area A, and the southern parcel will be defined as Area B, due to potential differences in future site use. Area A is planned for development as RV storage facility (unrestricted use), while Area B is planned for future development as traditional industrial use. In addition, the Site includes contaminated soil just outside of the property boundaries. The off-site contaminated soil will be included with the cleanup of the Area A (assumes unrestricted use).

2.2 Site Description

The Site is generally flat; however, the eastern end of the property slopes up to the road berm adjacent to the eastern property lines. The Site elevation ranges between approximately 205 and 225 feet above mean sea level.

The majority of the Site is undeveloped and vegetated with grass. Several large trees are present in the southwest area of the Site. Structures at the Site include a single-story residence with an attached garage, a small barn, and a pump house with a domestic well located in the southwest area of the Site (Figure 2).

The closed Leichner Brothers Landfill is located adjacent to the north, east, and south of the Properties. Waste Connections, Inc. (a garbage haul truck fleet facility and a solid waste container storage yard) borders approximately two-thirds of the Properties' northern boundary. The Properties' southern boundary is bordered by the Koski property which is predominately void of structural development except for a residential dwelling in the northwest corner. The Properties' western boundary is bordered by Northeast 94th Avenue; across Northeast 94th Avenue is a residential development.

2.3 Site History

The Site history was determined through review of historical documents and aerial photographs by GeoDesign, Inc. (GeoDesign) as part of the *Phase I Environmental Site Assessment and Limited Surface Soil Evaluation* (GeoDesign, 2010). The Site was first developed in the early 1940s with the construction of a residence and associated outbuildings in the northwest portion of the Site. In the period between 1945 and 1955, the existing residence was constructed in the southwestern portion of the Site and the outbuildings in the northwest portion were removed.

Fill consisting of clarifier solids (reportedly from the former Boise Cascade Mill) was placed on the Site beginning in 1970, possibly in conjunction with the operation of the then-owner's fertilizer processing business. The parcels comprising the Site were purchased by the previous property owners (Felix and Bonnie Fleischer) in 1977. Between 1980 and 1990, it appeared in aerial photos that some of the clarifier solids were removed, and between 1990 and 1996 the residence located in the northwest portion of the Site was removed.

Kirkland purchased the property in February 2018 with the intent to redevelop the Site for industrial purposes. On behalf of Kirkland, PBS applied for entry into the Voluntary Cleanup Program (VCP) to the Washington State Department of Ecology (Ecology) on September 21, 2018 and was accepted into the program on October 1, 2018, at which time it was assigned the VCP Project ID SW1657. Kirkland entered the Site into the VCP in order to facilitate remedial actions at the Site and redevelopment of the property.

2.4 Site Geology and Hydrogeology

Fill, consisting of topsoil and clarifier solids, is reported to be present at the Site from the surface with thickness ranging from trace to approximately 1.5 feet (MFA, 2014). Approximately 1 to 2 feet of sandy silt is present below the fill with coarse sand and gravel below that to approximately 8.5 feet below ground surface (ft bs).

Groundwater at the adjacent former landfill site is present at depths ranging from approximately 25 to 30 ft bgs in wells adjacent to the Site property lines. Groundwater flow direction, determined from monitoring events at the former landfill site, is to the southwest (SCS, 2013).

2.5 Regional Geology and Hydrogeology

The site is underlain by Pleistocene flood deposits, typically consisting of pebble sized gravel and cobble with few small boulders (less than 2.5 meters in diameter) in a sandy matrix (Phillips, 1987). Per investigations at the adjacent former landfill, an unconfined alluvial water bearing zone is present within the flood deposits (SCS, 2013).

The alluvial water bearing zone is underlain by the upper member of the Troutdale Formation aquifer. The alluvium and Troutdale Formation are locally separated by a discontinuous silt aquitard. The northern and western extents of the aquitard have not been delineated and the aquitard is not present in the southwest area of the former landfill (SCS, 2013).

2.6 Previous Investigations

Phase I Environmental Site Assessment and Limited Surface Soil Evaluation (March 2010)
GeoDesign, Inc.

GeoDesign identified clarifier solids on the Site as a recognized environmental condition (REC) in a Phase I environmental site assessment (ESA) conducted for the Site in 2010. This was considered a REC as the material was reportedly acquired from the former Boise Cascade Mill (known to use PCBs in their milling process) during historical property operations in the 1970s.

GeoDesign collected clarifier solids and surface soil samples from two locations at the Site for analysis of PCBs, total petroleum hydrocarbon—hydrocarbon identification, semivolatile organic compounds (SVOCs), and metals. One PCB Aroclor (Aroclor 1248) was detected in both soil samples at concentrations greater than the MTCA Method A CULs for both restricted and unrestricted land use. No other PCB Aroclors were detected above the laboratory reporting limits in either sample. Diesel- and heavy-oil-range hydrocarbons and metals (including arsenic, chromium, copper, lead, mercury, and nickel) were detected, although concentrations were below the MTCA Method A CULs for unrestricted land use. SVOCs were not detected above the MRLs.

GeoDesign conducted soil sampling at the Site to further investigate PCB impacts. The sampling was conducted on a grid basis with up to nine samples collected from within each of the 19 of the 20 grid sections (Figure 3). Soil samples were collected between the ground surface and 0.5 foot below ground surface (bgs). The soil samples from within each grid were homogenized into a composite sample. PCB Aroclor 1248 was detected in each composite soil sample at concentrations ranging from 0.820 to 32.4 milligrams per kilogram (mg/kg). PCB Aroclor 1254 was detected in the composite soil sample from Section 1 at a concentration of 0.396 mg/kg. Except for the result from the composite soil sample from Section 12, the detected concentrations of PCBs were greater than the MTCA Method A CUL of 1 mg/kg for unrestricted land use. Sample results collected from Sections 2 through 7, Section 14, and Section 17 were greater than the MTCA Method A CUL of 10 mg/kg for restricted land use (GeoDesign, 2010).

Preliminary Remedial Investigation and Feasibility Study (November 2014)
Maul Foster & Alongi, Inc.

Subsequent assessment by MFA in 2014 consisting of the collection of discrete soil samples from varying depths in 52 test pit locations. The assessment identified PCBs (primarily Aroclor 1248) at concentrations ranging from below method reporting limits (MRL) to 118 mg/kg. PCB-affected soil occurring above the most restrictive MTCA Method A CUL of 1 mg/kg ranged significantly in thickness at locations across the Site ranging from depths of 1.5 feet to 6 feet, in some locations, but generally at depths of 2 to 3 feet.

Soil analytical results from the MFA 2014 investigation are summarized in Table 1. Investigation locations are shown on Figure 4.

3.0 PRELIMINARY CONCEPTUAL SITE MODEL

A narrative conceptual site model (CSM) summarizing the sources of hazardous substances, types and concentrations of hazardous substances, potentially contaminated media, and actual and potential exposure pathways and receptors for the Site is presented below. This will be updated after further site characterization activities are conducted as part of the RI.

3.1 Contaminant Release

Fill consisting of clarifier solids containing PCBs was placed across the Site beginning in 1970, possibly in conjunction with the operation of the then-owner's fertilizer processing business. The exact duration of use of the PCB-containing solids and the volume of PCB-containing solids placed is unknown.

3.2 Contaminants of Concern

The contaminants of concern (COCs) for the Site are the chemicals detected at concentrations exceeding the MTCA Method A cleanup levels for soil resulting from the historic application of PCB-containing clarifier solids. The determination of COCs for the Site is based on the analytical results of soil. PCBs, specifically Aroclor 1248, were detected in soil samples at concentrations exceeding the MTCA Method A cleanup level of 1 mg/kg for soil for unrestricted land use.

3.3 Affected Media

The affected media at the Site includes soil. Groundwater impacts are not anticipated based on the expected depth to water at the Site of 25-30 ft bgs, the limited solubility of PCBs, and the tendency for PCBs to adsorb to soil particles. Soil vapor impacts are not anticipated as Aroclor 1248 has a low vapor pressure and is not considered volatile.

3.4 Nature and Extent

The preliminary Site boundary (i.e. extent of contamination) is defined by soil boring and test pit locations with contaminant concentrations in soil and groundwater below their respective CULS.

PCBs are generally present in surficial soils and subsurface soils up to approximately 5.5 ft bgs (with a few locations on the eastern portion of the site extending slightly deeper) in discrete locations at the Site. PCB concentrations exceeding 1 mg/kg in soil associated with the Site have been delineated to the south, east, and northeast and northwest corners.

3.5 Fate and Transport of Contaminants

The primary source of contamination at the property was the spreading of PCB-containing clarifier solids across the property surface. This release resulted in secondary contamination to surface and subsurface soils by means of adsorption.

Soil Leaching to Groundwater

Due to the limited solubility of PCBs and tendency of PCBs to strongly adhere to soil particles, leaching to groundwater is not considered a method of transportation at this site.

Runoff to Surface Water

The impacted soils are presently covered by well-established sages and grasses. Due to the presence of healthy vegetation, surficial soil is expected to be bound up in root systems, therefore, suspension of surficial soils in runoff is not expected. Runoff of contaminants to surface water is not considered a method of transportation at this Site.

Air Dispersion via Wind

The impacted soils are presently covered by well-established sages and grasses. Due to the presence of healthy vegetation, surficial soil is expected to be bound up in root systems, therefore, surficial soils are not expected to be entrained and transported via wind. Air dispersion of contaminants via wind is not considered a method of transportation at this Site.

3.6 Preliminary Potential Receptors and Exposure Routes

A potentially complete exposure pathway consists of: 1) an identified contaminant source; 2) a transport pathway to locations (exposure points) where potential receptors might come in contact with the contaminant; and 3) an exposure route (e.g. soil ingestion, vapor inhalation, drinking water) through which potential receptors might be exposed to a contaminant. Potential receptors and exposure routes are evaluated by media below.

The Site is a fenced vacant lot and access to the Site is controlled via locked gates. Additionally, the Site is currently undeveloped and there are no occupational workers on-site. There are currently no construction workers (e.g., excavation workers, trench workers) on the Property, however, construction activities would be performed as part of site investigation and redevelopment.

Ecological receptors present may contact chemicals in soil through dermal contact and ingestion; however, the potential for ecological exposure will be determined with the completion of a terrestrial ecological evaluation (TEE) in accordance with WAC 173-340-7490.

Direct Contact (including ingestion)

The impacted soils are presently covered by well-established sages and grasses. Direct dermal contact or ingestion are potential exposure pathways for surface and subsurface soil contamination. This exposure pathway is considered complete for construction workers and ecological receptors.

Inhalation

The impacted soils are presently covered by well-established sages and grasses. Inhalation of fugitive dusts generated from disturbance of surface and subsurface soils is a potential exposure pathway. This exposure pathway is considered complete for construction workers and ecological receptors.

All other exposure pathways are potentially complete and will be further evaluated after site characterization during the RI.

4.0 REGULATORY CRITERIA

Investigation and remedial work at the Site will be performed in accordance with EPA's PCB Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA; Site Revitalization Guidance) published in November 2005 and Title 40 of the Code of Federal Regulations (40 CFR)

part 761 (§761), and Washington State's Model Toxics Control and Regulation and Statute (MTCA; Washington Administrative Code [WAC] Title 173 Chapter 340).

4.1 Cleanup Levels Under TSCA

The Site Revitalization Guidance document specifies several options for self-implemented cleanups and solid waste disposal. Under TSCA, the Site is classified as a Low Occupancy Area, which meets the proposed future use of the site for RV storage as well as industrial activities. As the current zoning of the property as Light Industrial is unlikely to change, this designation is reasonable.

Under TSCA, the impacted soils at the Site are considered bulk PCB remediation waste. For low occupancy areas, EPA has established PCB cleanup levels for bulk remediation waste in three categories:

- Less than or equal to 25 ppm: PCB remediation waste meeting this cleanup level can be left on site with the use of an institutional control to ensure future use of the site meets "low occupancy" use.
- Greater than 25 ppm, but less than or equal to 50 ppm: in addition to the institutional control necessary for soils containing up to 25 ppm, the Site would require a security fence with an appropriate M_L mark indicating the presence of PCBs.
- Greater than 25 ppm, but less than or equal to 100 ppm: this cleanup level requires covering the Site with an appropriate cap such (i.e., a paved surface in the area where PCB remediation waste was removed or left in place in order to prevent or minimize human exposure, infiltration of water, and erosion) and an institutional control (i.e., deed restriction).

4.2 Cleanup Levels Under MTCA

Based on the current zoning and land use plans for the Site, the MTCA Method A cleanup level for industrial land use for PCB mixtures of 10 mg/kg may be applicable for Area B where planned development will be for traditional industrial use. Area A is planned for development as an RV Storage Lot, therefore, the applicable MTCA Method A cleanup level for unrestricted use for PCB mixtures in soil (1 mg/kg) would be applicable.

The previously identified occurrence of PCBs offsite along the southern boundary of Area B would also utilize the MTCA Method A cleanup level, as that property is not controlled by Kirkland Development.

4.3 Selected Screening Levels

Given the cleanup criteria, the planning level approach for management of the PCB impacted soil would include the following considerations. Site soil with PCB concentrations below the applicable cleanup level may only be reused if the concentrations are below 0.04 mg/kg in accordance with Ecology's Guidance for Remediation of Petroleum Contaminated Sites (Ecology 2016). Site soils with concentrations greater than or equal to the applicable cleanup level (1 or 10 mg/kg, depending on the Site area) and less than 50 mg/kg will be transported for disposal as non-hazardous PCB bulk waste at an approved solid waste landfill meeting the requirements under 40 CFR §761.61 paragraph (a)(5)(v)(A). Site soils with concentrations of PCBs exceeding 50 mg/kg will be excavated and transported offsite for disposal as bulk PCB remediation waste at a TSCA-permitted facility.

5.0 SAMPLING AND ANALYSIS PLAN

Site investigation activities will be completed in two phases. The first phase of investigation is designed to determine the extent of soils with PCB concentrations equal to or greater than 50 mg/kg. The second phase of investigation will be completed employing incremental sampling methodology (ISM) to collect data for areas of the Site not included during previous investigation to guide remedial action. Each phase is described in detail below.

5.1 Remedial Investigation Phase 1

The first phase of the RI will be completed to delineate the lateral and vertical extent of soils with PCB concentrations exceeding 50 mg/kg identified in previous investigations. Additionally, groundwater monitoring wells will be installed to establish baseline groundwater conditions at the Site.

5.1.1 Pre-Field Work Activities

A site and job specific health and safety plan that promotes personnel safety and preparedness during the planned activities will be developed prior to conducting the proposed work at the site. On the morning of the day that the field activities are to commence, a "tailgate" meeting will be conducted with Site workers to discuss the health and safety issues and concerns related to the specific work.

Ecology will be notified prior to beginning field work, well-construction Notice of Intent forms and applicable fees will be submitted to Ecology. In addition, necessary access agreements and encroachment permits will be obtained for the proposed sampling locations, as needed. Sampling locations will be marked with white paint or staked according to Washington Northwest Utility Notification Center (NUNC) requirements. At least two days prior to commencing work at the site, NUNC will be notified. The NUNC ticket will be maintained as long as work continues at the site and will be updated as necessary for any adjustments that are made based upon field reconnaissance. In addition, a private utility locator will be contracted to confirm the absence of buried utilities at each proposed well location.

Ecology 2016. Guidance for Remediation of Petroleum Contaminated Sites. Toxics Cleanup Program, Washington State Department of Ecology, Olympia, Washington. Publication No. 10-09-057. Revised June 2016.

5.1.2 Test Pit Completion and Soil Sampling

Shallow test pits will be completed in locations adjacent to where soil containing PCB concentrations above 10 mg/kg were previously documented in 2014 in order to delineate the lateral and vertical extent of these exceedances and to determine the areas and volumes of soil that will require offsite disposal of excavated material. Locations where PCBs were reported at concentrations exceeding 10 mg/kg in the 2014 investigation are TP02, TP05, TP06, TP10, TP13, TP14, TP15, TP17, TP21, TP23, TP25, TP26, TP27, TP30, TP39, TP42, TP45, and TP51.

In general, shallow test pits will be completed to depths of 5 ft bgs at step-out locations spaced 10 and 20 feet in each cardinal direction from the historic locations listed above. Samples will be collected from depths corresponding to the sample depths of the 2014 investigation.

Test pits around TP-10, TP-17, TP-27, and TP-42, which had PCB concentrations over 50 mg/kg in 2014, will be completed at step-out locations spaced 5 and 10 feet in each cardinal direction from the historic locations to better define the extent of the higher concentrations to guide the disposal of PCB-impacted soil. If the extent is not clearly defined following Phase 1 test pits, additional test pit locations will be added as needed.

Test pits around TP27 will extend to a vertical depth of 6 feet bgs at step-out locations due to PCBs detected at a concentration of 1.56 mg/kg at a depth of 5.5 ft bgs in that location in the 2014 investigation.

Sample locations and depths are summarized in Table 2. As indicated in Table 2, deeper sample intervals will be held for analysis pending analytical results of shallower samples or samples collected from other borings.

Test pits will be completed via backhoe under the oversight and direction by a field geologist. All test pit locations will be marked with a flag or stake in the field and the coordinates will be collected via handheld global positioning system (GPS) unit with sub-meter accuracy. At each location, a complete lithological log will be developed. Soils will be logged in accordance with the Unified Soil Classification System (USCS; ASTM D-2487). The soil type will be documented at a minimum of 1-foot intervals. Additionally, the presence of imported materials (e.g. debris, clarifier solids), if encountered, will be noted on the test pit logs.

During completion of the test pits, care will be taken to minimize vertical mixing of soils. To the extent possible, hand tools will be used for sample collection to ensure samples are collected from the targeted interval. At depths where hand tools cannot be used, soil samples will be collected directly from the excavator bucket, with care being taken to not sample material adhered to the excavator bucket. Soil from the test pits will be carefully placed on plastic sheeting, labeled with 1-foot intervals.

Soil samples will be collected directly into laboratory-provided containers that will be sealed and labeled with the project name, sample location ID (e.g. SB02-0.5), date, and time collected. The samples will be placed in a cooler and stored on ice for the duration of sampling and for

transportation to a Washington state-accredited laboratory. Soil samples will be submitted to the laboratory under chain of custody protocols for analysis of PCB Aroclors by EPA Method 8082A on a standard (10-14 business day) turnaround time or to be held for analysis pending the results of shallower samples. Held samples will be analyzed for PCB Aroclors if PCBs are detected at or above 1 mg/kg in the sample immediately above.

Field personnel will wear new disposable nitrile gloves. Hand tools will be decontaminated via a wash with non-phosphate detergent followed by a potable water rinse and final rinse with deionized water. Investigation derived waste (IDW) including decontamination water will be stored in properly labeled 55-gallon drums and stored on site until arrangement for disposal. Soil from test pits will not be collected as IDW but will be backfilled in 1-ft intervals to the vertical profile that it was excavated from. This procedure complies with TSCA guidance because it leaves the Site in a condition no worse than it was found and minimizes waste generation. Ecology's *Guidance for Remediation of Petroleum Contaminated Sites* indicates that soil from backhoe test pits can typically be placed back into the test pit from which they were generated, unless excavation reveals a layer of waste materials or obviously contaminated soil within a particular zone. In that case, the soil would be containerized and taken offsite for disposal.

5.1.3 Monitoring Well Installation and Sampling

Groundwater monitoring wells will be installed in three locations at the Site: upgradient near the east property boundary, approximately in the middle of the Site, and downgradient near the west property boundary.

The groundwater monitoring wells will be installed using a hollow stem auger drill rig. At each well location, a complete lithological log will be developed during advancement of the pilot boring. Soil samples) will be collected starting at ground surface to total depth using a split-spoon sampler at five-foot intervals. Each core sample will be logged in accordance with the Unified Soil Classification System (USCS; ASTM D-2487) and will include:

- Soil description (color, texture, structure, moisture/wetness, odor);
- Depth to groundwater;
- Total depth; and
- Drill rig type and drilling method.

The monitoring wells will be installed with screen intervals and depths designed to intercept the groundwater table beneath the Site up to an estimated total depth of approximately 40 ft bgs. The monitoring wells will be installed in accordance with ASTM D5092 Standard Practice for Design and Installation of Groundwater Monitoring Wells and WAC Title 173 Chapter 160. It is anticipated that the wells will be constructed of 2-inch diameter polyvinyl chloride (PVC) blank (riser) casing, 10 feet of slotted PVC well screen with a 0.010 slot size, and completed with a #2/12 sand (or equivalent) and sealed with hydrated bentonite chips and cement grout. The estimated total depth and screen interval will be finalized in the field based on lithology. The wellhead will be sealed with a watertight, lockable well cap. A flush-mounted, watertight, traffic-rated well box or an aboveground protective metal well casing will be installed over the

wellhead. Well construction details, such as screen interval and total depth, will be finalized in the field based on lithology.

The monitoring wells will be used for groundwater monitoring and to provide groundwater quality data as part of the RI. These monitoring wells will be used as compliance points for the Site.

The monitoring wells will be developed by surging and purging of up to ten well casing volumes of water to remove fine-grained material from the wells. Purge water will be monitored for field parameters including pH, electrical conductivity (EC), temperature, and turbidity. Well development will continue until field parameters stabilize (i.e., turbidity readings reach between five [5] and fifty [50] Nephelometric Turbidity Units [NTU]) or a minimum of ten well volumes have been purged from well.

Prior to groundwater sampling, water levels will be measured in each well using an electric water level probe. The probe will be decontaminated between each well with a non-phosphate detergent wash followed by a potable water rinse and a final rinse with deionized water. The water level in each well will be measured to the nearest 0.01 foot from the top of casing.

The monitoring wells will be purged using low-flow procedures. Groundwater samples will be collected using a peristaltic pump fitted with silicon tubing and polyethylene tubing. Pump tubing will be lowered to a mid-screen depth for purging and sampling. Monitoring wells will be purged at a rate of less than 0.3 liter per minute. The flow rate will be adjusted as necessary to prevent the groundwater level from dropping more than 10 percent. Field parameters will be measured in purged groundwater as it is discharging through a flow-through cell. Groundwater will be passed through the cell and discharged into a temporary storage container. Field parameters will be periodically measured (every 3 minutes) and recorded during well purging and upon stabilization. Field parameters will be measured using a multi-parameter meter and groundwater samples will be collected after the field parameters have stabilized as indicated below:

FIELD PARAMETER (Unit of Measurement)	STABILIZATION CRITERIA
Depth to Water (feet below top of casing, ft btoc)	± 0.3 ft
Temperature (degrees Celsius, °C)	± 3%
pH	± 0.1
Specific Conductance (milliSiemens per centimeter, mS/cm)	± 3%
Dissolved Oxygen (milligrams per liter, mg/L)	± 0.3 mg/L
Oxidation Reduction Potential (millivolts, mV)	± 10 mV
Turbidity (Nephelometric Turbidity Unit, NTU)	± 10% or <10 NTU

Groundwater samples will be collected from the discharge line of the peristaltic pump directly into laboratory-provided containers that will be sealed and labeled with the project name, sample location ID (e.g. MW01), date, and time collected. The samples will be placed in a cooler and stored on ice for the duration of sampling and for transportation to a Washington state-accredited laboratory. Groundwater samples will be submitted to the laboratory under chain of custody protocols for analysis of PCB Aroclors by EPA Method 8082A on a standard (10-14 business day) turnaround time.

Field personnel will wear new disposable nitrile gloves. Investigation derived waste (IDW) including soil cuttings and decontamination water will be stored in properly labeled 55-gallon drums and stored on site until arrangement for disposal.

5.2 Remedial Investigation Phase 2

ISM will be employed at the Site in order to guide the fate of excavated soils across the Site. The overall protocol is explained in detail in Interstate Technology and Regulatory Council's (ITRC) Incremental Sampling Methodology Technical and Regulatory Guidance published in February 2012. This guidance is currently in the process of being updated, however the Clarifications to ITRC 2012 ISM-1 Guidance document, dated January 22, 2020 will be consulted for incorporation into the sampling approach.

The site-specific approach is detailed below.

Soils with PCB concentrations exceeding 10 mg/kg, as delineated during the first phase of the remedial investigation, will be excluded from additional investigation. Those areas will either be staked and marked in the field or excavated as part of an interim action (as described below in

Section 7.1) prior to completion of further sampling activities conducted under Phase 2 of the remedial investigation.

5.2.1 Decision Units

Decision units (DUs) are defined areas on the Site that are used to subdivide the project site. DUs will be established for the Site based on the results of the initial RI investigation phase. As stated above, areas with soils exceeding 10 mg/kg will not be included in the ISM sampling program and the DUs will be developed to exclude those areas, assuming the data collected in the first phase is sufficient to determine the lateral and vertical extent of PCB contamination in soil.

The site will be divided into sections not to exceed approximately 0.5 acres each (approximately 20 sections over the entire property). The sections will be staked off at the surface. Each DU will consist of 1-foot vertical intervals within the individual section, with DUs extending up to depths of 5 ft bgs as needed, to allow for vertical delineation of PCB concentrations exceeding 1 mg/kg. Thirty samples will be collected from each one-foot interval DU. These individual sampling locations will be selected ahead of field activities and located in the field using a handheld Trimble GPS unit or equivalent that has been preprogrammed with these locations. The sampling process is described below.

5.2.2 ISM Sample Collection

Soil samples from two initial DUs intervals (0-1 feet bgs and 1-2 feet bgs) will be collected using hand tools (e.g. hand auger or soil handheld soil recovery probe). Deeper DU intervals, if needed, will be collected in a similar manner of test pit excavation utilized during Phase I of the investigation, segregating one-foot intervals on plastic sheeting during excavation. Approximately one ounce of soil will be collected from each discrete sample location (30 locations per DU) and placed in a laboratory provided container labeled with the DU number (e.g. DU-Sec01-1-2 which would be the 1-2 ft bgs interval from Section 1). The sample containers will be closed and placed in a cooler and stored on ice for the duration of sampling and for transportation to a Washington state-accredited laboratory. A marking flag will be placed at the sample location.

The samples will be submitted to a Washington state accredited laboratory under chain of custody protocols. The DU samples will be submitted for ISM processing and subsequent analysis of PCBs by EPA Method 8082A on a standard (10-14 business day) turnaround time.

Tools will be decontaminated between decision units. Decontamination will consist of a wash with non-phosphate detergent followed by a potable rinse and final rinse with deionized water.

Field personnel will wear new disposable nitrile gloves, which will be changed out between DUs. Decontamination water will be collected into a properly labeled 55-gallon drum and stored on site until it is disposed of.

5.2.3 Field Quality Assurance/Quality Control Samples

Per the ITRC guidance document, replicate incremental samples will be collected to ensure reliable estimates of the mean concentration of a contaminant within a DU. Replicate samples will be collected on a frequency of one per every 10 DU. One duplicate sample (i.e. the initial ISM sample plus two additional ISM samples) will be collected for the selected DUs for batch statistical evaluation of sampling precision. The replicate samples will be collected from within the same DU with the same number of samples collected from each subunit as in the initial ISM sample. The replicate samples will be collected along the same approximate directional lines established through the DU for the initial ISM sample with different random starting locations on the first line/row of the DU and continuing to sample at this different random interval throughout the DU for each replicate. The increments for ISM replicates will not be collected from the same locations or collocated with those used for the initial ISM sample. The replicate samples will be collected in a manner identical to the initial ISM sample. Replicate samples will be submitted to the laboratory as "blind" samples (e.g. given fictitious sample IDs [ex. DU11]).

Equipment blank samples will be collected to assess the adequacy of the decontamination process. Laboratory supplied deionized water will be poured over and/or through a decontaminated hand tool and collected directly into a laboratory provided container. The container will be labeled with project number, sample identification (e.g. Rinsate-1), and placed into a cooler and stored on ice for the duration of sampling and for transportation to a Washington state-accredited laboratory. Equipment blanks will be collected at a frequency of one per day or one per 20 DUs, whichever is more frequent.

The Quality Assurance/Quality Control Samples will be submitted to a Washington state accredited laboratory for analysis of PCBs by EPA Method 8082A on a standard (10-14 business day) turnaround time.

5.2.4 Laboratory Processing of ISM Samples

Sample conditioning will be performed by the laboratory upon receipt of the samples. The sample conditioning process will include the following steps:

- Air-drying – sample will be spread evenly over a lined tray and placed in a ventilated area with sufficient airflow to carry away evaporated moisture. The samples will be turned and/or crushed as needed during the drying process.
- Particle size reduction – following drying, the sample will be ground in order to facilitate more representative sub-sampling by reducing the range of particle sizes present. During sample grinding, the sample will be ground via method appropriate to minimize thermal degradation of PCBs in the sample such as a low-speed ball mill or rotary pulverizer.
- Analytical subsampling – the retained sample volume will be subsampled using the two-dimensional Japanese slabcake method. The sample will be spread evenly onto a 2-D surface. A square scoop will be taken by removing an increment that equally represents the entire vertical column of the slabcake then placed in a receiving

container. This process will be repeated at least 30 times at systematic random locations around the entire sample.

Once sample preparation is completed, the laboratory will prepare/extract and analyze the sample according to the analytical method (EPA Method 8082A).

6.0 ISM DATA EVALUATION

Replicate data collected from select DUs will be used to evaluate the field sampling variability for each DU at the Site. The general data evaluation process will be as follows:

The standard deviation will be calculated for each set of replicates.

$$SD = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n - 1}}$$

SD = standard deviation

n = number of data points

x_i = each triplicate result

\bar{x} = the mean of triplicate results

A percent relative standard deviation (RSD) will then be calculated using the following equation:

$$RSD\% = \frac{100\% \times \text{Standard Deviation}}{\text{Average}}$$

RSD values will be utilized to determine the confidence that the average contaminant concentrations are adequately representative of the sampling areas. An RSD of less than 35% will be determined to be suitable. If RSD percentage is greater than 35%, acceptability of this data will be evaluated with regard to factors including but not limited to field conditions and observations and whether analytical results are at or near the laboratory reporting limit, which may indicate a greater level of variability.

For RSD percentages greater than 35%, calculation of a 95% Upper Confidence Limit (UCL) using Student's t or Chebyshev methods will be utilized by means of an online calculator provided in the ITRC guidance document. The resulting UCL calculation will be compared to the either the 1 mg/kg or 10 mg/kg cleanup criteria, as applicable based on area. This online calculator, a Microsoft Excel table, is available for download from ITRC.

If review of RSD exceedances determines unacceptable results, a resampling of a percentage of the DUs may be warranted.

7.0 INTERIM REMEDIAL ACTION

Prior to development, Kirkland intends to mine the native gravel material present beneath the fill and silty sand. This would be done after removal of PCB-impacted soil. In addition, the finer particles of the gravel would be sampled to verify that it is uncontaminated. The sampling

results from Phase I and Phase 2 of the RI will be used to guide interim remedial action consisting of excavation at the Site prior to and during the gravel mining process.

Written notification will be provided to the EPA and Ecology at least 30 calendar days prior to beginning remedial excavation. The written notification will include a description of the nature and extent of contamination, a summary of sampling and analysis methods employed at the Site, a cleanup plan for the Site including the schedule of remediation activities and details regarding disposal, and a written certification signed by the owner stating that all documentation pertaining to the cleanup action is on file and available for EPA inspection. If conditions requiring a change to the planned activities occur, written notification describing the changes will be provided to the EPA and Ecology at least 14 calendar days prior to implementing the change.

7.1 Remedial Excavation

Soils with PCB concentrations greater than or equal to 1 mg/kg for Area A and 10 mg/kg for Area B will be excavated and disposed of off-site at a facility permitted to receive PCB-impacted soils. The areas and volumes of soil for excavation will be determined based on the results of the investigation activities described above. Soils with PCB concentrations exceeding the proposed cleanup criteria (1 or 10 mg/kg) for the area will be excavated laterally and vertically to the nearest lateral test pit location with concentrations below the applicable cleanup criteria and vertically to the full extent of PCB-impacted soil. Confirmation samples will be collected from the base of the resulting excavation at a frequency of one sample per 200 square feet, with a minimum on one sample per remedial excavation. If applicable, samples collected during Phase I may be utilized as confirmation samples. Excavated soils will be managed as described below.

Remedial excavation of soil for Area B, as noted above, may be completed at a later date to initially direct resources to Area A remedial activities and subsequent development. PBS will notify Ecology of the timing of remedial activities in Area B following completion of all proposed sampling activities.

During the remedial excavation activities, the Site soils will be managed on a decision unit scale per the following decision criteria:

- Soil in DUs (or DU subunit) with concentrations of total PCBs less than 0.04 mg/kg will be considered suitable for reuse onsite and will be segregated from PCB-impacted soils during excavation activities. Reuse of these soils on site will be limited to areas that will be capped as part of redevelopment
- Soil in DUs with estimated mean concentrations of total PCBs greater than or equal to 1 mg/kg and less than 50 mg/kg will be excavated and stockpiled. The stockpile area will be lined with a 15mil (equivalent to 0.015 inch) thick reinforced polyethylene (RPE) material and will be covered with RPE at the end of each workday to prevent stormwater exposure. The PCB-impacted stockpiled soils will be segregated from clean soils (that are eligible for reuse) and will be transported by a licensed hauling company to Wasco County Landfill for disposal as non-hazardous PCB-impacted solid waste.

- Soils in DUs with estimated mean concentrations of total PCBS equal to or greater than 50 mg/kg will be excavated and stockpiled separately from clean soils and other PCB-impacted soils. The area will be lined with a 15-mil-thick reinforced polyethylene (RPE) material and will be covered with RPE at the end of each workday to prevent stormwater exposure. The soils will be transported by a licensed hazardous waste hauling company to Wasco County Landfill for disposal as TSCA solid waste. A Uniform Hazardous Waste Manifest will accompany the soils.

After the PCB-impacted soil is removed, Kirkland plans to mine native gravel in the western area of the property, included in Area A. This would only be done after all PCB-impacted soil is excavated to uncontaminated (absent of detectable PCBs) clean soil. Sampling of the gravel to confirm the absence of PCBs would be completed using ISM methodology, in a similar manner as described in Section 5.2. DUs for evaluating the gravel will be completed in one-acre increments. Discrete sampling locations will be selected to represent the volume of the upper ten feet of gravel by completion of ten exploratory test pits, collecting gravel samples every two vertical feet in each test pit for a total of 50 discrete sampling points per DU. Based on previous evaluation of the gravel material completed by the property owner, this material was reported to be relatively free of fine materials. Collected ISM samples would be ground and milled by the laboratory prior to further ISM processing. Samples would be analyzed for PCBs. A replicate sample will be collected for analysis from the initial DU.

Following completion of the native gravel mining and excavation operations, imported backfill material will be placed to at least 10 feet above the high-water table. Excavated soils designated for re-use (site soils with <0.04 mg/kg total PCB concentration) for onsite backfill purposes will be placed above the imported fill. An additional 2-3 feet of imported fill will be used to cap those soils prior to surface completion.

7.2 Stockpile and Contaminated Soil Management

Excavated soils from Area A with PCB concentrations greater than or equal to 1 mg/kg will be stockpiled at a location to be designated following RI sampling that is determined to be ideal for continued management. Contaminated soils will be placed on RPE material with a minimum 15mil thickness with adjacent sheeting sections overlapping a minimum of 3 feet; soils will be segregated according to their designation as non-hazardous PCB-impacted solid waste or TSCA solid waste. All stockpiles will be surrounded by a berm to prevent run-on and/or run-off precipitation and covered with RPE material daily to prevent erosion and transport via wind and/or storm water.

Care will be taken during truck loading to minimize generation of dust. All truck loads will be securely covered before leaving the project site and remained covered during transport of the soil to the disposal facility.

Transport of contaminated soil to the appropriate disposal facilities will be performed by haulers licensed to transport the type of contaminated soil. Contractor shall submit a copy of its

Transporter's permit/qualifications for shipping Contaminated Wastes and/or Hazardous Wastes prior to any waste shipment.

Heavy equipment, including excavators and haul trucks, will arrive at the site free of debris and contamination. A staging area will be developed near the point where the trucks will enter the public roadway system. Prior to leaving the construction site, all heavy equipment will have visible soil removed from the wheels, wheel wells, and other exterior areas of the vehicle. The same decontamination process will be used for equipment moving from contaminated areas to non-contaminated cells to avoid cross contamination. The tracking of soil onto public roadways will be minimized by using standard construction practices, including the use of a trackout pad composed of washed gravel or crushed rock. Trackout will be cleaned up from roadways as needed by using a street sweeper, wet broom, or by manual sweeping, which will then be placed back into the stockpiled material for future disposal.

8.0 REPORTING

The RI and interim action report will present the results of the field investigation, summary of the nature and extent of contamination, identification of ecological and human health receptors, and a conceptual site model for current and future land uses. The report will include site plans and copies of laboratory reports and chain of custody documentation as follows:

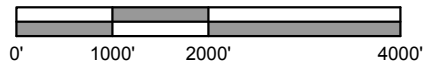
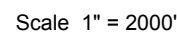
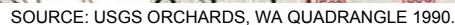
- Map of the site showing site feature and sampling locations with sample identification numbers and DU boundaries.
- Description of the sampling techniques and the type of analytical methods used. The descriptions will include the number, locations, and depths of samples.
- Tables with analytical results for the soil samples collected with sample identification numbers and comparison to the MTCA Method A cleanup level for unrestricted land use for total PCBs.
- The extents of the excavated soil and temporary stockpile locations.
- Copies of original analytical reports and data quality assurance reports, including method detection limits and practical quantitation limits.

9.0 SIGNATURES

Melanie Young, PE
Senior Environmental Engineer

Dennis Terzian, LG
Senior Project Manager

Figures



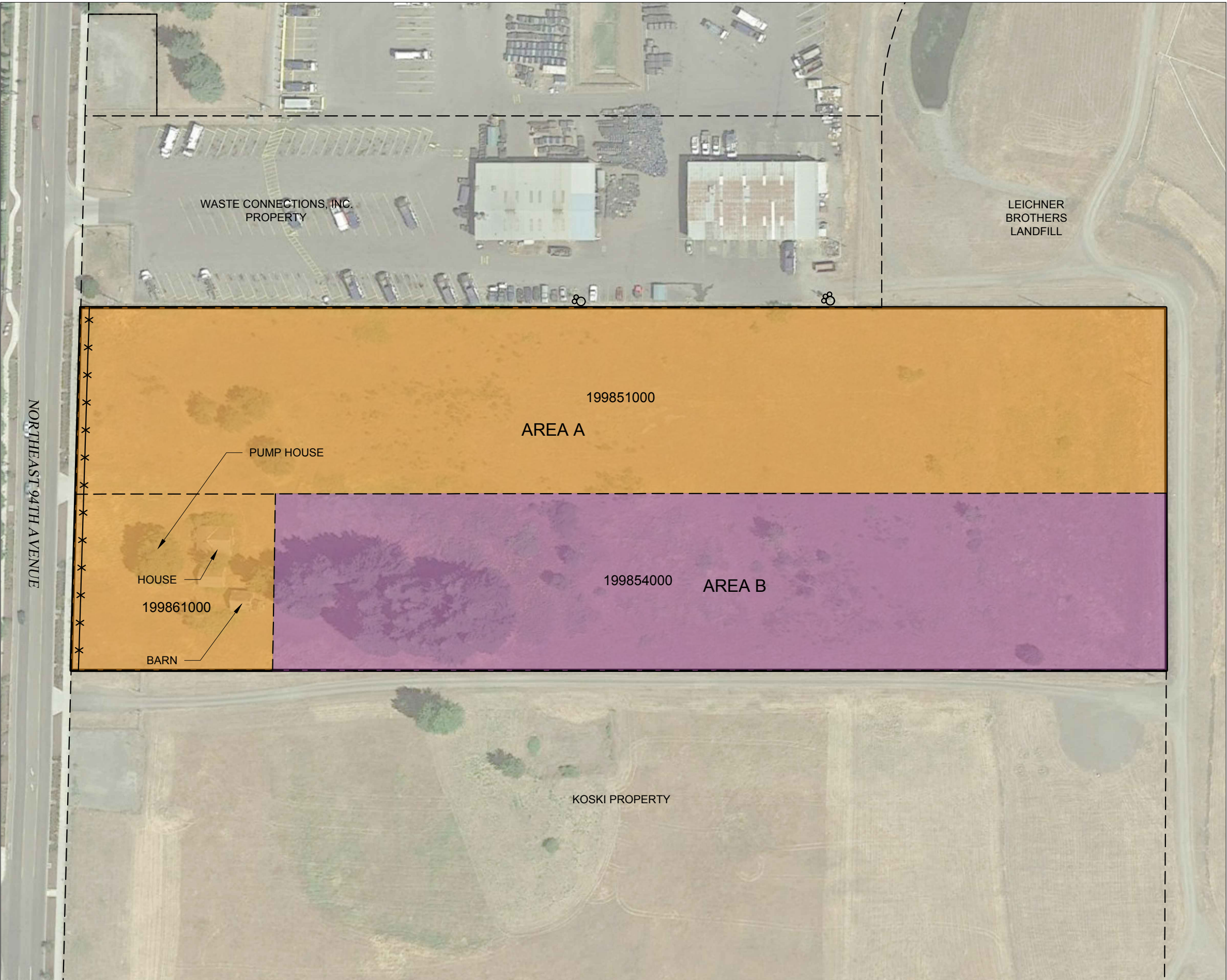
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9109 AND 9115 NORTHEAST 94TH AVENUE
VANCOUVER, WASHINGTON

1

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LEGEND

- POLE-MOUNTED TRANSFORMER
- PROPERTY BOUNDARY
- TAX LOT BOUNDARY
- FENCE
- AREA A
- AREA B

Scale 1" = 100'

Full Size Sheet Format Is 11x17; If Printed Size Is Not 11x17, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

PREPARED FOR: FLEISCHER PROPERTIES

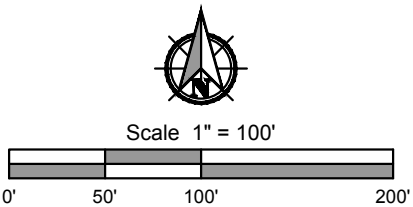
SITE PLAN
REMEDIAL INVESTIGATION WORK PLAN
9109 AND 9115 NORTHEAST 94TH AVENUE, VANCOUVER, WASHINGTON

PROJECT
22875.000
DATE
JUL 2020
SHEET ID
2

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- LEGEND**
- ⑫ SOIL SAMPLE GRID NUMBER (2010 GEODESIGN, INC. INVESTIGATION)
 - ⊗ POLE-MOUNTED TRANSFORMER
 - ⊕SS-1 COMPOSITE SOIL SAMPLE SECTION FROM 2010 GEODESIGN, INC. INVESTIGATION
 - ▭ PROPERTY BOUNDARY
 - ▭ TAX LOT BOUNDARY
 - x—x— FENCE
 - ▭ COMPOSITE SOIL SAMPLE SECTION FROM 2010 GEODESIGN, INC. INVESTIGATION



Full Size Sheet Format Is 11x17; If Printed Size Is Not 11x17, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

PREPARED FOR: FLEISCHER PROPERTIES

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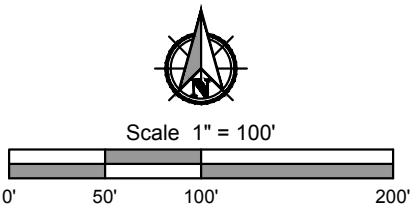
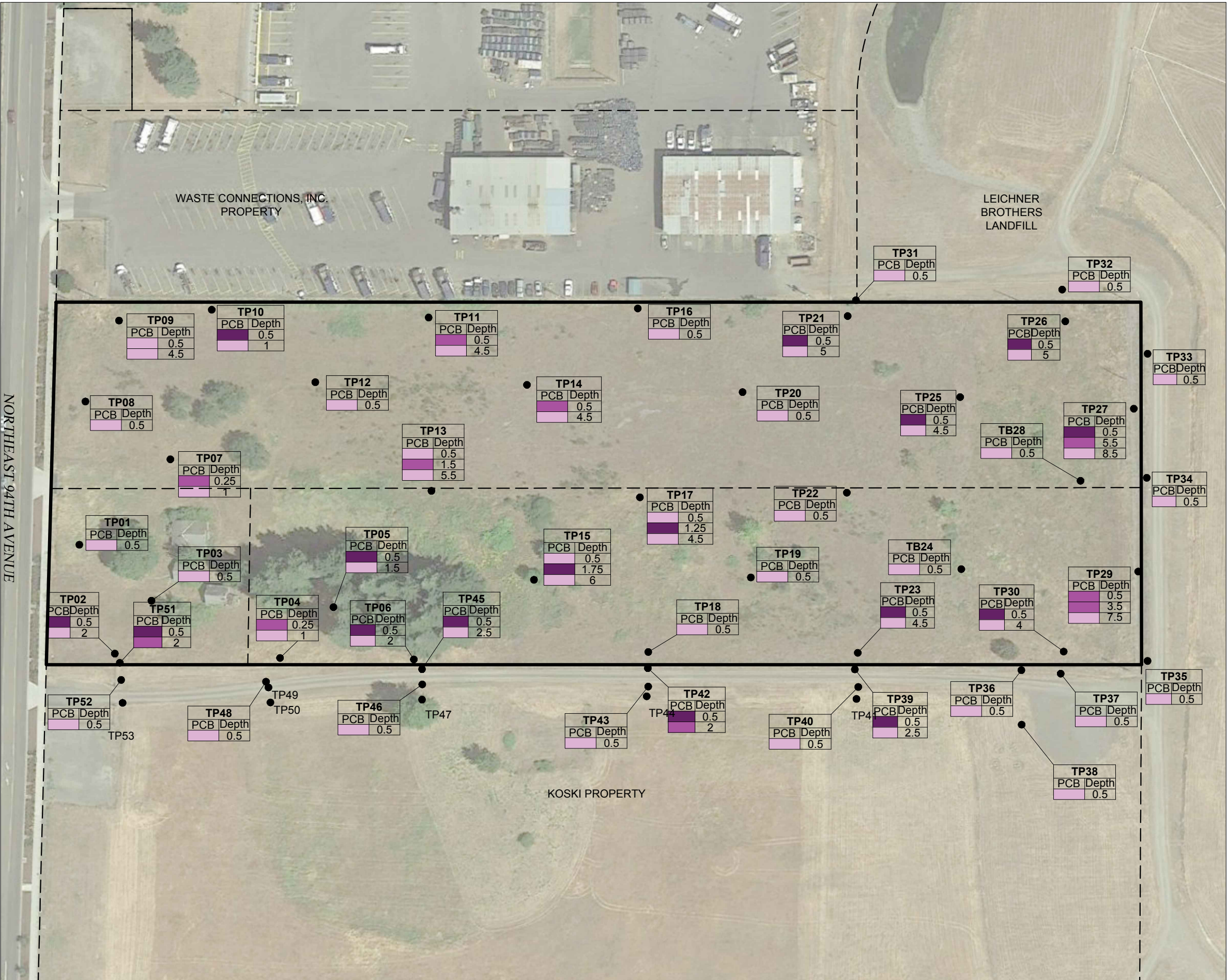
2010 INVESTIGATION LOCATIONS

REMEDIAL INVESTIGATION WORK PLAN

9109 AND 9115 NORTHEAST 94TH AVENUE, VANCOUVER, WASHINGTON

PROJECT
22875.000
DATE
JUL 2020
SHEET ID
3

NORTHEAST 94TH AVENUE



2014 INVESTIGATION LOCATIONS AND PCB CONCENTRATIONS

REMEDIAL INVESTIGATION WORK PLAN

9109 AND 9115 NORTHEAST 94TH AVENUE, VANCOUVER, WASHINGTON

PROJECT
22875.000
DATE
JUL 2020
SHEET ID
4

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Tables

TABLE 1
SUMMARY OF 2014 SOIL ANALYTICAL RESULTS

Fleischer Properties
9109 and 9115 Northeast 94th Avenue, Vancouver, Washington
PBS Project No. 22875.000

				PCBs ^b (mg/kg)										Metals ^c (mg/kg)										TPH ^d (mg/kg)	
Location	Sample Name	Collection Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs ^e	Arsenic	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Zinc	Diesel	Lube Oil	
MTCA A Industrial Land Use ^a				NV	NV	NV	NV	NV	NV	NV	NV	NV	10	20	2,000	NV	NV	1,000	NV	2	NV	NV	2,000	2,000	
TP01	TP01-S-0.5	7/15/2014	0.5	<0.0004	<0.0004	<0.0004	<0.0004	0.389	<0.0004	<0.0004	<0.0004	<0.0004	0.389	--	--	--	--	--	--	--	--	--	--	--	
TP02	TP02-S-0.5	7/15/2014	0.5	<0.000363	<0.000363	<0.000363	<0.000363	32.4	<0.000363	<0.000363	<0.000363	<0.000363	32.4	2.57	14.8	35.7	--	38.8	--	0.0341	16.3	601	138	855	
	TP02-S-2.0	7/15/2014	2.0	<0.000377	<0.000377	<0.000377	<0.000377	0.185	<0.000377	<0.000377	<0.000377	<0.000377	0.185	--	--	--	--	--	--	--	--	--	--	--	
TP03	TP03-S-0.5	7/15/2014	0.5	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	2.95	9.98	29.7	--	7.71	--	<0.0192	10.1	78.5	18.3	67	
TP04	TP04-S-0.25	7/15/2014	0.3	<0.000397	<0.000397	<0.000397	<0.000397	6.13	<0.000397	<0.000397	<0.000397	<0.000397	6.13	3.09	14.1	43.2	--	53.6	--	0.0631	12.6	836	85.7	659	
	TP04-S-1.0	7/15/2014	1.0	<0.000427	<0.000427	<0.000427	<0.000427	0.0667	<0.000427	<0.000427	<0.000427	<0.000427	0.0667	--	--	--	--	--	--	--	--	--	--	--	
TP05	TP05-S-0.5	7/15/2014	0.5	<0.000389	<0.000389	<0.000389	<0.000389	38	<0.000389	<0.000389	<0.000389	<0.000389	38	--	--	--	--	--	--	--	--	--	--	--	
	TP05-S-1.5	7/15/2014	1.5	<0.000406	<0.000406	<0.000406	<0.000406	0.0458	<0.000406	<0.000406	<0.000406	<0.000406	0.0458	--	--	--	--	--	--	--	--	--	--	--	
TP06	TP06-S-0.5	7/15/2014	0.5	<0.000379	<0.000379	<0.000379	<0.000379	48.3	<0.000379	<0.000379	<0.000379	<0.000379	48.3	2.05	16	44.4	--	45.9	--	0.0485	11.4	2380	111	386	
	TP06-S-2.0	7/15/2014	2.0	<0.00038	<0.00038	<0.00038	<0.00038	0.114	<0.00038	<0.00038	<0.00038	<0.00038	0.114	--	--	--	--	--	--	--	--	--	--	--	
TP07	TP07-S-0.25	7/15/2014	0.3	<0.000361	<0.000361	<0.000361	<0.000361	1.26	<0.000361	<0.000361	<0.000361	<0.000361	1.26	3.9	13.8	40.1	--	56.3	--	0.075	20.2	238	149	825	
	TP07-S-1.0	7/15/2014	1.0	<0.000406	<0.000406	<0.000406	<0.000406	0.045	<0.000406	<0.000406	<0.000406	<0.000406	0.045	--	--	--	--	--	--	--	--	--	--	--	
TP08	TP08-S-0.5	7/15/2014	0.5	<0.00038	<0.00038	<0.00038	<0.00038	0.0822	<0.00038	<0.00038	<0.00038	<0.00038	0.0822	2.51	9.87	28.3	--	15.4	--	0.0277	10.4	83.8	52.3	405	
TP09	TP09-S-0.5	7/15/2014	0.5	<0.00043	<0.00043	<0.00043	<0.00043	0.997	<0.00043	<0.00043	<0.00043	<0.00043	0.997	--	--	--	--	--	--	--	--	--	--	--	
	TP09-S-4.5	7/15/2014	4.5	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	<0.000366	--	--	--	--	--	--	--	--	--	--	--	
TP10	TP10-S-0.5	7/15/2014	0.5	<0.000399	<0.000399	<0.000399	<0.000399	68.5	<0.000399	<0.000399	<0.000399	<0.000399	68.5	2.96	14.3	38.1	--	39.3	--	0.055	20.4	1030	98.8	359	
	TP-S-0.5DUP	7/15/2014	0.5	<0.000399	<0.000399	<0.000399	<0.000399	53.2	<0.000399	<0.000399	<0.000399	<0.000399	53.2	2.74	14.4	45.3	--	34.8	--	0.0608	11.3	1340	78.2	232	
	TP10-S-1.5	7/15/2014	1.5	<0.000404	<0.000404	<0.000404	<0.000404	0.0343	<0.000404	<0.000404	<0.000404	<0.000404	0.0343	--	--	--	--	--	--	--	--	--	--	--	
TP11	TP11-S-0.5	7/15/2014	0.5	<0.000391	<0.000391	<0.000391	<0.000391	5.66	<0.000391	<0.000391	<0.000391	<0.000391	5.66										--	--	
	TP11-S-4.5	7/15/2014	4.5	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	<0.000374	--	--	--	--	--	--	--	--	--	--	--	
TP12	TP12-S-0.5	7/15/2014	0.5	<0.000396	<0.000396	<0.000396	<0.000396	0.493	<0.000396	<0.000396	<0.000396	<0.000396	0.493	2.61	12.1	30.7	--	8.65	--	0.0235	11.5	89.9	<17.8	85.2	
TP13	TP13-S-0.5	7/16/2014	0.5	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	<0.000399	--	--	--	--	--	--	--	--	--	--	--	
	TP13-S-1.5	7/16/2014	1.5	<0.000421	<0.000421	<0.000421	<0.000421	11.2	<0.000421	<0.000421	<0.000421	<0.000421	11.2	3.95	16	41.5	--	52.5	--	0.0899	14.6	893	25.8	91.7	
	TP13-S-5.5	7/16/2014	5.5	<0.00037	<0.00037	<0.00037	<0.00037	0.124	<0.00037	<0.00037	<0.00037	<0.00037	0.124	--	--	--	--	--	--	--	--	--	--	--	
TP14	TP14-S-0.5	7/16/2014	0.5	<0.000412	<0.000412	<0.000412	<0.000412	13.9	<0.000412	<0.000412	<0.000412	<0.000412	13.9	--	--	--	--	--	--	--	--	--	--	--	
	TP14-S-4.5	7/16/2014	4.5	<0.00037	<0.00037	<0.00037	<0.00037	0.0256	<0.00037	<0.00037	<0.00037	<0.00037	0.0256	--	--	--	--	--	--	--	--	--	--	--	
TP15	TP15-S-0.5	7/16/2014	0.5	<0.000397	<0.000397	<0.000397	<0.000397	0.108	<0.000397	<0.000397	<0.000397	<0.000397	0.108	--	--	--	--	--	--	--	--	--	--	--	
	TP15-S-1.75	7/16/2014	1.8	<0.00042	<0.00042	<0.00042	<0.00042	39.2	<0.00042	<0.00042	<0.00042	<0.00042	39.2	2.67	15.7	28.8	--	33.3	--	0.0877	9.86	1320	65.7	201	
	TP15-S-6.0	7/16/2014	6.0	<0.000373	<0.000373	<0.000373	<0.000373	0.0871	<0.000373	<0.000373	<0.000373	<0.000373	0.0871	--	--	--	--	--	--	--	--	--	--	--	
TP16	TP16-S-0.5	7/16/2014	0.5	<0.000428	0.000428	0.000428	<0.000428	0.0191	<0.000428	<0.000428	<0.000428	<0.000428	0.0191	3.62	15.6	33.2	--	8.1	--	<0.0214	18.8	5010	<19.3	82.2	
TP17	TP17-S-0.5	7/16/2014	0.5	<0.000385	<0.000385	<0.000385	<0.000385	1.71	<0.000385	<0.000385	<0.000385	<0.000385	1.71	--	--	--	--	--	--	--	--	--	--	--	
	TP17-S-1.25	7/16/2014	1.3	<0.000418	<0.000418	<0.000418	<0.000418	86.6	<0.000418	<0.000418	<0.000418	<0.000418	86.6	2.48	12.8	29.3	--	38.1	--	0.067	7.71	694	59.7	165	
	TP17-S-4.5	7/16/2014	4.5	<0.000375	<0.000375	<0.000375	<0.000375	0.134	<0.000375	<0.000375	<0.000375	<0.000375	0.134	--	--	--	--	--	--	--	--	--	--	--	

TABLE 1
SUMMARY OF 2014 SOIL ANALYTICAL RESULTS

Fleischer Properties
9109 and 9115 Northeast 94th Avenue, Vancouver, Washington
PBS Project No. 22875.000

				PCBs ^b (mg/kg)										Metals ^c (mg/kg)										TPH ^d (mg/kg)	
Location	Sample Name	Collection Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs ^e	Arsenic	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Zinc	Diesel	Lube Oil	
MTCA A Industrial Land Use ^a				NV	NV	NV	NV	NV	NV	NV	NV	NV	10	20	2,000	NV	NV	1,000	NV	2	NV	NV	2,000	2,000	
TP18	TP18-S-0.5	7/16/2014	0.5	<0.000395	<0.000395	<0.000395	<0.000395	0.793	<0.000395	<0.000395	<0.000395	<0.000395	0.793	2.5	11.9	27.5	--	6.98	--	0.0286	7.42	1250	<17.8	79.4	
TP19	TP19-S-0.5	7/16/2014	0.5	<0.000426	<0.000426	<0.000426	<0.000426	0.187	<0.000426	<0.000426	<0.000426	<0.000426	0.187	--	--	--	--	--	--	--	--	--	--	--	
TP20	TP20-S-0.5	7/16/2014	0.5	<0.000407	<0.000407	<0.000407	<0.000407	0.803	<0.000407	<0.000407	<0.000407	<0.000407	0.803	2.07	12.7	24.3	--	6.14	--	<0.0186	19.4	348	22.6	105	
TP21	TP21-S-0.5	7/16/2014	0.5	<0.000383	<0.000383	<0.000383	<0.000383	13.4	<0.000383	<0.000383	<0.000383	<0.000383	13.4	4.9	15.3	28.8	--	18.5	--	0.0304	13.8	2700	37.5	162	
	TP21-S-5.0	7/16/2014	5.0	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	<0.000375	--	--	--	--	--	--	--	--	--	--	--	
TP22	TP22-S-0.5	7/16/2014	0.5	<0.000434	<0.000434	<0.000434	<0.000434	0.635	<0.000434	<0.000434	<0.000434	<0.000434	0.635	2.5	9.46	41.6	--	7.13	--	<0.0201	10.6	168	<19.5	<65.1	
TP23	TP23-S-0.5	7/16/2014	0.5	<0.000397	<0.000397	<0.000397	<0.000397	17.1	<0.000397	<0.000397	<0.000397	<0.000397	17.1	2.24	10.6					0.0497			23.2	104	
	TP23-S-4.5	7/16/2014	4.5	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	<0.000363	--	--	--	--	--	--	--	--	--	--	--	
TP24	TP24-S-0.5	7/16/2014	0.5	<0.000386	<0.000386	<0.000386	<0.000386	0.514	<0.000386	<0.000386	<0.000386	<0.000386	0.514	2.18	10.1	27.4		32.2		0.114	8.7	177	19.3	104	
TP25	TP25-S-0.5	7/16/2014	0.5	<0.000387	<0.000387	<0.000387	<0.000387	26.9	<0.000387	<0.000387	<0.000387	<0.000387	26.9	3.7	12.6	29.2	--	23.8	--	0.0597	10.6	314	62.4	215	
	TP25-S-4.5	7/16/2014	4.5	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.000185	--	--	--	--	--	--	--	--	--	--	--	
TP26	TP26-S-0.5	7/16/2014	0.5	<0.000393	<0.000393	<0.000393	<0.000393	33.2	<0.000393	<0.000393	<0.000393	<0.000393	33.2	4.19	26.2	35.5	31200	95.3	538	0.0723	11.3	2380	44.9	133	
	TP26-S-5.0	7/16/2014	5.0	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	<0.00036	--	--	--	--	--	--	--	--	--	--	--	
TP27	TP27-S-0.5	7/16/2014	0.5	<0.000461	<0.000461	<0.000461	<0.000461	63.1	<0.000461	<0.000461	<0.000461	<0.000461	63.1	14.6	17	35.5	27200	96.4	333	0.11	8.97	448	69.3	162	
	TP27-S-5.5	7/16/2014	5.5	<0.000412	<0.000412	<0.000412	<0.000412	1.56	<0.000412	<0.000412	<0.000412	<0.000412	1.56	--	--	--	--	--	--	--	--	--	--	--	
	TP27-S-8.5	7/16/2014	8.5	<0.000377	<0.000377	<0.000377	<0.000377	0.392	<0.000377	<0.000377	<0.000377	<0.000377	0.392	--	--	--	--	--	--	--	--	--	--	--	
TP28	TP28-S-0.5	7/16/2014	0.5	<0.000391	<0.000391	<0.000391	<0.000391	0.532	<0.000391	<0.000391	<0.000391	<0.000391	0.532	--	--	--	47400	--	817	--	--	--	--	--	
TP29	TP29-S-0.5	7/16/2014	0.5	<0.000382	<0.000382	<0.000382	<0.000382	3.98	<0.000382	<0.000382	<0.000382	<0.000382	3.98	3.08	11.9	25.7	36900	15.5	429	0.0444	10.5	382	19.7	104	
	TP-S-0.5DUP	7/16/2014	0.5	<0.000386	<0.000386	<0.000386	<0.000386	3.64	<0.000386	<0.000386	<0.000386	<0.000386	3.64	2.88	15.5	24.5	43300	12.6	437	0.0405	15.3	390	23.1	105	
	TP29-S-3.5	7/16/2014	3.5	<0.000448	<0.000448	<0.000448	<0.000448	4.21	<0.000448	<0.000448	<0.000448	<0.000448	4.21	--	--	--	--	--	--	--	--	--	--	--	
	TP29-S-7.5	7/16/2014	7.5	<0.000358	<0.000358	<0.000358	<0.000358	0.186	<0.000358	<0.000358	<0.000358	<0.000358	0.186	--	--	--	--	--	--	--	--	--	--	--	
TP30	TP30-S-0.5	7/16/2014	0.5	<0.000382	<0.000382	<0.000382	<0.000382	17.3	<0.000382	<0.000382	<0.000382	<0.000382	17.3	--	--	--	41700	--	517	--	--	--	--	--	
	TP30-S-4.0	7/16/2014	4.0	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	--	--	--	--	--	--	--	--	--	--	--	
TP31	TP31-S-0.5	10/1/2014	0.5	<0.000363	<0.000363	<0.000363	<0.000363	0.0694	<0.000363	<0.000363	<0.000363	<0.000363	0.0694	--	--	--	--	--	--	--	--	--	--	--	
TP32	TP32-S-0.5	10/1/2014	0.5	<0.000401	<0.000401	<0.000401	<0.000401	0.0187	<0.000401	<0.000401	<0.000401	<0.000401	0.0187	--	--	--	--	--	--	--	--	--	--	--	
TP33	TP33-S-0.5	10/1/2014	0.5	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	<0.000337	--	--	--	--	--	--	--	--	--	--	--	
TP34	TP34-S-0.5	10/1/2014	0.5	<0.000347	<0.000347	<0.000347	<0.000347	<0.000347	0.00955	<0.000347	<0.000347	<0.000347	0.00955	--	--	--	--	--	--	--	--	--	--	--	
TP35	TP35-S-0.5	10/1/2014	0.5	<0.000349	<0.000349	<0.000349	<0.000349	0.0431	<0.000349	<0.000349	<0.000349	<0.000349	0.0431	--	--	--	--	--	--	--	--	--	--	--	
TP36	TP36-S-0.5	10/1/2014	0.5	<0.000362	<0.000362	<0.000362	<0.000362	0.00404	<0.000362	<0.000362	<0.000362	<0.000362	0.00404	--	--	--	--	--	--	--	--	--	--	--	
TP37	TP37-S-0.5	10/1/2014	0.5	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	<0.000362	--	--	--	--	--	--	--	--	--	--	--	
TP38	TP38-S-0.5	10/1/2014	0.5	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	<0.000383	--	--	--	--	--	--	--	--	--	--	--	
TP39	TP39-S-0.5	10/1/2014	0.5	<0.000385	<0.000385	<0.000385	<0.000385	19.6	<0.000385	<0.000385	<0.000385	<0.000385	19.6	--	--	--	--	--	--	--	--	--	--	--	
	TP39-S-2.0	10/1/2014	2.0	<0.000379	<0.000379	<0.000379	<0.000379	0.434	<0.000379	<0.000379	<0.000379	<0.000379	0.434	--	--	--	--	--	--	--	--	--	--	--	
TP40	TP40-S-0.5	10/1/2014	0.5	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	<0.000359	--	--	--	--	--	--	--	--	--	--	--	
TP42	TP42-S-0.5	10/1/2014	0.5	<0.000378	<0.000378	<0.000378	<0.000378	118	<0.000378	<0.000378	<0.000378	<0.000378	118	--	--	--	--	--	--	--	--	--	--	--	
	TP42-S-2.0	10/1/2014	2.0	<0.00036	<0.00036	<0.00036	<0.00036	3.93	<0.00036	<0.00036	<0.00036	<0.00036	3.93	--	--	--	--	--	--	--	--	--	--	--	
TP43	TP43-S-0.5	10/1/2014	0.5	<0.000365	<0.000365	<0.000365	<0.000365	0.605	<0.000365	<0.000365	<0.000365	<0.000365	0.605	--	--	--	--	--	--	--	--	--	--	--	

TABLE 1
SUMMARY OF 2014 SOIL ANALYTICAL RESULTS
Fleischer Properties
9109 and 9115 Northeast 94th Avenue, Vancouver, Washington
PBS Project No. 22875.000

				PCBs ^b (mg/kg)									Metals ^c (mg/kg)										TPH ^d (mg/kg)	
Location	Sample Name	Collection Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs ^e	Arsenic	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Zinc	Diesel	Lube Oil
MTCA A Industrial Land Use ^a				NV	NV	NV	NV	NV	NV	NV	NV	NV	10	20	2,000	NV	NV	1,000	NV	2	NV	NV	2,000	2,000
TP45	TP45-S-0.5	10/1/2014	0.5	<0.000376	<0.000376	<0.000376	<0.000376	10.8	<0.000376	<0.000376	<0.000376	<0.000376	10.8	--	--	--	--	--	--	--	--	--	--	--
	TP-S-DUP	10/1/2014	0.5	<0.000382	<0.000382	<0.000382	<0.000382	9.84	<0.000382	<0.000382	<0.000382	<0.000382	9.84	--	--	--	--	--	--	--	--	--	--	--
	TP45-S-2.5	10/1/2014	2.5	<0.000365	<0.000365	<0.000365	<0.000365	0.818	<0.000365	<0.000365	<0.000365	<0.000365	0.818	--	--	--	--	--	--	--	--	--	--	--
TP46	TP46-S-0.5	10/1/2014	0.5	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	<0.000385	--	--	--	--	--	--	--	--	--	--	--
TP48	TP48-S-0.5	10/1/2014	0.5	<0.000356	<0.000356	<0.000356	<0.000356	<0.000356	0.0119	<0.000356	<0.000356	<0.000356	0.0119	--	--	--	--	--	--	--	--	--	--	--
TP51	TP51-S-0.5	10/1/2014	0.5	<0.000368	<0.000368	<0.000368	<0.000368	40.3	<0.000368	<0.000368	<0.000368	<0.000368	40.3	--	--	--	--	--	--	--	--	--	--	--
	TP51-S-2.0	10/1/2014	2.0	<0.000369	<0.000369	<0.000369	<0.000369	2.84	<0.000369	<0.000369	<0.000369	<0.000369	2.84	--	--	--	--	--	--	--	--	--	--	--
TP52	TP52-S-0.5	10/1/2014	0.5	<0.000358	<0.000358	<0.000358	<0.000358	<0.000358	<0.000358	0.0319	<0.000358	<0.000358	0.0319	--	--	--	--	--	--	--	--	--	--	--

Notes:

BOLD indicates concentration exceeding MTCA Method A Soil Cleanup Level for Industrial Land Use

Highlighted cells are "J" flagged as estimated values

<## indicates analyte not detected at or above given laboratory reporting limit

-- indicates sample not analyzed for given parameter

NV indicates no value is set for the cleanup level

Abbreviations & Acronyms:

ft bgs - feet below ground surface

mg/kg - milligrams per kilogram

PCBs - Polychlorinated biphenyls

TPH - total petroleum hydrocarbons

Footnotes:

^a Washington State Department of Ecology Model Toxics Control Act Method A Cleanup Level for Unrestricted Land Use as established in WAC 173-340-900

^b Analyzed by Environmental Protection Agency Method 8082^A

^c Analyzed by Environmental Protection Agency Method 6020A and 7471B (Mercury)

^d Analyzed by Northwest Total Petroleum Hydrocarbon Method - Semi-volatile Petroleum Products (Extended) (NWTPH-Dx) with silica gel treatment

^e Total PCBs = sum of PCB Aroclors. Non-detect results are summed as zero. For samples in which all Aroclors are non-deted, total PCB is assigned the highest reporting limit value.



TABLE 2
TEST PIT SAMPLE MATRIX

Fleischer Properties
9109 and 9115 NE 94th Avenue, Vancouver, WA
PBS Project No. 22875.000

Test Pit Location	Test Pit ID	Sample Collection Depth (ft bgs)					
		0 - 0.5	1	2	3	4	5
Test pit locations for lateral delineation of PCBs >10 mg/kg							
TP02							
10ft N of TP02	TP02-N1	X	X	X	H	H	H
10ft E of TP02	TP02-E1	X	X	X	H	H	H
10ft W of TP02	TP02-W1	X	X	X	H	H	H
20ft N of TP02	TP02-N2	X	X	H	H	H	H
20ft E of TP02	TP02-E2	X	X	H	H	H	H
20ft W of TP02	TP02-W2	X	X	H	H	H	H
TP05							
10ft N of TP05	TP05-N1	X	X	H	H	H	H
10ft E of TP05	TP05-E1	X	X	H	H	H	H
10ft S of TP05	TP05-S1	X	X	H	H	H	H
10ft W of TP05	TP05-W1	X	X	H	H	H	H
20ft N of TP05	TP05-N2	X	H	H	H	H	H
20ft E of TP05	TP05-E2	X	H	H	H	H	H
20ft S of TP05	TP05-S2	X	H	H	H	H	H
20ft W of TP05	TP05-W2	X	H	H	H	H	H
TP06							
10ft N of TP06	TP06-N1	X	X	H	H	H	H
10ft S of TP06	TP06-S1	X	X	H	H	H	H
10ft W of TP06	TP06-W1	X	X	H	H	H	H
20ft N of TP06	TP06-N2	X	H	H	H	H	H
20ft S of TP06	TP06-S2	X	H	H	H	H	H
20ft W of TP06	TP06-W2	X	H	H	H	H	H
TP10							
5ft N of TP10	TP10-N1	X	H	H	H	H	H
5ft E of TP10	TP10-E1	X	H	H	H	H	H
5ft S of TP10	TP10-S1	X	H	H	H	H	H
5ft W of TP10	TP10-W1	X	H	H	H	H	H
10ft N of TP10	TP10-N2	X	H	H	H	H	H
10ft E of TP10	TP10-E2	X	H	H	H	H	H
10ft S of TP10	TP10-S2	X	H	H	H	H	H
10ft W of TP10	TP10-W2	X	H	H	H	H	H

TABLE 2
TEST PIT SAMPLE MATRIX

Fleischer Properties
9109 and 9115 NE 94th Avenue, Vancouver, WA
PBS Project No. 22875.000

Test Pit Location	Test Pit ID	Sample Collection Depth (ft bgs)					
		0 - 0.5	1	2	3	4	5
Test pit locations for lateral delineation of PCBs >10 mg/kg							
TP13							
10ft N of TP13	TP13-N1	X	X	X	H	H	H
10ft E of TP13	TP13-E1	X	X	X	H	H	H
10ft S of TP13	TP13-S1	X	X	X	H	H	H
10ft W of TP13	TP13-W1	X	X	X	H	H	H
20ft N of TP13	TP13-N2	X	X	H	H	H	H
20ft E of TP13	TP13-E2	X	X	H	H	H	H
20ft S of TP13	TP13-S2	X	X	H	H	H	H
20ft W of TP13	TP13-W2	X	X	H	H	H	H
TP14							
10ft N of TP14	TP14-N1	X	X	H	H	H	H
10ft E of TP14	TP14-E1	X	X	H	H	H	H
10ft S of TP14	TP14-S1	X	X	H	H	H	H
10ft W of TP14	TP14-W1	X	X	H	H	H	H
20ft N of TP14	TP14-N2	X	H	H	H	H	H
20ft E of TP14	TP14-E2	X	H	H	H	H	H
20ft S of TP14	TP14-S2	X	H	H	H	H	H
20ft W of TP14	TP14-W2	X	H	H	H	H	H
TP15							
10ft N of TP15	TP15-N1	X	X	X	H	H	H
10ft E of TP15	TP15-E1	X	X	X	H	H	H
10ft S of TP15	TP15-S1	X	X	X	H	H	H
10ft W of TP15	TP15-W1	X	X	X	H	H	H
20ft N of TP15	TP15-N2	X	X	H	H	H	H
20ft E of TP15	TP15-E2	X	X	H	H	H	H
20ft S of TP15	TP15-S2	X	X	H	H	H	H
20ft W of TP15	TP15-W2	X	X	H	H	H	H

TABLE 2
TEST PIT SAMPLE MATRIX

Fleischer Properties
9109 and 9115 NE 94th Avenue, Vancouver, WA
PBS Project No. 22875.000

Test Pit Location	Test Pit ID	Sample Collection Depth (ft bgs)					
		0 - 0.5	1	2	3	4	5
Test pit locations for lateral delineation of PCBs >10 mg/kg							
TP17							
5ft N of TP17	TP17-N1	X	X	X	H	H	H
5ft E of TP17	TP17-E1	X	X	X	H	H	H
5ft S of TP17	TP17-S1	X	X	X	H	H	H
5ft W of TP17	TP17-W1	X	X	X	H	H	H
10ft N of TP17	TP17-N2	X	X	H	H	H	H
10ft E of TP17	TP17-E2	X	X	H	H	H	H
10ft S of TP17	TP17-S2	X	X	H	H	H	H
10ft W of TP17	TP17-W2	X	X	H	H	H	H
TP21							
10ft E of TP21	TP21-E1	X	X	H	H	H	H
10ft S of TP21	TP21-S1	X	X	H	H	H	H
10ft W of TP21	TP21-W1	X	X	H	H	H	H
20ft E of TP21	TP21-E2	X	H	H	H	H	H
20ft S of TP21	TP21-S2	X	H	H	H	H	H
20ft W of TP21	TP21-W2	X	H	H	H	H	H
TP23							
10ft N of TP23	TP23-N1	X	X	H	H	H	H
10ft E of TP23	TP23-E1	X	X	H	H	H	H
10ft W of TP23	TP23-W1	X	X	H	H	H	H
20ft N of TP23	TP23-N2	X	H	H	H	H	H
20ft E of TP23	TP23-E2	X	H	H	H	H	H
20ft W of TP23	TP23-W2	X	H	H	H	H	H
TP25							
10ft N of TP25	TP25-N1	X	X	H	H	H	H
10ft E of TP25	TP25-E1	X	X	H	H	H	H
10ft S of TP25	TP25-S1	X	X	H	H	H	H
10ft W of TP25	TP25-W1	X	X	H	H	H	H
20ft N of TP25	TP25-N2	X	H	H	H	H	H
20ft E of TP25	TP25-E2	X	H	H	H	H	H
20ft S of TP25	TP25-S2	X	H	H	H	H	H
20ft W of TP25	TP25-W2	X	H	H	H	H	H

TABLE 2
TEST PIT SAMPLE MATRIX

Fleischer Properties
9109 and 9115 NE 94th Avenue, Vancouver, WA
PBS Project No. 22875.000

Test Pit Location	Test Pit ID	Sample Collection Depth (ft bgs)					
		0 - 0.5	1	2	3	4	5
Test pit locations for lateral delineation of PCBs > 10 mg/kg							
TP26							
10ft N of TP26	TP26-N1	X	X	H	H	H	H
10ft E of TP26	TP26-E1	X	X	H	H	H	H
10ft S of TP26	TP26-S1	X	X	H	H	H	H
10ft W of TP26	TP26-W1	X	X	H	H	H	H
20ft N of TP26	TP26-N2	X	H	H	H	H	H
20ft E of TP26	TP26-E2	X	H	H	H	H	H
20ft S of TP26	TP26-S2	X	H	H	H	H	H
20ft W of TP26	TP26-W2	X	H	H	H	H	H
TP27* (COLLECT TO 6 FT BGS FOR 5 FT STEP OUTS: TP27-N1, -E1, -S1, -W1 ONLY)							
5ft N of TP27	TP27-N1	X	X	X	X	X	X
5ft E of TP27	TP27-E1	X	X	X	X	X	X
5ft S of TP27	TP27-S1	X	X	X	X	X	X
5ft W of TP27	TP27-W1	X	X	X	X	X	X
10ft N of TP27	TP27-N2	X	X	X	X	X	X
10ft E of TP27	TP27-E2	X	X	H	H	H	H
10ft S of TP27	TP27-S2	X	X	H	H	H	H
10ft W of TP27	TP27-W2	X	X	H	H	H	H
TP30							
10ft N of TP30	TP30-N1	X	X	H	H	H	H
10ft E of TP30	TP30-E1	X	X	H	H	H	H
10ft S of TP30	TP30-S1	X	X	H	H	H	H
10ft W of TP30	TP30-W1	X	X	H	H	H	H
20ft N of TP30	TP30-N2	X	H	H	H	H	H
20ft E of TP30	TP30-E2	X	H	H	H	H	H
20ft W of TP30	TP30-W2	X	H	H	H	H	H
TP39							
10ft N of TP39	TP39-N1	X	X	H	H	H	H
10ft E of TP39	TP39-E1	X	X	H	H	H	H
10ft S of TP39	TP39-S1	X	X	H	H	H	H
10ft W of TP39	TP39-W1	X	X	H	H	H	H
20ft N of TP39	TP39-N2	X	H	H	H	H	H
20ft E of TP39	TP39-E2	X	H	H	H	H	H
20ft W of TP39	TP39-W2	X	H	H	H	H	H

TABLE 2
TEST PIT SAMPLE MATRIX

Fleischer Properties
9109 and 9115 NE 94th Avenue, Vancouver, WA
PBS Project No. 22875.000

Test Pit Location	Test Pit ID	Sample Collection Depth (ft bgs)					
		0 - 0.5	1	2	3	4	5
Test pit locations for lateral delineation of PCBs >10 mg/kg							
TP42							
5ft N of TP42	TP42-N1	X	X	H	H	H	H
5ft E of TP42	TP42-E1	X	X	H	H	H	H
5ft S of TP42	TP42-S1	X	X	H	H	H	H
5ft W of TP42	TP42-W1	X	X	H	H	H	H
10ft E of TP42	TP42-E2	X	X	H	H	H	H
10ft S of TP42	TP42-S2	X	X	H	H	H	H
10ft W of TP42	TP42-W2	X	X	H	H	H	H
TP45							
10ft N of TP45	TP45-N1	X	X	H	H	H	H
10ft E of TP45	TP45-E1	X	X	H	H	H	H
10ft S of TP45	TP45-S1	X	X	H	H	H	H
20ft N of TP45	TP45-N2	X	H	H	H	H	H
20ft E of TP45	TP45-E2	X	H	H	H	H	H
TP51							
10ft N of TP51	TP51-N1	X	X	X	H	H	H
10ft E of TP51	TP51-E1	X	X	X	H	H	H
10ft S of TP51	TP51-S1	X	X	X	H	H	H
10ft W of TP51	TP51-W1	X	X	X	H	H	H
20ft E of TP51	TP51-E2	X	X	H	H	H	H
20ft W of TP51	TP51-W2	X	X	H	H	H	H

* = Collect and analyze samples to 6 ft bgs at TP-27 for 5 ft step outs in each cardinal direction

Notes:

X indicates sample will be analyzed for PCBs

H indicates sample will be held pending results of shallow samples

Abbreviations & Acronyms:

mg/kg - milligrams per kilogram

ft - feet

bgs - below ground surface

PCBs - polychlorinated biphenyls