Soil Management Plan
Culvert Replacement Project
Pacific Wood Preserving of Oregon
Sheridan, Oregon

Prepared for:

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CITATION

BCI 2012. Soil Management Plan, Culvert Replacement Project
Pacific Wood Preserving of Oregon, Inc.
Prepared by: Belunes Consulting, Inc.
Scappoose, Oregon 97056

CERTIFICATION

ENVIRONMENTAL PROFESSIONAL'S APPROVAL

The technical materials contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a registered environmental professional, is affixed below.

Expires: 10/31/2012

March 30, 2012

Terrence E. Belunes, RG, LHG

Date

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EXECUTIVE SUMMARY

Pacific Wood Preserving of Oregon (PWPO) is planning a culvert replacement project at its Sheridan, Oregon facility as part of routine facility operations and maintenance. The purpose of the project is to replace several culverts that are impeding the flow of storm water in several drainage ditches in the White Pole Storage Yard.

As required by the Easement and Equitable Servitude (EES), Exhibit 4 to the Amended Agreements between PWPO and the Environmental Protection Agency and between PWPO and the Oregon Department of Environmental Quality, PWPO must submit a written plan for soil management prior to excavating any soils related to the project. This document represents PWPO's written Soil Management Plan for the White Pole Storage Yard Culvert Replacement Project.

1 INTRODUCTION AND BACKGROUND

This section presents an overview of the Soil Management Plan for the Culvert Replacement Project, including background information, and description of the planned projects. The PWPO facility is located in Sheridan, Oregon (Figure 1).

1.1 OVERVIEW

The purpose of this Soil Management Plan is to describe the procedures that Pacific Wood Preserving of Oregon (PWPO) will implement to:

1. Characterize soil in the vicinity of the White Pole Storage Yard culverts to be replaced
2. Based on the soil characterization, develop profile for the soil to be excavated
3. Identify and select management options for the soil to be excavated

This Soil Management Plan is organized as follows:

Section 1 - Introduction and Background
Section 2 - Sampling and Analysis Plan
Section 3 - Health and Safety Plan
Section 4 - Soil Management
Section 5 - Reporting
Section 6 - Schedule
Section 7 - References

1.2 BACKGROUND

The PWPO facility manufactures wood products treated with "General Use" preservatives and the "Restricted Use" preservative pentachlorophenol (Penta). The facility is the site of the former Taylor Lumber and Treating (TLT) facility, which was remediated by the United States Environmental Protection Agency (EPA) and Oregon Department of Environmental Quality (ODEQ) after contaminants associated with TLT wood treatment preservatives were discovered in the soil and groundwater.

PWPO acquired the TLT site in 2002 pursuant to two prospective purchaser agreements: one between PWPO and EPA and the other between PWPO and ODEQ (i.e., the Agreements). The Agreements were amended in May 2011 to account for various changes at the facility, including modifications to the remedy and updated operation and maintenance requirements. An EASEMENT AND EQUITABLE SERVITUDE (EES), Exhibit 4 to the Amended Agreement with EPA places restrictions on certain activities within the PWPO facility. Section 3.1.a of the EES states:

> 3.1 General Restrictions.
>
> a. Excavation of soils from within the West Facility shall be conducted in a manner that is protective of human health and the environment. Owner shall submit a written plan for soil management and obtain ODEQ approval before excavating soils from within the West Facility.

1.3 PROJECT DESCRIPTION

The Culvert Replacement Project discussed in this Soil Management Plan is part of routine, ongoing maintenance at the facility. Figure 2 shows the project location in the White Pole Storage Yard.

The White Pole Storage Yard is a part of the PWPO facility that has not historically been used to store treatment chemicals or treated wood products, and therefore, is not likely to be contaminated by process residuals, preservative drippage and/or spent formulations of treatment solutions. However, to ensure proper management of the excavated soil, PWPO has prepared this Soil Management Plan to collect data sufficient to characterize the soil and select a soil management option. If any contamination is present in soils it is likely to be beneath the gravel used to maintain the roads (i.e., periodically PWPO places gravel on the roads to stabilize the surface of the roads for rolling stock). The gravel was clean when placed and is not expected to be contaminated by wood treating chemicals because it was placed after TLT ceased operations (i.e., after the use of Penta or other historic wood treating chemicals).

The project is required because this low lying area receives run-off and sediment from the surrounding higher areas, resulting in sedimentation and poor drainage. The existing culverts will be replaced with 12 inch (inside diameter) plastic culverts, or similar design. The excavated area will be approximately 35 feet in length, 15 feet wide and 24 inches to 36 inches in depth. Approximately 40 to 60 cubic yards (cys) of soil are expected to be generated.

The culverts will be replaced by first excavating the surrounding soil to expose the existing culvert, which will be removed. Additional excavation and/or placement of fill materials will occur as needed to achieve the desired culvert elevation to achieve free flow of water through the culverts and drainage ditches.

1.4 PROJECT ORGANIZATION

The names and responsibilities of key project personnel involved with the preparation and implementation of the White Pole Storage Yard Culvert Replacement Project Soil Management Plan for the PWPO facility are listed in Table 1.

Table 1: Key Project Personnel

Name	Role	Email Address
Karen Keeley	EPA Remedial Project Manager	keeley.karen@epa.gov
Norm Read	ODEQ Project Manager	read.norm@deq.state.or.us
Elaina Jackson	COO, PWP Companies	elaina.jackson@pacificwood.com
Roland Mueller	General Manager, PWP Companies	roland.mueller@pacificwood.com
Terry Petko	Director of Environmental and Safety Compliance, PWP Companies	terry.petko@pacificwood.com
Dan Winkle	Plant Manager, PWPO	dan.winkle@pacificwood.com
Tom Baker	Environmental, Health and Safety Manager, PWPO	tom.baker@pacificwood.com
Al Andersen	Maintenance Supervisor, PWPO	al.andersen@pacificwood.com
Tom Lindley	Attorney representing PWPO	tlindley@perkinscoie.com
Polly Hampton	Attorney representing PWPO	phampton@perkiinscoie.com
Terrence E. Belunes, RG	Project Manager, PWPO Consultant	terrence@belunes-consulting.com

2 SAMPLING AND ANALYSIS PLAN

This section describes the work PWPO will perform to characterize the soil in project area prior to the start of the project.

2.1 CHEMICALS OF CONCERN

The following chemicals have been selected as chemicals of concern (COC) for this soil characterization event. Analytical methods for each COC are also presented. The rational for selecting these COCs is presented below.

- Arsenic (EPA Method 6020)
- Dioxins (EPA Method 1613B
- Penta (EPA 8270 C)
- RCRA Metals (See Table 3)

As part of the superfund investigation of the TLT site, EPA collected soil samples from different areas of the TLT site to identify COCs. Section 7.1.9 of the Record of Decision for the TLT Superfund Site (EPA 2005) summarized the risk from surface and subsurface soils at the site. Dioxins and arsenic were identified as the primary human health risk drivers associated with surface and subsurface soils at the site, and therefore, were selected as COCs for this soil management plan. Total dioxin/furan concentrations will be reported as Toxic EQuivalents (TEQs) calculated using the 2005 World Health Organization (WHO) Toxic Equivalency Factors (TEFs).

In addition to these COC, PWPO will analyze soil sample for pentachlorophenol (Penta) and the eight Resource Conservation and Recovery Act (RCRA) metals (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver). Penta has been selected because it is an historic treatment chemical. The RCRA metals will be analyzed using the Toxic Characterization Leaching Procedure (TCLP) (EPA Method 1311). These data will be used in conjunction with the total arsenic, dioxins and Penta data to evaluate soil management options.

Tables 2 and 3 present analytical methods, laboratory quality control specifications, sample container, preservation, holding time, and reporting limit requirement for the samples.

2.2 SAMPLE COLLECTION

2.2.1 Sample Locations

Soil samples for the project will be collected and analyzed prior to replacing the culverts to evaluate soil management options before the start of project. Sample locations for the culvert replacement project are shown on Figure 3.

2.2.2 Sample Collection Procedure

In general, samples will be obtained using a backhoe or shovel to collect soil samples from approximately 24 to 30 inches in depth. Samples will be collected from beneath the gravel road base at each sampling location. Prior to collecting a sample, a small hole (approximately 18 inches by 18 inches) will be excavated to an approximate depth of 24 to 30 inches, generating less than 0.15 cubic yards of material. The depth of the hole will be contingent on the thickness of the gravel road base. The backhoe or shovel will not penetrate into the underlying soils. Once the soil beneath the gravel is reached, an

individual soil sample will be collected for the analysis described in Section 2.1, above. At the completion of sampling, the removed gravel base material will be returned to the excavation to allow use of the roadways.

Collection procedures for soil samples are summarized below:

- Individual, discrete soil samples (approximately 8 ounces) will be collected using a stainless steel spoon.
- The discrete sample will be collected from the base of the excavation and be placed into the appropriately sized glass jar.
- Analytical methods, laboratory quality control specifications, sample container, preservation, holding time, and reporting limit requirements are shown in Tables 2 and 3.
- Nitrile gloves will be worn during sampling. Used gloves will be sealed in plastic trash bags discarded for disposal as a solid waste.

2.2.3 Sample Containers, Preservatives and Holding Times

The required sample containers, preservative requirements, and maximum holding times are shown in Table 3.

Precleaned and certified sample containers will be used for sample collection, and Tom Baker will retain all certificates of analysis for the precleaned containers.

2.2.4 Decontamination

To prevent cross-contamination between samples, all soil sampling equipment (e.g., trowels, shovels, scoops, bowls, etc.) will be decontaminated before a new composite sample is collected. The equipment will be decontaminated by wiping or brushing soil particles off the sampling devices and washing and rinsing the device. Non-phosphatic soap and tap water will be used for the initial wash/scrub. Deionized water will be used for the final rinse. The water will be disposed of on the ground surface near the sample collection location.

The backhoe will be decontaminated on the drip pad by pressure washing the bucket between sampling locations. The water will be routed to the Waste Water Treatment System for processing.

2.2.5 Equipment Blanks

One equipment blank will be collected for each arsenic and Penta.

The equipment blank sample will be collected by passing deionized water over the equipment. The rinsate will be collected directly into the sample containers. Rinsate from all sampling devices used during the day (i.e., trowel, spoon, bowl, and shovel) will be included in the sample.

2.3 SAMPLE MANAGEMENT AND HANDLING

Each sample will be labeled with a unique Sample Number, and a Location ID Number that identifies location and date the sample was collected.

2.3.1 Sample Labels

Prior to collection of a particular sample, all the containers needed for the different analyses will be properly labeled. The sample label will be attached directly to the sample container. The following information will be written on the sample label in non-water soluble ink (e.g. Sharpie, not ball-point) includes:

- Project name
- Sample ID–unique identification for each sample location
- Date sampled
- Time sampled – in military time
- Initials of sampler(s)
- Analysis for which the particular container is intended

The label should be wrapped in clear packing tape, once around the bottle, to ensure that the sample labels do not come off if they get wet in the cooler.

2.3.2 Sample Packaging

Hard plastic ice chests or coolers with similar durability will be used for shipping samples. Styrofoam or bubble wrap will be used as a packing material to protect the samples from leakage during shipment.

Coolers will be packed with ice (double-bagged in ziplock baggies). A volume of ice approximately equal to or greater than the sample volume will be placed in the cooler(s). Blue ice will not be used. Ice volume will be recorded in the field notebook. After packing is complete, the cooler will be taped securely, with custody seals affixed across the lid. Custody protocols are described in Section 2.3.5.3.

2.3.3 Sample Shipping

Samples will be shipped to the laboratory after sample collection is complete (i.e., shipped the same day as collected). Samples will be shipped overnight using FedEx.

2.3.4 Laboratory Contacts and Addresses

Columbia Analytical Services, Inc. will perform the sample analysis. The laboratory's contact information follows:

Columbia Analytical Services, Inc.
1317 S. 13th Ave
Kelso, WA 98626
360-577-7222 (office)
360-501-3363(direct)
www.caslab.com

Lisa Domenighini
Project Chemist
domenighini@caslab.com

2.3.5 Field Documentation

Field activities will be documented using the following methods:

- Field notebooks
- Sample point location photographs
- Chain of custody forms

2.3.5.1 Field Notebook

A field notebook will be used to record pertinent information and to describe sampling procedures. The following site activities will be recorded in the project notebooks:

- Start and end time of sampling
- Project personnel involved in the sampling event
- Equipment used
- Names of visitors, their associations, and purpose of visit

Before sampling, weather conditions will be recorded, including temperature, and precipitation (type and intensity). Other conditions to be recorded include the presence of airborne particulate such as dust from a gravel road, or the presence of an unusual odor.

2.3.5.2 Sample Point Location

Global Positioning System (GPS) coordinates will be collected for all sample locations. Sample locations will also be photographed.

2.3.5.3 Chain of Custody Forms

The COC form will accompany the samples during shipment from the field to the laboratory. The following procedures will be used when transferring the samples for shipment:

- Sample labels will be completed for each sample with waterproof ink, making sure that the labels are legible and affixed firmly on the sample container.

- All sample-related information will be recorded in the project logbook.

- The field sampler will retain custody of the samples until they are transferred to Tom Baker or properly dispatched.

- Tom Baker will be responsible for the care and custody of the samples until they are properly transferred to the laboratory.

- A COC form will accompany all samples. This record documents transfer of custody of samples from the field sampler to the laboratory. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record.

- Samples will be properly packaged for shipment and sent to the laboratory with a separate signed COC form, enclosed in a plastic bag which is then taped inside the cover of each sample cooler. The original record will accompany the shipment, and a copy will be retained by Mr. Baker. When samples are relinquished to shipping companies for transport, the tracking number from the shipping bill or receipt will be recorded on the COC form or in the site logbook.

- The COC must be signed when relinquished by field personnel and signed by the laboratory receiving the samples. The contact person on the COC should be Mr. Baker.

Custody seals will be used on the shipping containers when samples are shipped to the laboratory to inhibit sample tampering during transportation.

3 HEALTH AND SAFETY PLAN

Table 4 present the health and safety protocols to be followed during the field sampling.

Table 4: Health and Safety Protocols

HAS Consideration	Description of Protection
Foot Protection	Heavy duty work boots
Hand Protection	Nitrile gloves during sampling
Eye Protection	Safety glasses – all times on site
Clothing	Level D work clothes/ reflective vest required

4 SOIL MANAGEMENT

4.1 SOIL CHARACTERIZATION

The Resource Conservation and Recovery Act, *42 U.S.C.* §6901 et seq. (RCRA), gives EPA the authority to control hazardous waste from the "cradle-to-grave," including the generation, transportation, treatment, storage, and disposal of hazardous waste. Although not referenced in EPA regulations, EPA's policy is that contaminated soil, in and of itself, is not a hazardous waste and is not subject to regulation under RCRA. Contaminated soil can become subject to regulation under RCRA, however, if the soil "contains" a hazardous waste. EPA generally considers contaminated soil to contain hazardous waste when (1) soil exhibits a characteristic of hazardous waste, and/or (2) soil is contaminated with hazardous constituents from listed hazardous waste above certain concentrations (63 FR at 28617 May 26.1998).

The PWPO facility is a Large Quantity Generator (LQG) of hazardous wastes, and the former TLT facility was also a LQG. Examples of hazardous waste currently generated at the facility are associated with wood treatment processes and include incidental drippage from treated poles in the treated wood storage area, debris on drip trays and the drip pad, and used spill response equipment (e.g., adsorbent pads) that have come into direct contact with process waste (e.g., spent treatment chemicals). TLT handled similar wastes during its tenure. These wastes are considered “listed” wastes under 40 CFR 261 Subpart D and are given the designation F032 based on the current and historical use of Penta for wood treatment. Because there is a potential that soil at the facility could have historically been contaminated with FO32 wastes, the soil must be evaluated and properly characterized prior to disposal.

Process knowledge (historic and current) and analytical data will be used to develop a profile for management of the excavated soil. To evaluate management options for soil generated as part of the Culvert Replacement Project, PWPO will use the soil characterization process shown in Figure 4. The assessment will then be given to the disposal facility for use in completing the profile sheet for the soil.

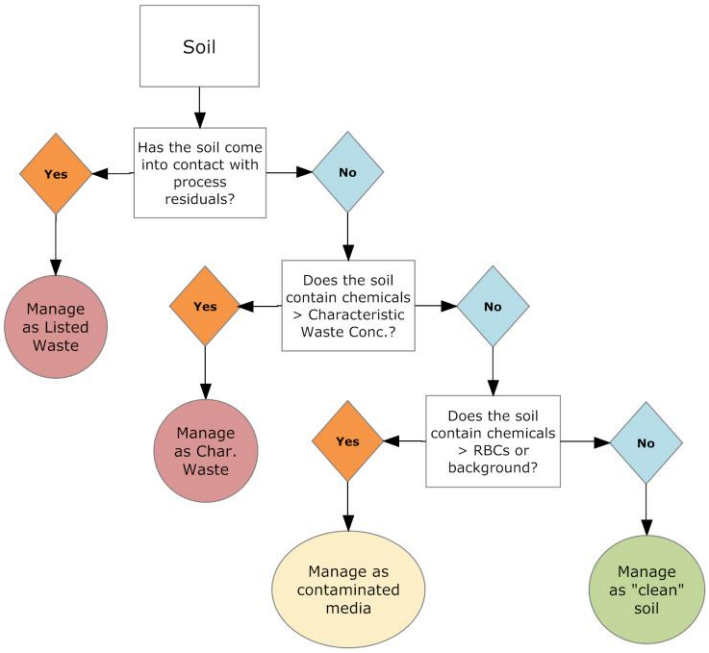


Figure 4: Soil Characterization Process

The steps outlined above follow the general approach defined in Oregon Administrative Rules, Chapter 340, Division 101, Section 0001 (OAR 340-101-0001) which includes by reference EPA's hazardous waste determination as set forth in the Code of Federal Regulation, Title 40, Part 261 (40 CFR Part 261).

Each of the steps identified in the characterization process are discussed below. Throughout the discussion, a soil potentially containing Penta will be used as an example of how the above process will be applied during the culvert replacement project. For the final report, the process will be used to profile the soil using data for the chemicals of concern cited in Section 2.1.

4.1.1 Process Knowledge and Listed Wastes

Process knowledge is an important factor in determining whether contaminated media is considered a hazardous waste. For example, contaminated soil containing Penta, by itself, is not considered a hazardous waste under State or Federal rules and is not subject to regulation under RCRA. However, contaminated soil can become subject to RCRA if it has come into direct contact with a hazardous waste (i.e., contained-in). An example of contaminated soil that could be considered a hazardous waste is soil excavated from under the MatCon Cap adjacent to the treatment plant, because this soil is known to have come into direct contact with listed F032, F034 or F035 waste from poor housekeeping practices used at the treatment plant prior to PWPO's ownership. Another area, although unlikely, where soil could have potentially contacted historic hazardous waste from poor housekeeping practices is the treated wood storage yard. This area was remediated during EPA's cleanup of the site. However, it is possible that some residual contamination remains.

4.1.2 Characteristic Wastes

DEQ and EPA will also consider contaminated soil a hazardous waste if the soil exhibits a characteristic of toxicity as defined by 40 CFR 261.24. In the case of Penta, if an extract of the soil contains more than 100 milligrams per liter (mg/l) Penta by the Toxic Characteristic Leaching Procedure (TCLP), the soil is considered a characteristic waste with the designation of D037.

4.1.3 Contaminated Soil

OAR 340-122-0244, Risk-Based Concentrations, allows the use of risk-based concentrations (RBC) to establish remediation levels for various exposure scenarios. Although PWPO is not remediating the site, RBCs can be used to determine whether the soils are safe and can remain on-site or whether the soils pose a risk to human health.

To determine a RBC for soil generated during the culvert project, two potential exposure scenarios will be evaluated: construction worker and excavation worker. The main difference between these two scenarios is frequency of exposure in a year. Excavation workers are anticipated to be exposed for a very short time (i.e., 9 days or less). Construction workers are expected to be potentially exposed to site conditions for 250 days per year.

The excavation worker scenario will help the PWPO and its contractor determine the level of protection needed during the culvert replacement project. The construction worker exposure scenario, which closely matches the potential exposure of PWPO facility personnel, will be used to assess whether the soil pose a threat of PWPO personnel if left on site.

4.1.4 Clean Soil

Soil generated during the culvert replacement project that is not a listed or characteristic waste (as defined by 40 CFR 261) and contains Penta below the RBC, will be considered "clean".

4.2 SOIL MANAGEMENT OPTIONS

4.2.1 During The Culvert Replacement Project

Soil found to be a listed or characteristic waste, or to contain chemicals in concentrations greater than ODEQ RBCs, will be managed as follows during the culvert replacement project:

1. A soil management area will be identified for stockpiling and managing the soil prior to off-site shipment for disposal.

2. The soil management area will be prepared by first inspecting the area for objects (such as angular gravel or pointed woody debris) that could potentially penetrate a polyethylene plastic liner. Any such objects will be removed from the area.

3. A 6 to 10 mil polyethylene plastic sheet will be placed on the ground's surface. The sheet will be sized to extend approximately 3 feet beyond the expected area to be occupied by the stockpiled soil. The end of the sheet will be secured to hold the sheet in place while the excavated soil is placed on it.

4. After placement, the stockpiled soil will be covered with 6 to 10 mil polyethylene plastic sheets that are overlapped and secured with timbers.

The purpose of plastic sheeting will be to prevent:

- Stockpiled soil from coming into contact with the underlying ground (i.e., surface soils)
- Stockpiled soil from coming into contact with storm water runoff/run-on
- Potential mobilization of contaminants, if present.

Instead of stockpiling the soil, PWPO may elect to place the excavated soil directly into trucks for transport to a disposal facility. This decision will be made on the basis of the soil profile, weather and availability of the equipment.

4.2.2 Disposal Options

4.2.2.1 Listed or Characteristic Waste

Soil determined to be listed or characteristic wastes will be disposed of at a Subtitle C Landfill, although PWPO reserves the right to dispose of this material via incineration.

4.2.2.2 Contaminated Soil

Soil found to contain a COC(s) in a concentration(s) greater than the RBCs will be disposed of in either a Subtitle C or D landfill. PWPO also reserves the right to dispose of this material via incineration.

4.2.2.3 Clean Soils

Soil found to be "clean" will be returned to the excavation or used elsewhere on site as fill.

5 REPORTING

This sampling event is intended as a one-time event; the data will be used to evaluate the proper disposal methods for soils excavated as part of the culvert replacement project. To facilitate decision making and the regulatory approval process, PWPO will first prepare a Sample Memorandum summarizing the analytical results and disposition of the soil.

5.1 SAMPLE MEMORANDUM

The sample memo will include the following:

- Sample Summary
    - Summary table, including sampling date, analytical methodology, detection limits, and analytical results
    - Figures showing sample locations
- Soil characterization/profile (Section 4.1)
- Identification and selection of soil management options (Section 4.2)

5.2 REPORT

A Report documenting the field activities, analytical result, soil characterization and selected soil management option will be prepared to document the work performed. In addition to the information included in the above outlined memorandum, the report will include the following.

- Field activities
    - Number of samples collected and locations
    - Dates of sampling
    - Sample management
    - Decontamination procedures
    - Figures showing sample locations
    - Chain-of-custody forms
    - GPS coordinates of samples collected
- Sample data
    - Table of analytical results
    - Summary table, including sampling date, analytical methodology, detection limits, and analytical results
    - Figures showing sample locations
    - Laboratory Data Reports
- Soil characterization/profile (as described in Sample Memorandum)
- Identification and selection of soil management options (as described in Sample Memorandum)

6 SCHEDULE

Table 5 present the schedule for the Culvert Replacement Project sampling event.

Table 5: Schedule

Activity	Date
Submit Soil Management Plan to EPA and ODEQ	March 30, 2012
EPA and ODEQ Approval	7 - 10 days
Field Sampling	7 - 10 days after work plan is accepted by EPA and ODEQ
Laboratory Analysis	Four weeks from date of sampling[a]
Submit Letter Report to EPA and ODEQ	Two weeks from receipt of analytical results

[a] The analytical laboratory requires a 15 to 20 days turnaround time for the dioxin/furan analysis.
All dates are approximate.

7 REFERENCES

EPA 2005. Final Record of Decision, Taylor Lumber and Treating Superfund Site, Sheridan Oregon, September 30, 2005, prepared by the U.S. Environmental Protection Agency, Region 10.

Tables

Culvert Replacement Project SMP
PWPO Sheridan, OR. Facility

Table 2
Laboratory Quality Control Specifications

Parameter[a]	Sensitivity	Precision	Bias (Accuracy)
Pentachlorophenol (soil)	MDL = 20 ug/kg MRL =100 ug/kg	40 percent RPD	10-123 percent for MS/MSD and 21-97 percent LCS;
Arsenic	MDL = 0.06 mg/kg MRL =0.5 mg/kg	20% RPD	78-121 percent MS/MSD 78-122 percent for LCS
PCDD/Fs (soil)	MDL: 0.05 to 0.27 pg/g MRL: 1 to 5 pg/g (these limits are advisory only and are calculated on a sample-specific basis per method and will vary)	20 RPD (for MS/MSD if requested and completed)	40 – 135 percent for internal standards 70 – 130 percent for LCS/duplicate LCS
RCRA METALS			
Arsenic	MDL = 0.01mg/l; MRL = 0.1 mg/l	20 percent	75-125
Barium	MDL = 0.7mg/l; MRL = 1.0 mg/l	20 percent	75-125
Cadmium	MDL = 0.002mg/l; MRL = 0.01 mg/l	20 percent	75-125
Chromium	MDL = 0.003mg/l; MRL = 0.01 mg/l	20 percent	75-125
Lead	MDL = 0.02mg/l; MRL = 0.05 mg/l	20 percent	75-125
Mercury	MDL = 0.0004 mg/l; MRL = 0.001 mg/l	20 percent	75-125
Selenium	MDL = 0.02 mg/l; MRL = 0.1 mg/l	20 percent	75-125
Silver	MDL = 0.007 mg/l; MRL = 0.01 mg/l	20 percent	75-125

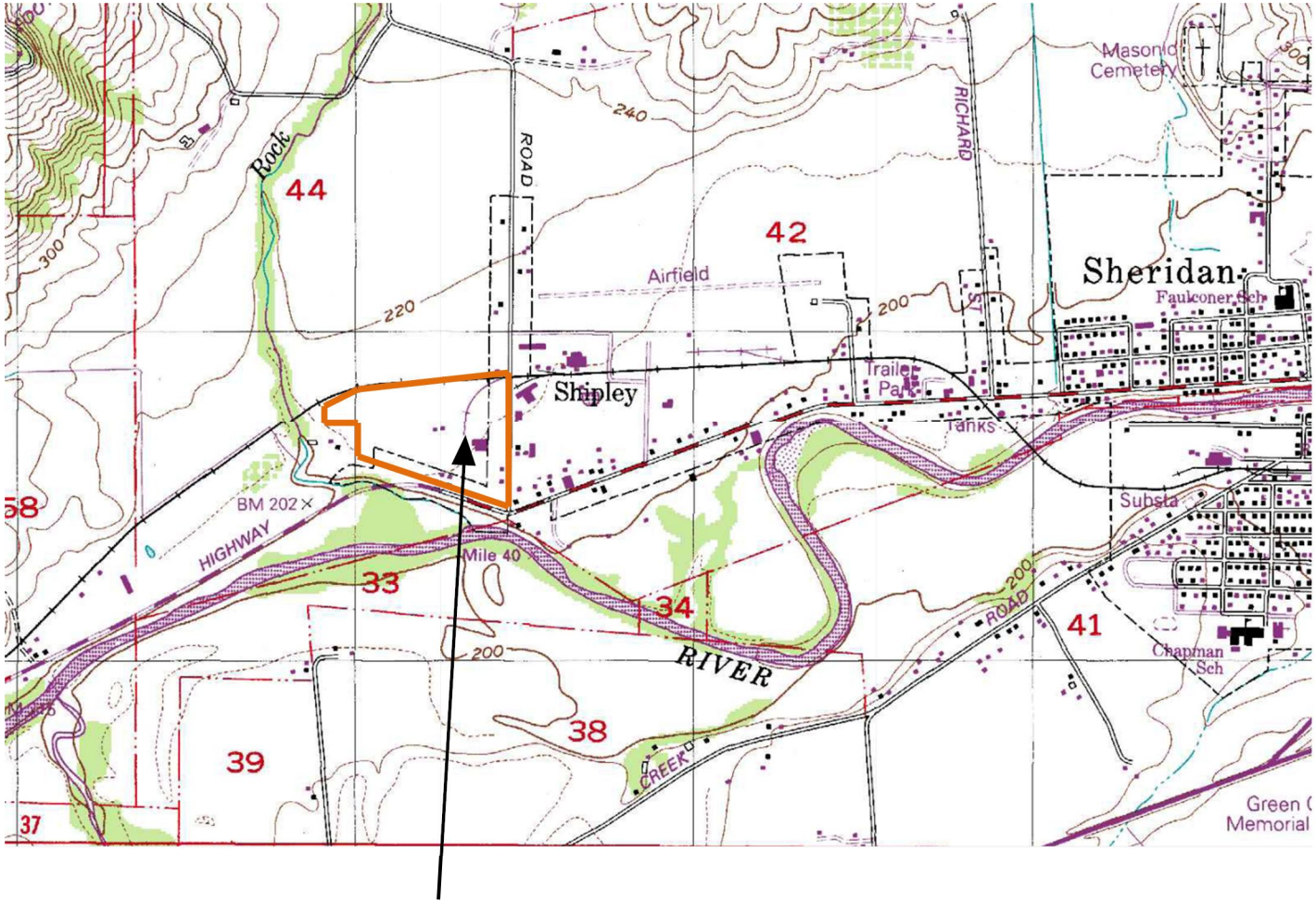
[a] Instrument calibration, required verification checks, blanks, internal standards and surrogates will be performed in accordance per method requirements

Table 3
Required Sample Containers, Preservation, and Holding Times

Analyses	Analytical Method	Sample Matrix	Container	Qty	Preservative	Holding Time
Pentachlorophenol	EPA 8270C	Soil	1 - 8 oz. wide-mouth glass	1	None; store at <6ºC	14 days/40 days
Arsenic	EPA 6020	Soil	1 - 8 oz. wide-mouth glass	1	None; store at <6ºC	6 months
PCDD/Fs (Dioxins)	EPA 1613B	Soil	1 - 8 oz. wide-mouth glass	1	None; store at <6ºC	Samples to be extracted within 30 days and completely analyzed within 45 days of extraction
TCLP Metals	Extraction: EPA Method 1311, except Mercury – EPA Method 7470A Analytical: EPA Method 3010A/6010C, except Mercury – EPA Method 7470A	Soil	1 - 8 oz. wide-mouth glass	1	None; store at <6ºC	180 days for all except Mercury – 28 days

Figures

Culvert Replacement Project SMP
PWPO Sheridan, OR. Facility



PWPO Facility Location

Figure 1

Facility Location

Culvert Replacement Project SMP

Pacific Wood Preserving of Oregon

N

Not To Scale

Figure 2

Project Location

Culvert Replacement
Project SMP

Pacific Wood
Preserving of Oregon

Legend

Project
Location

N

Not To Scale

Figure 3

Sample Locations

Culvert Replacement Project SMP

Pacific Wood Preserving of Oregon

Legend

Culvert to be replaced

Soil Sample Location

All locations are approximate

N

Not To Scale