CLEANUP ACTION PLAN

FORMER PACIFIC WOOD TREATING CO. SITE

111 WEST DIVISION STREET, RIDGEFIELD, WASHINGTON

FACILITY/SITE ID: 1019
CLEANUP SITE ID: 3020

OCTOBER 2013

Issued by:
Washington State Department of Ecology
Toxics Cleanup Program
Southwest Regional Office
Olympia, Washington

Exhibit A to Consent Decree between Washington State Department of Ecology, Port of Ridgefield, and City of Ridgefield

CONTENTS

CONTENTS (CONTINUED)

TABLES AND ILLUSTRATIONS

FOLLOWING REPORT:

TABLES

FIGURES

bgs	below ground surface
bml	below mudline
CAP	cleanup action plan
CFR	Code of Federal Regulations
City	City of Ridgefield
COE	U.S. Army Corps of Engineers
COMP	Comprehensive Operations Maintenance Plan
CSM	conceptual site model
CUL	cleanup level
CWA	Clean Water Act
DAHP	Washington State Department of Archeological and Historic Preservation
DCA	disproportionate cost analysis
dioxins	
DNR	Washington State Department of Natural Resources
DOT	U.S. Department of Transportation
Ecology	Washington State Department of Ecology
EIC	ecological indicator concentration
EMNR	enhanced monitored natural recovery
ENR	enhanced natural recovery
ESA	Endangered Species Act
FRTR	Federal Remediation Technologies Roundtable
FS	feasibility study
FWPCA	Federal Water Pollution Control Act
IHS	indicator hazardous substance
LRIS	Lake River Industrial Site
LWBZ	lower water-bearing zone
MFA	Maul Foster & Alongi, Inc.
MNR	monitored natural recovery
MTCA	Model Toxics Control Act
NAPL	nonaqueous-phase liquid
NGVD	National Geodetic Vertical Datum of 1929
ng/kg	nanograms per kilogram
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OHW	ordinary high water
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PCE	tetrachloroethene
PCP	pentachlorophenol
POC	point of compliance

Port	Port of Ridgefield
PQL	practical quantitation limit
Property	a portion of the former PWT site; the Property includes the LRIS, Port-owned properties and nearby surface water bodies Lake River and Carty Lake
PWT	Pacific Wood Treating Co.
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
REL	remediation level
RI	remedial investigation
RMC	Ridgefield Municipal Code
RNWR	Ridgefield National Wildlife Refuge
SEPA	State Environmental Policy Act
SER	steam-enhanced remediation
SER area	the portion of the LRIS where NAPL was present
Site	former PWT site; the Site includes the LRIS, Port-owned properties, upland off-property areas, and nearby surface water bodies Lake River and Carty Lake
SMA	Shoreline Management Act
SMCMP	Soil Management and Cap Monitoring Plan
SMS	sediment management standards
SVOC	semivolatile organic compound
TEQ	toxicity equivalent
TPAH	total PAHs
TSD	treatment, storage, and disposal
UPRR	Union Pacific Railroad
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UWBZ	upper water-bearing zone
VOC	volatile organic compound
WAC	Washington Administrative Code
WISHA	Washington Industrial Safety and Health Administration
WWTP	wastewater treatment plant

1 INTRODUCTION

This report presents the proposed cleanup action for a portion of the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (the Site) (see Figure 1-1). PWT operated a wood-treating facility from 1964 to 1993 at the Port of Ridgefield's (Port) Lake River Industrial Site (LRIS). This cleanup action plan (CAP) was prepared pursuant to the authority of Chapter 70.105D.050(1) of the Revised Code of Washington (RCW) and the requirements of the Washington State Model Toxics Control Act (MTCA) cleanup regulation, as established in Chapter 173-340-380 of the Washington Administrative Code (WAC 173-340). The CAP provides an overview of the PWT site history and environmental conditions, summarizes the cleanup action alternatives considered, and presents the proposed cleanup action for media containing concentrations of indicator hazardous substances (IHSs) that exceed relevant cleanup levels (CULs). The cleanup action decision is based on the former PWT site remedial investigation and feasibility study (RI/FS) report (Maul Foster & Alongi, Inc. [MFA], 2013a) and other relevant documents in the administrative record. The Pacific Wood Treating Site considered in this CAP includes the LRIS, the Port-owned properties, the adjacent upland off-property area, and sediment in nearby surface water bodies Lake River and Carty Lake (see Figure 1-2). This CAP describes the selected remedial actions for four of these five areas (the LRIS, the Port-owned properties, and sediment in nearby surface water bodies Lake River and Carty Lake). For purposes of the CAP these areas are defined as the "Property" (see Figure 1-2).

1.1 Declaration

The remedies selected will be protective of both human health and the environment. The selected remedies are consistent with the State of Washington's preference for permanent solutions to the maximum extent practicable and provide for adequate action to ensure effectiveness of the remedial action.

1.2 Applicability

CULs specified in this CAP are applicable only to the Property. CULs were developed as part of an overall remediation process under Washington State Department of Ecology (Ecology) oversight and the authority of MTCA and sediment management standards (SMS), and should therefore not be considered as setting precedents for other sites.

1.3 Administrative Record

The documents used to make the decisions discussed in this CAP are on file in the administrative record for the Site and are listed in the reference section. Multiple investigations have previously characterized the impacts associated with historical PWT operations. These investigations provide background information pertinent to the CAP. The former PWT site RI/FS (MFA, 2013a) captures the most recent understanding of the Site and summarizes the results of earlier environmental investigations conducted at the Site since 1985.

1.4 Cleanup Process

Cleanup conducted under the MTCA process requires the preparation of specific documents. Key documents and references to the applicable MTCA section requiring their completion are listed below, with descriptions of each task. Some project documents have been completed, and others will be developed as deliverables required under this CAP. All documents referenced here were, or will be, prepared by the Port. The schedule for submittal of the documents is provided in Section 9:

- The RI/FS report documents the investigations and evaluations conducted at the Site from the discovery phase to understanding the full extent of contamination and the issuance of the report. The RI collects and presents information on the nature and extent of contamination and the risks posed by the contamination. The FS subsequently presents and evaluates cleanup alternatives (WAC 173-340-350).
- The CAP sets CULs and standards for the Property and identifies the selected cleanup actions intended to achieve CULs (WAC 173-340-380). The CAP is issued by Ecology, and allows for public participation and opportunity for comment, as required by WAC 173-340-600.
- The Engineering Design Report outlines details of the selected cleanup action, including any engineered systems and design components from the CAP. Engineering Design Reports were completed for the LRIS under interim actions. Engineering Design Reports yet to be completed will be prepared by the Port and approved by Ecology. Public comment is optional (WAC 173-340-400).
- The Operation and Maintenance Plan(s) summarizes requirements for inspection and maintenance of cleanup actions. It includes actions required to operate and maintain equipment, structures, or other remedial systems (including management and maintenance of soil caps). In addition, compliance monitoring plans are an element of the Operation and Maintenance Plan and provide details on monitoring activities (if required) to ensure that cleanup actions are performing as intended. The operations, maintenance and monitoring documents will be included in the Comprehensive Operations Maintenance Plan (COMP) which is required under this CAP, and is to be prepared by the Port and approved by Ecology (WAC 173-340-400).
- The Cleanup Action Report is completed following implementation of the cleanup action(s) and provides details on the cleanup activities, along with documentation of adherence to or variance from goals set out in the CAP. The document is to be prepared by the Port and approved by Ecology (WAC 173-340-400).

2 SITE CONDITIONS

2.1 Site Description and History

The former PWT site includes the LRIS, the Port-owned properties, the upland off-property area, and the nearby surface water bodies Lake River and Carty Lake (see Figure 1-2); note that boundaries shown in Figure 1-2 approximate the extent of soil and/or groundwater impacts related to historical PWT activities. These areas, for purposes of the RI/FS and the CAP, are defined as the "Site" and are briefly described below:

- LRIS—the LRIS consists of property formerly used by PWT, which operated a wood-treating facility, and includes four Port-owned areas designated as Cells 1, 2, 3, and 4 and the City of Ridgefield's (City) wastewater treatment plant (WWTP) within the Cell 2 boundary. Soil and groundwater on the LRIS were impacted by PWT's historical operations, and interim actions on the LRIS have been conducted.
- Port-owned properties—this area includes the Railroad Avenue properties, the marina property, and an area just south of the LRIS formerly part of McCuddy's marina that is in a planned overpass footprint. Soil has been impacted on these properties.
- Upland off-property area—this consists of an upland area of investigation primarily east (residential areas) and south of the LRIS (McCuddy's marina). These properties are not owned by the Port. Sources of chemicals in surface soil in the off-property are not well established and further characterization of surface soil is needed.
- Lake River—a river on the western property boundary of the LRIS. Sediment offshore of the LRIS in Lake River has been impacted by wood-treating-related chemicals.
- Carty Lake—a lake in the Ridgefield National Wildlife Refuge (RNWR) north and west of the LRIS. Sediment in Carty Lake just north of the LRIS has been impacted by wood-treating-related chemicals.

Four of these areas, the LRIS, Port-owned properties, Lake River, and Carty Lake (identified as the "Property" in this CAP) will be remedied as described herein. The upland off-property must be further characterized before decisions regarding cleanup actions can be made.

2.1.1 LRIS

The approximately 40-acre LRIS is located within the Ridgefield city limits at 111 West Division Street, Ridgefield, Washington (Figure 1-2). The LRIS is the former location of the PWT facility; former operations involved pressure-treating wood products with oil-based treatment solutions and water-based mixtures. Constituents included creosote, pentachlorophenol (PCP), and water-based mixtures of copper, chromium, arsenic, and/or zinc. Interim actions completed on the LRIS included removal of the historical stormwater system, installation of a new stormwater system, soil removal, steam-enhanced remediation (SER) treatment, and installation of a clean cap. Former and current LRIS features are shown on Figure 2-1.

The Port owns the LRIS, with one exception: a portion of the City's WWTP historically was part of the LRIS and falls within the Cell 2 boundary. PWT leased the LRIS from approximately 1964 until 1993, when PWT filed for bankruptcy and abandoned the LRIS. Historical uses of the cells are briefly described below.

Cells 1 and 2 were vacant or used for farmland before industrial use by PWT. Cell 1 contained the PWT tank farm, the retort area, and a boiler room. PCP normally was stored in the tank farm in Cell 1 as a 40 percent concentrate in "P9 oil." The P9 oil consisted of diesel and about 10 percent long-chain alcohols and ketones. When used, the PCP concentrate was typically mixed with additional P9 oil, or occasionally with mineral spirits. PWT also used copper naphthenate as an alternative to PCP. Other wood-treating chemicals used include Woodgard™ and Fyrgard™. Woodgard consists of boric acid and paraffin wax in hexylene glycol. Fyrgard consists of ammonium phosphate, ammonium sulfate, boric acid, and borax in a water-based carrier. Cell 2 formerly was used by PWT for wood-manufacturing operations, and also contained features such as PWT's WWTP and the concrete pond stormwater feature. Before the 1980s, the concrete pond was used to trap and collect spills that had entered the stormwater system. In the 1980s, the WWTP was constructed and used to treat wastewater generated by PWT. The WWTP was operated until 1993, when PWT abandoned its operations. The tank farm, boiler room, retorts, and PWT's WWTP were demolished by the Port, with Ecology's oversight.

Before PWT's operations, the area now designated as Cell 3 was used as part of general shingle and sawmill operations. PWT used Cell 3, which it also referred to as the south pole yard, to store treated poles and dimensional lumber. Until 1988, PWT allowed preservative to drip directly onto the ground. In 1988, PWT installed a drip trough (see Figure 2-1), as a step to capture excess preservative from poles before their placement in Cell 3.

Before PWT's operations, the area now designated as Cell 4 was used for farming. PWT used Cell 4 to store untreated wood and operated a peeler, to debark poles, from approximately 1966 to 1993. Impacts to surface soil in Cell 4 were likely the result of vehicles tracking chemicals from other parts of the LRIS.

2.1.2 Port-Owned Properties

Port-owned properties adjacent to the LRIS include the Railroad Avenue, the Port marina, and the proposed overpass properties. The Railroad Avenue properties consist of two parcels oriented north-south and located along Railroad Avenue just east of Cell 3. These properties are located uphill of the LRIS and are undeveloped at this time. The Port-owned marina property immediately south of the LRIS includes a boat launch, parking, and landscaped areas. The overpass area was formerly part of the McCuddy's marina and includes the footprint of a planned overpass development.

2.1.3 Upland Off-Property

The upland off-property area is adjacent to the LRIS and features substantial development and minimal viable ecological habitat (see Figure 1-2). These areas are not owned by the Port and investigations identified soil impacts in the following areas:

- McCuddy's marina (south of LRIS and Port marina property): The approximately 5.3-acre, privately owned marina is located at 5 West Mill Street. McCuddy's Ridgefield Marina, the current operator, also leases approximately 11.04 acres in Lake River from the Washington State Department of Natural Resources (DNR).
- Residential off-property area (east of LRIS Cells 2 and 3 and Port-owned Railroad Avenue properties): The remaining off-property area east of the LRIS is zoned low-density residential and is located uphill of the LRIS and includes approximately six blocks.

The residential off-property area and McCuddy's marina are defined as areas in which concentrations exceed existing Method B soil CULs for dioxins (final CULs have not been established). As described in the RI/FS (MFA, 2013a), further characterization may be conducted under an agreed order between the Port and Ecology to evaluate risk to human health. Therefore, these areas are not further discussed here in this CAP.

2.1.4 Lake River

The lower Columbia River extends 146 river miles from Bonneville Dam to the Pacific Ocean. Elongated islands frequently divide the Columbia River and form sloughs, side channels, and adjacent lakes. Lake River is a side channel of the Columbia River and lies within the lower Columbia River west of Ridgefield, Washington, near the confluence of the Columbia River and the Lewis River. The National Wetlands Inventory has classified Lake River as a riverine, tidal, unconsolidated bottom, permanent tidal habitat.

Lake River is a slow moving, tidally influenced, 11-mile-long channel and is hydraulically connected at its mouth to the Columbia River, as well as through Bachelor Island Slough approximately 1 mile upstream of the mouth and through a tide gate/flushing structure along the western shoreline of Vancouver Lake. Lake River originates at Vancouver Lake in Vancouver, Washington, to the south, runs parallel to the Columbia River, and merges with the Columbia at the northern tip of Bachelor Island (see Figure 1-2).

Lake River varies in width from approximately 100 feet to over 300 feet, and averages 10 feet deep or less. Where it is adjacent to the LRIS, Lake River is approximately 300 feet wide. Generally, steep banks occur on both sides and there is currently no emergent vegetation. Armoring and mature vegetation dominate the shoreline along the western side of the LRIS. In-water and overwater structures, including the Port's pump house, several piles, and a public access float dock, are located along the shoreline of the LRIS (MFA, 2013a). Sections of the RNWR River S and Carty Units border Lake River near the Site.

DNR owns the land beneath Lake River. The Port leases three areas in Lake River from the DNR: 0.17 acres at the Port's pump house (DNR lease 20-009196), 3.9 acres adjacent to Cell 3 (DNR lease 20-A09947), and 0.35 acres at the public access float dock adjacent to the Port marina property (DNR lease 20-012902). As described in Section 2.1.3, McCuddy's marina leases approximately 11.04 acres in Lake River; this area is south of the LRIS and the Port marina property.

Based on available information, maintenance dredging of Lake River by the U.S. Army Corps of Engineers (COE) was conducted in 1970. The COE is authorized to dredge a channel to a width of approximately 100 feet and a depth of 6 feet, and typically dredges 2 additional feet to account for refill. There are no current plans for COE dredge activities in Lake River in the near future; however, future dredging, if proposed by the COE, would necessarily require the standard permitting process including evaluation of dredge prims and the future leave surface.

2.1.5 Carty Lake

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit (see Figure 1-2). The Carty Unit "lowlands" are immediately north of LRIS Cells 2 and west of Cell 4. The Carty Unit is also bordered by Lake River to the west, privately owned farmland and natural areas to the north, and Burlington Northern-Santa Fe railroad tracks to the east. During the rainy season, Gee Creek and Carty Lake can be hydraulically connected at the lake's northern end. During most of the year, Carty Lake has no outlet. Water levels in Carty Lake vary seasonally, and generally are higher during winter and spring and lower during summer and fall. The National Wetlands Inventory has classified Carty Lake as palustrine, unconsolidated bottom, permanent nontidal wetland, and Carty Lake contains Washington State-designated priority palustrine habitat.

2.2 Environmental Conditions

The RI/FS (MFA, 2013a) provides a detailed summary of the RI and previous investigation results, and should be referenced for detailed information regarding the nature and extent of contaminants and risk associated with those contaminants.

2.2.1 Soil

Soil characterization on the LRIS has been ongoing since 1991. Results are summarized in the RI/FS (MFA, 2013a). Metals, polycyclic aromatic hydrocarbons (PAHs), semivolatile organic compounds (SVOCs), volatile organic compounds (VOCs), PCP, petroleum hydrocarbons, and chlorinated dibenzo-p-dioxins and dibenzofurans (herein referred to as dioxins) were identified as IHSs. Interim actions have been conducted to address these impacts; these are considered the final cleanup actions. LRIS cleanup actions are discussed in Section 4.1

Investigations were conducted to characterize soil in Port-owned properties (i.e., Railroad Avenue, Port marina, and proposed overpass properties). Wood-treatment chemicals associated with historical PWT operations were largely undetected or occurred below levels expected to cause unacceptable human health or ecological risk. Dioxins were detected above levels protective of human health and ecological receptors and were thus selected as IHSs for the Port-owned properties.

2.2.2 Groundwater

The following chemicals and metals were identified as IHSs in groundwater: chlorinated phenolics, PAHs, SVOCs, VOCs, dissolved arsenic, and petroleum hydrocarbons.

Concentrations of IHSs in groundwater beneath Cells 1, 2, and 3 and the RNWR (i.e., southern portion of Carty Lake) show stable or declining trends. Groundwater monitoring data indicate that interim action source control and reduction efforts in the former tank farm area were effective, and concentrations of IHSs in groundwater show stable or declining trends. Interim actions are described in Section 4.1 and current groundwater conditions are described in Section 4.1.1.

Investigations conducted in Cell 4 and the RNWR "S" Unit (across Lake River from the LRIS; see Figure 1-2) confirm that groundwater in these areas is not impacted (MFA, 2007, 2010, 2011a).

2.2.3 Sediment

Surface and subsurface sediment testing was performed in Lake River and Carty Lake. Results are discussed in the RI/FS (MFA, 2013a) and the Lake River pre-design sampling results report (MFA, 2013b) and are briefly summarized below.

2.2.3.1 Lake River

Dioxins exceeded screening criteria at multiple locations in sediment offshore of the LRIS. PCP, m&p-cresol, and total PAHs (TPAH) exceeded screening criteria in the subsurface at only two locations. Concentrations exceeding screening criteria are collocated with elevated dioxins, and the remedial action developed for dioxins is expected to address other elevated chemicals. Thus, only dioxins were selected as IHSs. Elevated concentrations of all constituents occur primarily in areas adjacent to LRIS outfalls, suggesting historical stormwater as the most significant transport pathway for site-related contaminants. Concentrations decrease substantially with distance from the outfalls and the shoreline, and the vertical extent of dioxin impacts is generally between one and 3 feet below mudline (bml).

2.2.3.2 Carty Lake

Metals (arsenic and chromium), PCP, and dioxins exceeded screening criteria in sediment; however, metals and PCP exceeded the criteria in only one location, where dioxins were also most elevated. The remedial action developed for dioxins is expected to address metals and PCP, and thus only dioxins were identified as IHSs.

Dioxins are most elevated in surface sediment in the southern portion of the lake and decrease substantially within approximately 100 feet. Dioxins in the surface sediment in the rest of the lake are generally somewhat elevated above screening criteria and are consistent in concentration. The vertical extent of dioxin impacts is limited, with the deepest impacted sample from 2 to 3 feet bml. The spatial distribution of impacts is consistent with the conceptual model that shows that the source of impacts is historical discharge and/or surface soil erosion from the upland LRIS.

2.3 Conceptual Site Model

The conceptual site model (CSM) describes the physical and chemical conditions on the Site (MFA, 2013a). The primary purpose of the CSM is to describe pathways by which human and ecological receptors may be exposed to site-related chemicals in the environment. According to the U.S. Environmental Protection Agency (USEPA) (1989), a complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment; (2) an environmental transport medium for a released chemical; (3) a point of potential contact with the impacted medium (referred to as the exposure point); and (4) an exposure route (e.g., incidental sediment ingestion) at the exposure point. A brief summary of the key elements of the CSM is provided below.

2.3.1 Sources and Transport

Suspected historical sources of soil and groundwater impacts at the LRIS include wood-treating chemicals and other substances that were used as part of wood-treating operations. Potential historical sources include: spills in the process areas in Cells 1 and 2 (i.e., tank farm, retorts, drip pad); incidental releases to surface soil in Cells 1, 2, and 3; releases to surface and subsurface soil during operation of the former drip trough in Cell 3; releases in Cell 3 (where treated wood was stored) to surface soil through drippage and washing by precipitation; and stormwater catchment discharge to soil and infiltration to groundwater.

Impacts observed on the Port-owned properties may be related to historical LRIS activities, but the proximate source(s) is not well established.

Sources to Lake River and/or Carty Lake include "washing" of treated wood via precipitation and subsequent stormwater discharge, operation of the drip trough in Cell 3, discharge of the concrete pond contents to stormwater outfall OF-3 on Lake River, and overwater activities, such as barge loading adjacent to Cell 3. In particular, historical stormwater inputs from LRIS outfalls and/or surface soil erosion from upland areas likely are contributing sources of contamination observed in nearshore Lake River sediment adjacent to the LRIS. In contrast, groundwater migration is not a significant process by which chemicals are transported to sediment or surface water; groundwater monitoring has indicated that IHSs are stable and/or decreasing and modeling has shown that contamination in groundwater does not discharge to surface water at levels above surface water quality criteria.

Anthropogenic sources (e.g., vehicle emissions, back-yard trash burning, structure fires, stormwater runoff, and other common events and activities that generate dioxins) may also impact the Property. Sources are further discussed in the RI/FS (MFA, 2013a).

The relative importance of transport mechanisms will vary, depending on the chemical and physical properties of a released contaminant. The properties of soil and sediment and the dynamics of groundwater flow also shape contaminant fate and transport. Potential contaminant transport mechanisms operating at the Property include direct discharge to soils, tracking of soil impacts by vehicles, leaching of chemicals in soil to groundwater, groundwater flow to surface water, outfall discharge to sediments, stormwater runoff to soils and/or sediments, soil erosion, atmospheric deposition to soils and/or sediments, chemicals in soil/groundwater volatilizing to air, wave sediment erosion, propeller wash soils and/or sediment erosion, water current sediment erosion, groundwater infiltration, and food chain transfer originating from impacted media. Property-specific transport mechanisms are further discussed in the RI/FS (MFA, 2013a).

2.3.2 Exposure Scenarios—LRIS

The LRIS was first used for industrial purposes in the early 1900s. The LRIS is currently undeveloped except for one building that Port staff occupies. The LRIS is zoned by the City for waterfront mixed use and may be developed in the near future. Mixed use zoning provides for employment and light industrial uses; in-water uses and structures, upper-level residential; office and professional uses; retail and service uses; accompanied by open spaces and public waterfront access. Currently and in the future, the public may access a portion of the LRIS, and in the future, commercial operations, business workers, or residents may occupy the redeveloped property.

Soil

Scenarios by which human receptors may contact wood-treating chemicals in soil include on-property commercial workers, construction workers, residents, and recreational users. There is also contact potential for terrestrial ecological receptors.

Commercial workers (i.e., Port staff) currently occupy the LRIS and are likely to occupy the LRIS in the future. There are currently no construction workers (e.g., excavation workers, trench workers) conducting activities on the LRIS. However, construction activities likely will be performed as part of property redevelopment. Residents may occupy the property in the future in upper level residences (i.e., there will be no single family dwellings with yards). Exposure to residents who live in upper level residences at this property is expected to be limited relative to default unrestricted land use assumptions. Recreational users may also access the property now and in the future. Potential exposure pathways for commercial or construction workers and recreational and residential users include direct skin contact with soil, incidental ingestion of soil, and inhalation of soil particulates.

Exposure to terrestrial ecological receptors is likely limited, given lack of quality habitat (e.g., minimal vegetation) (see Appendix B of the RI/FS (MFA, 2013a). Direct contact (soil ingestion/uptake, dermal contact, or inhalation) and secondary ingestion (consumption of prey by upper-trophic-level receptors) may occur.

Groundwater

Groundwater impacts have been identified in Cells 1, 2, and 3. Human receptors are unlikely to have direct exposure to IHSs in groundwater at the LRIS. Groundwater is not used for drinking, and it is unlikely that IHSs in groundwater will be transported to an aquifer that could be used for drinking water. The Port is ensuring that groundwater will not be used in the future by placing a restrictive covenant on the property deed restricting groundwater extraction for any purpose at the LRIS or the other Port-owned properties addressed in this document.

Vapor Intrusion

Volatile compounds in subsurface soil or in groundwater at the water table in Cells 1 and 2 have the potential to migrate toward the surface and enter any indoor air of buildings. Commercial workers would then have the potential to inhale the compounds. Indirect exposure to VOCs in subsurface soil or groundwater via inhalation is not considered a significant exposure pathway in Cells 3 and 4.

Surface Water

Two surface water bodies are adjacent to the LRIS: Lake River and Carty Lake. Property stormwater historically drained to catch basins by overland flow and discharged directly into Lake River. Upland remedial actions (i.e., soil capping and stormwater conveyance system replacement) have been completed to eliminate the transport of impacted stormwater to Lake River (MFA, 2013a). There are no complete pathways, via groundwater or stormwater overland flow, for IHSs to reach Carty Lake or Lake River.

2.3.3 Exposure Scenarios—Port-Owned Properties

Port-owned properties consist of waterfront mixed-use undeveloped land on Railroad Avenue, the Port-owned parking and landscaped areas (Port marina property), and the proposed overpass footprint (see Figure 1-2). Incidental ingestion of IHSs in soil was identified as the most significant potential exposure pathway for humans. Exposure to ecological receptors is limited, given the small size and lack of quality habitat in this area; however, ecological receptor direct contact (soil ingestion/uptake, dermal contact, or inhalation) and secondary ingestion (consumption of chemicals in plant material or prey by upper-trophic-level receptors) are considered complete pathways.

2.3.4 Exposure Scenarios—Lake River

Lake River offshore of the LRIS is a relatively shallow, slow-velocity river that is frequented by recreationists, ecological receptors, and occasionally fishers. The following exposure pathways and receptors were identified as potentially significant:

- Human direct contact with sediment and incidental sediment ingestion
- Human secondary ingestion (consumption of chemicals in tissue of aquatic biota)
- Fish uptake of chemicals in sediment
- Secondary ingestion by ecological receptors (consumption of chemicals in aquatic prey)

2.3.5 Exposure Scenarios—Carty Lake

Carty Lake is located on the RNWR north of Cell 2 and west of Cell 4. Carty Lake has limited recreational uses and no formal access; however, the RNWR could work with the Port to develop a loop trail adjacent to Carty Lake for public access from the Port LRIS property. Fishing in Carty Lake is currently uncommon; a few individuals have been observed fishing on an irregular and seasonal basis, but it is not known if fish are caught for consumption. However, there is potential for future wildlife refuge workers to be exposed to IHSs in sediment. For example, sediment disturbance and contact may occur during operations to remove red canary grass. In addition, the Cowlitz Tribe may choose to harvest and consume wapato from Carty Lake in the future. Ingestion of wapato grown in impacted sediment is not expected to be a significant future exposure pathway.

As described in the RI/FS (MFA, 2013a), studies have shown that dioxins are not likely to be incorporated into any substantial fraction of the edible plant material (Paustenbach et al., 2006). Carty Lake provides habitat for a variety of ecological receptors, including fish, birds, and mammals. The following exposure pathways and receptors were identified as potentially significant:

- Worker direct contact with sediment and incidental ingestion of sediment
- Human secondary ingestion (consumption of chemicals in tissue of aquatic biota)
- Fish uptake of chemicals in sediment
- Secondary ingestion by ecological receptors (consumption of chemicals in aquatic prey)

3 CLEANUP REQUIREMENTS

MTCA cleanup requirements provide that cleanup actions must comply with the following minimum regulatory requirements (WAC 173-340-360):

Protect human health and the environment—Cleanup actions that achieve CULs at the applicable point of compliance (POC) and comply with applicable laws are presumed to be protective of human health and the environment.

Comply with cleanup standards and applicable state and federal laws—The primary components of cleanup standards are CULs, remediation levels (RELs), and POCs (see WAC 173-340-700 through 760). CULs determine the concentration at which a substance does not threaten human health or the environment. All material that exceeds a CUL is addressed through a remedy that prevents exposure to the material. A REL defines the concentration of a hazardous substance in a particular medium above or below which a particular cleanup action component will be used. RELs, by definition, exceed CULs. POCs represent the locations on the Property where CULs must be met. Applicable or relevant and appropriate requirements based on federal and state laws are provided in WAC 173-340-710.

Provide for compliance monitoring—Each cleanup action must include plans for compliance monitoring to ensure that human health and the environment are protected during construction, operation, and maintenance activities; to confirm that the actions have attained cleanup standards, RELs, and other performance standards; and to confirm the long-term effectiveness of the action once cleanup standards, RELs, and other performance standards have been attained (see WAC 173-340-410 and 173-340-720 through 760).

Cleanup actions to be conducted for sediment must also be consistent with the SMS requirements in WAC 173-204-580(2).

The final CULs and POCs are presented below by Property areas and their associated media. Applicable federal, state, and local laws are presented in Section 3.2.

3.1 Cleanup Levels, Remediation Levels, and Points of Compliance

CULs and, if applicable, RELs, were developed for four areas of the Property; detailed information regarding the derivation of CULs and RELs is provided in the RI/FS (MFA, 2013a). CULs were developed consistent with MTCA and the SMS to be protective of human health and ecological receptors.[1] CULs, RELs, and their respective POCs are summarized below. A summary of Property concentrations for all media relative to selected CULs is provided in Appendix A.

3.1.1 LRIS

CULs for IHSs on the LRIS in soil and groundwater are summarized in Table 3-1. Standard Method B direct-contact CULs were applied to soil, with a few exceptions:

- Generic MTCA Method B CULs are not available for petroleum mixtures. The only standard CULs for petroleum mixtures are MTCA Method A unrestricted use values. Therefore, Method A soil CULs are used for petroleum hydrocarbon mixtures.
- The MTCA Method B direct-contact CUL (0.67 milligram per kilogram) for arsenic is below natural background concentrations in soil. Therefore, the natural background concentration of arsenic in Clark County of 5.81 milligrams per kilogram (Ecology, 1994) is used as the CUL.
- It was assumed that a hypothetical terrestrial ecological receptor could contact soil at the LRIS at some point in the future (A TEE is provided in Appendix B of the RI/FS [MFA, 2013a]). If available and more protective than MTCA Method B CULs, MTCA ecological indicator concentrations (EICs) protective of wildlife (i.e., risk based ecological factors) were selected as CULs. See Table 3-1 for chemicals with CULs based on EICs.

RELs may be used at sites where a combination of cleanup action components is used to achieve CULs at the POC. According to WAC 173-340-355(4), RELs may be defined as either a concentration or another method of identification of a hazardous substance. RELs were based on the MTCA Method C Carcinogen Industrial Land Use Table Value (direct contact). In addition, the presence of nonaqueous-phase liquid (NAPL) was set as an REL. The POC for human exposure via direct contact is 0 to 15 feet below ground surface (bgs) for soil throughout the property (WAC 173-340-740 (6)(d)).

Standard Method B CULs were applied to groundwater (see Table 3-1), with a few exceptions:

- Generic MTCA Method B CULs are not available for petroleum mixtures. The only standard CULs for petroleum mixtures are MTCA Method A values. Therefore, Method A groundwater CULs are used for petroleum hydrocarbon mixtures.

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[1] In determining the CUL, the rule typically looks to the more conservative of the risk based human health or ecological numeric criteria such that the CUL is protective of both endpoints. For purposes of this CAP, these numeric criteria are referred to as risk based human health and ecological factors.

- The MTCA Method B groundwater CUL for arsenic is below natural background concentrations in groundwater. The MTCA Method A groundwater CUL is based on naturally occurring arsenic throughout Washington; therefore, the Method A CUL of 5 micrograms per liter is used as the CUL.
- MTCA Method B groundwater CULs for the vapor intrusion pathway were used if MTCA Method A or B groundwater CULs were unavailable.

The POC for groundwater is the entire water-bearing zone—upper and lower (UWBZ and LWBZ, respectively)—at the site (WAC 173-340-720(8)(b)). Note sources to groundwater have been removed and monitoring has indicated groundwater concentrations are stable and/or decreasing. A conditional POC may be established if it is not practicable to meet the CUL throughout the Site within a reasonable restoration time frame (WAC 173-340-720(8)(c)). The conditional POC for groundwater is located in the UWBZ and the LWBZ along the LRIS perimeter. Groundwater flow beneath the LRIS is consistently east to west in both aquifer units (from the residential area above the LRIS towards Lake River) with a west-northwesterly groundwater flow trend from the northern portion of Cell 2. Groundwater contamination from the LRIS extends beyond the LRIS northern boundary at Cell 2 so the POC correspondingly extends to the edge of contamination in the RNWR. In addition, five monitoring wells will be monitored north of Cell 2 in the RNWR and one well on the southern boundary of Cell 3. POC monitoring wells include the following:

- **Cell 2:** MW-55, MW-55S, MW-55D, MW-56, MW-57S, MW-57D, MW-58D, and MW-62
- **Cell 3:** MW-29D, MW-45D, MW-46S, MW-46D, and MW-47D
- **RNWR:** RMW-2S, RMW-2D, MW-61, MW-63, and USDFW-1

3.1.2 Port-Owned Properties

Dioxins were identified as an IHS for the Railroad Avenue, Port-owned marina, and proposed overpass properties. The selected CULs are risk based factors protective of ecological receptors and are presented as a dioxin TEQ of 9.8 ng/kg and a furan TEQ of 11.4 ng/kg (see Table 3-2). As indicated in the TEE provided in Appendix B of the RI/FS (MFA, 2013a), there may be unacceptable risk if ecological receptors are exposed to soil on the Railroad Avenue property.

The MTCA Method B CUL for dioxin is 11 nanograms per kilogram (ng/kg) (TEQ). The exceedances of the MTCA Method B CUL protective of human health are colocated with exceedances of the selected CULs; therefore, remedy directed at addressing soil exceeding CULs is also expected to mitigate any unacceptable risk to human health. The POC for human exposure via direct contact is 0 to 15 feet bgs for soil (WAC 173-340-740 (6)(d)). The POC for ecological exposure is the biologically active zone of 0 to 6 feet bgs for soil (WAC 173-340-7490).

3.1.3 Lake River

Dioxins were identified as an IHS for Lake River sediment. Risk-based factors protective of human health were developed for Lake River (MFA, 2013a).[2] The risk-based factor protective of human fish consumption is lower than natural background (2 ng/kg dioxin TEQ) and the practical quantitation limit (PQL) of 5 ng/kg dioxin TEQ (RI/FS—MFA, 2013a). WAC 173-340-700(6)(d) states that when risk-based factors are less than natural background levels or levels that can be reliably measured, then the CUL shall be established at a concentration equal to the PQL or natural background concentration, whichever is higher. Therefore, the selected CUL is 5 ng/kg dioxin TEQ. Compliance with the dioxin CUL is measured based on the surface-weighted average dioxin TEQ concentration of Lake River sediments within the Site.

Cleanup scenarios, based on various potential RELs, were evaluated in the RI/FS. An REL of greater than 30 ng/kg dioxin TEQ is selected based on an evaluation of feasibility, cost, and ability to meet cleanup levels through enhanced natural recovery for potential dredge scenarios (MFA, 2013b).

According to SMS requirements, the POC is represented by the biologically active sediment zone within the uppermost 10 centimeters bml. This includes protection from potential exposure to deeper contaminants or to contaminant migration.

3.1.4 Carty Lake

Dioxins were identified as an IHS for Carty Lake sediment. Evaluations of human fish consumption scenarios at Carty Lake indicate that a human health risk-based number[3] may be below natural background and the PQL. The dioxin CUL is therefore based on the PQL of 5 ng/kg dioxin TEQ (WAC 173-340-700(6d)).

Human activity at Carty Lake is currently minimal. Carty Lake is part of a national wildlife refuge and, as such, is an important resource for ecological receptors. The REL is therefore set at a level protective of ecological receptors, i.e., at the risk-based ecological factor for dioxin congeners.

According to SMS requirements, the POC is represented by the biologically active sediment zone within the uppermost 10 centimeters bml. This includes protection from potential exposure to deeper contaminants or to contaminant migration.

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[2] In determining the risk based factor, the rule looks to the more conservative of a human health factor or ecological congener-specific, factor. Ecological congener-specific factors protective of fish, bird, and mammal populations were developed (MFA, 2013a). The value protective of the most sensitive population was selected as the factor for each congener and is presented in Table 3-3. Those factors were less conservative than the developed human health factors. Therefore the human health factors were used as the risk-based factor in setting the sediment cleanup level.

[3] In determining the risk based factor, the rule looks to the more conservative of a human health factor or ecological congener-specific, factor. Ecological congener-specific factors protective of fish, bird, and mammal populations were developed (MFA, 2013a). The value protective of the most sensitive population was selected as the factor for each congener and is presented in Table 3-4. Those factors were less conservative than the developed human health factors. Therefore the human health factors were used as the risk-based factor in setting the sediment cleanup level.

3.2 Applicable Federal, State, and Local Laws

In addition to the cleanup standards developed through MTCA, applicable laws and regulations must be considered in the selection and implementation of the cleanup action. MTCA requires the cleanup standards to be "at least as stringent as all applicable state and federal laws" (WAC 173-340-700(6)(a)). Besides establishing requirements for cleanup standards, applicable state and federal laws may impose procedural (permitting) requirements for performing cleanup actions (WAC 173-340-710). In other cases, the cleanup actions must comply with the substantive requirements of the law but are exempt from the procedural requirements of the law (RCW 70.105D.090; WAC 173-340-710(9).

For remedial actions conducted under a consent decree, order, or agreed order, MTCA provides an exemption from the procedural requirements of RCW 70.94 (Air), 70.95 (Solid Waste), 70.105 (Hazardous Waste), 75.20 (Hydraulic Permit), 90.48 (Water Quality), and 90.58 (Shorelands), and the procedural requirements of any laws requiring or authorizing local government permits or approvals (RCW 70.105D.090). Given the Port's existing agreed order with Ecology (Agreed Order No. 01TCPSR-3119) and the Consent Decree (which will be the administrative mechanism for implementing actions in this CAP), the cleanup actions meet the permit exemption provisions of MTCA, obviating compliance with procedural requirements of the various local and state regulations that would otherwise apply. Ecology is required to ensure compliance with the substantive provisions of RCW 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58, and the substantive provisions of laws requiring or authorizing local government permits or approvals. Ecology makes the final decision regarding which substantive provisions are applicable.

Persons conducting remedial actions have a continuing obligation to determine whether additional permits or approvals are required, or whether substantive requirements for permits or approvals must be met. In the event that either the Port or Ecology becomes aware of additional permits or approvals or substantive requirements that apply to the remedial action, they shall promptly notify the other party of this knowledge (WAC 173-340-710(9)(e)).

Interim actions were conducted on the LRIS in accordance with Agreed Order No. 01TCPSR-3119 between the Port and Ecology. Emergency and interim actions conducted between 1996 and 2002 were completed by the Port under Agreed Order No. DE96TC-S304. Applicable laws and associated procedural and substantive requirements were met (MFA, 2013a and references therein).

Applicable local, state, and federal laws are evaluated in the RI/FS; those relevant to remedial actions to be conducted on Port-owned properties, Lake River, and Carty Lake are summarized below, and are developed to ensure conformance with the substantive provisions of these laws, regulations, and rules.

3.2.1 Applicable Federal Laws

U.S. Army Corps of Engineers Permitting Requirements—The COE requires that a dredge/fill permit be obtained consistent with Section 404 of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972, commonly referred to as the Clean Water Act (CWA). A Nationwide Permit #38 will apply to this project as it is conducted under a MTCA consent decree for cleanup of hazardous and toxic waste. Ecology will also ensure the substantive requirements of project certification under CWA Section 401 are met, although individual 401 review is not required with the nationwide permit #38 when the cleanup is being conducted under a MTCA consent decree. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code [USC] 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section states that any other work affecting the course, location, condition, or physical capacity of U.S. waterways is unlawful unless the work has been permitted by the COE. Finally, Section 106 review processes are set forth in 36 Code of Federal Regulations (CFR) 800; Section 106 compliance is required, as state funds are being used to facilitate a portion of the cleanup and activities requiring a permit from COE are being conducted.

COE permitting to fulfill the requirements of CWA Section 404, Section 10 of the Rivers and Harbors Act, and federal requirements under Section 106, through the preparation of a Joint Aquatic Resources Permit Application, will be included in the implementation of all alternatives in conjunction with design. Because the dredged sediment will not be discharged to waters of the U.S. and no adverse effect on the historical integrity of the remedial action area is expected, approval of the action is expected, provided that the Endangered Species Act (ESA) consultation and the Section 401 Water Quality Certification are successfully completed.

Endangered Species Act and Biological Opinion—The COE's permitting requirements will prompt an ESA consultation with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), as this is typically requested by the COE for projects of this magnitude. A biological evaluation or assessment will be conducted to evaluate whether adverse or negative impacts to endangered species and their critical habitats are anticipated during or as a result of remedy implementation.

Clean Water Act—The objective of the CWA (33 USC 1251-1376 and 40 CFR 129 and 131) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The State of Washington has been delegated the authority to implement the CWA and has rules and regulations corresponding to all of those stated in the CWA. Consequently, for the Port, any discharges to surface water will be managed under the state program. The CWA sets forth a number of provisions that require the development of regulations to protect the quality of the nation's waters. Section 401 requests every applicant for a federal permit for any activity that may result in a discharge to a water body to obtain a certification from the state that the proposed activity will comply with state water quality standards. Ecology will ensure the substantive requirements of certification under CWA Section 401 are met, although individual 401 review is not required when the project is permitted under Nationwide Permit #38 and is being conducted under a consent decree. Water quality impacts resulting from the remedy will be further evaluated in the design phase. Best management practices may be required, along with water quality monitoring (i.e., turbidity monitoring), during all in-water work activity.

Migratory Bird Treaty Act—The federal Migratory Bird Treaty Act of 1918 makes it unlawful to kill migratory birds by any means unless permitted by regulations. Implementing the remedial action in conformance with MTCA and SMS will protect wildlife, including migratory birds. Additional consultation with the USFWS is recommended during construction planning because of the close proximity of the RNWR.

Solid Waste Disposal Act—The Solid Waste Disposal Act (42 USC 6921 Subtitle C) incorporated under the federal Resource Conservation and Recovery Act (RCRA, 40 CFR § 260 through 266) contains requirements for "cradle to grave" management of materials that meet the RCRA definition of hazardous waste and provides design standards for treatment, storage, and disposal (TSD) facilities. The soil and sediment data have been reviewed for waste designation purposes; no materials would be designated as either RCRA listed hazardous wastes or RCRA characteristic wastes. No consolidation or off-Property treatment is associated with the remedial action. No excavation, stockpiling, or sorting of soil and debris on the Property is subject to the TSD facility requirements.

Land-Disposal Restrictions—Land-disposal restrictions for RCRA wastes characterized as toxic (40 CFR § 268) require that the waste be treated to specified concentrations before placement in a land-based unit. Land-disposal restrictions would not apply to wastes removed from the Property, as soil and sediment data will be designated and disposed of as a nonhazardous waste.

U.S. Department of Transportation Hazardous Materials Regulations—The U.S. Department of Transportation (DOT) has published regulations, including requirements regarding communications and emergency response, shipping, and packaging (40 CFR 171 through 180), that govern the transportation of hazardous materials to or from the Property. The provisions of 40 CFR § 263 establish minimum standards that apply to persons transporting hazardous waste by air or water. DOT regulations would not apply to the Property, as soil and sediment data will be designated and disposed of as a nonhazardous waste.

National Ambient Air Quality Standards—The USEPA has established national ambient air quality standards for a variety of potentially airborne substances known as criteria pollutants. Criteria pollutants include carbon monoxide, nitrogen dioxide, ozone, lead, particulates smaller than 10 micrometers, and sulfur dioxide. The air emissions generated by handling soil and sediment upland at the Property are subject to applicable air-quality standards to control or prevent the emission of air contaminants. Based on the contaminants present at the Property, the applicable criteria pollutant at the Property would be particulate matter (dust).

Occupational Safety and Health Administration—Occupational Safety and Health Administration (OSHA) regulations pertaining to hazardous waste sites are addressed under 29 CFR 1910.120, the Hazardous Waste Operations and Emergency Response Standard. Regulations pertaining to construction, cleanup, and corrective actions will apply, unless the employer can demonstrate that the operations do not involve employee exposure, or the reasonable possibility of employee exposure, to safety or health hazards. All work will be performed under a project-specific health and safety plan in conformance with the applicable federal and state OSHA regulations.

Cultural Resources—The following federal laws and acts pertain to the protection of cultural resources: the Antiquities Act (1906) laid out penalties for the unauthorized excavation of archaeological sites and requires permits for excavations on federal lands; the 1966 National Historic Preservation Act (NHPA) requires federal agencies to address effects of their actions on significant cultural resources; the 1978 American Indian Religious Freedom Act (AIRFA) requires federal agencies to consult with traditional religious leaders on potential impacts to rights and practices (42 U.S.C. 1996); the 1979 Archaeological Resources Protection Act (ARPA) establishes protections for archaeological resources on federal and Tribal lands; the 1990 Native American Graves Protection and Repatriation Act (NAGPRA) deals with the disposition of indigenous Tribal cultural items recovered on Tribal or Federal lands; and 36 CFR 79 (Curation of Federally Owned and Administered Archeological Collections) was codified in 1990 to "…establish definitions, standards, procedures and guidelines to be followed by Federal agencies to preserve collections of prehistoric and historic material remains, and associated records…" as stipulated in the Antiquities Act , the Reservoir Salvage Act, NHPA, and ARPA (36 CFR 79.1). Applicable federal laws are further detailed in the RI/FS (MFA, 2013a).

Work will be conducted under a project-specific cultural resource protection plan developed in coordination with and reviewed by affected Tribes.

3.2.2 Applicable State Laws

Sediment Management Standards—In Washington State, the SMS governs the investigation and cleanup of contaminated-sediment sites (WAC 173-204). The SMS includes procedures for conducting hazard assessments to identify cleanup sites, determining the appropriate site cleanup authority, conducting a site cleanup study, determining the site-specific cleanup standard, and selecting a site cleanup action. All elements of the remedial design and remedial action will comply with the SMS.

Model Toxics Control Act—MTCA governs the investigation and cleanup of contaminated sites in Washington (Chapter 70.105D RCW). A contaminant is defined by MTCA 173-340-200 as any hazardous substance that does not occur naturally or that occurs at concentrations greater than natural levels. MTCA contains provisions controlling site cleanup activities, including site discovery, priority, listing, investigation, and cleanup; liability provisions; administrative options for remedial actions, payment of costs, and funding; public participation; cleanup standards; and other general provisions. The law regulates the cleanup of sites contaminated with CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) hazardous substances, all state and federal RCRA hazardous and dangerous wastes, and petroleum products. All elements of the remedial design and remedial action will comply with MTCA.

Water Pollution Control Act—In Washington, water-quality standards for surface waters of the state are promulgated under Chapter 173-201A WAC. Water quality monitoring during all in-water work activity is anticipated and will be specifically addressed in the design phase of the project and through issuance of the Section 401 Water Quality Certification. No water will be generated or discharged to Lake River or Carty Lake during Port-owned property remedial action. The dredging cleanup action includes treatment of water following dewatering of sediment. If water from the dredged material is discharged to Carty Lake or Lake River, it will be required to meet the water quality standards. During construction, access improvements, and sediment-handling operations, water will be directed through erosion- and sediment-control features to meet any water quality standards.

Washington Dangerous Waste Regulations—Washington regulations identify RCRA F-listed and K-listed wastes as dangerous waste (WAC 173-303-9904). Designated dangerous wastes may be treated, stored, or disposed of at a permitted TSD facility. Property media will not be designated as either RCRA listed hazardous wastes or RCRA characteristic wastes; therefore, this requirement is not applicable.

National Pollutant Discharge Elimination System—Chapter 173-220 WAC establishes a state permit program, applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state, operating under state law as a part of the National Pollutant Discharge Elimination System (NPDES) created by Section 402 of the FWPCA. Permits issued under this chapter are intended to satisfy the requirements for discharge permits under both Section 402(b) of the FWPCA and Section 90.48 RCW. NPDES construction stormwater permits are required for construction sites of 1 acre or larger or for discharging surface water from a site. A stormwater pollution prevention plan and best management practices will be prepared and implemented as part of the final design to meet substantive requirements of the NPDES stormwater permit for Port-owned property cleanup and in-water cleanup. Interim action remedial activities for the LRIS properties were conducted under the Port's individual NPDES permit (which covered construction activities). As the Railroad Avenue properties are less than 1 acre, a construction stormwater permit will not be required. An NPDES construction permit may be required for discharge of water from sediment-handling operations.

Shoreline Management Act—The state Shoreline Management Act (SMA) (Chapter 173-22 WAC) regulates any action within 200 feet of the ordinary high water (OHW) mark of a shoreline. Shorelines in towns and cities are regulated by shoreline master programs (Chapter 173-26 WAC) adopted by local municipalities. The City has a shoreline master program, and substantive shoreline management requirements may be triggered by cleanup actions associated with dredging. However, cleanup actions are exempt from the procedural (permitting) requirements (Chapter 173-27 WAC). The SMA may also be applicable in association with the access improvements and construction of an upland sediment-handling site, and will be addressed during the design.

Washington Department of Natural Resources Authorization—The DNR requires that an authorization be obtained to perform any work over state-owned aquatic lands. A DNR authorization is different from other regulatory permits in that it is a legal contract in which the DNR outlines the terms and conditions of the use, as well as conveying property rights to the user in exchange for rent.

Washington Department of Fish and Wildlife—The Washington State Legislature developed the Hydraulic Project Approval process to provide requirements for the protection of fish and fish habitat from the impacts of hydraulic projects (Chapter 77.55 RCW). The Hydraulic Code requires any person or agency that desires to undertake a hydraulic project to obtain approval from the WDFW, in the form of a permit, before beginning work. While the project is exempted from obtaining the permit under MTCA, Ecology will coordinate with WDFW to ensure the project will meet the substantive requirements of the HPA process. All prescribed work windows will be observed.

Air Quality Standards—WAC 173-400, -460, and -470 establish provisions for general regulation of air pollution sources, ambient air quality standards, and acceptable levels for particulate matter, and stipulate requirements for new sources of toxic air pollutant emissions. During sediment- or soil-handling activities, it may be necessary to implement engineering controls to manage particulate emissions. Air testing may be required to show that emissions meet the substantive requirements of applicable air quality permits and rules. If results illustrate that substantive requirements have not been met, the design will require modification.

Noise Regulations—Maximum environmental noise levels have been determined and are contained in WAC 173-60. Approved procedures for measurement of environmental noise are contained in WAC 173-58. During design, expected noise levels will be estimated and compared to the limitations established in 173-60 WAC. The need to adjust the approach to meet these requirements will be determined.

State Environmental Policy Act—The State Environmental Policy Act (SEPA), contained in Chapter 43.21C RCW, provides the framework for state and local agencies to consider the environmental consequences of a proposal before taking action. The act is implemented through the SEPA Rules and Procedures, Chapters 197-11 and 173-802 WAC, respectively. The SEPA review process requires the preparation of an environmental checklist, which may be achieved by review of the environmental impacts and proposal of mitigation measures. The completed checklist helps to identify potential environmental impacts associated with the proposed action.

SEPA review will be conducted for the project design. The Port or Ecology can act as the lead agency for SEPA review. The Port will complete a SEPA checklist for Ecology's review.

Cultural Resources—Under the Washington State Governor's Executive Order 05-05, archeological and cultural resources must be evaluated to satisfy federal regulations 36 CFR 800. RCW 27.44 (Indian Graves and Records) addresses the need to protect graves, cairns, and glyptic marks, and associated penalties, civil actions, and procedures. RCW 27.5 (Archaeological Sites and Resources) lays out the State of Washington's interest in protecting archaeological resources and establishes and empowers the Washington State Department of Archeological and Historic Preservation DAHP to complete an inventory, study, make National Register of Historic Places nominations, and identify and excavate the "state's archeological resources" (RCW 27.53.020). WAC 25-48 establishes procedures for implementing the permit sections of RCW 27.53. WAC 25-46 establishes regulation procedures for historic archaeological resources on, in, or under aquatic lands owned by the state; RCW 79.105.600 deals with "archaeological activities" on state aquatic lands, and address shoreline management (via RCW 79.105). RCW 42.56.300 exempts disclosure of the location of archaeological sites.

The Washington State Department of Archeological and Historic Preservation (DAHP) and affected Tribes will review a project-specific cultural resource protection plan under which work will be conducted.

Washington Industrial Safety and Health Administration—Washington Industrial Safety and Health Administration (WISHA) regulations pertaining to hazardous waste sites are addressed under WAC 296-843, Hazardous Waste Operations. This standard applies to cleanup and corrective actions at MTCA-regulated sites. All work will be performed under a project-specific health and safety plan in conformance with the applicable WISHA regulations.

3.2.3 Applicable Local Laws

Shoreline Master Program—A cleanup action performed along any shoreline of statewide significance in the City is regulated under the Shoreline Master Program (Chapter 18.820 of the Ridgefield Municipal Code [RMC]). A Substantial Development Permit is required for such an action. Since the remedial action includes dredging activities and may include upland construction of a sediment-handling facility, bank work, and access improvements completed within 200 feet of a shoreline, the substantive requirements of the Substantial Development Permit will be met as part of the remedial design.

City of Ridgefield Critical Areas Ordinance—The City of Ridgefield Critical Areas Ordinance designates and regulates projects that may impact ecologically sensitive areas, including wetlands and fish and wildlife habitat conservation areas, or geophysical hazards such as geologically hazardous areas and frequently flooded areas (RMC 18.280.120). The remedial action will be conducted in an area that includes designated fish and wildlife habitat conservation areas, critical aquifer recharge areas, and frequently flooded areas. The design will meet the substantive requirements designed to protect these resources.

City Flood Control Ordinance—The purpose of the Flood Control Ordinance is to promote public health, safety, and general welfare; reduce the cost of flood insurance; and minimize public and private losses due to flooding (RMC 18.750). The ordinance requires a demonstration that development, grading, and filling projects will not exacerbate flood conditions through hydrologic and hydraulic analyses showing that the proposed encroachment would not result in a net increase in base flood elevation or flood velocity. The remedial actions are designed to ensure that there is no net increase in fill in the floodway or that there is no net increase in base flood elevation or velocity due to fill in the floodway. Hydraulic analysis will be provided. Consultation with the City will confirm that the design meets the substantive requirements.

4 SELECTED CLEANUP ACTIONS

The cleanup action for the Property incorporates a variety of actions targeted to different areas of the Property. The cleanup actions were determined for four areas of the Property independently and are described separately in the following sections. The cleanup actions were selected based on findings of the RI/FS (MFA, 2013a).

4.1 LRIS Cleanup Action

Interim actions completed on the LRIS are consistent with the recommended alternative actions in the RI/FS and are considered the final cleanup actions for the LRIS. The cleanup action for the LRIS comprises source removals and hot spot excavations, the application of an emergency SER system, installation of a new stormwater system, groundwater monitoring, site capping, and institutional controls.

Source removals were conducted between 1996 and 2012. The goals of the source removals were to remove equipment, wood-treating products and waste stored on site and to remove site features that were heavily impacted by former PWT activities. The source removals also included the excavation of hot spot soil throughout the LRIS (i.e., soil exceeding RELs). Figure 4-1 shows the areas excavated.

Remediation of groundwater contamination has been completed via the SER system and through removal and treatment of groundwater encountered during excavation of the concrete pond. The SER system was implemented from 2004 through 2011 as an emergency action in order to remove mobile product primarily within a NAPL plume, originating from the former tank farm and retort area that extended from Cell 1 into a portion of Cell 2. Another goal of the SER system was to prevent migration of impacts to the RNWR. The SER process involved steam injected to the subsurface via injection wells and recover contamination by vapor extraction, groundwater pumping and slurping. The SER system removed approximately 24,800 gallons of NAPL, over 500 tons of contaminated sludge, and treated over one million gallons of groundwater. Throughout the duration of the SER application, groundwater samples were analyzed to evaluate the effectiveness of the treatment. The application was conducted in two phases followed by a polishing phase. The SER application reached a point of diminishing returns during the polishing phase, at which point approval was received from Ecology to terminate application. Figures showing the reduction in NAPL were provided in the final RI/FS (MFA, 2013a).

Additional active groundwater remediation during interim actions included groundwater removal around the former concrete pond. The soils around the former concrete pond contained NAPL and were removed as part of the interim action. The excavation extended below the water table to allow approximately 320,000 gallons of groundwater to be removed and treated.

Groundwater monitoring will be completed at existing monitoring wells to assess natural contaminant attenuation rates and verify that contaminants are not migrating. Groundwater samples will be collected from 18 monitoring wells (at existing monitoring wells defined as conditional POCs; see Section 3.1.1), on a semiannual basis for a minimum of two years, and then every 18 months thereafter upon Ecology approval. Compliance groundwater monitoring starts August 2013. After year six, the monitoring program may be modified as needed, to collect samples from fewer wells or at lesser frequency upon Ecology approval. The compliance monitoring program will be detailed in a Comprehensive Operation and Maintenance Plan (COMP) developed for the Property. No IHSs were identified in groundwater in Cell 4; therefore, no remedial actions were identified for Cell 4 groundwater.

The historical stormwater system was removed and a new stormwater system, incorporating engineering controls, was installed in 2012. The new system uses a series of catch basins to collect overland flow from the newly capped surface and discharges through three new outfalls.

The final phase of cleanup action for the LRIS was installation of a soil cap. Obstructions (e.g., buildings, surface completions, pilings) were removed before grading and placement of the soil cap. Capping materials that have been installed at the LRIS consist of gravel, soil, asphalt, or a combination of these materials and a polypropylene geotextile demarcation fabric. The final and current Ecology-approved capping conditions are shown on Figure 4-2. Cap monitoring will be conducted annually consistent with the Soil Management and Cap Monitoring Plan (SMCMP) to be included in the COMP developed for the Property.

Institutional controls include restrictive covenants for vapor migration, adherence to the SMCMP for protection and maintenance of surface capping and management of residual contamination, prohibiting installation of any water well or withdrawal with the potential to pull contamination from Cell 2 toward Cell 4, and prohibiting use of groundwater for drinking. Historical municipal drinking water wells east of the LRIS have been abandoned by the City.

4.1.1 LRIS Types, Levels, and Amounts of Contamination Remaining

Impacts above CULs in soil and groundwater remain on the LRIS. A summary of soil analytical data and CUL and REL exceedances for samples remaining on the LRIS following completion of emergency and interim actions is provided in Appendix A, Tables A-1 through A-4 and Figures 4-3, 4-4, and 4-5 show locations where soil IHSs remain.

A summary of groundwater sample results from the four most recent sampling events is provided in Appendix A, Table A-5. The data are compared with groundwater CULs. The total boundary extents for groundwater exceeding the CULs are shown for both the UWBZ and the LWBZ in Figure 4-6.

Evaluations have also shown that there are two distinct plumes. One plume is beneath Cell 3 and is limited to the UWBZ, and the other is beneath Cells 1 and 2 and the southern portion of the RNWR Carty Unit in the UWBZ and LWBZ. Therefore, the descriptions below of the nature and extent of groundwater impacts are presented separately for each plume (i.e., "Cells 1 and 2" plume and "Cell 3" plume).

The Cells 1 and 2 plume occurs below and downgradient of LRIS sources (e.g., former tank farm, retorts, and concrete pond). The plume contains arsenic, chlorinated phenolics (including PCP), SVOCs (including carcinogenic PAHs), VOCs, and petroleum hydrocarbons. The plume extends through Cells 1 and 2 and beneath the RNWR and Lake River. However, conservative modeling shows that groundwater will not discharge to surface water above analytical method reporting limits, surface water ambient water quality criteria, and/or natural background concentrations. The Cells 1 and 2 plume has been reduced significantly by the operation of the SER system. Groundwater monitoring has shown that the plume is stable or declining.

The Cell 3 plume occurs below and downgradient of LRIS sources (e.g., former drip trough) and has also been impacted by migration of tetrachloroethene (PCE) from an upgradient source (i.e., the Park Laundry site as determined from monitoring wells located between the LRIS and the former Park Laundry site). Park Laundry is currently being investigated by the property owner, with Ecology oversight. The Cell 3 plume contains arsenic, PCP, and PCE. The plume extends through Cell 3 and slightly beneath Lake River. However, conservative modeling shows that groundwater will not discharge to surface water above analytical method reporting limits, surface water ambient water quality criteria, and/or natural background concentrations. Groundwater monitoring has shown that the Cell 3 plume is stable or declining.

Depictions of the nature and extent of the groundwater plumes are provided in Section 3 of the RI/FS (MFA, 2013a). Figures associated with this Section show the plan view extents and cross section for the most extensive IHSs in groundwater as of 2011: benzene, PCE, naphthalene, PCP, and arsenic.

4.2 Port-Owned Properties Cleanup Action

The Port owns three properties that are included within the boundaries of the Property: (1) the Railroad Avenue properties, (2) the Port marina property, and (3) the proposed overpass property. Concentrations of dioxins in soil are above CULs at these properties.

Railroad Avenue properties. A 2-foot cap will be placed on the Port Railroad Avenue properties. The extent of the cap will include Port-owned property (i.e., including right-of-ways), approximately 0.94 acres. Cap monitoring will be conducted annually consistent with the SMCMP.

Port marina property. Most of the Port marina property has already been capped with asphalt. In addition, a narrow strip of soil between the asphalt on the Port marina property and Cell 3 has been capped with polypropylene geotextile fabric and clean soil. Cap monitoring will be consistent with the SMCMP.

Proposed overpass property. This area will be covered with a cap consistent with LRIS capping options. If soil is excavated during construction, a soil management plan will be required.

4.2.1 Types, Levels, and Amounts of Contamination Remaining

A summary of soil analytical results compared with CULs for the Port-owned properties is provided in Appendix A, Table A-6. Figure 4-7 shows the sample locations and remaining exceedances of CULs. Dioxins will be contained beneath the soil caps at concentrations above CULs.

4.3 Lake River Cleanup Action

The selected cleanup for Lake River is mechanical dredging and enhanced natural recovery (ENR) of sediment. Cleanup includes bank and in-water actions.

The bank will be covered with a geotextile filter fabric and rock armor stabilization. Bank and beach armor will extend from the dredged area in the river channel, over the existing shoreline and tie into the existing LRIS upland soil cover; armoring of the bank with rounded gravels and cobbles resistant to erosion ("fish mix") will reinforce the existing slopes and act as a physical barrier to the movement of underlying bank and shore soil and sediment.

The in-water remedy consists of removing approximately 14,000 cubic yards of sediment within the dredge prism above the selected REL of 30 ng/kg dioxin TEQ by mechanical dredging and placement of an approximately 1-foot thick clean sand layer to manage dredging residuals. In addition, an approximately 1-foot thick sand layer will be placed over all areas outside of the dredge prism that exceed the CUL of 5 ng/kg, to immediately reduce surface concentrations below the CUL and enhance natural recovery of sediment. The depositional nature of the Lake River environment will contribute to natural recovery as well. The dredge prism and enhanced natural recovery area outside of the dredge prism are shown in Figure 4-8.

Additional in-water cleanup components include the following:

- Preparation of upland staging and processing area.

- A bathymetric survey of the river confluence area will be conducted to assess barge accessibility and the need for access dredging.
- Existing in-water structures and debris will be removed prior to dredging; the existing kayak launch and pilings will be removed and replaced following dredging activities.
- Best management practices for water quality will be considered and implemented during work; these may include silt curtains for containment; dredge methods; and turbidity monitoring before, during, and after construction.
- Dredged material will be disposed of as nonhazardous material waste at a Subtitle D landfill facility.
- Natural recovery will be monitored; monitoring will quantify the reduction in concentrations relative to the CUL (5 ng/kg dioxin TEQ).
- Long-term institutional controls would not be required; however current sediment conditions would need to be characterized before any future activities resulting in significant sediment disturbance, such as in-water construction or dredging, are initiated.

4.3.1 Types, Levels, and Amounts of Contamination Remaining

Dioxins were identified as an IHS for sediment in Lake River. Other contaminants exceeding screening levels identified in the RI/FS (i.e., TPAH, PCP, and m&p-cresol) co-occur with elevated dioxins and will be completely removed as part of the cleanup action selected.

A summary of sediment analytical results compared with the CUL and RELs for Lake River is provided in Appendix A, Table A-7. Sediments between the CUL of 5 ng/kg dioxin TEQ and the REL of 30 ng/kg dioxin TEQ will remain after active cleanup for a period of time. The sand layer will immediately cover and sequester concentrations above the CUL, and will mix with the underlying sediments over time to reduce the concentration (laterally and vertically) to below approximately 4.4 ng/kg dioxin TEQ, determined on an area-weighted average basis for the active cleanup area. Sediment monitoring will confirm that natural recovery of sediment is occurring. Estimates of dioxin contamination for individual sampling stations predicted to remain upon completion of the remedial action are shown in Figure 4-9. Concentrations conservatively assume the sand layer becomes completely mixed with residual concentrations below. The area-weighted average for the entire river channel offshore of the LRIS upon completion of the remedial action is estimated to be approximately 2.5 ng/kg dioxin TEQ.

4.4 Carty Lake Cleanup Action

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit. The selected cleanup action consists of mechanical dredging and a limited residuals cap in the southernmost portion of the lake. A maximum of approximately 6,000 cubic yards of sediment exceeding the RELs (i.e., CULs protective of ecological receptors; see Section 3.1.4) in the surface and subsurface will be removed. Note that significant refinement of the dredge area is expected as a result of predesign characterization. Approximately 1 foot of clean sand will be placed in dredged areas to manage residuals from the dredging activity. The thin layer sand cap for Carty Lake is not intended to provide for natural recovery of in-situ sediments since sediments will be removed to the RELs within Carty Lake, but will be placed to cover and mix with residual sediments that may be generated resulting from the dredging activity. The sand layer for Carty Lake is unlikely to be disturbed because Carty Lake is a quiescent environment. In addition, motorboats are not allowed on the lake, so propeller-induced mixing of the sand cap layer will not occur. Other cleanup components include the following:

- Access improvements may be required and likely would include clearing and grubbing and construction of a temporary staging area.
- Dredged material will be disposed of as nonhazardous material waste at a Subtitle D landfill facility.
- Best management practices for water quality will be implemented, potentially in the form of containment, use of appropriate dredging practices, as well as turbidity monitoring before, during, and after construction, if appropriate.
- Post remedial monitoring will be conducted to assess the efficacy of the remedial action.
- Institutional controls to protect human receptors from potential effects from consuming fish from areas of the lake where concentrations will remain above the CUL will be put in place. To accomplish this, the USFWS will prohibit fishing from Carty Lake.
- Additional evaluations on the potential for impacts to human health from fish consumption may be necessary if Carty Lake is reconnected with the Columbia River in the future.
- Functionally replacing the bulkhead on the southern end of Carty Lake.
- Repair and rehabilitation of wetland areas to be impacted by access, staging, and/or dredging in consultation with USFWS.

The estimated extent of the dredge area is shown on Figure 4-10. The specific extent of the dredge area will be determined after considering additional data (including dioxin, arsenic, chromium, and PCP data) collected during predesign sampling activities, dredging logistics, feasibility, and lake bed characteristics and will be refined during design, in consultation with the USFWS.

4.4.1 Types, Levels, and Amounts of Contamination Remaining

Dioxins were identified as an IHS for sediment in Carty Lake. Other contaminants exceeding screening levels that were identified for the RI/FS (i.e., arsenic, chromium, and PCP) are exclusively co-located with the highest dioxin areas, occur only in sediment exceeding dioxin RELs, and will therefore be removed as part of the cleanup action selected. A summary of sediment analytical results compared with the CUL and RELs for Carty Lake is provided in Appendix A, Table A-8.

Estimates of dioxin (TEQ) contamination remaining upon remedy implementation, based on currently available data, are provided in Figure 4-10. These estimates will be refined as samples are collected for remedy design. Fishing prohibitions at Carty Lake will be implemented to prevent human exposure to remaining dioxin concentrations via fish consumption. After remedy implementation, there will be no individual dioxin congeners present above RELs throughout the lake.

5 ALTERNATIVES CONSIDERED AND BASIS FOR REMEDY SELECTIONS—LRIS

5.1 Cleanup Technologies

Technology screenings were conducted separately for Cells 1 and 2, Cell 3, and Cell 4. All of the screenings were conducted consistent with WAC 173-340-350(8)(b). The technologies were initially generated based on the Federal Remediation Technologies Roundtable (FRTR) screening matrix (FRTR, 2008) and commonly used remediation methods. This comprehensive technologies list was screened against applicability, effectiveness, and implementability, with the remaining technologies to be evaluated further in the FS. A summary of the findings for screenings for Cells 1 and 2, Cell 3, and Cell 4 is provided below.

5.1.1 Cells 1 and 2

Based on the results of the screening, the following technologies were retained in the FS for further evaluation: capping, natural attenuation, excavation and off-site disposal (with soil screening), in situ and ex situ thermal treatment, and institutional controls. Further details on the analysis of all screened technologies can be found in Appendix K of the Cells 1 and 2 RI/FS (MFA, 2011a).

5.1.2 Cell 3

Based on the results of the screening, the following technologies were retained in the FS for further evaluation: capping, natural attenuation, separation, stabilization, excavation and off-site disposal, institutional controls, and groundwater pumping. Further details on the analysis of all screened technologies can be found in Appendix B of the Cell 3 FS (MFA, 2011b).

5.1.3 Cell 4

Based on the results of the screening the following technologies were retained in the FS for further evaluation: capping, excavation, and institutional controls (MFA, 2010). Further details on the analysis of screened technologies can be found in Section 6.1 of the Cell 4 FS (MFA, 2010).

5.2 Feasibility Study Alternatives

Remedial alternatives were developed using the individual cleanup technologies retained from the technology screening process with consideration of applicable MTCA minimum requirements for cleanup actions (WAC 173-340-360(2)), which include: cleanup requirements (see Section 3), provision for a reasonable restoration time frame, and use of permanent solutions to the maximum extent possible. Ecology's expectations for the development of alternatives and the selection of cleanup actions were also considered (WAC 173-340-370). The FS alternatives were conducted separately for Cells 1 and 2, Cell 3, and Cell 4 as discussed in the Cells 1 and 2 RI/FS (MFA, 2011a), Cell 3 FS (MFA, 2011b), and Cell 4 RI/FS (MFA, 2010). The following sections provide summaries for each of these areas of the LRIS.

5.2.1 Cells 1 and 2

Four alternatives were developed as part of the FS for Cells 1 and 2 (MFA, 2011a), which included variations in combinations of excavations, capping, groundwater monitoring, and institutional controls. Subsequent comments from Ecology led to the formulation of Alternatives 2A (formerly 2) and 2B (new alternative). The five alternatives are listed below, with complete descriptions presented in Table 5-1.

Alternative 1: Minimum 2-foot-deep soil cap (or equivalent), SER operation and decommissioning, groundwater monitoring, and institutional controls

Alternative 2A: Targeted removal, capping, SER operation and decommissioning, groundwater monitoring, and institutional controls

Alternative 2B: Additional targeted removal, capping, SER operation and decommissioning, groundwater monitoring, and institutional controls

Alternative 3: Removal of soil exceeding RELs, capping, SER operation and decommissioning, groundwater monitoring, and institutional controls

Alternative 4: SER operation and decommissioning to achieve groundwater CULs, excavation of SER system and soil exceeding CULs, and groundwater monitoring

5.2.2 Cell 3

Three alternatives were developed for the Cell 3 FS (MFA, 2011b), involving variations of capping, soil removal, institutional controls, and groundwater monitoring. Each alternative is listed below and a thorough description is provided in Table 5-2.

Alternative 1: Minimum 2-foot-deep soil cap (or equivalent), institutional controls, and groundwater monitoring

Alternative 2: Soil removal to RELs, capping, institutional controls, and groundwater monitoring

Alternative 3: Removal of soil and groundwater exceeding CULs, treat and discharge groundwater recovery, and treatment

5.2.3 Cell 4

Three alternatives were developed for the Cell 4 cleanup action (MFA, 2010), involving variations of capping, soil removal and institutional controls. A detailed summary of components of each alternative is provided in Table 5-2. The three alternatives are listed below.

Alternative 1: Engineered cap and institutional controls

Alternative 2: Engineered cap, removal of soil above RELs, and institutional controls

Alternative 3: Removal of soil exceeding CULs

5.3 Rationale for Selecting Proposed Alternatives

This section describes the rationale by which the preferred cleanup action alternatives for the LRIS were selected. The selected cleanup actions meet the minimum threshold requirements pursuant to WAC 173-340-360, including protection of human health and the environment, compliance with cleanup standards and applicable state and federal laws, and providing for compliance monitoring. Compliance monitoring for all alternatives would include construction performance criteria, a cap maintenance program, and confirmation sampling during excavation, if warranted. For further details, see the Cells 1 and 2 RI/FS (MFA, 2011a), Cell 3 FS (MFA, 2011b), and Cell 4 RI/FS (MFA, 2010).

5.3.1 Disproportionate Cost Analysis

The alternatives were evaluated according to evaluation criteria outlined in WAC 173-340-360(3)(f), and according to disproportionate cost analysis (DCA) as outlined in WAC 173-340-360(3)(e). Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including:

- Protectiveness
- Permanence
- Long-term effectiveness
- Management of short-term risks
- Technical and administrative implementability
- Consideration of public concerns
- Cost

Summaries of the analyses, primary assumptions, unit costs, and number of units for all significant project elements are included in the FSs for Cells 1 and 2, Cell 3, and Cell 4. Net present value calculations are also included for operation, maintenance, and monitoring costs, if applicable.

5.3.1.1 Cells 1 and 2

Alternatives 1, 2, 3, and 4 meet the threshold criteria and were included in the DCA (see Table 5-3). Alternative 4 ranked highest in categories of protectiveness, permanence, and long-term effectiveness, (followed by Alternative 3, Alternative 2, and then Alternative 1). Alternatives 1 and 2 ranked higher than Alternatives 3 and 4 regarding management of short-term risks; in terms of technical and administrative implementability Alternative 1 ranked highest, followed by Alternative 2, next by Alternative 3, and finally by Alternative 4.

The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

- Alternative 1: $7,030,000
- Alternative 2A: $10,301,000
- Alternative 2B: $10,320,000
- Alternative 3: $32,883,000
- Alternative 4: $367,531,000

Alternative 1 costs less than Alternatives 2A and 2B. Alternatives 2A and 2B are estimated to be one-third the cost of Alternative 3. Given the large cost discrepancy and the limited incremental benefit over the other alternatives, the baseline option, Alternative 4, is disproportionately costly and is rejected as an alternative. Based on this assessment, Alternatives 1, 2A, and 2B remain viable options in terms of cost effectiveness. Alternative 2B, for an incremental cost of approximately $3.3 million over Alternative 1, provides a greater degree of protectiveness and long-term effectiveness. Additionally, given that material removed became Corrective Action Management Unit-eligible after the DCA was finalized, Alternatives 2A and 2B are actually estimated to cost approximately $1.7 million less.

5.3.1.2 Cell 3

Alternatives 1 through 3 meet the threshold criteria and were included in the DCA (see Table 5-4). Alternative 3 performed better for categories of protectiveness, permanence, and long-term effectiveness, with the highest rating, while scoring the lowest rating for categories of management of short-term risks and technical and administrative implementability. Alternative 2 ranked consistent in all categories, while Alternative 1 ranked slightly lower and higher, averaging less than Alternative 2 by one point. The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

- Alternative 1: $1,263,000
- Alternative 2: $1,524,000
- Alternative 3: $22,880,000

The estimated cost for Alternative 3 is $21,356,000 higher than Alternative 2. Given the large cost discrepancy and the limited incremental benefit over Alternative 2, Alternative 3 is disproportionately costly and is rejected as an alternative. Based on this assessment, Alternative 2 remains a viable option. The estimated cost for Alternative 2 is $261,000 higher than Alternative 1, but for the incremental cost difference was determined to provide a greater degree of protectiveness and long-term effectiveness.

5.3.1.3 Cell 4

Alternatives 1 through 3 meet the threshold criteria and were included in the DCA (see Table 5-5). Alternative 3 ranked highest in categories of protectiveness, permanence, and long-term effectiveness (followed by Alternative 2 and then Alternative 1). Alternatives 1 and 2 ranked higher than Alternative 3 regarding management of short-term risks; in terms of technical and administrative implementability, Alternative 1 ranked highest, followed by Alternative 2, and last by Alternative 3. The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

- Alternative 1: $707,000
- Alternative 2: $720,000
- Alternative 3: $12,692,000

Given the large cost discrepancy and the limited incremental benefit over the other alternatives, the baseline option, Alternative 3, is disproportionately costly and is rejected as an alternative. Based on this assessment, Alternatives 1 and 2 remain viable options in terms of cost effectiveness. Alternative 1 costs slightly less than Alternative 2. Alternative 2, for an incremental cost of $13,000 over Alternative 1, provides a greater degree of protectiveness and long-term effectiveness.

5.3.2 Restoration Time Frame

WAC 173-340-360(4) contains guidance for determining reasonable restoration time frames. A preference is given for alternatives that can be implemented in less time if other factors such as permanence and costs are equal.

5.3.2.1 Cells 1 and 2

Alternatives 1, 2, and 3 likely would have a longer restoration time frame than Alternative 4 because not all soil exceeding CULs would be removed. The practicability of achieving a shorter restoration time frame is limited; Alternative 4 requires the removal of more than 500,000 tons of soil, decreasing the practicability of such an option.

To achieve restoration, Alternatives 1, 2, and 3 include natural attenuation of IHSs. Alternatives 1, 2, and 3 do not rely on natural attenuation to protect receptors, but instead use engineering and institutional controls to address risks to human health and the environment and to restore the LRIS to potential future uses. The effectiveness and reliability of institutional controls at the LRIS are high because of the Port's continued ownership and management of the LRIS.

5.3.2.2 Cell 3

Alternative 2 has a slightly greater degree of permanence than Alternative 1; however, Alternative 1 costs less than Alternative 2. Alternative 1 can be implemented within a shorter time frame than Alternative 2.

For Alternatives 1 and 2, protection of human health and the environment against risks associated with soil contaminants remaining after excavation would be achieved through institutional controls rather than through meeting cleanup standards. These protections can be established within a reasonably short time frame.

5.3.2.3 Cell 4

Alternatives 1 and 2 likely would have a longer restoration time frame than Alternative 3 because soil exceeding CULs would not be removed. The practicability of achieving a shorter restoration time frame is limited; Alternative 3 requires the removal of more than 42,000 tons of soil, decreasing the practicability of such an option.

To achieve restoration Alternatives 1 and 2 include natural attenuation of IHSs. As described for Cells 1 and 2, effectiveness and reliability of institutional controls at the LRIS are high and are therefore appropriate for addressing risks to human health and the environment and for restoring potential future uses.

5.3.3 Selected Alternatives Summary

5.3.3.1 Cells 1 and 2

Alternative 4 was found disproportionately costly when compared to the incremental benefit relative to the other alternatives. Alternatives 1 and 2 were considered more viable options when considering cost effectiveness. Alternative 2 provides greater long-term effectiveness and level of protectiveness for a relatively minimal increase in cost. Based on this and other findings of the FS, Alternative 2 was the initial selected remedy.

Subsequent comments from Ecology regarding the chosen alternative (2) led to the formulation of Alternatives 2A (formerly 2) and 2B (new alternative). Alternative 2B is identical to 2A, with the exception of the additional excavations near sample locations exceeding dioxin and PCP RELs. With the modification, Alternative 2B is the final chosen alternative.

5.3.3.2 Cell 3

When comparing total ranking sum and cost, Alternative 3 was disproportionately costly for benefits realized when compared to Alternatives 1 and 2, and therefore Alternative 3 was eliminated as a viable option.

The difference in cost between Alternatives 1 and 2 is small compared to Alternative 3, with Alternative 2 being 2 percent greater in cost than Alternative 1. The additional cost of Alternative 2 is associated with the removal of soil exceeding the RELs. This additional cost was found to be justified, based on the greater improvement of overall environmental quality and a greater degree of certainty in the overall effectiveness over the long term. Therefore, the difference in cost between Alternatives 2 and 1 was not considered disproportionate, given the benefits provided. Based on these conclusions, Alternative 2 is the recommended action for Cell 3.

5.3.3.3 Cell 4

Based on the very large difference in cost and limited incremental benefit, Alternative 3 was found disproportionately costly and was eliminated as a viable alternative. Alternatives 1 and 2 were compared, and it was found that the incremental cost of $13,000 of Alternative 2 over Alternative 1 provides a greater degree of protectiveness and long-term effectiveness. Therefore, the cost of

Alternative 2 compared to Alternative 1 was not considered disproportionate, and Alternative 2 is the recommended action for Cell 4.

6 ALTERNATIVES CONSIDERED AND BASIS FOR REMEDY SELECTION—PORT-OWNED PROPERTIES

Port-owned properties, beyond the portions of the LRIS that are owned by the Port, described in Section 5, include the Railroad Avenue, marina, and planned overpass properties (see Figure 1-2). The Railroad Avenue properties consist of two parcels oriented north-south and located along Railroad Avenue just east of Cell 3 of the LRIS. The marina property, immediately south of the LRIS, includes a boat launch, parking, and landscaped areas. The overpass area was formerly part of the McCuddy's marina and includes the footprint of a proposed overpass development.

6.1 Cleanup Technologies

Consistent with WAC 173-340-350(8)(b), individual cleanup technologies identified in the FRTR screening matrix (2008), as well as other commonly used remediation methods, were reviewed and screened to identify applicable methods for remediating soil. Effectiveness and implementability of the technologies were assessed, resulting in a list of technologies that were retained for further consideration: no action, in situ containment via a cap, and ex situ treatment via excavation and off-site disposal. For further details, see MFA (2013a).

6.2 Feasibility Study Alternatives

Remedial alternatives were generated using the individual cleanup technologies retained (see Section 6.1), with consideration of applicable MTCA minimum requirements for cleanup actions (WAC 173-340-360), which include: cleanup requirements (see Section 3), provision for a reasonable restoration time frame, and use of permanent solutions to the maximum extent possible. The MTCA DCA was used to determine which cleanup action is permanent to the maximum extent practicable.

Port-owned property soils exceeded the CULs based on ecological risk. Although concentrations are below a human health $1x10^{-5}$ cumulative carcinogenic risk level, concentrations of dioxins and furans in the Railroad Avenue properties lead to unacceptable ecological risk. A No Action alternative was therefore dismissed as an option.

Exposed soil on the Port marina property (located between the LRIS property boundary and the paved area of the marina property) was capped with approximately 1 foot of clean soil during interim LRIS actions (see Figure 4-2), and a polypropylene geotextile fabric was placed above the native, impacted soil and below the clean layer. These actions and the presence of an asphalt cap on the rest of the Port marina property eliminate exposure to underlying soil, and alternative cleanup actions specific to this area were not further considered.

In the proposed overpass property (located south of the LRIS Cell 3 and east of McCuddy's marina) construction of an overpass will reduce potential for exposure to soil. Construction will include covering the area with a cap consistent with LRIS capping options. This construction will limit exposure to underlying soil, and alternative cleanup actions for this area were therefore not further considered.

The following alternatives were considered for Port-owned properties:

- Institutional controls
- Railroad Avenue properties engineered soil cap in locations exceeding CULs
- Removal of soils exceeding CULs in the Railroad Avenue properties

Under Alternative 1, institutional controls would be implemented at the Railroad Avenue properties. These controls could include deed restrictions, access restrictions such as installing a fence, and signage.

Alternative 2 (Engineered Cap) includes placement of a clean soil cap at the Port Railroad Avenue properties to mitigate potential exposure. The cap would consist of a minimum 2 foot of soil or gravel over a geotextile separation layer to demarcate the underlying soil. Compliance and protection monitoring would take place as part of construction oversight during the implementation of the cap; annual cap monitoring would be conducted under a SMCMP.

Under Alternative 3 (Sampling and Removal), it was assumed that removal of the top 1 foot of soil would meet CULs. Additional sampling would determine which areas within the property required soil removal and to verify the 1 foot depth assumption. The excavated soil would be transported by truck and disposed of as nonhazardous material at the Subtitle D landfill facility. The removed soil would be replaced with clean topsoil for an operational surface and to protect against erosional forces.

6.3 Rationale for Selecting Proposed Alternative

MTCA requirements were used as the criteria for evaluating cleanup actions. The alternatives were evaluated according to evaluation criteria outlined in WAC 173-340-360(3)(f), and according to DCA as outlined in WAC 173-340-360(3)(e). Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative.

Alternatives 1 through 3 meet the threshold criteria and were included in the DCA (see Table 6-1). Alternative 1 (Institutional Controls) is protective of both human health and the environment; institutional controls would minimize exposure through access restrictions. Alternatives 2 (Engineered Cap) and 3 (Sampling and Removal) provide additional measures in comparison to Alternative 1 to enhance protectiveness for all areas exceeding the CULs. Alternative 3 is the most protective of the three remedies, as areas of soil would be removed for off-site disposal. Alternative 3 is more permanent than Alternatives 1 and 2 and has greater long-term effectiveness, as areas of accessible soil exceeding CULs would be replaced with clean topsoil. Alternative 1 (Institutional Controls) rates low for permanence and long-term effectiveness. Alternatives 1 and 2 rate high for management of short-term risks. These alternatives do not involve significant handling or management of impacted soil. All remedies are technically and administratively implementable and community concerns have been addressed throughout the history of this project.

The estimated net present value costs for implementation, operation and maintenance, and sampling are as follows:

- Alternative 1 (Institutional Controls) : $53,000
- Alternative 2 (Engineered Cap): $116,000
- Alternative 3 (Sampling and Removal): $273,000

Alternative 3 is the most costly of the alternatives. The alternative is more than twice as expensive as Alternative 2, while providing only modest improvements in protectiveness and permanence. Alternative 1 has the lowest cost, but the alternative does not provide the same degree of risk management and places constraints on a property that could otherwise be a useful asset to the community.

WAC 173-340-360(4) contains guidance for determining reasonable restoration time frames. All of the alternatives possess reasonable restoration time frames. Alternative 3 involves more extensive construction activities and will require greatest amount of time to complete. The engineered cap (associated with Alternative 2) and implementation of institutional controls (associated with Alternative 1) can be implemented readily.

In summary, the preferred remedy (Engineered Cap) is protective of both human health and the environment, and is permanent without being disproportionately costly. The remedy can be implemented within a reasonable timeframe and complies with MTCA requirements and Ecology expectations as described in WAC 173-340-370.

7 ALTERNATIVES CONSIDERED AND BASIS FOR REMEDY SELECTION—LAKE RIVER

Lake River is a side channel of the Columbia River and lies within the lower Columbia River west of Ridgefield, Washington, near the confluence of the Columbia and Willamette rivers. The Lake River remediation area described in this CAP consists of the shoreline and river bottom adjacent to the LRIS, approximately 2 miles upstream from where Lake River meets the Columbia River (see Figure 1-2).

7.1 Cleanup Technologies

Consistent with the SMS requirements in WAC 173-204-560(4)(f)(iii) and using MTCA procedures as a guideline (WAC 173-340-350(8)(b)), individual cleanup action components were reviewed and screened to identify applicable methods for remediating the impacted sediment in Lake River. The preliminary screening of applicable technologies is based on technologies identified in the FRTR screening matrix (2008), as well as other commonly used remediation methods. Effectiveness and implementability of each technology were assessed for specific contaminants in the sediment, resulting in a list of technologies that were retained for further consideration: institutional controls, natural attenuation, ENR (thin cap sand layer), in situ containment (capping), mechanical dredging, confinement in a commercial landfill, and ex situ treatment via physical methods. For further details, see MFA (RI/FS-2013a).

7.2 Feasibility Study Alternatives

Remedial alternatives for Lake River were developed by using the individual cleanup technologies retained from the technology screening process and by considering the CULs. Each of the four alternatives assessed protection of human health and the environment through compliance with cleanup standards, removal and capping of impacted sediment, or institutional controls to manage the potential for exposure to impacted sediment (see Table 7-1). A No Action alternative was considered, but was dismissed from further evaluation, as it does not meet cleanup standards.

Interim actions for upland soil that is supported adjacent to the riverbank have been completed (Cell 3) or will be completed in 2013 (Cell 2). For all of the alternatives in this analysis, the area between the upland cap and the extent of the chosen in-water remedy (dredging and ENR) will be covered with a geotextile filter fabric and stabilized with rock armor. Armoring of the bank will reinforce the existing slopes and act as a physical barrier to the movement of underlying soil and sediment. No other remedial alternatives for the riverbank were retained from the technology screen because of the discovery of cultural artifacts in the bank and the requirement to preserve the artifacts in place.

7.2.1 Alternative 1: Monitored Natural Recovery

Alternative 1 relies on stabilization of the riverbank, combined with the natural deposition of clean sediment over impacted sediment in Lake River. Natural attenuation occurs under favorable conditions over an indeterminate period of time and acts without human intervention.

A comprehensive work plan would be prepared outlining monitoring techniques to further characterize fluvial conditions and deposition rates that would affect natural attenuation. The plan would define sampling locations and methods to supplement existing sampling data from within the study area perimeter.

Following the in-depth characterization of the fluvial environment, institutional controls (e.g., no-anchor zones) would be implemented and a monitoring program would be developed that would verify the ongoing effectiveness of recovery by natural processes.

7.2.2 Alternative 2: Enhanced Monitored Natural Recovery

Alternative 2 relies on a combination of bank stabilization, ENR, and a long-term monitoring program to protect receptors and verify recovery, resulting in enhanced monitored natural recovery (EMNR). EMNR is accomplished by placing a layer (approximately 6 to 12 inches deep) of clean sand over the impacted sediment and then monitoring the additional natural recovery that occurs. The clean sand layer would provide a surface stratum of cleaner sediment, resulting in an immediate reduction in surface contaminant concentrations. Clean sand would be placed over all areas exceeding the CUL of 5 ng/kg dioxin TEQ.

As in Alternative 1, a comprehensive work plan would be prepared, outlining characterization of the fluvial conditions at Lake River, monitoring techniques, and sampling events. In addition, institutional controls (e.g., no-anchor zones) would be implemented and a monitoring program would be developed that would verify the ongoing effectiveness of recovery by natural processes.

7.2.3 Alternative 3: Engineered Cap

Under Alternative 3, the bank would be stabilized and an engineered 2-foot-deep sediment cap would be placed by mechanical means over the designated remediation area (i.e., areas exceeding the CUL). Appropriate options for the capping material would be developed in detail during the remedial design.

Impacts to active federal navigation channels designated by the COE are subject to review by the COE and the U.S. Coast Guard. Typically, where capping is performed within the limits of an active federal navigation channel, the cap's top elevation is maintained below the project depth, with sufficient clearance to provide for channel maintenance dredging. Pending further review of channel dimensions and navigation requirements, the cost for removal of sediment from within the navigation channel project boundary has not been included in Alternative 3. Further, dredging required to maintain navigation depths would involve at least partially removing contaminated sediments, negating the need for a cap in some areas.

The cap material would be placed in a manner that minimizes mixing of impacted sediment and cap material, allows for proper settlement during and after construction, and minimizes the amount of turbidity generated in the water column. As part of the engineered cap, a protective layer of rock armor would be placed to protect against erosion of the underlying sand material of the sediment cap.

Ongoing cap integrity would be managed through implementation of a monitoring and maintenance program, which would include a plan outlining the requirements for routine cap performance monitoring, schedule, emergency response, and reporting. It would also include steps to be taken if the cap fails to meet the performance criteria.

Restrictions on future maintenance dredging would be required as an institutional control in order to prevent breaching of the engineered sediment cap without appropriate remedial measures. Additional restrictions on navigation, access to shore, and short-term future land use (e.g., in-water construction) would all be included as institutional controls.

Long-term cap maintenance and monitoring would be implemented to support and verify cap performance. Performance standards would be established and actions developed as a response should performance standards be exceeded.

7.2.4 Alternative 4: Dredging and ENR

Alternative 4 consists of bank stabilization, removing the most impacted sediment in Lake River through the process of mechanical dredging and placement of approximately 1 foot of clean sand to initiate the natural recovery of residual sediment with dioxins above the CUL. The dredge volume (approximately 14,000 cy) associated with removing sediment above an REL of 30 ng/kg dioxin

TEQ was selected for purposes of the FS and has been refined with additional predesign data (MFA, 2013b). The REL was selected based on technical feasibility (i.e., evaluation of residuals generated during dredging), meeting the CUL, and cost/benefit associated with reduction of concentrations of dioxins. Monitoring of the clean sand layer would ensure achievement of the CUL and continued effectiveness.

Before dredge operations, existing in-water structures would be demolished. There are a few infrastructure remnants of historical LRIS river operations; some dolphins, pilings, a possible submerged bulkhead, and a dock (currently in operation) are located in the sediment remediation area.

Sediment containing dioxins above the REL would be removed from the river bottom and transferred, by material barge, to an upland offloading area in the LRIS adjacent to the in-water work. Alternatively, if possible, sediment may be transported by barge. Dredged sediment would be disposed of at a Subtitle D landfill facility. Best management practices for water quality would be implemented, including silt curtains for containment; dredge method; and turbidity monitoring before, during, and after construction.

Although this alternative likely would not prevent any future dredging activities for channel maintenance and other construction activities, evaluation of sediment conditions would be required before activities involving significant sediment disturbance were initiated.

7.3 Rationale for Selecting Proposed Alternative

SMS requirements for cleanup actions include: overall protection of human health and the environment; attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws; short-term effectiveness; and long-term effectiveness (WAC 173-204-560(4)). WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing cleanup actions. In WAC 173-204-580(4), the SMS further specifies that, in evaluating the alternatives, the net environmental effects, relative cost effectiveness, and relative technical effectiveness should be considered for the cleanup action alternatives. These factors were all included in the evaluation of alternatives. For further details, see MFA (2013a).

7.3.1 Protection of Human Health and the Environment

According to the SMS, considerations for the protection of human health and the environment include overall protectiveness of the alternative, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternatives. All four alternatives protect human health and the environment through compliance with cleanup standards, removal and capping of impacted sediment, and/or institutional controls to manage the potential for exposure to impacted sediment.

Alternative 1 is somewhat protective of human health and the environment. Alternative 1 relies on natural processes to attenuate impacts in the sediment, resulting in an extended time frame. Therefore, there is still potential for exposure to contaminants, as well as for institutional controls to go unheeded. Alternative 2 is protective, as it includes institutional controls plus the placement of a sand layer that would result in the immediate reduction in surface contaminant concentrations.

Contamination would initially be covered by clean sand, but, over the long term, it is likely to mix as a result of use or wave action, thereby exposing receptors to dioxins in the surface sediment. Alternative 3 is protective because it fully isolates contaminants in the sediment from the environment immediately after construction. However, loss of the sediment cap could result in re-exposure of the environment to contaminants. Alternative 4 is most protective, as it uses dredging to remove contaminants, as well as ENR. The selected dredging and ENR scenario is estimated to result in a surface weighted average concentration of approximately 4.4 ng/kg dioxin TEQ (MFA, 2013b), below the CUL of 5 ng/kg. Because the highest levels of dioxin would be removed, significantly less time would be required to achieve the CUL than for Alternatives 1 and 2. Alternative 4 is also immediately protective of ecological receptors. Alternative 4 is more permanent than Alternative 3 in that a breach of the cap could result in transport and recontamination of dioxins. Alternative 4 has a higher potential for on- and off-site impacts due to handling, transport, and disposal of impacted sediments. Proper controls during dredging would limit this exposure potential.

7.3.2 Compliance with Cleanup Standards and Applicable Federal, State, and Local Laws

This cleanup action is being conducted under the SMS (WAC 173-204). The selected cleanup action would be conducted consistent with all applicable laws and applicable cleanup standards as defined in Section 3 of this CAP. All alternatives are anticipated to meet the CUL; however, the time required to attain these differs by alternative. Alternatives 1 and 2 are expected to achieve the CUL following natural recovery processes requiring an extended timeframe; Alternative 2 would take less time than Alternative 1. Alternatives 3 is expected to attain the CUL immediately upon completion of the remedial action. Alternative 4 is also expected to attain the CUL in the surface sediment immediately upon completion of the remedial action due to placement of 1 foot of clean sand over remaining low-level contamination; over time the sand is likely to mix with underling low-level contamination and equilibrate and is expected to continue to meet the CUL long term.

7.3.3 Short-Term Effectiveness

According to the SMS, analysis of the short-term effectiveness includes consideration of the protection of human health and the environment during construction and implementation of the alternative.

Alternative 1 provides little effective protection in the short term; however, exposure potentials are also lowest, as limited bank stabilization construction activities would be conducted. Alternative 2 has much greater short-term effectiveness than Alternative 1 because of clean sand placement; construction-related exposure would be insignificant because the sand layer can be spread slowly to minimize disturbance of the existing sediment surface. Alternative 3 has the greatest short-term protectiveness because the sediment cap would be effective immediately after its construction; dredging in the navigation channel to accommodate the sediment cap would have the highest short-term construction risks. Alternative 4 produces the most short-term exposure because of dredging and handling of the sediments. Construction would be actively managed to limit the spread of disturbed, impacted sediment beyond the dredge footprint.

7.3.4 Long-Term Effectiveness

Pursuant to the SMS, the following considerations were made in analyzing the alternatives for the evaluation requirements pertaining to long-term effectiveness: degree of certainty that the alternative will be successful; long-term reliability; magnitude of residual, biological, and human health risk; and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues, remaining wastes cleanup, and/or disposal site risks.

Alternative 1 can be effective in the long term, and additional information would be collected during the preparation of the monitoring program to confirm long-term effectiveness. Alternative 2 has similar long-term benefits, as mixing of the clean sand layer with higher concentrations below would occur. Alternative 3 provides a high level of long-term effectiveness, assuming that the cap is maintained and repaired as necessary; institutional controls would communicate the limits of the armored cap boundary as well as requirements for future development in capped areas, and long-term cap monitoring would confirm remedy effectiveness. Alternative 4 has the greatest long-term effectiveness, as sediments with the highest concentrations would be removed and placement of a clean sand layer would mitigate exposure to residuals. Alternative 4 does not require long-term institutional controls. Monitoring would be conducted to ensure effectiveness and evaluate the natural recovery processes.

7.3.5 Cleanup Time Frame

WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing the cleanup actions. Lake River poses potential risks to human health and the environment, requiring the shortest cleanup time frame practicable. Natural attenuation through sedimentation may occur within the ten-year time frame required by WAC 173-204-580(3)(a)(ii) in some areas of Lake River under Alternative 1. Alternatives 3 and 4 provide for a quick cleanup timeframe (following remedy implementation), followed by Alternative 2, ultimately achieving cleanup standards within the ten-year time frame.

The current use of Lake River and surrounding areas allows for implementation of all of the action alternatives. Institutional controls would be required under Alternatives 1, 2, and 3. These would not be required under Alternative 4 because the scenario does not require that sediments remain undisturbed.

7.3.6 Net Environmental Effects

This requirement includes consideration of the net environmental effects of the alternatives, including residual effects, recovery rates, and any adverse effects of cleanup construction or disposal activities. Under Alternative 1, leaving contamination exposed over time to gradually recover naturally may result in a net environmental effect. Some construction impacts would be associated with Alternatives 2, 3, and 4, but these impacts can be minimized through appropriate project design and construction practices.

7.3.7 Relative Cost and Technical Effectiveness

For the purposes of performing a comprehensive assessment, cost and technical effectiveness were evaluated together, using the MTCA DCA framework because it addresses SMS requirements in WAC 173-204-580(4) as well as additional requirements found in WAC 173-204-560(4)(g-k). The DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including protectiveness, permanence, long-term effectiveness, management of short-term risks, technical and administrative implementability, consideration of public concerns, and cost. The DCA analysis is summarized in Table 7-2.

7.3.7.1 Protectiveness

Protectiveness of human health and the environment includes the degree to which existing risks are reduced; time required to reduce risk at the facility and attain cleanup standards; on-site and off-site risks resulting from implementation of the cleanup action alternative; and improvement of the overall environmental quality.

As discussed in Section 7.3.1, Alternatives 1 through 4 are, in varying degrees, protective of human health and the environment. Alternative 4 scores high for protectiveness because the remedy removes contaminants, enhances natural recovery, immediately achieves the CUL at the surface, and provides for monitoring to ensure compliance with the CUL following natural recovery. No institutional controls are required.

7.3.7.2 Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. Under the MTCA DCA process, preference is given to permanent solutions, to the maximum extent practicable. A "permanent solution" is defined as a cleanup action in which the cleanup standards are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

Alternatives 1 through 4 vary in permanence, with Alternatives 1 and 2 scoring lowest. Alternatives 1 through 3 rely on institutional controls, potentially reducing permanence. Removal of sediment and no required institutional controls in Alternative 4 make it most permanent. The remedy provides compliance with the REL through dredging; while application of clean sand and monitoring will ensure compliance with the CUL long term.

7.3.7.3 Management of Short-Term Risks

This factor addresses the risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that would be taken to manage such risks.

There are limited short-term risks associated with Alternatives 1 and 2 because of limited construction activities. Alternatives 3 and 4 score higher for short-term risk, as significantly more activities relating to sediment (e.g., cap construction, transport off-site for disposal, sediment resuspension) would take place that potentially detrimentally affect human health or the environment if conducted improperly; however, construction controls known to be effective in managing these risks would mitigate the overall risk.

7.3.7.4 Effectiveness over Long Term

As discussed in Section 7.3.4, long-term effectiveness includes the degree of certainty that the alternative will be successful; the reliability of the alternative for the period of time during which hazardous substances are expected to remain on-site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes.

With proper implementation, all four alternatives can be effective over the long term under this criterion. Alternatives 1 and 2 score lowest because they rely on natural recovery processes. Alternative 3 is scored high, yet future damage to the cap could result in releases of contaminated sediment. Alternative 4 is the most effective over the long after sediment removal, monitoring will ensure continued compliance with the CUL, and no institutional controls are required.

7.3.7.5 Technical and Administrative Implementability

This factor addresses whether the alternative can be implemented and is technically possible. The availability of necessary materials, regulatory requirements, scheduling, access for construction operations and monitoring, and integration with existing facility operations must be considered.

All the alternatives use proven sediment-remediation technologies that have been employed at many sites and that are implementable from a technical and administrative perspective. Alternative 4 will require multiple permits and approvals to complete but does not require institutional controls, and is therefore ranked highest under this criterion.

7.3.7.6 Consideration of Public Concerns

This factor includes considering concerns from individuals, community groups, local governments, tribes, and federal and state agencies, including the COE, the DNR (i.e., the landowner, and therefore the owner, of the sediments), and any other organization that may have an interest in or knowledge of Lake River and that may have a preferred alternative.

Ecology has addressed community concerns throughout the history of the associated project work. During development of the RI/FS, Ecology began the process of addressing community concerns for the sediment remediation by communicating with local tribes, DNR, and USFWS, and hosting an open house for community members to inform them about the sediment contamination and potential cleanup opportunities. Interests and concerns of these entities were considered in selection of the preferred alternative. Additional issues or concerns of the DNR, other state and local agencies, tribes and the public will continue to be considered by Ecology as part of the public review process for this Cleanup Action Plan, and during permitting of the sediment cleanup. Alternative 4 scores highest for this criterion because it reflects community/agency preferences for removal of contaminated sediments and meets the CUL in a relatively short time frame. Common community concerns include noise and traffic, short- and long-term risks, and the time frame for any proposed cleanup actions. Community concerns will also be factored into local permit processes, including responding to the City's shoreline ordinance and development permitting. All alternatives are scored high for this criterion because they have similar permitting and public comment processes.

7.3.7.7 Cost

The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

- Alternative 1 (Monitored Natural Recovery [MNR]): $679,000
- Alternative 2 (EMNR): $2.8 million
- Alternative 3 (Engineered Cap): $7.7 million
- Alternative 4 (Dredge and ENR): $9.5 million

Alternative 4 is the most permanent of the alternatives. The associated costs are considered proportionate to the level of risk reduction achieved in comparison to other, lower-cost, alternatives. Alternative 3 scores lower than Alternative 4 and has a similar remedy cost (depending on the amount of dredging that is incorporated into the alternative to accommodate navigation considerations). Alternatives 1 and 2 have a relatively low cost compared to Alternative 4; however, Alternative 4 achieves a significant increase in protectiveness as well as a higher cumulative score. Based on the DCA findings (see Table 7-2), Alternative 4 is considered permanent to the maximum extent practicable.

7.3.8 Selected Alternative Summary

Alternative 4 (Dredge and ENR) is selected as the in-water remediation alternative for the Lake River sediment. It is the most protective of human health and the environment for the following reasons:

- Dioxin TEQ surface weighted average concentration of the affected area will be reduced to the extent technically feasible and is expected to achieve the CUL of 5 ng/kg; dioxin congener area wide concentrations will be below concentrations protective of ecological receptors.
- Other contaminants exceeding screening levels (i.e., TPAH, PCP, and m&p-cresol) would be removed.
- Contaminated dredged sediment would be permanently removed and would not be available for potential future transport or exposure.
- Residuals within the dredge footprint and sediment with slightly elevated dioxin concentrations adjacent to the dredge footprint would be managed through the placement of a clean sand layer (ENR). The clean sand layer will immediately sequester and control residual concentrations.

Alternatives 1 and 2 provide marginal levels of protectiveness over the short and long terms because high concentrations would remain in place. Alternative 3 achieves a level of protectiveness similar to that of Alternative 4, with a similar level of disturbance to sediments and with a similar cost, while leaving high contaminant concentrations in place. Alternative 4 provides the highest degree of certainty for long-term protectiveness, combined with immediate short-term reductions in surface concentrations, and is proportionately cost effective when the benefits are considered. Alternative 4 would not require long-term institutional controls and likely would not prevent any future dredging activities for channel maintenance and other construction activities; however, evaluation of sediment conditions would be required before activities involving significant sediment disturbance are initiated.

8 ALTERNATIVES CONSIDERED AND BASIS FOR REMEDY SELECTION—CARTY LAKE

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit. The Carty Unit "lowlands" are immediately north of the LRIS Cell 2 (see Figure 1-2).

8.1 Cleanup Technologies

Consistent with the SMS requirements found in WAC 173-204-560(4)(f)(iii) and using MTCA procedures as a guideline (WAC 173-340-350(8)(b)), individual cleanup action components (technologies) were reviewed to identify applicable methods for remediating the sediment in Carty Lake. The preliminary screening reviewed technologies that are identified in the FRTR screening matrix (2008), as well as other commonly used remediation methods. Effectiveness and implementability of the technologies were assessed, resulting in a list of technologies that were retained for further consideration: institutional controls, natural attenuation, residuals cap (thin cap sand layer), in situ containment (capping), mechanical dredging, and confinement in a commercial landfill. For further details, see MFA (2013a).

8.2 Feasibility Study Alternatives

Remedial alternatives were developed using the individual cleanup technologies retained from the technology screening process with consideration of protection of human health and the environment and attainment of the cleanup standard(s) (see Table 8-1). Each of the assessed four alternatives protect human health and the environment through compliance with cleanup standards, removal and capping of impacted sediment, or institutional controls to manage the potential for exposure to impacted sediment. A No Action alternative was considered, but was dismissed from further evaluation as it does not address cleanup standards.

Carty Lake is part of a national wildlife refuge, and therefore it will be necessary to coordinate alternatives with USFWS and ensure that they are consistent with USFWS plans for Carty Lake.

8.2.1 Alternative 1: Monitored Natural Recovery

Alternative 1 relies on MNR and institutional controls to achieve cleanup standards. Natural recovery occurs under favorable conditions over an indeterminate period of time and acts without human intervention. Further analysis of the hydrodynamic processes occurring in Carty Lake would be required to quantify the expected time frame for sufficient sedimentation to occur.

A comprehensive work plan would be prepared outlining methods for monitoring techniques and sampling events. The monitoring program would be developed with the objective of verifying the ongoing effectiveness of recovery of contaminated sediment by natural processes.

Restrictions on access, future land use and fishing would all be included as institutional controls. Additional evaluations would be necessary if Carty Lake were to be reconnected with the Columbia River.

8.2.2 Alternative 2: Focused Dredge and Limited Residuals Cap

Alternative 2 consists of removing sediment above RELs by means of dredging and disposal. The location of the impacted sediments would allow dredging from an upland position, with tracked equipment. Actual extents would be refined during design, in consultation with USFWS, but in general are limited to the extreme south part of Carty Lake.   Dewatering and solidification of the dredged material in the upland area would be required before landfilling it as nonhazardous material at a local Subtitle D landfill. Access improvements may be required and likely would include clearing and grubbing and the construction of a staging area

Clean sand would be placed in an approximately 1-foot thick layer over dredged areas to manage the dredge-generated residuals that are assumed to be contained within the dredge footprint. The thin layer sand cap is not likely to be significantly disturbed because Carty Lake is a quiescent environment and motorboats are not allowed on the lake.

Access improvements may be required and likely would include clearing and grubbing and the construction of a staging area. Rehabilitation of the wetland in the access, staging, and dredging area will be completed in coordination with USFWS. In addition, the existing bulkhead at the southern portion of the Lake will be functionally replaced to stabilize the adjacent upland property.

The monitoring program would be developed with the objective of evaluating concentration trends in Carty Lake sediment. The monitoring would quantify the reduction in concentrations relative to the CUL (5 ng/kg dioxin TEQ) and would evaluate the ongoing need for institutional controls associated with fish consumption.

8.2.3 Alternative 3: Focused Dredge and Expanded Residuals Cap

Alternative 3 consists of the same elements found in Alternative 2, but with additional clean sand placement in areas outside of the dredged area somewhat elevated dioxin concentrations (areas exceeding 30 ng/kg; see MFA, 2013a). Following sediment removal (using the same RELs as for Alternative 2), clean sand for a residual cap layer would be placed in an approximately 1-foot-thick layer over the selected portions of Carty Lake. Extents would be refined during design, in consultation with USFWS. Because the lake is a quiescent environment and there is little likelihood that the residual cap would be disturbed, the residuals layer would also provide an isolation layer over impacted bottom sediments.

8.2.4 Alternative 4: Focused Dredge and Full Residuals Cap

Alternative 4 consists of the same elements found in Alternatives 2 and 3, but with additional clean sand placement. In addition to the dredging component identified in Alternative 2, clean sand for a residuals cap layer would be placed in an approximately 1 foot-thick layer over all areas of the Carty Lake bottom sediments that have concentrations above the CUL of 5 ng/kg dioxin TEQ. Actual extents would be refined during design, in consultation with USFWS. Access improvements most likely would include clearing and grubbing and the construction of a staging area to provide ingress to the entire lake for sand cap placement.

8.3 Rationale for Selecting Proposed Alternative

SMS requirements for cleanup actions include: overall protection of human health and the environment; attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws; short-term effectiveness; and long-term effectiveness (WAC 173-204-560(4)). WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing cleanup actions. In WAC 173-204-580(4), the SMS further specifies that, in evaluating the alternatives, the net environmental effects, relative cost effectiveness, and relative technical effectiveness should be considered for the cleanup action alternatives. These factors were all included in the evaluation of alternatives. For further details, see MFA (2013a).

8.3.1 Protection of Human Health and the Environment

Considerations for the protection of human health and the environment include overall protectiveness of the alternative, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternative.

Alternative 1 is somewhat protective of human health and the environment. Natural recovery of Carty Lake sediments would involve the slow deposition of clean sediment on top of existing impacted sediment, natural degradation of contaminants, and/or the natural dispersion of contaminated materials. Because there are few sediment inputs to Carty Lake, the time frame for attenuation could be extensive, increasing the possibility of exposure to contaminants and the likelihood that institutional controls will be ignored.

Alternatives 2 through 4 are protective of human health and the environment. Implementing the alternatives would, over the short and long terms, prevent exposure to contaminants in sediment exhibiting the highest concentrations and that contribute to unacceptable risk to ecological receptors. The residuals cap layer of clean sand placed directly over the dredged area would prevent contact with any dredge-generated residuals. Additional sand placement in Alternative 3 would result in area wide sediment concentrations that are only marginally less than those for Alternative 2, while all of the low-level impacts would be covered by the cap layer in Alternative 4.

8.3.2 Compliance with Cleanup Standards and Relevant Federal, State, and Local Laws

This cleanup action is being conducted under the SMS (WAC 173-204). All cleanup alternatives will be conducted consistent with cleanup standards and applicable laws as defined in Section 3 of this CAP. Compliance with the permit would be necessary to meet this requirement.

Alternatives 2, 3, and 4 are all anticipated to achieve RELs immediately upon completion of the active remedy. Alternative 1 would require the longest time frame to meet the CUL and RELs, and is likely to require more than ten years to meet these levels, given the low level of sediment input to the lake. Alternative 4 would require the shortest amount of time to reach the CUL because the initial placement of a clean layer of sand would cover all concentrations above the CUL. Alternatives 2 and 3 are likely to require similar time frames for achieving the CUL and would require less time than Alternative 1 and more time than Alternative 4.

8.3.3 Short-Term Effectiveness

According to the SMS, analysis of the short-term effectiveness includes consideration of the protection of human health and the environment during construction and implementation of the alternative.

Alternative 1 provides little effective protection in the short term; however, exposure potentials are also lowest, as no construction activities would take place. Alternatives 2 through 4 provide short-term effectiveness because a residuals cap layer would be placed over dredged locations; some short-term exposure during dredging may occur. However, the more extensive cap placement in Alternative 4 leads to more short-term exposure to contaminants during construction and implementation because of dredging of the sediments and subsequent handling of the dredged material. Extensive sand placement in Alternative 4 may significantly disturb benthic biota and associated biota that rely on benthics throughout the lake.

8.3.4 Long-Term Effectiveness

Pursuant to the SMS, the following considerations were made in analyzing the alternatives for the evaluation requirements pertaining to long-term effectiveness: degree of certainty that the alternative will be successful; long-term reliability; magnitude of residual, biological, and human health risk; and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues, remaining wastes cleanup, and/or disposal site risks.

Alternative 1 can be effective in the long term, provided that the natural attenuation mechanisms are operating and are understood to the extent that a completion time frame can be predicted. No disposal site risks are associated with this alternative. Restrictions would be placed on future uses in order to protect human health, increasing long-term effectiveness if the restrictions are followed.

Alternatives 2 through 4 provide a higher degree of long-term effectiveness due to removal of highly impacted sediment and placement of a physical barrier over a selected area of residual impacted sediment. Removing the higher concentrations of dioxins and other contaminants would eliminate unacceptable risk to ecological receptors; protection of human health depends on effectiveness of institutional controls. Alternative 4 improves on the long-term effectiveness of Alternatives 2 and 3 through the addition of a more extensive sediment cap layer, which would isolate surface concentrations on a wider, more permanent scale than with Alternative 2. The disposal site would be an operating landfill with established controls in place to adequately contain impacts associated with these sediments.

8.3.5 Cleanup Time Frame

WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing cleanup actions. Alternative 1 relies on natural deposition to achieve cleanup standards and likely would have a significantly longer cleanup time frame than Alternatives 2, 3, and 4. Alternatives 2, 3, and 4 would achieve the RELs (ecological cleanup standards) well within the ten-year time frame (WAC 173-204-580(3)(a)(ii)), while institutional controls would immediately take effect to protect human health. Alternative 4 would achieve the shortest cleanup time frame because of the placement of the more extensive sediment cap. However, it may still take a considerable amount of time for natural recovery to achieve levels protective of human health.

8.3.6 Net Environmental Effects

This requirement includes consideration of the net environmental effects of the alternatives, including residual effects, recovery rates, and any adverse effects of cleanup construction or disposal activities. The implementation of Alternative 1 results in no net change to the existing environmental system, on-site or off-site. Alternatives 2 through 4 have the potential for much greater environmental impacts than Alternative 1; however, if properly managed and designed, dredging and disposal of impacted sediment would not affect water quality. Alternatives 2 through 4 would result in greater benefits than Alternative 1 through the removal of a significant mass of contaminants and the immediate reduction of potential exposure to the highest levels of contamination. Alternative 4 would result in a marginal net environmental benefit over Alternatives 2 and 3, as it contains the same amount of risk associated with the removal of impacted sediments. More clean sand would be placed over the impacted sediments, resulting in lower concentrations; however, significantly greater disturbance of lake biota would occur.

8.3.7 Relative Cost and Technical Effectiveness

For the purposes of performing a comprehensive assessment, cost and technical effectiveness were evaluated together, using the MTCA DCA framework because it addresses SMS requirements in WAC 173-204-580(4) as well as additional requirements found in WAC 173-204-560(4)(g-k). The DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including protectiveness, permanence, long-term effectiveness, management of short-term risks, technical and administrative implementability, consideration of public concerns, and cost. The DCA analysis is summarized in Table 8-2.

8.3.7.1 Protectiveness

According to the SMS, considerations for the protection of human health and the environment include overall protectiveness of the alternative, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternative.

Alternatives 1, 2, 3, and 4 are protective of human health and the environment. Alternative 1 rates lowest for protectiveness. Alternative 2 is rated in the middle for protectiveness, as contaminants would be removed to RELs and a residuals cap layer would limit exposure of residual impacts in the dredge area. Impacted sediments above the CUL would remain and institutional controls would be required to protect human health. Alternative 3 results in minimal reduction in post remedial dioxin concentrations relative to Alternative 2. Alternative 4 rates highest for protectiveness.

8.3.7.2 Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. Under the MTCA DCA process, preference is given to permanent solutions, to the maximum extent practicable. A "permanent solution" is defined as a cleanup action in which the cleanup standards are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

Alternative 1 rates lowest for permanence. Alternative 2 is rated in the middle under this criterion, as contaminated sediment is removed and (assumed) residuals are covered by a residuals cap layer. The relative longevity and effectiveness of the residuals cap layer will be less quantifiable, as it is not an engineered cap and cannot be relied upon as such; however, the fluvial environment in Carty Lake is not highly dynamic and impairment to the residuals cap surface would not occur as a result of human activity (e.g., propeller wash). Alternative 3 is also a partial capping alternative, and is not fundamentally different enough from Alternative 2 to be considered more permanent. Alternative 4 rates highest for permanence.

8.3.7.3 Management of Short-Term Risks

This factor addresses the short-term risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.

There are no construction-related short-term risks associated with Alternative 1, and therefore Alternative 1 is rated the highest under this criterion. Alternatives 2 and 3 remove sediment, increasing the potential to detrimentally affect human health or the environment if the sediment is handled improperly, but are overall a much less intensive implementation process than Alternative 4, decreasing short-term risks associated with construction and resulting in a middle rating. Alternative 4 rates lowest for management of short-term risks.

8.3.7.4 Effectiveness over Long Term

Long-term effectiveness includes a degree of certainty that the alternative will be successful; the reliability of the alternative for the period of time during which hazardous substances are expected to remain on site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes.

Alternative 1 may be effective in the extreme long term, provided that the natural processes occur without incident and that the institutional controls placed on future uses in order to protect human receptors are effective. Alternatives 2 and 3 are rated in the middle under this criterion, as the alternatives remove contaminated sediment and add a residuals cap layer for the purposes of managing residuals in the dredged area only (Alternative 2) or the dredged area in addition to other areas of somewhat elevated contamination (Alternative 3), with the rest of the footprint of the lake relying on natural recovery over time and institutional controls to protect human receptors. The degree of certainty in long-term effectiveness is somewhat lower for Alternatives 2 and 3 than for Alternative 4 because of the potentially slow process of sedimentation at Carty Lake. The addition of a more extensive sediment cap layer would isolate surface concentrations on a wider, more permanent scale.

8.3.7.5 Technical and Administrative Implementability

All alternatives use proven technologies for remediating sediment, have been employed at many sites, and are therefore implementable from a technical and administrative perspective. Alternative 2 is implementable, as mechanical dredging is straightforward. This alternative presents some difficulty in managing sediment for off-site disposal and in gaining access to Carty Lake, with limited impacts to the surrounding wetland area introducing some technical and logistical issues. Alternative 2 has administrative requirements, such as institutional controls and ongoing monitoring and maintenance of the residual cap, in addition to monitoring the natural recovery of the remaining sediments. Alternative 4 requires a great deal more access to the entirety of Carty Lake, causing increased logistical and physical constraints over Alternative 2. Alternatives 2, 3, and 4 require ongoing administrative action in a shorter time frame than for Alternative 1, resulting in a higher ranking for these alternatives, with Alternative 2 ranking highest because of fewer constraints during implementation.

8.3.7.6 Consideration of Public Concerns

Ecology has addressed community concerns throughout the history of this project. During development of the RI/FS, Ecology began the process of addressing community concerns for the sediment remediation by communicating with local tribes, DNR, and USFWS, and hosting an open house for community members to inform them about the sediment contamination and potential cleanup opportunities. Interests and concerns of these entities were considered in selection of the preferred alternative. Additional issues or concerns of the DNR, other state and local agencies, tribes and the public will continue to be considered by Ecology as part of the public review process for this Cleanup Action Plan, and during permitting of the sediment cleanup. Alternative 4 scores highest for this criterion because it reflects community/agency preferences for removal of contaminated sediments and meets the CUL in a relatively short time frame. Additional issues or concerns will be evaluated by Ecology as part of the cleanup action selection process. This includes consideration of public use of Carty Lake. Common community concerns include noise and traffic, short- and long-term risks, and the time frame of any proposed cleanup actions. Community concerns will also be factored into local permit processes, including responding to the City's shoreline ordinance and development permitting. Alternative 1 has the potential to be less open to the public because it is unlikely that there will be permitting requirements that provide opportunities for public comments.

8.3.7.7 Cost

The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

- Alternative 1 (MNR): $280,500
- Alternative 2 (Focused Dredge and Limited Residuals Cap): $1.6 million
- Alternative 3 (Focused Dredge and Expanded Residuals Cap): $2.3 million
- Alternative 4 (Focused Dredge and Full Residuals Cap): $7.3 million

Alternative 2 provides a much greater degree of protectiveness and long-term effectiveness for an incremental cost of approximately $1.6 million when compared to Alternative 1. Alternative 3 costs nearly half again as much as Alternative 2 and results in nearly the same estimated post remedial dioxin TEQ concentrations (see MFA, 2013a); therefore, Alternative 2, with less thin sand placement, is more cost effective, and Alternatives 3 and 4 are disproportionately costly.

8.3.8 Selected Alternative Summary

Alternative 2 (Focused Dredge and Limited Residuals Cap), is the selected alternative and meets the cleanup action requirements specified in WAC 173-204-580(2). This alternative is found to be the most protective of human health and the environment relative to cost for the following reasons:

- Sediment with concentrations of dioxins above RELs (protective of ecological receptors) would be removed, sediment with the highest concentrations of dioxins would not be available for potential future exposure or transport, and area wide dioxin concentrations would be significantly reduced.

- Dredging of impacted dioxin areas would also remove other contaminants above screening criteria.

- Residuals within the dredge footprint would be managed through the placement of a thin sand cap layer.

- Alternative 2 would be implemented with appropriate institutional controls to continue to limit consumption of fish from Carty Lake, including monitoring of surface sediment quality to evaluate long-term remedy performance and continued recovery of lake sediment.

- Bulkhead stabilization.

- Rehabilitation of the wetland in the dredge, staging, or access areas.

9 IMPLEMENTATION OF CLEANUP ACTION

9.1 LRIS

As summarized in Section 4.1, a number of interim actions that are also selected as final cleanup actions have been completed at the LRIS. These include:

- Initial source removals
- SER system
- Cells 3 and 4 interim action
- Cells 1 and 2 interim action

The implementation of these cleanup actions is described below.

9.1.1 Initial Source Removals

Remedial actions were conducted from 1996 until 2002 as emergency and interim actions to meet requirements of Agreed Order No. 01TCPSR-3119. The actions were focused on removal of PWT equipment, tanks, and product; general site maintenance; and hot spot removal. The interim actions are detailed in the 2004 RI work plans (MFA, 2004, Vols. I, II, and III) and are summarized below for Cells 1, 2, 3, and 4.

CELLS 1 AND 2

- Replacement of the stormwater line and removal of drain tile and impacted soil west of the concrete pond to OF-3.

- Cleanout of the remaining stormwater system and installation and maintenance of catch basin and trench drain filters. The first cleanout was conducted in phases, starting in 1995 and ending in 1998. A second stormwater cleanout was conducted in 1999.

- Removal of the tank farm, retorts, PWT's WWTP, treated lumber, ancillary equipment, treating buildings, hazardous chemicals and sludge, the concrete pond, and the historical French drain system.

- Excavation of contaminated soil at the dry PCP spill area; soil where the City expanded their WWTP around sample locations T-4 and T-5; and soil near Building 6, around sample locations B-228, DS-N, and DS-S.

CELL 3

- Removal of treated wood left by PWT.

- Removal of an oil/water separator that historically discharged to OF-1.
- Removal of the drip trough and treatment of 300 cubic yards of impacted soils with peroxide. The soil was placed back in the excavation after treatment.
- Soil exceeding Method C CULs, surrounding B-208 and B-220 in the western portion of Cell 3, was removed and placed in Cell 1.

CELL 4

- A soil berm was constructed to direct surface water flow to Cell 2 and OF-3.

9.1.2 SER System

The SER system began operations in 2004 as an interim/emergency action designed to remove NAPL from the subsurface and prevent the NAPL plume from migrating onto the RNWR. The system configuration, shown on Figure 9-1, was installed on the portion of the LRIS where NAPL was present (i.e., herein referred to as the SER area).

SER SYSTEM: PHASES 1 AND 2

The SER project was conducted in two phases. Section 4 of the draft Cells 1 and 2 RI/FS (MFA, 2011) discusses the 2004–2005 Phase 1 operations and the 2006–2010 Phase 2 operations in detail. In general, Phase 1 was a pilot study conducted through the center of the NAPL plume to evaluate the effectiveness of the system and obtain information to design the full-scale operation. Phase 2, the full-scale operation, was designed to thoroughly remediate the entire SER area.

Liquids (i.e., NAPL, groundwater, and condensate) were treated using heat exchangers, bulk oil/water separation, coagulation and flocculation, filtration, and, finally, granular activated carbon. Vapors were treated using heat exchangers, air/liquid separators, dryers, and, finally, granular activated carbon.

During Phase 1 and 2 operations, the SER system used an approximately 100-gallon-per-minute liquid treatment system and a 1,500-standard-cubic-feet-per-minute vapor extraction and treatment system. The Phase 1 system was installed as described in the interim/emergency action design report submitted to Ecology on February 19, 2002 (SteamTech, 2002).

In Phase 1, the liquid treatment plant treated approximately 60,000 gallons of contaminated liquids per day (i.e., at 42 gallons per minute). The average temperature of the extracted liquid was approximately 120 degrees Fahrenheit. Phase 1 operated from May 2004 to May 2005 and addressed portions of Areas 2 and 4 of the SER area (see Figure 9-1).

The Phase 2 wellfield was constructed as described in the Interim/Emergency Action Phase 2 Design Report (MFA, 2005). Phase 2 was operated in Areas 1 through 4, sequentially, as shown on Figure 9-1. Phase 2 operations took place from March 2006 through December 2010 as follows:

- Operations were conducted in Area 1 from March 7, 2006, to April 4, 2007. Area 1 is just south of the former tank farm and incorporates the area where the retort doors were opened.
- Operations were conducted in Area 2 from July 10, 2007, to February 1, 2008. Area 2 incorporates a portion of the former tank farm and retort area.
- Area 3 operated from April 1, 2008, to August 3, 2009, and is downgradient of Area 1.
- Area 4 operated from August 3, 2009, to December 15, 2010, and is the most downgradient area of the SER area.

In Phases 1 and 2, approximately 24,800 gallons of NAPL was removed and separated using the SER system. Based on data submitted in the Cells 1 and 2 RI/FS (MFA, 2011a), SER has removed mobile product and is approaching diminishing returns. To confirm diminishing returns and remove any remaining NAPL that can be addressed by SER, the Port proposed a polish phase.

POLISHING STAGE

In preparation for the polishing stage, a second boiler was procured to increase steam generation capacity. Piping was reconfigured to allow injection and extraction in all four areas.

On March 8, 2011, the Port began polishing operations to treat previously steamed areas to remove any remaining NAPL. During the polishing operations, the SER system injected steam into the subsurface at approximately 18,000 to 23,000 pounds per hour. The system extracted liquid at 105 to 120 gallons per minute (approximately double the previous rate) and soil vapor at approximately 50 percent more than the previous rate. Polishing operations ended on June 19, 2011. The SER system was then cleaned and dismantled.

9.1.3 Cells 3 and 4 Interim Action

This work was completed during 2010 and 2011 and included the following:

- Removal of existing trees and vegetation
- Demolition of the existing building
- Removal of the existing bulkhead along Lake River
- Crushing of concrete slabs
- Excavation and off-site disposal of contaminated soil
- Excavation and regrading of the Lake River bank along Cell 3 above 11 National Geodetic Vertical Datum of 1929 (NGVD)
- Placement of excavated bank soils upland
- Replacement of the existing stormwater system
- Placement of a minimum 2-foot-deep clean cap over each cell

All trees within the Cells 3 and 4 limits of work (on Port property and above 11 NGVD) were removed. Vegetated debris was ground to 0.5-inch-minus and washed with water for a minimum 15 minutes before off-site disposal in a nonhazardous-waste landfill.

The existing building was demolished. Building debris was disposed of at a nonhazardous-waste landfill. Concrete and asphalt slabs encountered during the subgrade preparation were crushed and placed on the LRIS.

A treated wood bulkhead just south of the existing kayak launch was removed. The wooden piles were cut off flush with the mudline and disposed of with other treated wood debris from the LRIS.

Shallow soils were removed where concentrations of IHSs exceeded MTCA Method C CULs (382 tons). Confirmation samples were taken from the floor and sidewalls of each excavation; excavations were expanded until sample results demonstrated compliance with MTCA C CULs. This soil was disposed of at the Aragonite incineration facility in Aragonite, Utah.

Soil was excavated from the Lake River bank along Cell 3 above 11 NGVD and placed upland. The bank along Cell 3 was regraded at a 2:1 slope.

The existing stormwater system was removed and replaced with a new collection and conveyance system and two new outfalls. The new stormwater network consists of catch basins, manholes, and pipes (see Figure 9-2). Riprap splash pads were installed at the two new outfalls. The new Cell 4 drainage network was connected to the existing Cell 2 stormwater network.

Once excavated, bank soils were placed and compacted in the upland portion of the LRIS. The subgrade was covered by demarcation geotextile, and a minimum 2-foot-deep clean cap was placed over Cells 3 and 4. Along the bank on Cell 3, a minimum 3-foot-deep cap was placed (see Figure 4-2). A permanent erosion-control mat was placed on the 2:1 Cell 3 bank slope for stabilization. A seed mixture was applied to establish vegetation.

9.1.4 Cells 1 and 2 Interim Action

The Cells 1 and 2 interim action was completed during 2012 and 2013. These are described in detail below:

9.1.4.1 Cells 1 and 2 Soil Removal Project

This portion of the Cells 1 and 2 interim action was completed during early summer 2012. Shallow soils were removed where concentrations of IHSs exceeded MTCA Method C CULs. Confirmation samples were taken from the floor and sidewalls of each excavation; excavations were expanded until sample results demonstrated compliance with applicable MTCA C CULs. Two large areas of NAPL contamination were excavated and removed (i.e., from the area known as the concrete pond area). NAPL impacts were confirmed by visual and photoionization detector confirmation within the original excavation limits. Two buildings and associated concrete slabs were demolished to allow access to the NAPL contamination.

Excavation overburden, soils that did not exhibit NAPL impacts but were removed during the NAPL excavations, were temporarily stockpiled on an existing concrete slab lined with plastic sheeting. The shallow excavations were backfilled with clean cap soils. The NAPL excavations were first backfilled with clean rock imported from off-site (to provide a solid footing for compaction above), then with excavation overburden, and finally with clean cap soils as required to meet existing grade. Backfill was completed in 1- to 2-foot layers.

This project removed 8,264 tons of soil from Cells 1 and 2, with disposal at the Chemical Waste Management of the Northwest landfill in Arlington, Oregon.

9.1.4.2 Cells 1 and 2 Capping Project

This portion of the Cells 1 and 2 interim action was completed during 2012 and 2013. This work included the following:

- Removal of trees and vegetation
- Demolition of the remaining buildings except for the Port Administration Office
- Crushing of concrete and asphalt slabs
- Regrading the Lake River bank along Cell 2 above 11 NGVD at a 6:1 slope
- Placement of excavated bank soils upland
- Replacement of the existing stormwater system
- Installation of access roadways and trails (required by the City)
- Reconfiguration of Division Street
- Placement of a minimum 2-foot-deep clean cap soil over Cells 1 and 2

All trees within the Cells 1 and 2 limits of work (on Port property and above the OWH line) were removed. Vegetated debris was ground to 0.5-inch-minus and washed with water for a minimum 15 minutes before off-site disposal in a nonhazardous-waste landfill.

Building 6 was demolished. Building debris was partially salvaged by the contractor; remaining debris was disposed of at a nonhazardous-waste landfill.

Concrete and asphalt slabs encountered during the subgrade preparation were crushed and placed on-site. Crushed concrete was used for portions of the hard trail system and Division Street as roadway fill. These areas are capped with asphalt pavement.

The Lake River bank above 11 NGVD was regraded at a 6:1 horizontal to vertical slope. Excavated soil was placed and compacted as fill in the upland portion of the LRIS. Demarcation geotextile was placed on the slope and the area received a 3-foot-deep, clean soil cap.

A short section of the Lake River bank could not be regraded consistent with the plans because of the discovery of archaeological artifacts. As a result, the western edge of this area where it meets the bank did not receive the designed 3-foot-deep, clean cap. This area will be addressed during the Lake River sediment work to receive a minimum 2-foot-deep cap thickness. Once excavated, bank soils were placed and compacted in the upland portion of the Cell, and demarcation geotextile was placed, followed by clean cap soil. The area west of the hard trail received a minimum 3-foot-deep cap; the area east of the hard trail received a minimum 2-foot-deep cap (see Figure 4-2). Seed mixtures have been spread over the Cells, and vegetation is being established.

The existing stormwater system was replaced with a new collection and conveyance system. Most of the existing stormwater system was removed from the LRIS; other sections were plugged with concrete and abandoned in place. A network of new drainage ditches, catch basins, manholes, and pipes was installed (see Figure 9-2). Riprap splash pads were installed at each of the three new outfalls. The Cell 4 drainage network, installed during the Cells 3 and 4 interim action, was connected to the new Cell 2 stormwater network.

As required by the City shorelines permit, a network of hard and soft trails was installed. The hard trail system extends from the southwest corner of Cell 3 to the northwest corner of Cell 4 (see Figure 4-2). The soft trail roughly follows the top of the 6:1 bank slope along the Cell 2 river frontage. An unpaved access road to the City's WWTP was installed across Cell 2.

The elevation of Division Street was increased to approximately the level of the clean cap on either side. The roadway vertical geometry was also adjusted near the railroad tracks to improve access to the property. The existing roadway surface was scarified and crushed concrete was placed and compacted to form the roadway base. Additional graded crushed base rock was placed on the crushed concrete, followed by asphalt pavement.

9.2 Port-Owned Properties

The Port-owned properties include the Railroad Avenue properties, the marina property, and the proposed overpass property. The Railroad Avenue properties will be regraded and demarcation geotextile will be placed. The property will receive a 2-foot-deep, clean cap to prevent public exposure to dioxins. A retaining wall may be necessary to facilitate cap placement on the western edge of the property. It is anticipated that this work will be conducted during summer 2014.

Much of the marina property has been capped with asphalt. As part of the Cells 3 and 4 interim action, a narrow strip of land north of the parking area was capped with clean soil. Construction in the proposed overpass property will include covering the overpass footprint with a cap consistent with LRIS capping options, and a soil management plan will be required if soil is to be excavated. No further remedies are planned for these properties.

9.3 Lake River

Lake River sediment work is planned for the in-water work window of fall 2014 through winter 2015. Plantings will follow in spring and summer 2015.

The Lake River sediment work consists of four main project components:

- Construction of staging area
- Removal of existing debris and dock
- Dredging of contaminated sediment
- Placement of ENR and residuals cap
- Bank stabilization (placement of rock)

All debris will be removed before other in-water work. Where pilings and dolphins lie within the dredge prism, they will be pulled; where they occur within either the limits of bank protection or the ENR cap, they will be cut off flush with the mudline. The existing kayak launch will be removed and replaced upon completion of the remedial action. Debris will be disposed of according to the appropriate regulations.

Dredging will follow debris removal and will be conducted using "precision dredging" techniques. The engineer will provide the contractor with a digital terrain model of the required dredge prism. The specifications likely will require the use of specialized buckets attached to fixed-arm machinery to handle unanticipated debris as well as to limit contaminant resuspension and the generation of residuals. Bathymetric survey will be conducted to confirm required dredge elevations were achieved.

Dredged sediment will be disposed of at a Subtitle D landfill; two handling and transportation options are considered: (1) upland handling and truck transportation, and (2) barge transport. If dredged sediments are handled upland, the material will be temporarily placed into scows; the scows will not be allowed to overflow sediment laden water to limit impacts to water quality. A sediment handling and dewatering area will be constructed on an upland portion of the LRIS. The sediment-handling area will be lined to prevent contact between sediment and the recently placed clean cap soils. Sediment received from barges will be placed directly into the sediment-handling area. Sediment will be evaluated to determine whether additional dewatering is required. Depending on the selected disposal facility, sediment may be required to pass the Paint Filter Liquids Test before transport. In this case, the contractor may mix approved admixtures (such as Portland cement, quicklime, perlite, Zapzorb) into the sediment to reduce free liquid. Free liquid that drains off in the sediment-handling area will be collected and treated for turbidity before discharge back into Lake River.

If dredged sediment is transported by barge, the material will be placed into scows for over-water transport. Loaded scows will be transported by tug down Lake River to the Columbia River and, eventually, to a transload facility. Sediment may be conditioned along the route to the transload facility to further encourage dewatering. Upon arrival at the transload facility, sediment will be dewatered by perlite amendment if required for disposal. Sediment will be placed in a Subtitle D landfill. Dewatering and transport from the transload facility to the landfill will be provided by the selected contractor.

Dredged material will be disposed of as nonhazardous material waste at a Subtitle D landfill facility. The sediment data results have been reviewed and screened for waste designation purposes; the dredged material will not be designated as either a RCRA listed hazardous waste or a RCRA characteristic waste.

Placement of the ENR cap will follow dredging as quickly as is practicable. The ENR cap will be placed in accordance with the required depths shown on the plans. The ENR placement method will be designed to ensure adequate coverage, limit disturbance of dredge residuals, and prevent water quality impacts.

Bank stabilization work will follow dredging and ENR cap placement. Rock armor will be placed to tie in with the LRIS soil cap to protect the bank from erosion by waves, propeller wash, and river velocities. Riparian vegetation will be established on the clean cap placed above 11 NGVD during the Cells 1 and 2 interim action to prevent erosion during high water events.

Project limits for turbidity at both near- and far-field compliance points will be established by the engineer before construction begins. Work will be conducted consistent with the substantive requirements of the 401 certification.

Following completion of remedial action, a new kayak dock will be installed. Any damage to Division Street or the trail system will be repaired. Any sediment dewatering areas will be dismantled and the area restored to preconstruction condition.

Protection monitoring for water quality will take place during project construction, according to substantive requirements of the Ecology 401 Water Quality Certification. Specific requirements for this monitoring will be worked out during project permitting, but at a minimum will include measuring turbidity in the water column surrounding the work area. Sediment monitoring of areas outside of the active remediation area may be required to ensure the work has not degraded surrounding sediments.

Long term monitoring will be conducted to understand the effectiveness of the remedy. A long term monitoring plan (as part of the COMP) will be developed by the Port as a required deliverable under this CAP. Confirmation sampling will not be conducted upon completion of dredging. The planned post-dredge surface was well-characterized prior to finalizing the project design and the dredge prism was conservatively designed to remove contaminants. A baseline assessment of dioxins in surface sediment in the remedial action area will be conducted shortly after completion of the remedy, i.e., dredging and ENR placement. Monitoring for dioxins in the remediation area will be conducted at the end of year two, year five, and year ten after baseline sampling. Specifics of the sampling and the monitoring will be developed as part of the monitoring plan. The need for subsequent sampling events will be determined by Ecology if after review of year ten sampling there are indications that concentrations could increase above expected levels. Post remedial monitoring sampling will be conducted in a way that ensures that results are reproducible, to the extent practicable, and that results and temporal trends can be established.

9.4 Carty Lake

Carty Lake sediment work is planned for the summer of 2014. This work will consist of the following main project components:

- Construction of staging area.
- Dredging of sediment with concentrations of dioxins above RELs.
- Placement of residuals cap and plantings.
- Functionally replace the existing bulkhead to the south and east of Carty Lake between the RNWR and Port LRIS property.

All debris in the dredge/residuals cap area will be removed prior to other work. The dredge/residuals cap area will be isolated from the rest of Carty Lake to limit water quality impacts during construction.

Dredging will likely will be executed by track-mounted excavators. Dredged sediment will be loaded into trucks for landfill disposal. Additional dewatering prior to transport is not anticipated. Upon survey confirmation that the required dredge depth has been reached, the residuals cap will be placed. Dredged material will be disposed of as nonhazardous material waste at a Subtitle D landfill facility. The sediment data results have been reviewed and screened for waste designation purposes; the dredged material will not be designated as either a RCRA listed hazardous waste or a RCRA characteristic waste.

Confirmation sampling will not be conducted upon completion of dredging. The planned post-dredge surface will be well-characterized prior to finalizing the project design, and the dredge prism will be conservatively designed to remove contaminants.

Approximately 1-foot of clean sand will comprise the residuals cap. Consistent with a USFWS request, an attempt will be made to deepen the southern portion of Carty Lake by 6 inches (in comparison to preconstruction elevations) via the dredge depth and final ENR cap elevations. Further, the USFWS has expressed a desire for 3:1 slopes leaving the bottom of Carty Lake. Design will be further developed in coordination with USFWS.

Upon completion of dredging and clean sand placement the residuals cap area will be planted with native plants. Planting plans will be developed in consultation with USFWS. The work area will be hydraulically reconnected to the rest of Carty Lake. Any temporary access roads within the refuge will be removed, and temporary road areas will be restored to preconstruction condition.

Monitoring will be conducted to understand changes, if any, in dioxin concentrations in surface sediment over time. Monitoring will be conducted five years after completion of the remedy. Additional post remedial sampling could be conducted in consideration of eliminating intuitional controls on fishing in the lake, and to evaluate concentration trends. Sampling will be conducted in a way that ensures that results are reproducible, to the extent practicable, and that results are representative and temporal trends can be established.

9.5 Integrating Community Concerns

Integrating community concerns addresses concerns from individuals, community groups, local governments, tribes, federal and state agencies, and any other organization that may have an interest in or knowledge of the Property.

Ecology and the Port have addressed community concerns throughout the history of this project, and will continue coordination to ensure that cleanup actions account for community input. Consistent with WAC 173-340-600, Ecology will provide public notice, and public comments on the project and on this document will be solicited from the community during the formal comment period. After review and consideration of the comments received during the public comment period, Ecology shall issue a final CAP and publish its availability in the Site Register and by other appropriate methods. Common community concerns may include noise and traffic, short- and long-term risks, socioeconomic impacts, and the time frame of any proposed cleanup actions. Special concerns related to this project include potential impacts to cultural or archaeological resources and potential impacts to wetlands.

Permitting processes and coordination with stakeholders and interested parties also provide a mechanism for integrating community concerns during the design phase of the project. Agencies that will have input in the process are not limited to, but include:

- COE: the COE will review the design of the selected alternative for Lake River and permit the project upon input from natural resource trustees and tribes; this includes consideration of potential effects on biological and cultural resources, with input from agencies including NOAA/NMFS and DAHP.
- DNR: DNR is the landowner of Lake River sediments and had input regarding the remedy selection process during the development of the RI/FS and CAP. DNR will continue to have input through permitting of the selected alternative.
- USFWS: Remedy design for Carty Lake will be further coordinated with the USFWS, particularly because remedy design has the potential to impact wetlands in the south part of Carty Lake.
- DAHP and Tribes: A project-specific cultural resource protection plan under which work will be conducted will be developed in coordination with DAHP and affected Tribes.
- City of Ridgefield: Ecology will coordinate with City of Ridgefield to ensure that all aspects of the project comply with the substantive requirements of the local permit processes, including responding to the City's shoreline ordinance, critical areas ordinance and development permitting.

Additional permitting requirements that further address community concerns are detailed in Section 3.2.

9.6 Comprehensive Operation and Maintenance Plan

A Comprehensive Operation and Maintenance Plan i.e., COMP, will be generated. The COMP will encompass operation and maintenance plans for areas of the Property, providing a reference document for all institutional controls and compliance monitoring requirements. Institutional controls are required by this document and enforced through a deed restriction that is registered with the county that stays with the property. Different institutional controls will be required for the various areas of the Property. Compliance monitoring plans are an element of operation and maintenance plans and will be included in the COMP developed for the Property. As work is completed for each location, each operation and maintenance plan can be prepared and approved by Ecology as standalone document and then attached to the COMP.

9.7 Schedule for Implementation

Cleanup of the Property is currently underway. A number of components of the cleanup have been completed as interim actions; other components are anticipated to take place over a number of years as cleanup actions. Exhibit C of the consent decree summarizes the project schedule for additional cleanup activities.

Ecology requires documentation for each phase of work. These include operation and maintenance plans (which include compliance monitoring programs and sampling and analysis plans), engineering design reports, construction plans and specifications, and construction completion (as-built) reports. Table 9-1 summarizes required deliverables and the schedule for submittal. Each document will be submitted to Ecology for review and approval. The Port will incorporate Ecology review comments before proceeding with the next phase of work. As appropriate, some documents may be combined to cover related work or work being conducted simultaneously.

It is anticipated that permitting agencies will require additional documentation, especially relating to in-water work. As appropriate, the Port will provide Ecology an opportunity to provide comment before major submittals.

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TABLES

Table 3-1
LRIS Cleanup Levels
Former PWT Site

Indicator Hazardous Substances	Soil Cleanup Level (mg/kg)	Basis	Soil Remediation Level (mg/kg)	Basis	Groundwater Cleanup Level (µg/L)	Basis
Metals						
Arsenic	5.81	a	88	j	5	g
Barium	102	b	NA	f	NA	d
Chromium	67	b	NA	f	48	h
Copper	217	b	NA	f	NA	d
Zinc	360	b	NA	f	NA	d
Chlorinated Phenolics						
Pentachlorophenol	4.5/8.3	c/b	1100	j	0.73	h
2,3,4,6-Tetrachlorophenol	NA	d	NA	d	480	h
2,4,5-Trichlorophenol	NA	d	NA	d	800	h
2,4,6-Trichlorophenol	NA	d	NA	d	4	h
Carcinogenic PAHs						
cPAH TEQ	0.14	c	18	j	0.012	h
Noncarcinogenic PAHs						
Acenaphthene	4800	c	NA	f	960	h
Anthracene	NA	d	NA	d	4800	h
Fluoranthene	3200	c	NA	f	640	h
Fluorene	3200	c	NA	f	640	h
2-Methylnaphthalene	320	c	NA	f	32	h
Naphthalene	1600	c	NA	f	160	h
Pyrene	2400	c	NA	f	480	h
SVOCs						
BEHP	NA	d	NA	d	6.3	h
Carbazole	NA	d	NA	d	4.4	h
Dibenzofuran	160	c	NA	f	32	h
VOCs						
Acetone	NA	d	NA	d	800	h
Benzene	NA	d	NA	d	0.8	h
Chloromethane	NA	d	NA	d	5.2	i
Dichlorodifluoromethane	NA	d	NA	d	9.9	i
cis-1,2-Dichloroethene	NA	d	NA	d	80	h
Ethylbenzene	NA	d	NA	d	800	h
Hexachlorobutadiene	NA	d	NA	d	0.56	h
Naphthalene	1600	c	NA	f	160	h
Styrene	33	c	NA	f	1.5	h
1,1,2,2-Tetrachloroethane	5	c	NA	f	0.22	h
1,1,2-Trichloroethane	NA	d	NA	d	0.77	h
TCE	NA	d	NA	d	0.42	i

Table 3-1
LRIS Cleanup Levels
Former PWT Site

Indicator Hazardous Substances	Soil Cleanup Level (mg/kg)	Basis	Soil Remediation Level (mg/kg)	Basis	Groundwater Cleanup Level (µg/L)	Basis
1,2,3-Trichloropropane	NA	d	NA	d	0.0063	h
1,2,4-Trimethylbenzene	4000	c	NA	f	24	i
1,3,5-Trimethylbenzene	NA	d	NA	d	25	i
Vinyl chloride	NA	d	NA	d	0.029	h
m,p-Xylene	NA	d	NA	d	310	i
o-Xylene	NA	d	NA	d	440	i
Toluene	NA	d	NA	d	640	h
Isopropylbenzene	NA	d	NA	d	NA	d
Methylene chloride	NA	d	NA	d	NA	d
Tetrachloroethene	NA	d	NA	d	0.081	h
Petroleum Hydrocarbons						
GRO	30	e	NA	f	NA	d
DRO/RRO	2000	e	NA	f	500	g
Dioxin TEQ	0.000011	c	0.0015	j	NA	d

NOTES:

a = Washington State Department of Ecology Publication No. 94-115, Natural Background Soil Metals Concentrations in Washington State, Clark County.

b = MTCA Ecological Indicator Concentration for protection of wildlife (Table 749-3).

BEHP = bis(2-ethylhexyl) phthalate.

c = MTCA Method B, direct contact (ingestion only), unrestricted land use.

cPAH TEQ = carcinogenic PAH toxicity equivalent.

d = not an indicator hazardous substance in specified media.

dioxin TEQ = chlorinated dibenzo-p-dioxins and dibenzofurans toxicity equivalent.

DRO = diesel-range organics.

e = MTCA Method A Industrial/Unrestricted Land Use Table Value.

f = remediation level not determined.

g = MTCA Method A groundwater cleanup level.

GRO = gasoline-range organics.

h = MTCA Method B groundwater cleanup level.

i = MTCA Method B groundwater screening level for vapor intrusion pathway; values used if MTCA Method A or B groundwater cleanup levels were unavailable during remedial investigation or interim action activities.

j = MTCA Method C Carcinogen Industrial Land Use Table Value (Direct Contact)

LRIS = Lake River Industrial Site.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

µg/L = micrograms per liter.

NA = not applicable.

PAH = polycyclic aromatic hydrocarbon.

PWT = Pacific Wood Treating Co.

RRO = residual-range organics.

SVOC = semivolatile organic compound.

TCE = trichloroethene.

VOC = volatile organic compound.

Table 3-2
Port-owned Properties Cleanup Levels
Former PWT Site

CULs	Site-Specific Risk-Based Ecological Factor[a]	Soil Cleanup Level
Dioxins (ng/kg)		
Dioxin (p-dibenzo dioxin) TEQ	9.8E+00	9.8E+00
Furan TEQ	1.14E+01	1.14E+01

NOTES:
CUL = cleanup level.
ng/kg = nanograms per kilogram.
Port = Port of Ridgefield.
PWT = Pacific Wood Treating Co.
TEQ = toxicity equivalent.
[a]Ecological factors were derived separately for dioxin (p-dibenzo dioxin) congeners and for furan congeners, as determined in coordination with Washington State Department of Ecology (see MFA, 2013b).

Table 3-3
Lake River Cleanup Levels
Former PWT Site

Analyte	Lower Columbia River Natural Background	Dioxin PQL	Risk-Based Ecological Factor	Sediment Cleanup Level	Sediment Remediation Level[a]
Dioxins (ng/kg)					
TEQ	2.0E+00	5.0E+00	NA	5.0E+00	3.0E+01
2,3,7,8-TCDD	NA	NA	1.4E+00	NA	NA
1,2,3,7,8-PeCDD	NA	NA	4.3E+01	NA	NA
1,2,3,4,7,8-HxCDD	NA	NA	8.6E+01	NA	NA
1,2,3,6,7,8-HxCDD	NA	NA	5.4E+02	NA	NA
1,2,3,7,8,9-HxCDD	NA	NA	5.4E+02	NA	NA
1,2,3,4,6,7,8-HpCDD	NA	NA	1.4E+05	NA	NA
OCDD	NA	NA	4.6E+06	NA	NA
2,3,7,8-TCDF	NA	NA	3.8E+01	NA	NA
1,2,3,7,8-PeCDF	NA	NA	2.4E+02	NA	NA
2,3,4,7,8-PeCDF	NA	NA	2.9E+00	NA	NA
1,2,3,4,7,8-HxCDF	NA	NA	4.3E+02	NA	NA
1,2,3,6,7,8-HxCDF	NA	NA	4.3E+02	NA	NA
1,2,3,7,8,9-HxCDF	NA	NA	4.3E+02	NA	NA
2,3,4,6,7,8-HxCDF	NA	NA	4.3E+02	NA	NA
1,2,3,4,6,7,8-HpCDF	NA	NA	1.1E+05	NA	NA
1,2,3,4,7,8,9-HpCDF	NA	NA	1.1E+05	NA	NA
OCDF	NA	NA	4.6E+06	NA	NA

NOTES:

Risk-based factors are values protective of fish, mammal, and birds and are based on standard, default assumptions commonly used and in rule, when available. Limited site-specific assumptions, where applicable, were integrated into models, although models developed do not represent refined site-specific risk analyses. See (MFA, 2013a) for details.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

NA = not applicable.

Table 3-3
Lake River Cleanup Levels
Former PWT Site

ng/kg = nanograms per kilogram.
OCDD = octachloro dibenzo-p-dioxin.
OCDF = octachloro dibenzofuran.
PeCDD = pentachloro dibenzo-p-dioxin.
PeCDF = pentachloro dibenzofuran.
PQL = practical quantitation limit.
PWT = Pacific Wood Treating Co.
TCDD = tetrachloro dibenzo-p-dioxin.
TCDF = tetrachloro dibenzofuran.
TEQ = toxicity equivalent.
[a]Remediation level selected based on various scenarios evaluated in the remedial investigation and feasibility study (MFA, 2013a).

Table 3-4
Carty Lake Cleanup Levels
Former PWT Site

Analyte	Lower Columbia River Natural Background	Dioxin PQL	Risk-Based Ecological Factor	Sediment Cleanup Level	Sediment Remediation Level
Dioxins (ng/kg)					
TEQ	2.0E+00	5.0E+00	NA	5.0E+00	NA
2,3,7,8-TCDD	NA	NA	3.3E+00	NA	3.3E+00
1,2,3,7,8-PeCDD	NA	NA	9.8E+01	NA	9.8E+01
1,2,3,4,7,8-HxCDD	NA	NA	2.0E+02	NA	2.0E+02
1,2,3,6,7,8-HxCDD	NA	NA	1.2E+03	NA	1.2E+03
1,2,3,7,8,9-HxCDD	NA	NA	1.2E+03	NA	1.2E+03
1,2,3,4,6,7,8-HpCDD	NA	NA	3.1E+05	NA	3.1E+05
OCDD	NA	NA	1.0E+07	NA	1.0E+07
2,3,7,8-TCDF	NA	NA	8.6E+01	NA	8.6E+01
1,2,3,7,8-PeCDF	NA	NA	5.5E+02	NA	5.5E+02
2,3,4,7,8-PeCDF	NA	NA	6.5E+00	NA	6.5E+00
1,2,3,4,7,8-HxCDF	NA	NA	9.8E+02	NA	9.8E+02
1,2,3,6,7,8-HxCDF	NA	NA	9.8E+02	NA	9.8E+02
1,2,3,7,8,9-HxCDF	NA	NA	9.8E+02	NA	9.8E+02
2,3,4,6,7,8-HxCDF	NA	NA	9.8E+02	NA	9.8E+02
1,2,3,4,6,7,8-HpCDF	NA	NA	2.5E+05	NA	2.5E+05
1,2,3,4,7,8,9-HpCDF	NA	NA	2.5E+05	NA	2.5E+05
OCDF	NA	NA	1.0E+07	NA	1.0E+07

NOTES:

Risk-based factors are values protective of fish, mammal, and birds and are based on standard, default assumptions commonly used and in rule, when available. Limited site-specific assumptions, where applicable, were integrated into models, although models developed do not represent refined site-specific risk analyses. See (MFA, 2013a) for details.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

NA = not applicable.

ng/kg = nanograms per kilogram.

Table 3-4
Carty Lake Cleanup Levels
Former PWT Site

OCDD = octachloro dibenzo-p-dioxin.
OCDF = octachloro dibenzofuran.
PeCDD = pentachloro dibenzo-p-dioxin.
PeCDF = pentachloro dibenzofuran.
PQL = practical quantitation limit.
PWT = Pacific Wood Treating Co.
TCDD = tetrachloro dibenzo-p-dioxin.
TCDF = tetrachloro dibenzofuran.
TEQ = toxicity equivalent.

Table 5-1
Summary of Feasibility Study Alternatives for Cells 1 and 2
Former PWT Site

Alternatives	Alternative Descriptions
1: Capping, groundwater monitoring, and institutional controls	**Capping:** Cells 1 and 2 receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building). **Stormwater:** Remove existing stormwater system. Construct new stormwater system, with engineering controls. **SER:** Operation of SER system until point of diminishing returns is reached (at which point SER is decommissioned). **Groundwater Monitoring:** All non-POC monitoring wells to be decommissioned. Groundwater monitoring continues at POC wells, sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August). **Institutional Controls:** Restrictive covenants for vapor migration, adherence to SMCMP (MFA, 2013), use of groundwater for drinking prohibited.
2A: Targeted removal, capping, groundwater monitoring, and institutional controls	**Targeted Removal:** Soil at the concrete pond area to be excavated and disposed of. Excavation backfilled with clean soil or unimpacted overburden. **Capping:** Cells 1 and 2 receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building). **Stormwater:** Remove existing stormwater system. Construct new stormwater system, with engineering controls. **SER:** Operation of SER system until point of diminishing returns is reached (at which point SER is decommissioned). **Groundwater Monitoring:** All non-POC monitoring wells to be decommissioned. Groundwater monitoring continues at POC wells, sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August). **Institutional Controls:** Restrictive covenants for vapor migration, adherence to SMCMP, use of groundwater for drinking prohibited. Institutional controls may vary by cell, based on sampling results, to ensure protectiveness of human health and environment.
2B: Targeted removal, capping, groundwater monitoring, and institutional controls	**Targeted Removal:** Removal as described in Alternative 2A. In addition, excavation of SS-14 and TP-03 and disposal at a licensed facility. Off-site treatment before disposal at a Subtitle C facility. Waste may be considered a CAMU-eligible waste. **Capping:** Cells 1 and 2 receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building). **Stormwater:** Remove existing stormwater system. Construct new stormwater system, with engineering controls. **SER:** Operation of SER system until point of diminishing returns is reached (at which point SER is decommissioned). **Groundwater Monitoring:** All non-POC monitoring wells to be decommissioned. Groundwater monitoring continues at POC wells, sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August). **Institutional Controls:** Restrictive covenants for vapor migration, adherence to SMCMP, use of groundwater for drinking prohibited. Institutional controls may vary by cell, based on sampling results, to ensure protectiveness of human health and environment.
3: Removal of soil exceeding MTCA C CULs, capping, groundwater monitoring, and institutional controls	**Removal:** Soil exceeding RELs and soil in the concrete pond area with NAPL to be excavated and disposed of at a licensed facility. Maximum depth of excavation 15 feet bgs. Soil from the concrete pond area is assumed to require treatment before disposal, and soil from the MTCA C exceedance excavation may be considered a CAMU-eligible waste. Use clean soil to backfill. **Capping:** Cells 1 and 2 receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building). **Stormwater:** Remove existing stormwater system. Construct new stormwater system, with engineering controls. **SER:** Operation of SER system until point of diminishing returns is reached (at which point SER is decommissioned). **Groundwater Monitoring:** All non-POC monitoring wells to be decommissioned. Groundwater monitoring continues at POC wells, sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August). **Institutional Controls:** Restrictive covenants for vapor migration, adherence to SMCMP, use of groundwater for drinking prohibited. Institutional controls may vary by cell, based on sampling results, to ensure protectiveness of human health and environment.

Alternatives	Alternative Descriptions
4: Excavation of SER system and soil exceeding CULs, and groundwater monitoring	**Removal:** Soil 0 to 15 feet bgs above CULs to be removed and disposed of off site. Assumed one-third of excavated soil disposed of at the following: Subtitle C disposal facility, organic vapor recovery treatment prior to disposal at a Subtitle C disposal facility; waste may be considered a CAMU-eligible waste. Use clean soil to backfill. **SER:** Operate until groundwater CULs are reached. It is assumed that CULs will be reached after 20 years of operation. Once the CULs are reached, the SER system will be demobilized. **Stormwater:** Remove existing stormwater system. Construct new stormwater system, with engineering controls. **Groundwater Monitoring:** Completed at existing monitoring wells to assess effectiveness of the SER system.

NOTES:
bgs = below ground surface.
CAMU = Corrective Action Management Unit.
CUL = cleanup level.
LRIS = Lake River Industrial Site.
MTCA = Model Toxics Control Act.
NAPL = nonaqueous-phase liquid.
POC = point of compliance.
PWT = Pacific Wood Treating Co.
REL = remediation level.
SER = steam-enhanced remediation.
SMCMP = soil management and cap maintenance plan.

Table 5-2
Summary of Feasibility Study Alternatives for Cells 3 and 4
Former PWT Site

Cell 3 Alternatives	Alternative Descriptions
1: Capping, institutional controls, and groundwater monitoring	**Capping:** Cell 3 to receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building) **Institutional Controls:** Restrictive environmental covenants to prohibit groundwater use, and adherence to SMCMP for protection and maintenance of surface capping and management of residual site contamination. **Groundwater Monitoring:** Groundwater monitoring conducted at POC wells. Monitoring to be conducted as follows: MW-46S for arsenic; MW-45D for PCP; and MW-29D, MW-45D, MW-46D, and MW-47D for PCE. Sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August).
2: Soil removal to RELs, capping, institutional controls, and groundwater monitoring	**Removal:** Soil exceeding REL excavated and disposed of off site. **Capping:** Cell 3 to receive 2-foot minimum soil cap and demarcation fabric (or equivalent exposure barrier, i.e., liner, asphalt, concrete, building) **Institutional Controls:** Implemented as described in Alternative 1. **Groundwater Monitoring:** Groundwater monitoring conducted at POC wells. Monitoring to be conducted as follows: MW-46S for arsenic; MW-45D for PCP; and MW-29D, MW-45D, MW-46D, and MW-47D for PCE. Sampling conducted semiannually for two years and then every 18 months at observed high and low water events (i.e., January and August).
3: Removal of soil exceeding CULs, groundwater recovery and treatment	**Removal:** Soil exceeding CULs to be excavated and disposed of off site at a licensed disposal facility. Excavated soil with concentrations below CULs would be temporarily stockpiled on site and used as excavation backfill. **Groundwater Monitoring:** Groundwater containing concentrations above groundwater CULs would be extracted, treated, and discharged at an existing stormwater outfall. Groundwater monitoring would be conducted to assess extraction performance. **Institutional Controls:** None.
Cell 4 Alternatives	**Alternative Descriptions**
1: Engineered cap and institutional controls	**Capping:** Cell 4 to be capped with an exposure barrier (e.g., soil, liner, asphalt, concrete, building), concurrent with the cap profiles outlined in the TEE. **Institutional Controls:** Restrictive environmental covenants to prohibit groundwater use, and adherence to SMCMP for protection and maintenance of surface capping and management of residual site contamination. Also prohibit the installation of any water well that may influence groundwater flow with the potential to pull contamination from Cell 2 toward Cell 4.
2: Engineered cap, removal of soil above RELs, and institutional controls	**Capping:** As described in Alternative 1. **Removal:** Soil exceeding RELs to be excavated and managed according to a soil management plan. Soil is assumed to be removed for off-site disposal at a Subtitle C facility. **Institutional Controls:** Restrictive environmental covenants to prohibit groundwater use, and adherence to SMCMP for protection and maintenance of surface capping and management of residual site contamination. Also prohibit the installation of any water well that may influence groundwater flow with the potential to pull contamination from Cell 2 toward Cell 4.
3: Removal of soil to CULs	**Removal:** Soil exceeding the soil CULs would be excavated for off-site disposal at a licensed facility. **Institutional Controls:** Implemented to limit the use of groundwater. No residual contamination in soil is expected in Cell 4 following excavation of hot spots, and therefore there would be no requirement for a restrictive covenant regarding soils.

NOTES:
CUL = cleanup level.
LRIS = Lake River Industrial Site.
MTCA = Model Toxics Control Act.
PCE = tetrachloroethene.
PCP = pentachlorophenol.
POC = point of compliance.
PWT = Pacific Wood Treating Co.
REL = remediation level.
SMCMP = soil management and cap maintenance plan.
TEE = terrestrial ecological evaluation.

Table 5-3
Disproportionate Cost Analysis—Cells 1 and 2
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Sum	Total cost
1	Cap Cells 1 and 2 Stormwater system upgrade SER polishing and demobilization Institutional controls Groundwater monitoring	3.5	3	2	5	5	18.5	$7,030,000
2	Excavation of concrete pond area Cap Cells 1 and 2 Stormwater system upgrade SER polishing and demobilization Institutional controls Groundwater monitoring	4	3	3	3.5	3.5	17	$10,301,000
3	MTCA C CUL and concrete pond excavation Cap Cells 1 and 2 Stormwater system upgrade SER polishing and demobilization Institutional controls Groundwater monitoring	4.5	3	3.5	2	3	16	$32,883,000
4	Excavation to CULs SER system continued operation	5	5	4	1	1	16	$367,531,000

Table 5-3
Disproportionate Cost Analysis—Cells 1 and 2
Former PWT Site

NOTES:
1 = worst, 5 = best.
CUL = cleanup level.
MTCA = Model Toxics Control Act.
PWT = Pacific Wood Treating Co.
SER = steam-enhanced remediation.

Table 5-4
Disproportionate Cost Analysis—Cell 3
Former PWT Site

Alternative	Remedial Action—Soil	Remedial Action—Groundwater	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Sum	Total cost
1	Cap Cell 3 Institutional controls	Institutional Controls Compliance monitoring	3	3	3	5	5	19	$1,263,000
2	Soil excavation above RELs Cap Cell 3 Institutional controls	Institutional Controls Compliance monitoring	4	4	4	4	4	20	$1,524,000
3	Soil excavation above CULs	Pump and treat to CULs Compliance monitoring	5	5	5	1	1	17	$22,880,000

NOTES:

1 = worst, 5 = best.

CUL = cleanup level.

PWT = Pacific Wood Treating Co.

REL = remediation level.

Table 5-5
Disproportionate Cost Analysis—Cell 4
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Management of Short-term Risks	Technical and Admin. Implementability	Sum	Total cost
1	Engineered cap Institutional controls	3	3	3	4	5	18	$707,000
2	Engineered cap Remove soil exceeding RELs Institutional controls	4	3	4	4	4	19	$720,000
3	Soil excavation above CULs (dispose of soil at licensed disposal facility) Institutional controls	5	5	5	2	2	19	$12,692,000

NOTES:

1 = worst, 5 = best.

CUL = cleanup level.

PWT = Pacific Wood Treating Co.

REL = remediation level.

Table 6-1
Disproportionate Cost Analysis—Port-Owned Properties
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Management of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
1	Institutional Controls ▪ Deed restrictions, fence, and signs.	2	2	2	5	2	2	15	$53,000	5
2	Engineered Cap ▪ Gravel cap on Railroad Avenue property; ▪ Site prep and regrading; and ▪ Post implementation cap monitoring.	4	4	4	5	4	5	26	$116,000	5
3	Sampling and Removal ▪ Additional sampling of the property prior to final design; ▪ Removal of soil to ecological CULs; and ▪ Placement of crushed rock for operational surface.	5	5	5	2	4	4	25	$273,000	3

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion

2—Marginally satisfies the criterion

3—Partially satisfies the criterion

4—Mostly satisfies the criterion

5—Completely satisfies the criterion

CUL = cleanup level.

Ecology = Washington State Department of Ecology.

Table 7-1
Summary of Feasibility Study Alternatives for Lake River
Former PWT Site

Alternative	Alternative Descriptions
1: Monitored Natural Recovery	**Natural Recovery:** Natural deposition of clean sediment over impacted sediment to engender natural attenuation in the form of dilution of contaminant concentration through mixing and/or a physical barrier. **Bank:** Bank stabilization; the area between the upland cap and in-water remedy (approximately elevation 11 down to the slope break to the beach) will be covered with a geotextile filter fabric and stabilized with rock armor. Armoring of the bank will reinforce the existing slopes and act as a physical barrier to the movement of underlying soil and sediment. **Pre-Monitoring:** Further characterization of the Lake River fluvial conditions to better understand the deposition rates of fluvial processes that would affect natural attenuation. **Institutional Controls:** No-anchor zones. **Long-Term Monitoring:** Program would be developed that would be capable of verifying the ongoing effectiveness of recovery by natural processes.
2: Enhanced Monitored Natural Recovery	**ENR:** ENR by placing an approximately 1-foot layer of clean sand over impacted sediment. **Bank:** As described in Alternative 1. **Long-Term Monitoring:** Monitoring additional natural recovery that occurs after sand layer has been placed. **Institutional Controls:** No-anchor zones. **Long-Term Monitoring:** As described in Alternative 1.
3: Engineered Cap	**Capping:** Engineered 2-foot sediment cap would be placed by mechanical means over the designated remediation area (i.e., areas exceeding the dioxin CUL). Following placement of the engineered cap, a protective layer of rock armor would be placed to protect against erosion of the underlying sediment cap. **Bank:** As described in Alternative 1. **Long-Term Monitoring:** Implementation of a monitoring and maintenance program, which would include a plan outlining the requirements for routine cap performance and monitoring, schedule, emergency response, and reporting. Also includes steps to be taken if the cap fails to meet the performance criteria. **Institutional Controls:** Restrictions on future maintenance dredging would be required in order to prevent breaching of the engineered sediment cap. Restrictions on navigations, access to shore, and short-term future land use would also be included.
4: Dredging and ENR	**Removal:** Using mechanical dredging to remove sediment above the REL. Existing in-water structure removal before dredging. Dredged material would be disposed of as nonhazardous material waste at a Subtitle D landfill facility. **ENR:** Placement of an approximately 1-foot sand layer over all dredged areas to manage residuals and over areas with sediment concentrations between the CUL and the REL to enhance the natural recovery of sediment after construction. Armor would be applied to the lower portions of the bank. The armor would be tied in to the bank layback and extend down to overlap the dredged areas and the ENR layer. The armor would also function as a cap in the transition area. **Bank:** As described in Alternative 1. **Long-Term Monitoring:** Implementation of a monitoring program to verify effectiveness of natural recovery processes. **Institutional Controls:** Characterization of current sediment conditions and leave surface (if applicable) would be required before activities involving significant sediment disturbance are initiated.

NOTES:

CUL = cleanup level.

ENR = enhanced natural recovery.

PWT = Pacific Wood Treating Co.

REL = remediation level.

Table 7-2
Disproportionate Cost Analysis—Lake River
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
1	Monitored Natural Recovery: ▪ Bank stabilization; ▪ Natural attenuation in the form of sedimentation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls.	2	2	2	5	2	5	18	$679,000	5
2	Enhanced Monitored Natural Recovery: ▪ Bank stabilization; ▪ Placement of a sand layer to enhance natural attenuation; ▪ Long-term monitoring plan; and ▪ Institutional controls.	3	3	3	4	2	5	20	$2,815,000	3
3	Engineered Cap: ▪ Bank stabilization; ▪ Placement of an engineered sand cap; ▪ Placement of a protective armor layer; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls.	4	4	4	3	3	5	23	$7,718,000	2

Table 7-2
Disproportionate Cost Analysis—Lake River
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
4	Dredging and ENR: ▪ Removal of impacted sediment through mechanical dredging; ▪ Existing in-water structure removal; ▪ Bank stabilization; and ▪ Placement of an ENR layer.	4	5	5	3	4	5	26	$9,492,000	2

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion

2—Marginally satisfies the criterion

3—Partially satisfies the criterion

4—Mostly satisfies the criterion

5—Completely satisfies the criterion

ENR = enhanced natural recovery.

PWT = Pacific Wood Treating Co.

Table 8-1
Summary of Feasibility Study Alternatives for Carty Lake
Former PWT Site

Alternative	Alternative Descriptions
1: Monitored Natural Recovery	**Natural Recovery:** Natural recovery occurs under favorable conditions over an indeterminate period of time and without human intervention. Deposition rate for sediment in Carty Lake depends on many variables, so further analysis of the processes that are occurring would be required to quantify the expected time frame for sufficient sedimentation to occur. **Monitoring:** A comprehensive work plan would be developed to define sampling locations and methods within the study area perimeter to better understand processes that would affect natural attenuation. Long-term monitoring would verify the ongoing effectiveness of recovery in contaminated sediment. **Institutional Controls:** Restrictions on access and future land use, and advisories on fish consumption.
2: Focused Dredge and Limited Residuals Cap	**Removal:** Removal of sediment above RELs in the southeast corner of Carty Lake by means of dredging and disposal. Dredged material would be disposed of as nonhazardous material at a Subtitle D landfill. Dewatering and solidification of the dredge material would be required before landfilling. **Residuals Cap:** Clean sand would be placed in an approximately 1-foot layer over dredged areas and the dredged-generated residuals. **Long-Term Monitoring:** A monitoring program would be developed to verify ongoing effectiveness of recovery of contaminated sediment by natural attenuation. The monitoring would quantify the reduction in concentrations relative to the human health CUL (5 ng/kg dioxin TEQ). **Institutional Controls:** Advisories on fish consumption.
3: Focused Dredge and Expanded Residuals Cap	**Removal:** As described in Alternative 2. **Residuals Cap:** Clean sand for a residuals cap layer would be placed in an approximately 1-foot layer over the dredge footprint. In addition, sand would be placed in areas exceeding 30 ng/kg dioxin TEQ to reduce surface concentrations and stimulate natural recovery. Sand would be placed using a combination of shore-based equipment and floating equipment. Material would be placed either from shore or from segmented floating barges. **Long-Term Monitoring:** As described in Alternative 2. **Institutional Controls:** As described in Alternative 2.
4: Focused Dredge and Full Residuals Cap	**Removal:** As described in Alternative 2. **Residuals Cap:** Clean sand for a residuals cap layer would be placed in an approximately 1-foot layer over the dredge footprint. In addition, sand would be placed in areas exceeding the CUL of 5 ng/kg dioxin TEQ to reduce surface concentrations and stimulate natural recovery. Floating equipment for spreading sand hydraulically would be required. Access improvements likely would include clearing and grubbing and construction of a staging area to provide ingress to the entire lake for sand cap placement. **Long-Term Monitoring:** As described in Alternative 2. **Institutional Controls:** As described in Alternative 2.

NOTES:
CUL = cleanup level.
ng/kg = nanograms per kilogram.
PWT = Pacific Wood Treating Co.
REL = remediation level.
TEQ = toxicity equivalent.

Table 8-2
Disproportionate Cost Analysis—Carty Lake
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
1	Monitored Natural Recovery: ▪ Natural attenuation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls to protect receptors.	2	1	2	5	2	3	15	$280,500	5
2	Focused Dredge and Limited Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake; ▪ Placement of residuals cap layer over the dredged area; ▪ Post-remedy monitoring; and ▪ Institutional controls to protect receptors.	3	3	3	4	5	5	23	$1,633,000	4
3	Focused Dredge and Expanded Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake and marginally impacted sediment; ▪ Placement of residuals cap layer over the dredged area; ▪ Post-remedy monitoring; and ▪ Institutional controls to protect receptors.	3	3	3	3	4	5	21	$2,308,000	3

Table 8-2
Disproportionate Cost Analysis—Carty Lake
Former PWT Site

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
4	Focused Dredge and Full Residuals Cap: ▪ Dredging the highly impacted southern area; ▪ Placement of a sediment cap layer over the entire lake; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls to protect receptors.	4	4	4	2	3	5	22	$7,340,000	1

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion

2—Marginally satisfies the criterion

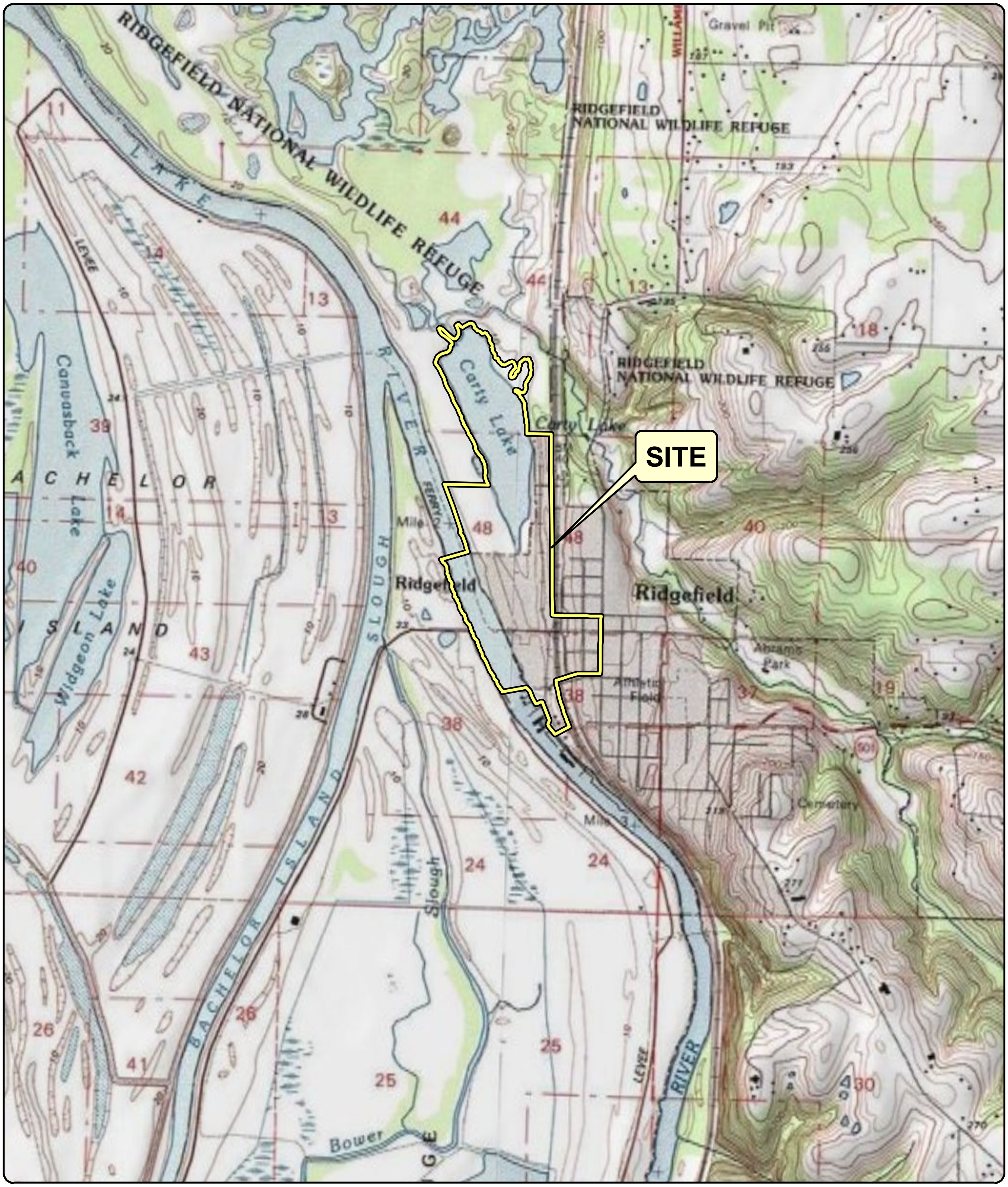
3—Partially satisfies the criterion

4—Mostly satisfies the criterion

5—Completely satisfies the criterion

PWT = Pacific Wood Treating Co.

FIGURES



Source: Topographic Quadrangle obtained from ArcGIS Online Services/NGS-USGS TOPO/US Geological Survey (1999)
7.5-minute topographic quadrangle: Ridgefield
Address: Lake River Industrial Site
111 W. Division Street, Ridgefield, WA 98642
Section: 24 Township: 4N Range: 1W Of Willamette Meridian

Legend

Former Pacific Wood Treating Site

Figure 1-1
Site Location

Former PWT Site
Ridgefield, Washington

0 1,000 2,000
Feet

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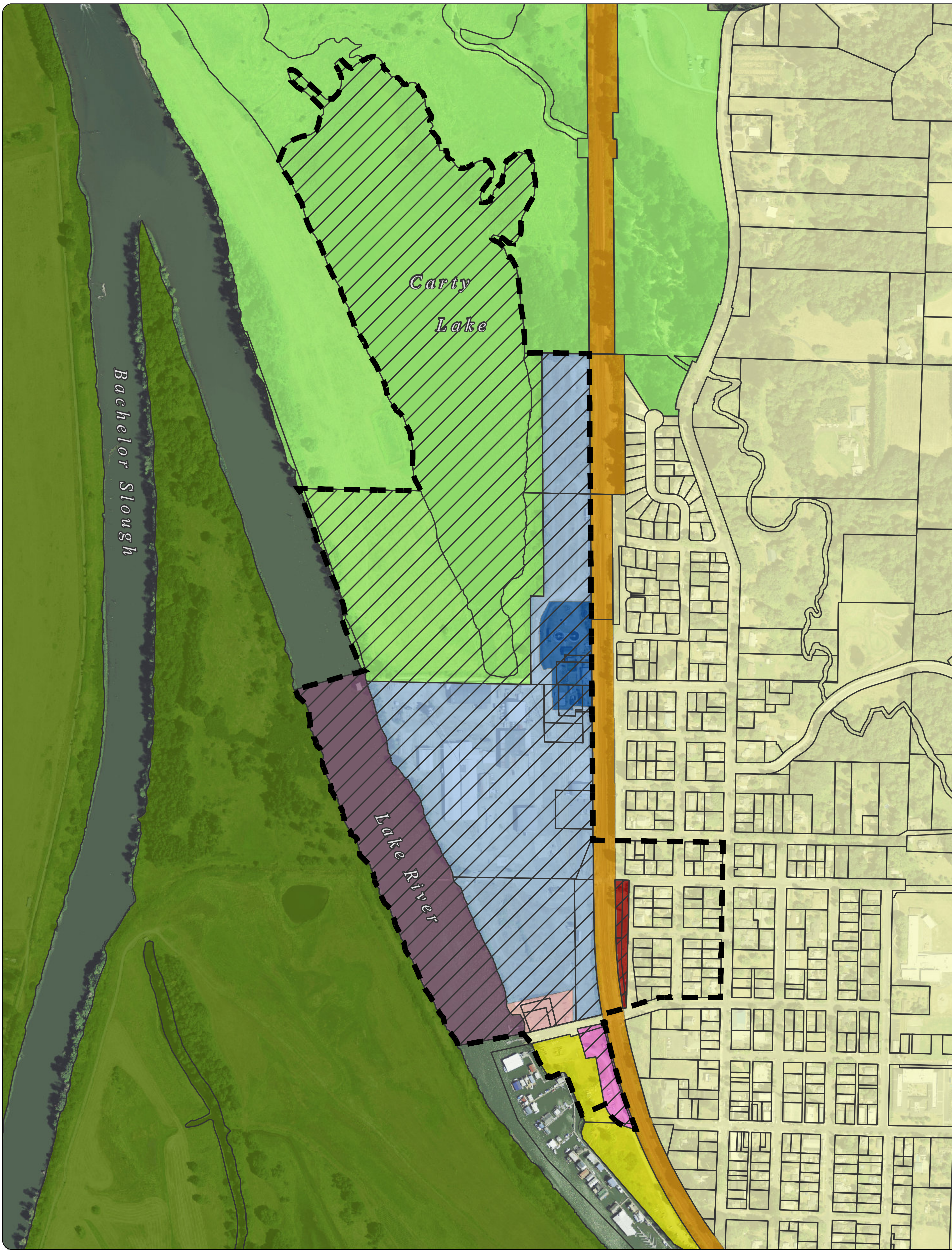
Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig1-1_Site Location.mxd
Print Date: 3/27/2013
Approved By: J. King
Produced By: D. Coe/ W. Coffey
Project: 9003.01.20



Source: Aerial photograph obtained from Clark County (2007).

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

Legend

- Pacific Wood Treating Site
- Clark County Tax Lots (2010)
- The Property

Area Designations

LRIS
- Port-Owned
- City of Ridgefield WWTP

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

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

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

0 250 500
Feet

Figure 1-2
Site and Property Diagram
Former PWT Site
Ridgefield, Washington

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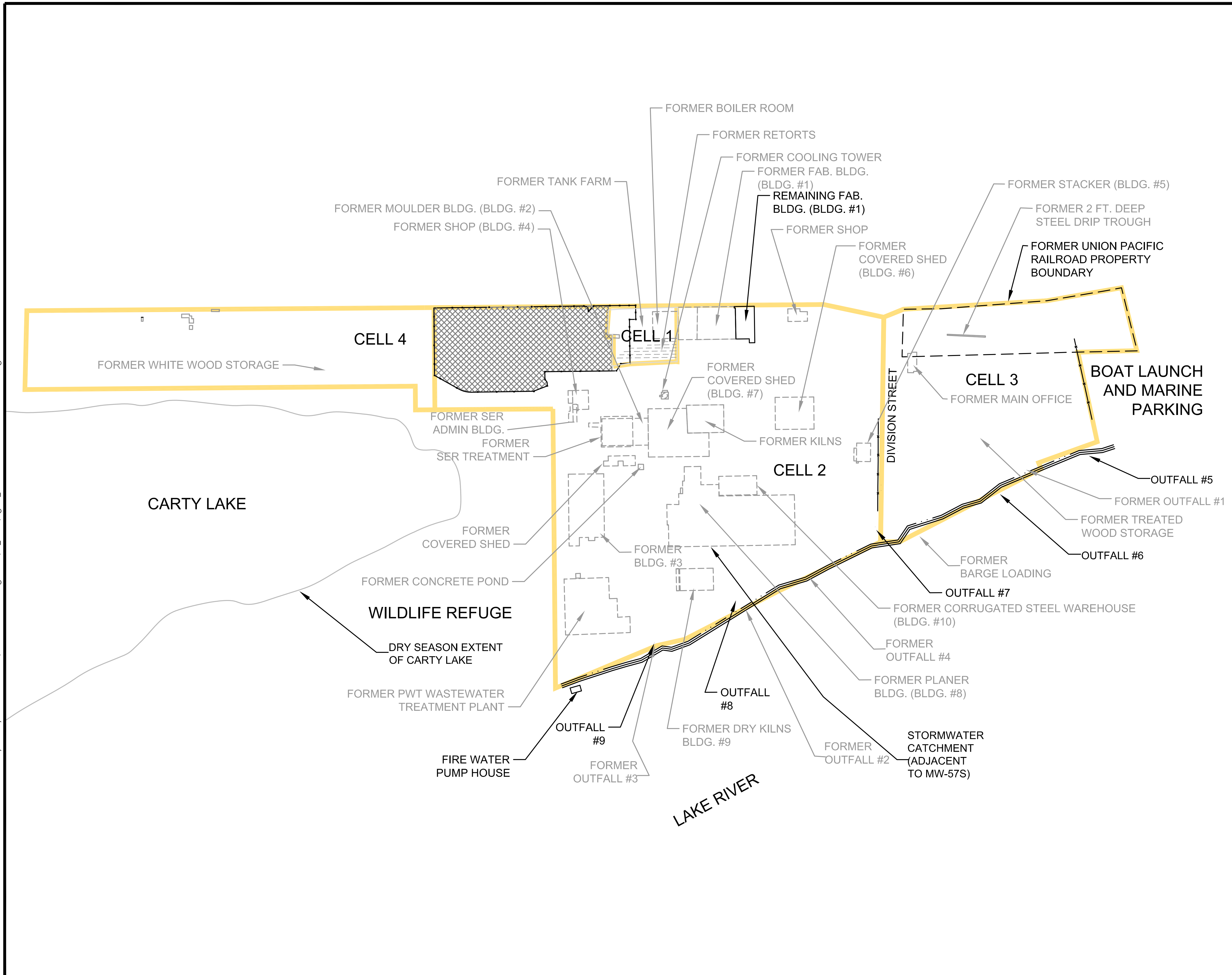
Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig1-2_Site Diagram.mxd
Print Date: 7/1/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49

Figure 2-1
LRIS Former and Current Site Features

Former PWT Site RI/FS
Ridgefield, Washington



LEGEND:
CITY OF RIDGEFIELD WASTEWATER TREATMENT PLANT
FORMER UNION PACIFIC PROPERTY BOUNDARY
CELL BOUNDARY
CURRENT FEATURES
FENCE LINE
FORMER PWT FEATURES
ORDINARY HIGH WATER

NOTES:
LRIS - LAKE RIVER INDUSTRIAL SITE

SHADED TYPE INDICATE FORMER FEATURES

BOLDED TYPE INDICATE CURRENT FEATURES

N

0 300 600
FEET

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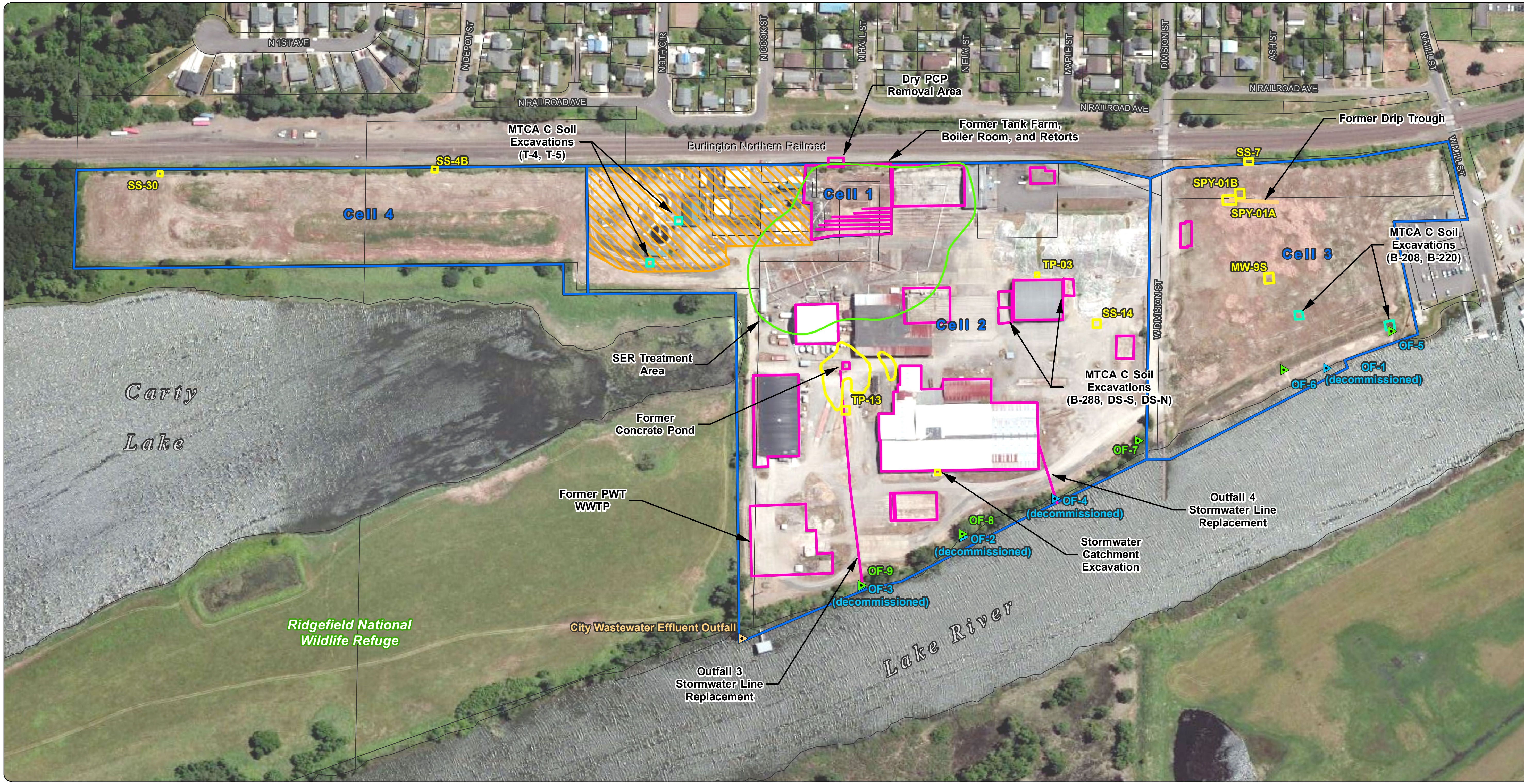
PLOTTED ON: 2013-07-11 1:43 PM PLOTTED BY: Lindsey Crosby FILENAME: G:\9003.01 Port of Ridgefield\49_RI-FS\Fig2-1_Site Features-historic 2012 REV.dwg

Layout: 1 Project: 9003.01.49 Drawn By: J. Fisher Approved By: A. Hughes



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. MTCA = Model Toxics Control Act
2. WWTP = Wastewater Treatment Plant
3. LRIS = Lake River Industrial Site

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Legend

- Structures Removed
- MTCA C Soil CUL exceedances excavated and moved to Cell 1
- MTCA C Soil CUL exceedances excavated and disposed of off-site
- Steam-Enhanced Remediation (SER) Area
- New Outfalls (2012)
- Former PTW Outfalls
- City of Ridgefield Outfalls
- City of Ridgefield WWTP
- Cell Boundaries
- Tax Lots

0 125 250
Feet

Figure 4-1
LRIS Remediation Areas
Former PWT Site
Ridgefield, Washington

Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig4-1_LRIS Remediation Areas.mxd
Print Date: 7/11/2013
Approved By: A. Hughes
Produced By: J. Schane
Project: 9003.01.49

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Note: WWTP = wastewater treatment plant

Legend

- Proposed Overpass Property (Gravel)
- Railroad Avenue Property
- Port Marina Property
- WWTP
- Port of Ridgefield Cell Boundaries
- Outer LRIS Boundary
- Asphalt Cap and Building
- 2' Soil Cap
- 3' Soil Cap
- 1' Cap Along Boundary
- Division Street (14" Crushed Base Rock, 5" Asphalt)
- Hard Trail (6" Crushed Base Rock, 2.5" Asphalt over 24" Soil Cap (min))
- Soft Trail (3" Crushed Base Rock over 36" Soil Cap (min))
- Cell 2 Gravel Access Road (2' Crushed Base Rock)
- Cell 3 Gravel Access Road (8" Crushed Base Rock over 14" of Soil)

Figure 4-2
Final Cap Overview

Former PWT Site
Ridgefield, Washington

0 150 300
Feet

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Path: X:\9003.01 Port of Ridgefield\40\Projects\06\Fig4-2_Final Cap Overview.mxd
Print Date: 7/15/2013
Approved By: M. Novak
Produced By: apadilla
Project: 9003.01.40-06

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online

Notes:
1. CUL = Cleanup Level
2. REL = Remediation Level

Legend

Sample Locations
- Soil Boring
- Test Pit
- Soil Sample
- Monitoring Well
- Abandoned Monitoring Well

Exceedances
- No Exceedance
- CUL Exceedance
- REL Exceedance
- Cell Boundary

0 50 100
Feet

Figure 4-3
Cells 1 & 2 Remaining Soil Contamination

Former PWT Site
Ridgefield, Washington

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Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig4-3_Cells 1 & 2 Remaining Soil Contamination.mxd
Print Date: 3/11/2013
Approved By: M. Novak
Produced By: jschaine
Project: 9003.01.49-01

Figure 4-4
Cell 3 Remaining Soil Contamination

Former PWT Site
Ridgefield, Washington

Legend

Sample Locations

- Soil Boring
- Test Pit
- Soil Sample
- Monitoring Well
- Abandoned Monitoring Well

Exceedances

- No Exceedance
- CUL Exceedance
- Cell Boundary

Notes:
1. CUL = Cleanup Level
2. Port Marina sample locations were obtained from a historical report (MFA, 2000) and are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online

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Project: 9003.01-49-01 Produced By: jschane Approved By: M. Novak Print Date: 3/11/2013 Path: X:\9003.01 Port of Ridgefield\20 Projects\CAP\Fig4-4_Cell 3 Remaining Soil Contamination.mxd

Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig4-5_Cell 4 Remaining Soil Contamination.mxd

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online

Note: CUL = Cleanup Level

Legend

Sample Locations

- ○ Soil Boring
- □ Test Pit
- △ Soil Sample

Exceedances

- No Exceedance
- CUL Exceedance
- Cell Boundary

Figure 4-5
Cell 4 Remaining Soil Contamination

Former PWT Site
Ridgefield, Washington

0 50 100
Feet

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Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. MTCA = Model Toxics Control Act
2. WWTP = Wastewater Treatment Plant
3. Cell 3 plume may extend to south or east beyond boundary shown due to potential upgradient impacts.

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Legend

- Extent of Groundwater Contamination (Dashed Where Approximate)
- Steam-Enhanced Remediation (SER) Area
- Concrete Pond Excavation
- City of Ridgefield WWTP
- Cell Boundaries
- Tax Lots

Figure 4-6
Remaining Groundwater Contamination

Former PWT Site
Ridgefield, Washington

0 125 250
Feet

Path: X:\9003.01 Port of Ridgefield\40\Projects\06\Fig4-6_Remaining Groundwater Contamination.mxd
Print Date: 7/15/2013
Approved By: A. Hughes
Produced By: J. Schane
Project: 9003.01.40-06

Figure 4-7
Port-Owned Properties Remaining Soil Contamination

Former PWT Site
Ridgefield, Washington

Legend

Sample Locations

△ Soil Sample

Exceedances

No Exceedance

CUL Exceedance

Boundary

Railroad Avenue Property

Port Marina Property

Proposed Overpass Property

Note: CUL = Cleanup Level

0 50 100
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online

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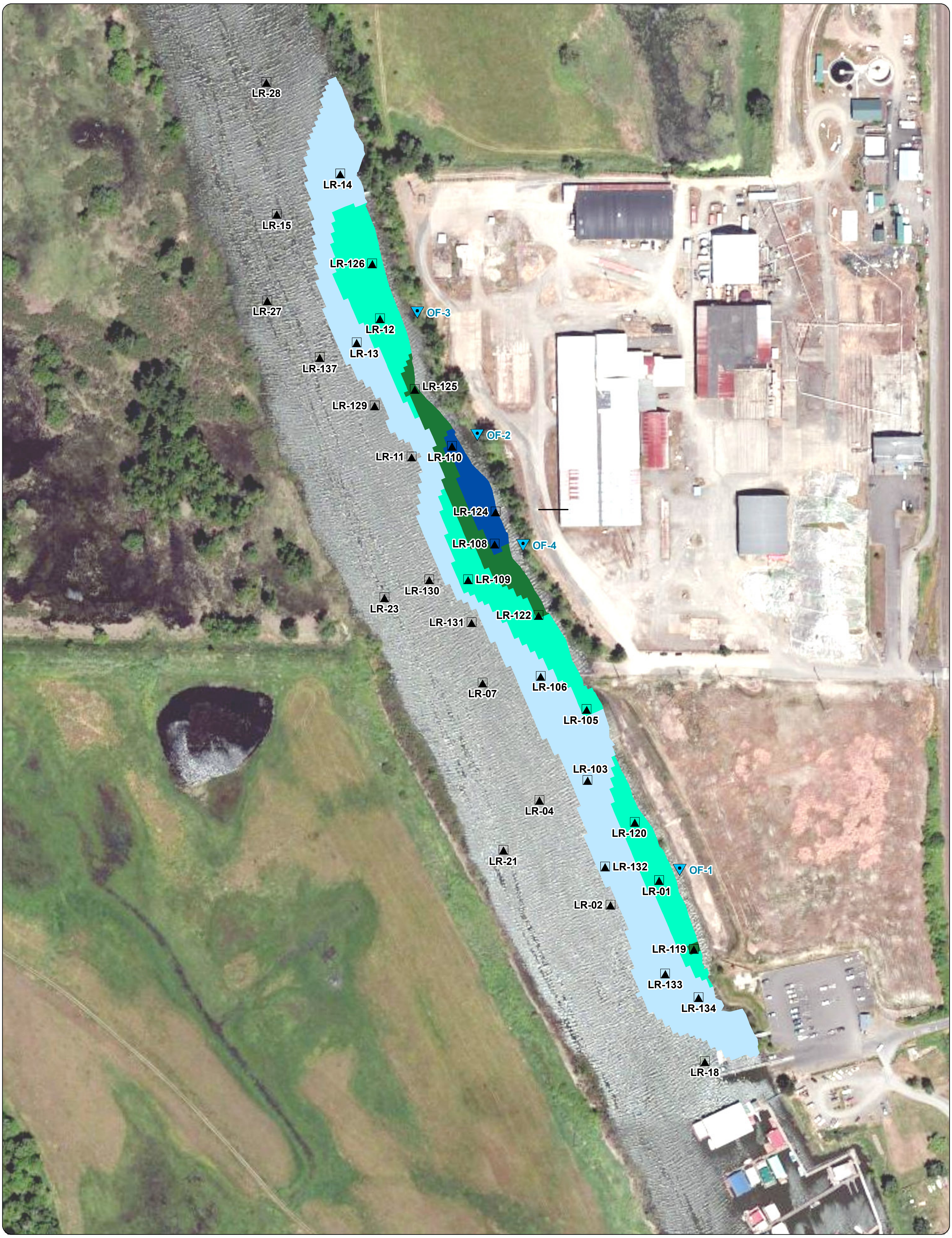
Project: 9003.01.49-01 Produced By: jschane Approved By: M. Novak Print Date: 6/7/2013 Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig4-7_Port-Owned Properties Remaining Soil Contamination.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. ENR = Enhanced Natural Recovery.
2. IDW = Inverse Distance Weighted.
3. Dredge depths denote neatline.
4. Dredged areas will also receive 1 foot of ENR treatment.
5. Analysis extent has been clipped to the bank-sediment interface. Dredge boundaries near the shore were generally determined by projection of a 3:1 horizontal to vertical slope down from the shoreline inflection point to the required dredge depth. ENR boundaries near the shore were determined by the point where the shore slope transitions to less than a 5:1 horizontal to vertical slope.

Legend

Historical Outfall

Surface Sediment Sample

Remedial Action Areas

ENR Only | 1-ft Dredge | 2-ft Dredge | 3-ft Dredge

Figure 4-8
Lake River Remedy Projected Extent

Former PWT Site
Ridgefield, Washington

0 100 200
Feet

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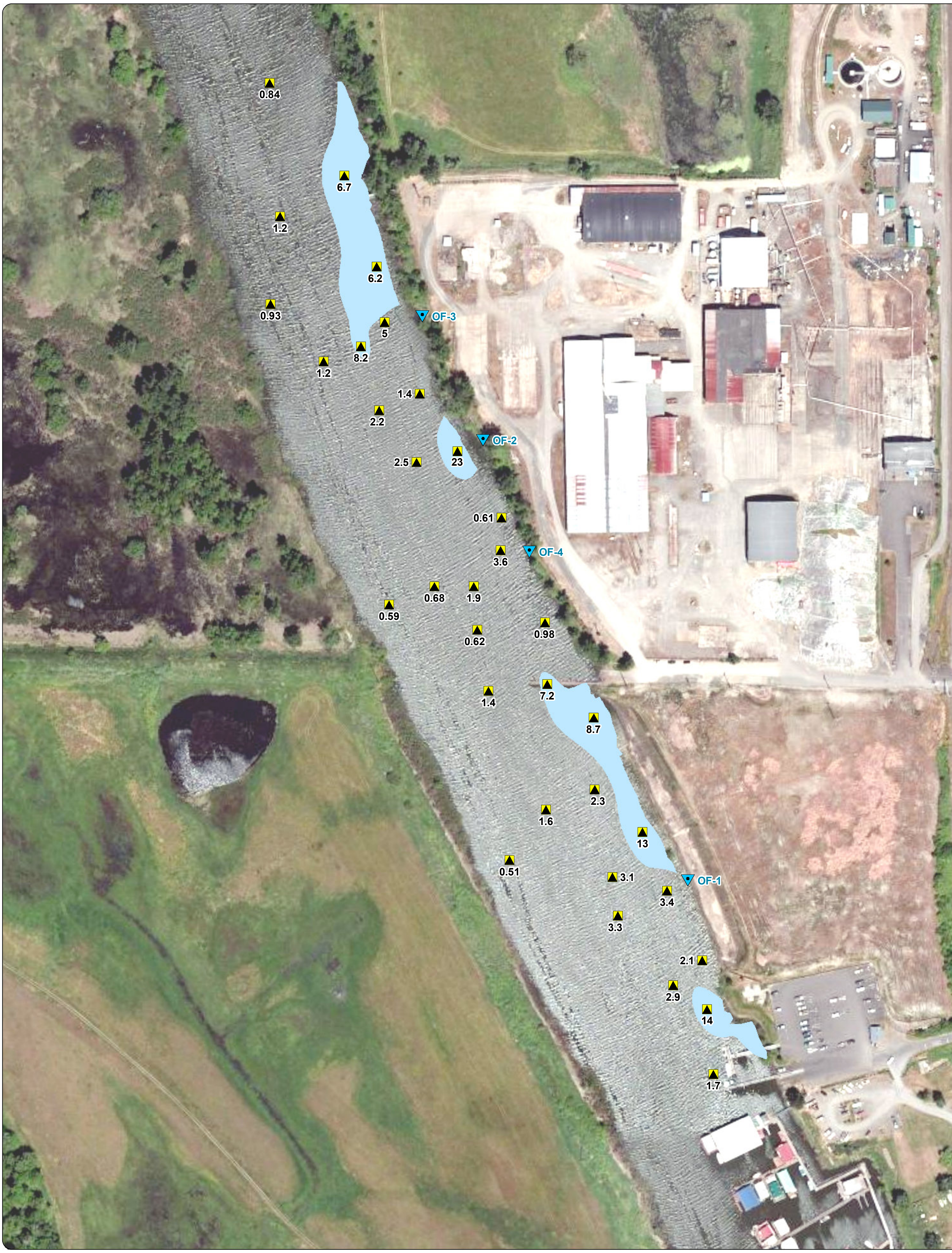
Path: X:\9003.01 Port of Ridgefield\20\Projects\CAP\Fig4-8_Remedial Action Areas.mxd
Print Date: 7/15/2013
Approved By: mnovak
Produced By: cmikes
Project: 9003.01.40/06



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. ENR = Enhanced Natural Recovery.
2. IDW = Inverse Distance Weighted.
3. TEQ = Toxicity Equivalent.
4. ng/kg = nanograms per kilogram.
5. Post-remedy concentrations represent the concentration attained post-dredging and post-mixing with the ENR layer.
6. Post-remedy concentrations were log-normalized prior to conducting interpolation to maintain consistent methodology with the interpolation of the pre-remedy surface which presented a positively skewed histogram.
7. Analysis extent has been clipped to the bank-sediment interface. Dredge boundaries near the shore were generally determined by projection of a 3:1 horizontal to vertical slope down from the shoreline inflection point to the required dredge depth. ENR boundaries near the shore were determined by the point where the shore slope transitions to less than a 5:1 horizontal to vertical slope.
8. IDW parameters: Power=1, 200-ft x 100-ft elliptical search neighborhood at 155°, minimum samples=1, smoothing factor=0.5.

Legend

Surface Sediment Sample

Historical Outfall

Surface Dioxin TEQ (ng/kg)

5.1 - 30

> 30

0 100 200
Feet

Figure 4-9
Lake River Projected Remaining Contamination

Former PWT Site
Ridgefield, Washington

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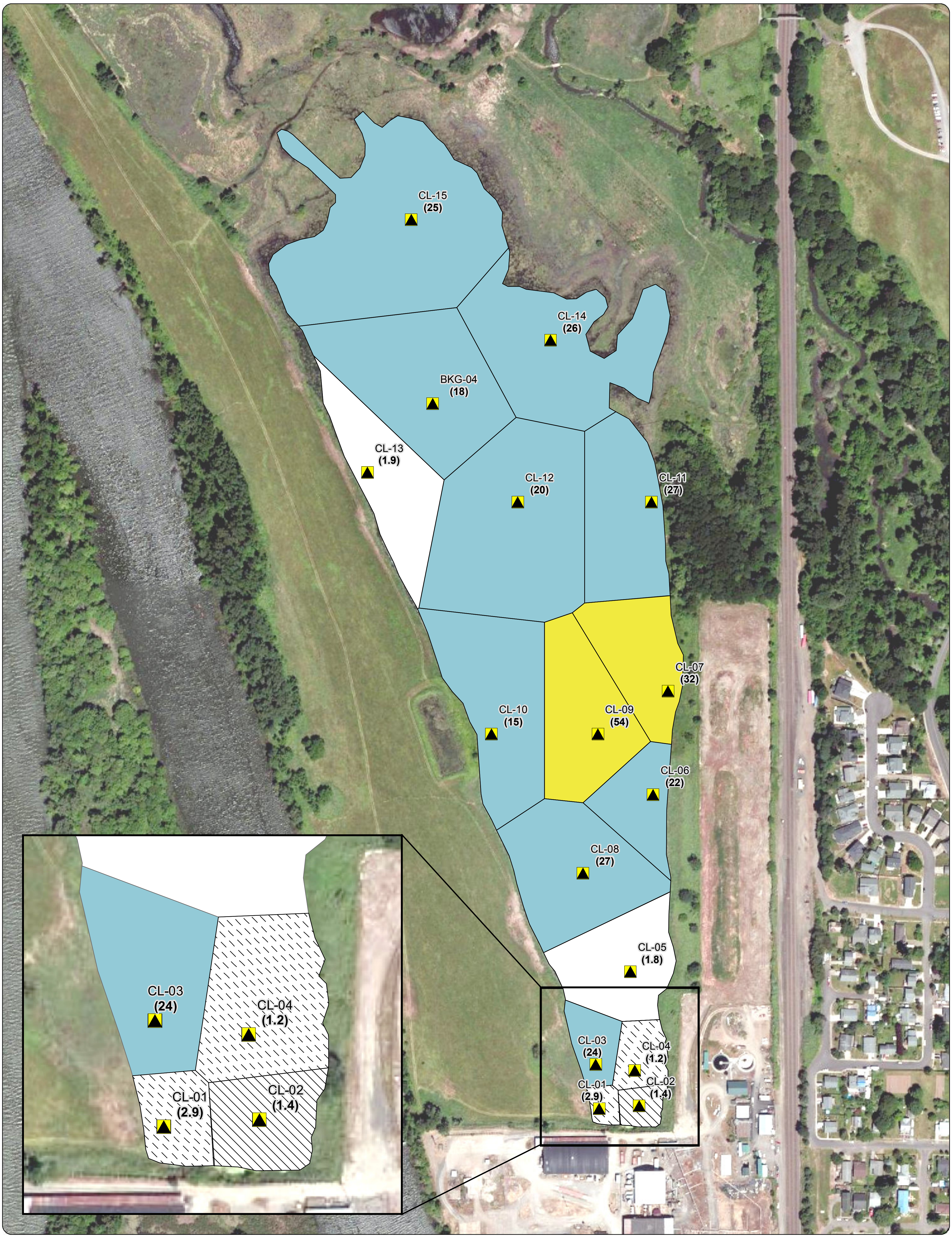
Print Date: 7/15/2013
Approved By: mnovak
Produced By: cmikes
Project: 9003.01.40/06



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. TEQ = toxicity equivalent
2. ng/kg = nanograms per kilogram
3. Dredge depth includes one foot of overdredge.

Legend

Surface Sediment Sample
(Estimated Post-Remedial Dioxin TEQ [ng/kg])

Dredge Depth

2 feet

3 feet

Post Remedy

0.3 - 5

5 - 30

40 - 60

Figure 4-10
Carty Lake Projected Remedy Extent and Remaining Contamination

Former PWT Site
Ridgefield, Washington

0 150 300
Feet

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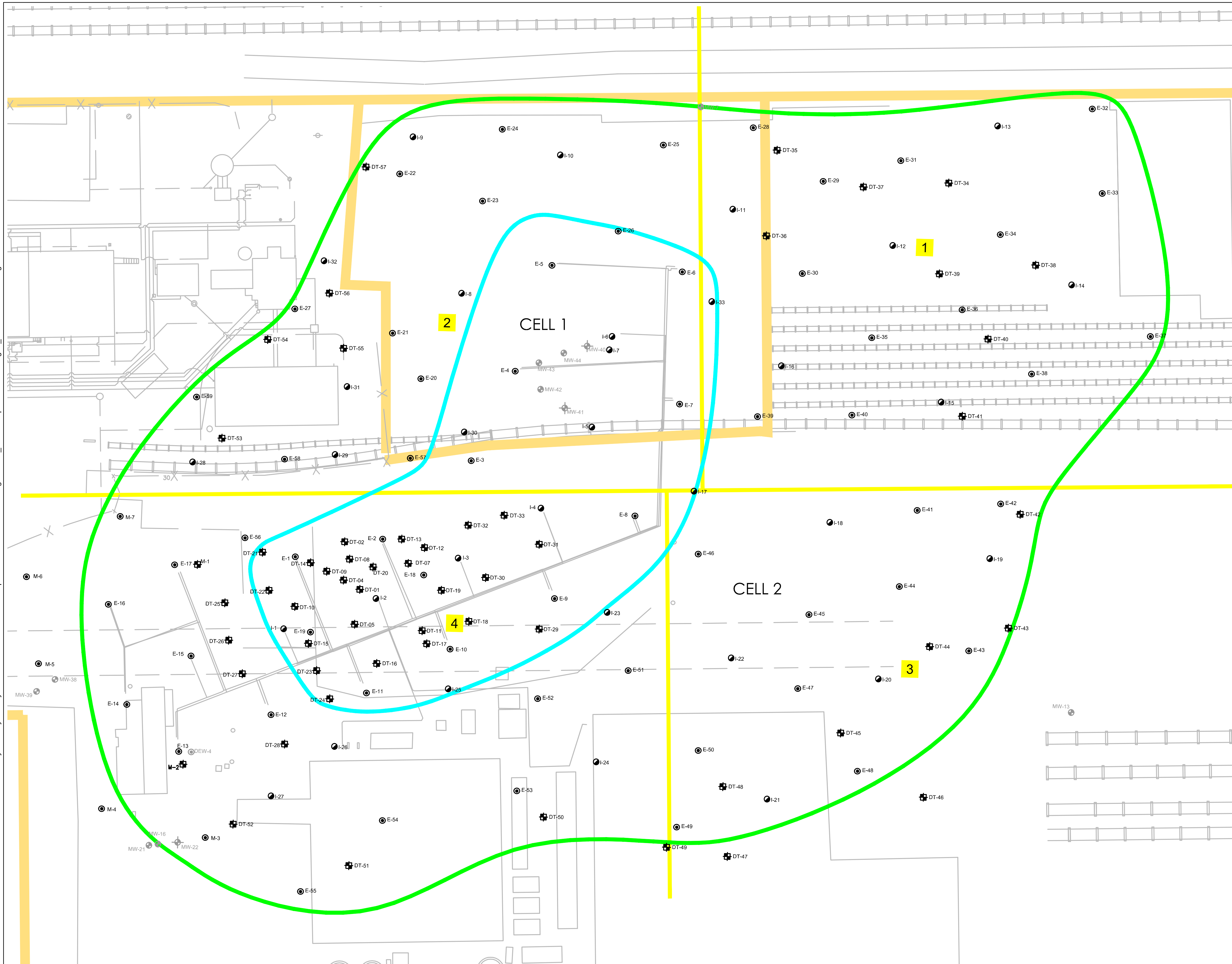
Approved By: M. Novak
Produced By: cmikes
Project: 9003.01.20



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LEGEND:

- INJECTION WELL
- EXTRACTION WELL
- TEMPERATURE MONITORING POINT (DIGITAM)
- LOWER WATER BEARING ZONE MONITORING WELL
- UPPER WATER BEARING ZONE MONITORING WELL
- SER AREA
- SER AREA BOUNDARY
- APPROXIMATE EXTENT OF PHASE 1
- APPROXIMATE EXTENT OF PHASE 2
- CELL BOUNDARY

0 50' 100'

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

Figure 9-1
SER Area

Former PWT Site
Ridgefield, WA

Filepath: G:\9003.01 Port of Ridgefield\29_SER Completion Memo\Fig01_Steam Enhance.dwg
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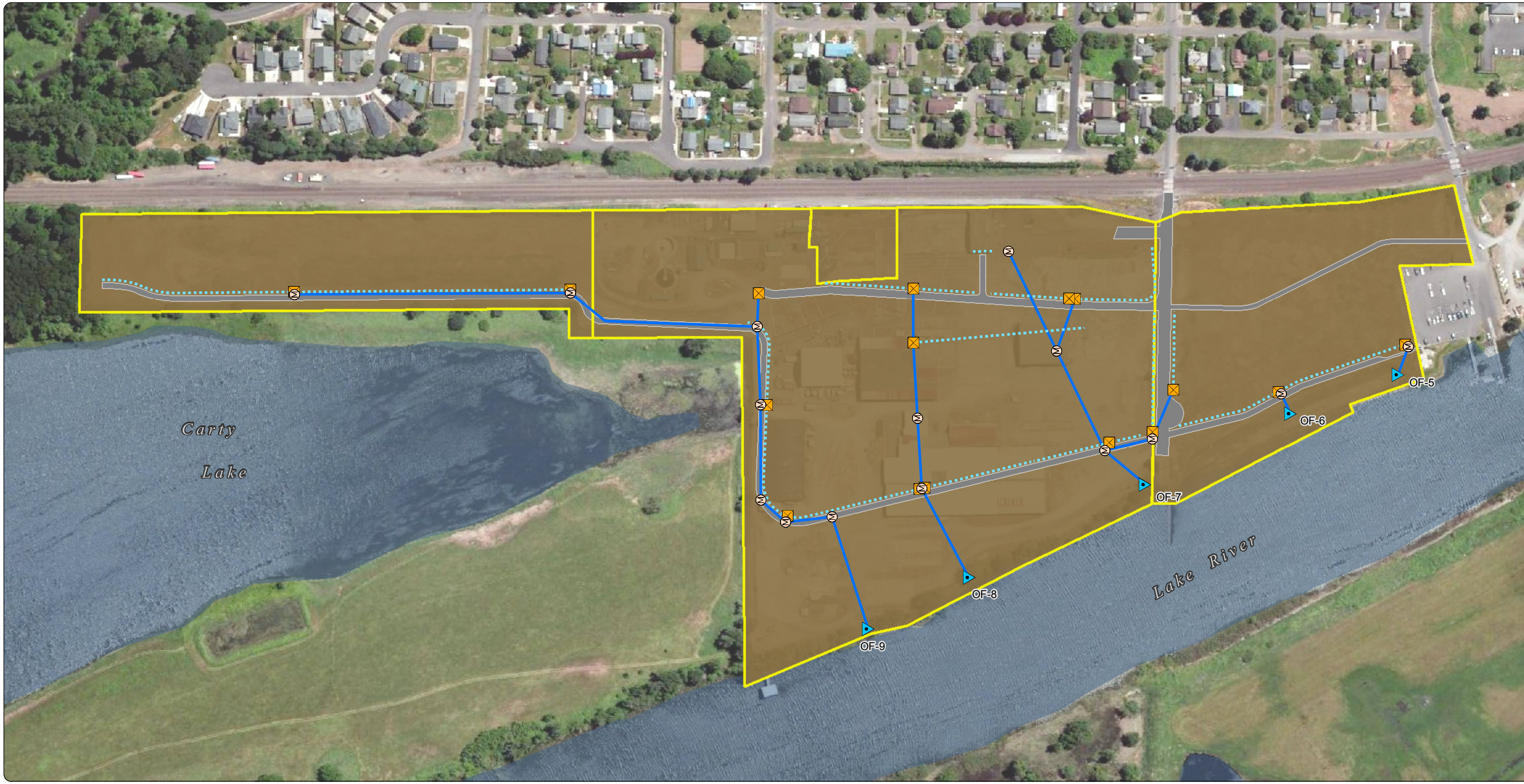
Date: 7/12/2013 12:42:56 PM



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Legend

Ⓜ	Manhole		Roads
☒	Catch Basin		Lake & River
▼	Outfall		Cell Boundaries
	Ditch		
	Stormline		

Figure 9-2
Current LRIS Stormwater Features

Former PWT Site
Ridgefield, Washington

0 125 250
Feet

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Print Date: 7/12/2013
Approved By: A. Hughes
Produced By: cmikes
Project: 9003.01.49

APPENDIX A
ANALYTICAL SUMMARY

Appendix A Notes
Cleanup Level Screening
Former PWT Site

Bold indicates values that exceed CULs (for dioxins, if values were non-detects ["U" or "UJ"], half the reported concentration was compared with CULs).

Shading indicates values that exceed RELs.

-- = not analyzed.

bgs = below ground surface.

cm = centimeter(s).

cPAH = carcinogenic polycyclic aromatic hydrocarbons.

CUL = cleanup level.

dup = duplicate sample.

ft = feet.

ft bgs = feet below ground surface.

HpCDD = heptachlorodibenzo-p-dioxin.

HpCDF = heptachlorodibenzofuran.

HxCDF = hexachlorodibenzofuran.

J = estimated value.

LRIS = Lake River Industrial Site.

LWBZ = lower water-bearing zone.

mg/L = milligrams per liter (parts per million).

NC = not calculated.

ND = not detected.

ng/kg = nanograms per kilogram (parts per trillion).

NS = not sampled.

NV = no value.

OCDD = octachlorodibenzo-p-dioxin.

OCDF = octachlorodibenzofuran.

PeCDD = pentachlorodibenzo-p-dioxin.

PeCDF = pentachlorodibenzofuran.

PWT = Pacific Wood Treating Co.

Q = qualifier.

REL = remediation level.

TCDD = tetrachlorodibenzo-p-dioxin.

TCDF = tetrachlorodibenzofuran.

TEQ = toxicity equivalent.

U = Compound analyzed, but not detected above detection limit.

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

µg/L = micrograms per liter (parts per billion).

Appendix A Notes
Cleanup Level Screening
Former PWT Site

UJ = Compound analyzed, but not detected above estimated detection limit.

UWBZ = upper water-bearing zone.

[a]Ecological CULs derived separately for dioxin congeners and for furan congeners, as determined in coordination with Ecology; composite ("-Comp") results were used to screen soil for ecological risk, where available (see MFA, 2013b).

[b]Location will be removed via dredging.

		Analyte	cPAH TEQ	2-Methyl-naphthalene		Acenaphthene		Arsenic		Chromium		Copper		Diesel-Range Organics		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline-Range Organics		Residual-Range Organics		Naphthalene	
		Unit	µg/kg	µg/kg		µg/kg		µg/kg		µg/kg		µg/kg		µg/kg		ng/kg	µg/kg		µg/kg		µg/kg		µg/kg		µg/kg	
		Soil Cleanup Level	140	320000		4800000		5810		67000		217000		2000000		11	3200000		3200000		30000		2000000		1600000	
		Soil Remediation Level	18000	NV		NV		88000		NV		NV		NV		1500	NV		NV		NV		NV		NV	
Sample Location	Sample Date	Depth (feet bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-30	12/01/1997	3.5	4.3	5	U	5	U	3000		13000		19000		10000	U	--	22		5	U	10000	U	--	--	5	U
B-30	12/01/1997	9.5	NC	16000		12000		1000		7000		23000		1110000		--	9000		7000		10000	U	--	--	42000	
B-30	12/01/1997	17	NC	15000		15000		1000		5000		19000		619000		--	13000		9000		10000	U	--	--	52000	
B-31	11/26/1997	3.5	4.2	5	U	5	U	1000	U	6000		15000		10000	U	--	34		5	U	10000	U	--	--	5	U
B-31	11/26/1997	8	4.9	5	U	5	U	1000		6000		17000		10000	U	--	44		5	U	10000	U	--	--	5	U
B-31	11/26/1997	15.5	**2400.0**	32000		39000		1000		10000		22000		1100000		--	31000		23000		10000	U	--	--	60000	
B-316	11/17/2011	2	38.2	8.99		40.4		**11500**		--	--	--	--	17800		--	121		19.5		--	--	242000		8.99	
B-317	11/17/2011	1.25	**875**	1440		1920		**140000**		--	--	--	--	412000		--	11100		1580		--	--	257000		1780	
B-318	11/17/2011	1.75	110	24.1		78.1		**10200**		--	--	--	--	94200		--	672		112		--	--	125000		33.6	
B-319	11/17/2011	2	81.9	7.5	U	7.5	U	**7840**		--	--	--	--	46400		--	127		7.5	U	--	--	246000		7.5	U
B-32	12/05/1997	6.5	**220.0**	5	U	5	U	**12000**		13000		23000		--	--	--	21		5	U	--	--	--	--	5	U
B-32	12/08/1997	14	--	--	--	--	--	1000		7000		20000		10000	U	--	--	--	--	--	10000	U	--	--	--	--
B-320	11/17/2011	2.25	**271**	86.3		220		**10200**		--	--	--	--	268000		--	2140		204		--	--	698000		255	
B-322	11/17/2011	2.5	**15600**	10300		73900		**241000**		--	--	--	--	--	--	**8100**	189000		35500		--	--	--	--	3780	
B-323	11/17/2011	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-324	11/17/2011	0.5	23.6	8.2	U	8.2	U	--	--	--	--	--	--	--	--	--	26.2		8.2	U	--	--	--	--	8.2	U
B-325	11/17/2011	8.5	NC	--	--	--	--	**6790**		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33	12/04/1997	3.5	**1400**	4100		5000		**18000**		24000		33000		1380000		--	19000		4300		10000	U	--	--	238	
B-33	12/04/1997	9.5	**263**	53		537		**6000**		22000		28000		151000		--	3800		537		10000	U	--	--	14	
B-33	12/04/1997	15.5	NC	4000		7000		1000		7000		17000		371000		--	8000		5000		10000	U	--	--	6000	
B-34	11/26/1997	3.5	107	67		621		**10000**		14000		19000		38000		--	1070		489		10000	U	--	--	39	
B-34	11/26/1997	8	NC	29000		38000		2000		12000		20000		734000		--	33000		24000		10000	U	--	--	56000	
B-34	11/26/1997	17	NC	27000		29000		1000	U	6000		16000		284000		--	23000		18000		10000	U	--	--	51000	
B-35	12/02/1997	3.5	NC	16000		23000		**10000**		37000		32000		**4430000**		--	13000		13000		10000	U	--	--	36000	
B-35	12/02/1997	11	NC	66000		72000		2000		10000		25000		**2180000**		--	58000		47000		10000	U	--	--	226000	
B-35	12/02/1997	14	NC	187000		120000		1000		8000		33000		**4430000**		--	88000		72000		10000	U	--	--	879000	
B-36	12/03/1997	5	**7240**	111000		56000		2000		22000		16000		**3710000**		--	38000		32000		10000	U	--	--	736000	
B-36	12/03/1997	9.5	**3100**	59000		46000		2000		9000		25000		**2010000**		--	44000		35000		10000	U	--	--	120000	
B-36	12/03/1997	15.5	NC	5000		6000		1000		10000		19000		147000		--	6000		4000		10000	U	--	--	16000	
B-37	12/02/1997	5	NC	64000		18000		**25000**		28000		22000		**3630000**		--	8000		19000		10000	U	--	--	13000	
B-37	12/03/1997	15.5	4.1	5	U	5	U	1000		9000		18000		10000	U	--	24		5	U	10000	U	--	--	8	
B-38	12/05/1997	3.5	**631**	677		3100		**12000**		27000		18000		--	--	--	8800		1900		--	--	--	--	705	
B-38	12/05/1997	9.5	**10000**	69000		74000		2000		12000		28000		--	--	--	63000		45000		--	--	--	--	227000	
B-38	12/05/1997	15.5	**10400**	101000		79000		2000		12000		22000		--	--	--	60000		45000		--	--	--	--	429000	
B-39	01/19/1998	6.5	NC	--	--	--	--	3000		27000		22000		--	--	--	--	--	--	--	--	--	--	--	--	--
B-39	01/19/1998	12.5	NC	--	--	--	--	2000		12000		23000		--	--	--	--	--	--	--	--	--	--	--	--	--
B-40	12/11/1997	6.5	**3400**	9000		21000		**8000**		**95000**		22000		--	--	--	23000		10000		--	--	--	--	34000	
B-40	12/11/1997	14	**18600**	188000		201000		3000		14000		17000		--	--	--	159000		112000		--	--	--	--	646000	
B-41	12/10/1997	5	**5190**	64000		69000		**11000**		**110000**		21000		--	--	--	60000		43000		--	--	--	--	213000	
B-41	12/10/1997	14	**7500**	95000		72000		1000		7000		17000		--	--	--	56000		42000		--	--	--	--	401000	
B-43	11/20/1997	3.5	12.5	682		57		**6000**		13000		13000		--	--	--	23		11		--	--	--	--	9400	
B-43	11/20/1997	9.5	NC	121000		61000		3000		11000		25000		--	--	--	36000		33000		--	--	--	--	649000	
B-44	11/20/1997	6.5	**161**	1720		1470		**6000**		13000		16000		--	--	--	2050		1120		--	--	--	--	1060	

Table A-1
LRIS Cell 1 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	2-Methyl-naphthalene	Acenaphthene	Arsenic	Chromium	Copper	Diesel-Range Organics	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	320000	4800000	5810	67000	217000	2000000	11	3200000	3200000	30000	2000000	1600000
		Soil Remediation Level	18000	NV	NV	88000	NV	NV	NV	1500	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (feet bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result	Result Q	Result Q	Result Q	Result Q	Result Q
B-44	11/20/1997	12.5	NC	40000	41000	**17000**	26000	20000	-- --	--	35000	25000	-- --	-- --	141000
B-45	11/19/1997	3.5	NC	1000 U	2000	**8000**	19000	14000	249000	--	2000	1000	**415000**	-- --	1000 U
B-45	11/19/1997	5	**274**	96	116	**7000**	18000	18000	-- --	--	327	168	-- --	-- --	53
B-45	11/19/1997	8	NC	8000	22000	**9000**	28000	17000	-- --	--	14000	16000	-- --	-- --	6000
B-46	11/19/1997	5	8.8	17	28	**8000**	18000	13000	10000 U	--	99	44	10000 U	-- --	27
B-46	11/19/1997	9.5	ND	5 U	5 U	2000	13000	22000	10000 U	--	17	5 U	10000 U	-- --	5
B-48	11/20/1997	3.5	24.5	1090	406	**9000**	17000	15000	-- --	--	266	444	-- --	-- --	8700
B-48	11/20/1997	12.5	NC	12000	7000	2000	6000	17000	-- --	--	5000	4000	-- --	-- --	53000
MW-40	07/18/2002	55	**2300**	15000	12000	900 U	19200	-- --	-- --	--	12000	8800	-- --	-- --	43000
MW-40	07/19/2002	61	45	5.6 U	66	900 U	6800	-- --	-- --	--	250	93	-- --	-- --	6.6
MW-40	07/19/2002	66	18	6.5 U	54	1100 U	8300	-- --	-- --	--	120	48	-- --	-- --	7.8
SS-9	07/17/2008	0.3	130	11.3	23.3	**8250**	-- --	-- --	-- --	**1300**	103	52.2	-- --	-- --	7.06 U

		Analyte	Pentachloro-phenol		Pyrene		Zinc	
		Unit	µg/kg		µg/kg		µg/kg	
		Soil Cleanup Level	8300		2400000		360000	
		Soil Remediation Level	1100000		NV		NV	
Sample Location	Sample Date	Depth (feet bgs)	Result	Q	Result	Q	Result	Q
B-30	12/01/1997	3.5	75		21		40000	
B-30	12/01/1997	9.5	8000		7000		86000	
B-30	12/01/1997	17	**12000**		13000		43000	
B-31	11/26/1997	3.5	240		25		30000	
B-31	11/26/1997	8	930		40		28000	
B-31	11/26/1997	15.5	**29000**		24000		38000	
B-316	11/17/2011	2	842		94.4		--	--
B-317	11/17/2011	1.25	5890		6910		--	--
B-318	11/17/2011	1.75	**13700**		483		--	--
B-319	11/17/2011	2	3260		72.7		--	--
B-32	12/05/1997	6.5	18		21		39000	
B-32	12/08/1997	14	6		--	--	38000	
B-320	11/17/2011	2.25	**52300**		1810		--	--
B-322	11/17/2011	2.5	--	--	130000		--	--
B-323	11/17/2011	1	**8380**		--	--	--	--
B-324	11/17/2011	0.5	61.5	U	19.7		--	--
B-325	11/17/2011	8.5	--	--	--	--	--	--
B-33	12/04/1997	3.5	**17000**		20000		69000	
B-33	12/04/1997	9.5	3200		1800		48000	
B-33	12/04/1997	15.5	**29000**		7000		26000	
B-34	11/26/1997	3.5	1400		765		43000	
B-34	11/26/1997	8	**29000**		25000		40000	
B-34	11/26/1997	17	**20000**		18000		25000	
B-35	12/02/1997	3.5	**23000**		9000		107000	
B-35	12/02/1997	11	**53000**		51000		42000	
B-35	12/02/1997	14	**77000**		76000		32000	
B-36	12/03/1997	5	**182000**		33000		39000	
B-36	12/03/1997	9.5	**128000**		49000		45000	
B-36	12/03/1997	15.5	**22000**		5000		35000	
B-37	12/02/1997	5	**17000**		5000		86000	
B-37	12/03/1997	15.5	41		15		40000	
B-38	12/05/1997	3.5	5000		8100		188000	
B-38	12/05/1997	9.5	**349000**		63000		126000	
B-38	12/05/1997	15.5	**296000**		57000		43000	
B-39	01/19/1998	6.5	**290000**		--	--	48000	
B-39	01/19/1998	12.5	**190000**		--	--	32000	
B-40	12/11/1997	6.5	**161000**		24000		116000	
B-40	12/11/1997	14	**554000**		156000		39000	
B-41	12/10/1997	5	**274000**		59000		**411000**	
B-41	12/10/1997	14	**242000**		54000		30000	
B-43	11/20/1997	3.5	5	U	28		58000	
B-43	11/20/1997	9.5	**34000**		37000		39000	
B-44	11/20/1997	6.5	5800		1930		43000	

		Analyte	Pentachloro-phenol		Pyrene		Zinc	
		Unit	µg/kg		µg/kg		µg/kg	
		Soil Cleanup Level	8300		2400000		360000	
		Soil Remediation Level	1100000		NV		NV	
Sample Location	Sample Date	Depth (feet bgs)	Result	Q	Result	Q	Result	Q
B-44	11/20/1997	12.5	**41000**		33000		138000	
B-45	11/19/1997	3.5	4000		1000		56000	
B-45	11/19/1997	5	**40000**		331		51000	
B-45	11/19/1997	8	**22000**		11000		49000	
B-46	11/19/1997	5	170		75		42000	
B-46	11/19/1997	9.5	33		15		40000	
B-48	11/20/1997	3.5	89		264		62000	
B-48	11/20/1997	12.5	5000		5000		30000	
MW-40	07/18/2002	55	--	--	10000		272000	
MW-40	07/19/2002	61	--	--	210		24900	
MW-40	07/19/2002	66	--	--	100		29900	
SS-9	07/17/2008	0.3	596		69.8		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-1	11/07/2000	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	240000 --
B-10	02/04/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-10	02/04/1991	10.5	ND	-- --	-- --	3 U	2.5 U	-- --	-- --	-- --	-- --	2.5 U	-- --
B-10	02/04/1991	16	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-100	07/08/1998	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-100	07/08/1998	45	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-100	07/08/1998	65	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-101	07/08/1998	10	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-101	07/08/1998	33	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-103	07/08/1998	2.5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-104	06/03/1999	5	ND	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-104	06/03/1999	10	ND	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-104	06/03/1999	25	ND	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-105	06/03/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-105	06/03/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-105	06/03/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-106	06/04/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-106	06/04/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-107	06/04/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-107	06/04/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-107	06/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-107	06/07/1999	45	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-108	06/07/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-108	06/07/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-109	06/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-109	06/08/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-109	06/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-109	06/08/1999	40	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-11	02/04/1991	3	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-11	02/04/1991	13.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-110	06/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-110	06/08/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-110	06/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-110	06/08/1999	43	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-111	06/10/1999	30	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-112	06/10/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-112	06/10/1999	30	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-113	06/11/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-114	06/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-114	06/11/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-114	06/14/1999	30	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-115	06/14/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-115	06/14/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-116	06/14/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-116	06/15/1999	40	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-116	06/15/1999	95	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-117	06/15/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-117	06/15/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-117	06/16/1999	65	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-117	06/16/1999	90	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-119	06/17/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-119	06/17/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-119	06/17/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-12	02/05/1991	3	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-12	02/05/1991	13	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-13	02/05/1991	15.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-139	10/04/1999	2.5	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-139	10/04/1999	5	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-139	10/04/1999	20	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-14	02/05/1991	8	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-14	02/05/1991	13	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-140	10/06/1999	10	ND	-- --	-- --	1300	410	**14000**	-- --	29000	27000	130	10000 U
B-147	10/08/1999	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-149	10/08/1999	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-15	02/05/1991	3	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-15	02/05/1991	15.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-153	10/11/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-153	10/11/1999	10	ND	100 U	400 U	12	76	**8000**	-- --	31000	20000	21	10000 U
B-155	10/12/1999	5	30	200 U	800 U	730	640	**6000**	-- --	22000	21000	10 U	10000 U
B-155	10/12/1999	9	ND	200 U	800 U	18	22	**6000**	-- --	43000	28000	10	10000 U
B-160	10/13/1999	10	ND	5 U	20 U	40	140	-- --	-- --	-- --	-- --	11 --	10000 U
B-161	10/13/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-162	10/13/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-165	10/13/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-167	10/14/1999	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-170	10/15/1999	7.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-18	05/03/1993	5	--	-- --	-- --	-- --	-- --	4600	-- --	16000	20100	-- --	-- --
B-18	05/03/1993	15	--	-- --	-- --	-- --	-- --	3700	-- --	25100	16800	-- --	-- --
B-18	05/03/1993	25	--	-- --	-- --	-- --	-- --	2700	-- --	16900	17400	-- --	-- --
B-187	10/21/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-188	10/21/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-188	10/21/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-189	10/22/1999	2.5	--	100 U	400 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-189	10/22/1999	12	--	2000 U	2000 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-19	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-190	10/25/1999	2.5	--	50 U	200 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-190	10/25/1999	5	--	50 U	200 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-190	10/25/1999	10	--	50 U	200 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-191	10/25/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-191	10/25/1999	5	ND	-- --	-- --	10 U	10 U	2000	-- --	9000	5000	10 U	10000 U
B-192	10/25/1999	2.5	ND	-- --	-- --	10 U	10 U	2000	-- --	13000	5000	10 U	-- --
B-192	10/25/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-193	10/25/1999	2.5	23	-- --	-- --	79	180	2000	-- --	11000	17000	120	840000
B-193	10/25/1999	5	**270**	-- --	-- --	54	360	**14000**	-- --	31000	20000	160	920000
B-193	10/25/1999	10	ND	-- --	-- --	10 U	10 U	2000	-- --	22000	24000	10 U	10000 U
B-194	10/25/1999	2.5	120	-- --	-- --	2600	1900	**7000**	-- --	23000	16000	1000	10000 U
B-194	10/25/1999	5	19	-- --	-- --	42	11	3000	-- --	22000	24000	10 U	10000 U
B-194	10/25/1999	10	**370**	-- --	-- --	3600	3600	3000	-- --	31000	27000	2100	10000 U
B-195	10/26/1999	2.5	**1300**	-- --	-- --	130	370	**33000**	-- --	**129000**	53000	200	890000
B-195	10/26/1999	5	59	-- --	-- --	10 U	10 U	4000	-- --	25000	8000	10 U	230000
B-195	10/26/1999	10	7.6	-- --	-- --	10 U	45	4000	-- --	29000	34000	10 U	10000 U
B-196	10/26/1999	3	ND	-- --	-- --	10 U	10 U	1000 U	-- --	2000	11000	10 U	10000 U
B-196	10/26/1999	9	34	-- --	-- --	770	260	2000	-- --	19000	22000	120	460000
B-197	10/26/1999	2.5	43	5 U	20 U	10 U	15	**13000**	-- --	18000	31000	10 U	10000 U
B-197	10/26/1999	5	9.4	-- --	-- --	10 U	10 U	4000	-- --	18000	13000	10 U	32000
B-197	10/26/1999	10	ND	5 U	20 U	10 U	10 U	5000	-- --	29000	30000	10 U	10000 U
B-198	10/27/1999	2.5	ND	5 U	20 U	11	10 U	3000	-- --	9000	5000	10 U	160000
B-198	10/27/1999	5	ND	5 U	20 U	10 U	10 U	2000	-- --	9000	6000	10 U	10000 U

Table A-2
LRIS Cell 2 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-199	10/27/1999	2.5	ND	-- --	-- --	10 U	10 U	3000	-- --	10000	7000	10 U	10000 U
B-199	10/27/1999	5	ND	-- --	-- --	10 U	10 U	3000	-- --	8000	8000	10 U	10000 U
B-199	10/27/1999	10	ND	5 U	20 U	10 U	10 U	**7000**	-- --	17000	13000	10 U	10000 U
B-199	10/27/1999	15	ND	5 U	20 U	10 U	10 U	5000	-- --	15000	20000	10 U	10000 U
B-2	11/07/2000	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	150000 --
B-20	05/03/1993	5	--	-- --	-- --	-- --	-- --	**7900**	-- --	15700	30000	-- --	-- --
B-20	05/03/1993	20	**9200**	-- --	-- --	130000	200000	3100	-- --	7400	16500	110000	-- --
B-21	04/02/1996	26	**630**	-- --	-- --	1200	2900	-- --	-- --	-- --	-- --	1500	-- --
B-21	04/02/1996	31	--	-- --	-- --	-- --	-- --	1600	76100	-- --	17000	-- --	-- --
B-22	04/02/1996	21	**140**	-- --	-- --	140	800	-- --	-- --	-- --	-- --	340	-- --
B-22	04/02/1996	49	NC	-- --	-- --	180 U	180 U	-- --	-- --	-- --	-- --	360 U	-- --
B-23	04/02/1996	16	NC	-- --	-- --	220 U	220 U	-- --	-- --	-- --	-- --	440 U	-- --
B-23	04/02/1996	21	--	-- --	-- --	-- --	-- --	2000	**175000** --	-- --	23300	-- --	-- --
B-24	04/02/1996	26	--	-- --	-- --	-- --	-- --	3500	**178000** --	-- --	24500	-- --	-- --
B-25	04/02/1996	11	--	-- --	-- --	-- --	-- --	**24500**	**174000** --	-- --	24200	-- --	-- --
B-26	04/02/1996	8.5	--	-- --	-- --	-- --	-- --	1800	64000 --	-- --	8700 U	-- --	-- --
B-200	10/27/1999	2.5	ND	-- --	-- --	10 U	10 U	4000	-- --	12000	8000	10 U	10000 U
B-200	10/27/1999	5	ND	5 U	20 U	10 U	10 U	3000	-- --	10000	6000	10 U	10000 U
B-201	10/28/1999	2.5	ND	-- --	-- --	24 --	11	**8000**	-- --	12000	10000	10 U	10000 U
B-201	10/28/1999	5	ND	-- --	-- --	10 U	10 U	3000	-- --	10000	6000	10 U	10000 U
B-201	10/28/1999	10	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-201	10/28/1999	15	**270**	-- --	-- --	25000	9400	**7000**	-- --	34000	30000	5000	10000 U
B-201	10/28/1999	20	ND	-- --	-- --	31	300	4000	-- --	17000	24000	290	10000 U
B-202	10/28/1999	2.5	ND	-- --	-- --	10 U	10 U	**8000**	-- --	18000	7000	10 U	10000 U
B-202	10/28/1999	5	ND	5 U	20 U	10 U	10 U	3000	-- --	12000	8000	10 U	10000 U
B-202	10/28/1999	15	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-203	10/28/1999	2.5	ND	-- --	-- --	10 U	10 U	4000	-- --	12000	7000	10 U	10000 U
B-203	10/28/1999	5	ND	-- --	-- --	10 U	10 U	2000	-- --	9000	6000	10 U	10000 U
B-203	10/28/1999	10	**800**	-- --	-- --	940	1100	4000	-- --	23000	12000	450 --	560000 --
B-221	11/09/1999	2.5	9.7	-- --	-- --	10 U	10 U	5000	-- --	19000	24000	10 U	10000 U
B-221	11/09/1999	7.5	7.6	-- --	-- --	10 U	45 --	3000	-- --	15000	21000	19	10000 U
B-222	11/10/1999	2.5	**1600**	-- --	-- --	4300	19000	-- --	-- --	-- --	-- --	12000	10000 U
B-222	11/10/1999	5	**160**	-- --	-- --	510	1400	3000	-- --	15000	17000	860	10000 U
B-222	11/10/1999	10	ND	-- --	-- --	10 U	64	5000	-- --	25000	24000	10 U	10000 U
B-223	11/10/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-223	11/10/1999	5	ND	-- --	-- --	10 U	10 U	3000	-- --	17000	18000	10 U	29000 --

Table A-2
LRIS Cell 2 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-223	11/10/1999	10	ND	-- --	-- --	10 U	28 --	5000	-- --	22000	24000	10 U	10000 U
B-224	11/10/1999	2.5	8.6	-- --	-- --	10 U	10 U	**11000**	-- --	24000	27000	10 U	10000 U
B-224	11/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-224	11/10/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-225	11/10/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-225	11/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-226	11/11/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-226	11/11/1999	5	--	-- --	-- --	-- --	-- --	2000	-- --	11000	6000	-- --	10000 U
B-226	11/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-227	11/11/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-227	11/11/1999	5	--	-- --	-- --	-- --	-- --	3000	-- --	23000	21000	-- --	10000 U
B-228	11/11/1999	5	--	-- --	-- --	-- --	-- --	1000	-- --	8000	5000	-- --	10000 U
B-229	11/11/1999	2.5	--	-- --	-- --	-- --	-- --	4000	-- --	20000	20000	-- --	10000 U
B-229	11/11/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-229	11/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-230	11/12/1999	2.5	9.8	-- --	-- --	97	20	2000	-- --	10000	5000	31	60000
B-230	11/12/1999	5	ND	-- --	-- --	10 U	10 U	-- --	-- --	-- --	-- --	10 U	10000 U
B-231	11/12/1999	2.5	ND	-- --	-- --	10 U	10 U	-- --	-- --	-- --	-- --	10 U	10000 U
B-231	11/12/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-231	11/12/1999	7	33	5 U	20 U	180	65	2000 U	-- --	11000	7000	42	110000
B-232	12/07/1999	5	--	6.5 U	26 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-232	12/07/1999	25	--	6.6 U	27 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-233	12/07/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-233	12/07/1999	15	ND	-- --	-- --	150	1100	**7000**	-- --	29000	30000	930	10000 U
B-233	12/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-234	12/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-235	12/08/1999	25	ND	-- --	-- --	360	64	**6000**	-- --	23000	26000	40	10000 U
B-236	12/08/1999	10	8.9	-- --	-- --	400	340	**35000**	-- --	35000	27000	180	148000
B-236	12/08/1999	15	7.7	-- --	-- --	950	710	2000	-- --	28000	27000	500	10000 U
B-236	12/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-237	12/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-237	12/08/1999	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-237	12/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-238	12/09/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-239	12/09/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-240	12/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-240	12/10/1999	15	10.8	-- --	-- --	28	650	**6000**	-- --	25000	25000	560 --	10000 U
B-240	12/10/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-241	12/10/1999	5	68	-- --	-- --	1500	1000	**9000**	-- --	39000	22000	480	120000
B-241	12/10/1999	15	9.4	-- --	-- --	1800	940	5000	-- --	24000	25000	800	10000 U
B-241	12/10/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-242	12/13/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-243	12/14/1999	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-244	12/15/1999	25	--	5.5 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-244	12/15/1999	30	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-244	12/15/1999	35	ND	5.3 U	21 U	10 U	10 U	-- --	-- --	-- --	-- --	10 U	10000 U
B-245	12/15/1999	15	ND	-- --	-- --	10 U	10 U	-- --	-- --	-- --	-- --	10 U	**5230000**
B-245	12/15/1999	30	19.8	-- --	-- --	55	110	-- --	-- --	-- --	-- --	110	10000 U
B-246	12/16/1999	5	ND	5.4 U	22 U	10 U	10 U	-- --	-- --	-- --	-- --	10 U	10000 U
B-246	12/16/1999	10	--	5.2 U	21 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-246	12/16/1999	20	--	5.6 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-247	12/17/1999	2.5	--	5.9 U	24 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-247	12/17/1999	5	--	5.6 U	23 U	-- --	-- --	4000	-- --	15000	20000	-- --	10000 U
B-247	12/17/1999	16	--	5.5 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-248	12/20/1999	2.5	--	4.5 U	18 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-248	12/20/1999	15	--	5.2 U	21 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-248	12/20/1999	25	--	5.3 U	21 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-249	12/20/1999	2.5	--	5.4 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-249	12/20/1999	20	--	5.7 U	23 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-249	12/20/1999	25	--	5 U	20 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-250	12/21/1999	20	9.2	5.4 U	21 U	10 U	10	**7000**	-- --	18000	27000	29	10000 U
B-250	12/21/1999	25	ND	5.5 U	22 U	14	53	3000	-- --	11000	17000	79	10000 U
B-250	12/21/1999	35	31.15	5.9 U	24 U	10 U	200	2000 U	-- --	9000	14000	140	10000 U
B-251	12/22/1999	2.5	--	6.1 U	25 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-251	12/22/1999	10	--	5.6 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-251	12/22/1999	25	--	5.5 U	22 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-252	12/22/1999	15	ND	-- --	-- --	10 U	10 U	3000	-- --	28000	30000	10 U	10000 U
B-252	12/22/1999	20	ND	-- --	-- --	10 U	10 U	2000	-- --	27000	31000	10 U	10000 U
B-252	12/22/1999	25	ND	-- --	-- --	10 U	10 U	3000	-- --	30000	34000	10 U	10000 U
B-253	12/23/1999	25	64	-- --	-- --	990	630	5000	-- --	27000	36000	290	10000 U
B-255	01/14/2000	10	**2400**	-- --	-- --	52000	19000	**20000**	-- --	14000	14000	9300	10000 U
B-255	01/14/2000	15	ND	-- --	-- --	34	16	4000	-- --	26000	33000	10 U	10000 U

Table A-2
LRIS Cell 2 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-255	01/14/2000	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-256	01/14/2000	5	ND	-- --	-- --	10 U	10 U	4000	-- --	21000	17000	10 U	10000 U
B-256	01/14/2000	10	ND	-- --	-- --	10	64 --	5000	-- --	25000	37000	22	10000 U
B-256	01/14/2000	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-261	01/20/2000	10	ND	-- --	-- --	10 U	10 U	2000	-- --	12000	17000	10 U	10000 U
B-261	01/20/2000	15	110	-- --	-- --	1000	970	2000	-- --	13000	18000	650	10000 U
B-261	01/20/2000	30	ND	-- --	-- --	10 U	10 U	1000	-- --	7000	15000	10 U	10000 U
B-264	08/17/2001	2.5	11	-- --	-- --	52	14 U	4900	-- --	25400	21800	14 U	16000
B-264	08/17/2001	10	ND	-- --	-- --	13 U	13 U	2200	-- --	21900	20600	13 U	20000
B-265	08/17/2001	5	ND	-- --	-- --	13 U	13 U	2500	-- --	24500	18500	13 U	12000 U
B-266	08/17/2001	5	ND	-- --	-- --	16 U	21	5300	-- --	22400	23400	16 U	16000 U
B-272	08/17/2001	5	54	-- --	-- --	700	1000	**14400**	-- --	45500	11800	330	130000
B-273	08/20/2001	5	33	-- --	-- --	950	580	3800	-- --	26000	27400	280	22000
B-274	08/20/2001	5	12	-- --	-- --	14 U	18	2600	-- --	19900	17100	14 U	14000 U
B-3	11/07/2000	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	240000
B-302	09/23/2005	20	NC	-- --	-- --	50.5 U	96 U	-- --	-- --	-- --	-- --	53 U	-- --
B-303	09/26/2005	20	NC	-- --	-- --	36 U	233 U	-- --	-- --	-- --	-- --	908 U	-- --
B-304	06/12/2008	10	**2570**	57.1 U	57.1 U	152 U	4950	**38200**	-- --	**68700**	24300	629	**11800000**
B-304	06/12/2008	19.5	ND	13.7 U	13.7 U	45.6 U	181	2280 U	-- --	21000	16800	71.1	25300
B-305	06/12/2008	10	ND	69.4 U	69.4 U	46.3 U	46.3 U	2310 U	-- --	17800	45800	46.3 U	38800
B-305	06/12/2008	19	ND	13.8 U	13.8 U	93.7	407	2550 U	-- --	34100	22800	227 --	29200
B-306	03/11/2009	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-306	03/11/2009	18	**5810**	-- --	-- --	-- --	541	2750	-- --	18200	24300	-- --	-- --
B-313	05/21/2009	2.5	ND	-- --	-- --	35.3 U	35.3 U	1530	-- --	7730	2740	35.3 U	15900 U
B-313	05/21/2009	5	ND	-- --	-- --	35.8 U	35.8 U	1560	-- --	8050	3060	35.8 U	-- --
B-313	05/21/2009	10	ND	-- --	-- --	43 U	43 U	2220	-- --	12600	9530	43 U	19400 U
B-313	05/21/2009	15	ND	-- --	-- --	44.3 U	44.3 U	3570	-- --	21100	16800	44.3 U	19900 U
B-321	11/17/2011	2	**225**	-- --	-- --	342	1300	4020	-- --	-- --	-- --	-- --	-- --
B-325	11/17/2011	10	7	-- --	-- --	8.02 U	8.02 U	-- --	-- --	-- --	-- --	-- --	-- --
B-326	11/17/2011	4.5	--	-- --	-- --	-- --	-- --	**17800**	-- --	-- --	-- --	-- --	-- --
B-42	12/09/1997	8	**424**	-- --	-- --	87	1290	3000	-- --	12000	28000	733 --	-- --
B-42	12/09/1997	12.5	--	-- --	-- --	-- --	-- --	1000	-- --	9000	18000	-- --	10000 U
B-42	12/09/1997	15.5	**2300**	-- --	-- --	21000 --	15000	1000	-- --	10000	23000	10000 --	-- --
B-47	11/18/1997	3.5	NC	-- --	-- --	1000 U	1000 U	**6000**	-- --	14000	15000	1000 U	-- --
B-47	11/18/1997	9.5	ND	-- --	-- --	5 U	5 U	2000	-- --	8000	32000	5 U	-- --
B-47	11/18/1997	15.5	**1100**	-- --	-- --	29000	32000	2000	-- --	11000	26000	24000	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-49	11/25/1997	5	ND	-- --	-- --	1000 U	1000 U	**7000**	-- --	16000	11000	1000 U	-- --
B-49	11/25/1997	9.5	NC	-- --	-- --	16000	9000	4000	-- --	8000	22000	6000	-- --
B-50	11/21/1997	3.5	NC	-- --	-- --	1000 U	1000 U	**15000**	-- --	22000	14000	1000 U	-- --
B-50	11/21/1997	8	7.2	-- --	-- --	14	11	5000	-- --	11000	24000	10	-- --
B-51	11/24/1997	3.5	NC	-- --	-- --	10000	23000	**7000**	-- --	16000	14000	14000	-- --
B-51	11/24/1997	9.5	ND	-- --	-- --	-- --	100 U	5000	-- --	16000	30000	-- --	10000 U
B-52	11/20/1997	3.5	122	-- --	-- --	174	136	**101000**	-- --	37000	20000	116	-- --
B-52	11/20/1997	9.5	NC	-- --	-- --	98000	68000	3000	-- --	7000	19000	51000	-- --
B-53	01/14/1998	9.5	ND	-- --	-- --	5 U	5 U	4000	-- --	14000	30000	5 U	-- --
B-53	01/14/1998	15.5	115	-- --	-- --	115	224	2000	-- --	10000	39000	158	-- --
B-54	01/14/1998	8	134	-- --	-- --	5 U	119	**7000**	-- --	22000	18000	131	-- --
B-54	01/14/1998	15.5	NC	-- --	-- --	1000 U	1000 U	1000	-- --	9000	16000	1000 U	-- --
B-55	01/15/1998	8	4.4	-- --	-- --	35	69	**6000**	-- --	20000	14000	66	-- --
B-55	01/15/1998	17	NC	-- --	-- --	7000	5000	4000	-- --	12000	14000	3000	-- --
B-56	01/15/1998	6.5	4.1	-- --	-- --	72	16	**8000**	-- --	20000	13000	5 U	-- --
B-56	01/15/1998	12.5	NC	-- --	-- --	3000	3000	3000	-- --	8000	22000	2000	-- --
B-57	01/16/1998	8	ND	-- --	-- --	5 U	5 U	**8000**	-- --	20000	15000	5 U	-- --
B-57	01/16/1998	14	NC	-- --	-- --	14000	18000	2000	-- --	13000	24000	14000	-- --
B-58	01/16/1998	6.5	4.4	-- --	-- --	5 U	5 U	2000	-- --	12000	21000	5 U	-- --
B-58	01/16/1998	14	NC	-- --	-- --	7000	14000	2000	-- --	14000	21000	10000	-- --
B-58A	06/12/1998	5	19	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-58A	06/12/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-6	02/04/1991	33	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-62	06/12/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-62	06/12/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-63	06/12/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-63	06/12/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-66	06/12/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-66	06/12/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-69	06/16/1998	0.5	**1700**	-- --	-- --	5 U	10 U	**19000**	-- --	26000	33000	5 U	10000 U
B-69	06/16/1998	2.5	ND	-- --	-- --	5 U	10 U	4000	-- --	19000	19000	5 U	10000 U
B-69	06/16/1998	5	ND	-- --	-- --	5 U	10 U	4000	-- --	18000	24000	5 U	10000 U
B-69	06/16/1998	10	ND	-- --	-- --	5 U	10 U	1000	-- --	8000	19000	5 U	10000 U
B-69	06/16/1998	17	ND	-- --	-- --	5 U	10 U	2000	-- --	8000	17000	5 U	10000 U
B-7	02/04/1991	5.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-7	02/04/1991	13.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-72	06/17/1998	0.5	**7000**	-- --	-- --	120000	170000	**22000**	-- --	36000	50000	88000	-- --
B-72	06/17/1998	5	20	-- --	-- --	5 U	26	3000	-- --	15000	16000	31	-- --
B-72	06/17/1998	10	31	-- --	-- --	5 U	10	2000	-- --	16000	25000	12	-- --
B-72	06/17/1998	17	ND	-- --	-- --	5 U	10 U	2000	-- --	8000	19000	5 U	-- --
B-73	06/17/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-74	06/17/1998	2.5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-74	06/17/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-75	06/17/1998	2.5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-75	06/17/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-76	06/17/1998	10	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-76	06/17/1998	27	31	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-77	06/17/1998	2.5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-77	06/17/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-77	06/17/1998	17	**9700**	-- --	-- --	130000	83000	-- --	-- --	-- --	-- --	46000	-- --
B-78	06/18/1998	0.5	**4800**	-- --	-- --	1100	13000	-- --	-- --	-- --	-- --	4600	-- --
B-78	06/18/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-79	06/18/1998	2.5	ND	-- --	-- --	3300	700	-- --	-- --	-- --	-- --	190	-- --
B-79	06/18/1998	10	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-79	06/18/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-80	06/19/1998	2.5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-80	06/19/1998	15	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-80	06/19/1998	25	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-81	06/19/1998	2.5	ND	-- --	-- --	40	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-82	06/19/1998	10	7.6	-- --	-- --	17	31	-- --	-- --	-- --	-- --	15	-- --
B-82	06/19/1998	20	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-83	06/23/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-83	06/23/1998	17	**2600**	-- --	-- --	100000	42000	-- --	-- --	-- --	-- --	24000	-- --
B-84	06/23/1998	10	28	-- --	-- --	190	380	-- --	-- --	-- --	-- --	200	-- --
B-84	06/23/1998	35	ND	-- --	-- --	14	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-85	06/23/1998	5	**160**	-- --	-- --	370	97	-- --	-- --	-- --	-- --	77	-- --
B-86	06/23/1998	5	ND	-- --	-- --	59	29	-- --	-- --	-- --	-- --	20	-- --
B-86	06/23/1998	15	**7500**	-- --	-- --	190000	89000	-- --	-- --	-- --	-- --	53000	-- --
B-87	06/23/1998	5	ND	-- --	-- --	34	10 U	-- --	-- --	-- --	-- --	6	-- --
B-87	06/23/1998	15	**140**	-- --	-- --	1500	1500	-- --	-- --	-- --	-- --	950	-- --
B-88	06/23/1998	5	ND	-- --	-- --	24	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-88	06/23/1998	15	8.4	-- --	-- --	24	21	-- --	-- --	-- --	-- --	13	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-89	06/23/1998	5	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-89	06/23/1998	15	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-90	06/23/1998	0.5	**3000**	-- --	-- --	380	2500	-- --	-- --	-- --	-- --	1000	-- --
B-90	06/23/1998	17.5	9.6	-- --	-- --	5 U	22	-- --	-- --	-- --	-- --	19	-- --
B-91	06/23/1998	0.5	**200**	-- --	-- --	960	85	-- --	-- --	-- --	-- --	110	-- --
B-91	06/23/1998	15	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-92	06/23/1998	10	ND	-- --	-- --	5 U	150	-- --	-- --	-- --	-- --	5 U	-- --
B-92	06/23/1998	30	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-93	06/24/1998	25	33	-- --	-- --	350	470	-- --	-- --	-- --	-- --	200	-- --
B-93	06/24/1998	40	42	-- --	-- --	220	220	-- --	-- --	-- --	-- --	110	-- --
B-94	06/24/1998	10	**200**	-- --	-- --	9400	4900	-- --	-- --	-- --	-- --	1800	-- --
B-94	06/24/1998	35	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-95	06/24/1998	25	ND	-- --	-- --	60	37	-- --	-- --	-- --	-- --	19	-- --
B-95	06/24/1998	32.5	ND	-- --	-- --	10	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-96	07/08/1998	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-96	07/08/1998	30	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-97	07/08/1998	2.5	ND	-- --	-- --	7	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-97	07/08/1998	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	**2088000**
B-98	07/08/1998	17	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-99	07/08/1998	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	10000 U
B-99	07/08/1998	45	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
B-99	07/08/1998	64	ND	-- --	-- --	5 U	10 U	-- --	-- --	-- --	-- --	5 U	-- --
DS-E	06/18/1997	0	ND	-- --	-- --	300 U	300 U	**10000**	-- --	24000	34000	300 U	10000 U
DS-W	06/18/1997	0	ND	-- --	-- --	300 U	300 U	**40000**	-- --	54000	38000	300 U	10000 U
GP10	05/20/2009	1.5	ND	-- --	-- --	38.7 U	38.7 U	4320	-- --	13500	14400	38.7 U	469000
GP10	05/20/2009	10	ND	-- --	-- --	45.3 U	45.3 U	2260	-- --	19200	18400	45.3 U	20400 U
GP10	05/20/2009	15	ND	-- --	-- --	44.7 U	44.7 U	2990	-- --	17000	14900	44.7 U	20100 U
GP11	05/21/2009	1.5	ND	-- --	-- --	38.2 U	38.2 U	**6880**	-- --	13000	4420	38.2 U	128000
GP11	05/21/2009	5	ND	-- --	-- --	42.2 U	42.2 U	2300	-- --	23800	17700	42.2 U	19000 U
GP11	05/21/2009	10	ND	-- --	-- --	45.5 U	45.5 U	3680	-- --	21400	17000	45.5 U	20500 U
GP11	05/21/2009	15	ND	-- --	-- --	43.9 U	43.9 U	3380	-- --	25000	17100	43.9 U	19800 U
GP8	05/22/2009	1.4	ND	-- --	-- --	175 U	175 U	2570	-- --	11300	8000	175 U	118000
GP8	05/22/2009	5	ND	-- --	-- --	129	145	1360	-- --	13500	9380	82.7	17600 U
GP8	05/22/2009	11	ND	-- --	-- --	210 U	210 U	**13100**	-- --	38100	30800	210 U	189000 U
GP8	05/22/2009	15	ND	-- --	-- --	117	94.6	3310	-- --	25600	17300	71.4	21300 U
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-13	05/03/1993	5	--	-- --	-- --	-- --	-- --	1800	-- --	6400	3700	-- --	-- --
MW-13	05/03/1993	15	--	-- --	-- --	-- --	-- --	5600	-- --	10200	20000 U	-- --	-- --
MW-13	05/03/1993	20	--	-- --	-- --	-- --	-- --	2500	-- --	9200	16400	-- --	-- --
MW-14	05/03/1993	5	--	-- --	-- --	-- --	-- --	4200	-- --	14600	19100	-- --	-- --
MW-14	05/03/1993	20	--	-- --	-- --	-- --	-- --	4000	-- --	27600	17000	-- --	-- --
MW-15	05/03/1993	10	--	-- --	-- --	-- --	-- --	2200	-- --	11100	7300	-- --	-- --
MW-15	05/03/1993	20	--	-- --	-- --	-- --	-- --	5100	-- --	22300	22700	-- --	-- --
MW-17	05/03/1993	5	--	-- --	-- --	-- --	-- --	4900	-- --	17400	11700	-- --	-- --
MW-17	05/03/1993	12.5	--	-- --	-- --	-- --	-- --	5400	-- --	19500	21700	-- --	-- --
MW-22	05/03/1993	10	--	-- --	-- --	-- --	-- --	3600	-- --	25300	16300	-- --	-- --
MW-22	05/03/1993	15	--	-- --	-- --	-- --	-- --	3000	-- --	24300	12300	-- --	-- --
MW-24	04/02/1996	0.5	**370**	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-24	04/02/1996	11	**1300**	-- --	-- --	33000	22000	**11900**	**135000**	14000	16100	13000	-- --
MW-24	04/02/1996	21	**4700**	-- --	-- --	64000	51000	-- --	-- --	-- --	-- --	30000	-- --
MW-25	04/02/1996	3	**170**	-- --	-- --	370 U	120	-- --	-- --	-- --	-- --	50	-- --
MW-25	04/02/1996	36	--	-- --	-- --	-- --	-- --	2100	69500	11600	18000	-- --	-- --
MW-26	04/02/1996	21	**1000**	-- --	-- --	15000	17000	-- --	-- --	-- --	-- --	9100	-- --
MW-27	04/02/1996	6	--	-- --	-- --	-- --	-- --	**6800**	**137000**	16500	18800	-- --	-- --
MW-31	04/02/1996	16	--	-- --	-- --	-- --	-- --	**14300**	100000	15200	12100	-- --	-- --
MW-31	04/02/1996	21	81	-- --	-- --	-- --	150 --	-- --	-- --	-- --	-- --	73	-- --
MW-31	04/02/1996	26	90	-- --	-- --	-- --	430 U	-- --	-- --	-- --	-- --	430 U	-- --
MW-31	04/02/1996	31	ND	-- --	-- --	-- --	420 U	-- --	-- --	-- --	-- --	420 U	-- --
MW-55	06/10/2008	10	ND	13.7 U	13.7 U	45.7 U	45.7 U	2740	-- --	18300	16000	45.7 U	26300
MW-55	06/10/2008	20	ND	14.1 U	14.1 U	46.9 U	163	2600 U	-- --	32400	24000	76.9	37000
MW-58D	06/18/2008	10	ND	10.9 U	10.9 U	36.3 U	36.3 U	**15000**	-- --	27000	18800	36.3 U	33300
MW-58D	06/18/2008	13.5	ND	14.9 U	14.9 U	103	512	4470	-- --	23500	32500	50.2	74900
NPY-03	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
NPY-04	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SS-01	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SS-13	02/26/2009	0.5	ND	-- --	-- --	-- --	7.1 U	2590	-- --	16100	5410	-- --	-- --
SS-15	02/26/2009	0.5	ND	-- --	-- --	-- --	7.87 U	**8320**	-- --	18100	13400	-- --	-- --
SS-16	02/26/2009	0.5	11	-- --	-- --	-- --	8 U	**22900**	-- --	46700	30700	-- --	-- --

		Analyte	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,2,4-Trimethyl-benzene	2-Methyl-naphthalene	Acenaphthene	Arsenic	Barium	Chromium	Copper	Dibenzofuran	Diesel-Range Organics
		Unit	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	140	5000	4000000	320000	4800000	5810	102000	67000	217000	160000	2000000
		Soil Remediation Level	18000	NV	NV	NV	NV	88000	NV	NV	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
SS-17	02/26/2009	0.5	ND	-- --	-- --	-- --	7.46 U	1630	-- --	11400	10100	-- --	-- --
SS-18	02/26/2009	0.5	5.65	-- --	-- --	-- --	7.49 U	2440	-- --	21200	10200	-- --	-- --
SS-19	02/26/2009	0.5	**2240**	-- --	-- --	-- --	44.3	**39500**	-- --	57400	51700	-- --	-- --
SS-2	04/02/1996	8.5	--	-- --	-- --	-- --	-- --	5300	**165000**	14900	20200	-- --	-- --
TP-02	05/03/1993	0.2	--	-- --	-- --	-- --	-- --	**6200**	-- --	10400	35000	-- --	-- --
TP-02	05/03/1993	5	--	-- --	-- --	-- --	-- --	**8000**	-- --	18000	10800	-- --	-- --
TP-02	05/03/1993	9	--	-- --	-- --	-- --	-- --	**7100**	-- --	23000	11000	-- --	-- --
TP-03	05/03/1993	10	--	-- --	-- --	-- --	-- --	2200	-- --	8300	4400	-- --	-- --
TP-04	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	2400	-- --	13200	21800	-- --	-- --
TP-04	05/03/1993	5	--	-- --	-- --	-- --	-- --	1200	-- --	450	320	-- --	-- --
TP-04	05/03/1993	10	--	-- --	-- --	-- --	-- --	500	-- --	8900	5900	-- --	-- --
TP-05	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	**11300**	-- --	24500	4000	-- --	-- --
TP-05	05/03/1993	8	--	-- --	-- --	-- --	-- --	2200	-- --	16900	7500	-- --	-- --
TP-06	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	3700	-- --	10900	4200	-- --	-- --
TP-06	05/03/1993	3	--	-- --	-- --	670 U	670 U	**13100**	-- --	26100	6600	670 U	-- --
TP-06	05/03/1993	10	--	-- --	-- --	-- --	-- --	2500	-- --	20900	10300	-- --	-- --
TP-09	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	**79600**	-- --	52500	54600	-- --	-- --
TP-09	05/03/1993	4	--	-- --	-- --	300 U	300 U	4800	-- --	14600	12100	300 U	-- --
TP-09	05/03/1993	9	--	**14000**	-- --	86000	57000	**61000**	-- --	**123000**	16200	33000	-- --
TP-11	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	**78000**	-- --	**69500**	56500	-- --	-- --
TP-11	05/03/1993	10	--	-- --	-- --	-- --	-- --	4700	-- --	17800	18600	-- --	-- --
TP-12	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	2400	-- --	15000	11600 --	-- --	-- --
TP-12	05/03/1993	3	--	-- --	-- --	130000	67000 U	-- --	-- --	-- --	-- --	67000 U	-- --
TP-12	05/03/1993	6.5	--	-- --	-- --	2400	2600	**6900**	-- --	16300	11300	1700 U	-- --
TP-13	05/03/1993	5.5	--	-- --	-- --	-- --	-- --	**32700**	-- --	9000	9200	-- --	-- --
TP-13	05/03/1993	7.5	--	5 U	-- --	-- --	-- --	**10600**	-- --	14800	17000	-- --	-- --
TP-14	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	**50100**	-- --	55400	32200	-- --	-- --
TP-14	05/03/1993	5	--	-- --	-- --	-- --	-- --	2800	-- --	9100	5200	-- --	-- --
TP-15	05/03/1993	0.2	--	-- --	-- --	-- --	-- --	**22000**	-- --	34100	29600	-- --	-- --
TP-15	05/03/1993	6	--	-- --	-- --	-- --	-- --	**51500**	-- --	12100	7500	-- --	-- --
TP-16	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	**41200**	-- --	40700	55100	-- --	-- --
TP-16	05/03/1993	7	--	-- --	-- --	-- --	-- --	**7600**	-- --	11100	11100	-- --	-- --
TP-27	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-28	05/03/1993	7	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-28	05/03/1993	9.5	--	5000 U	-- --	**340000**	250000	-- --	-- --	-- --	-- --	140000	-- --
TP-32	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-1	11/07/2000	0	--	-- --	-- --	20000 U	1200000 --	-- --	-- --	-- --	-- --	-- --
B-10	02/04/1991	0	--	-- --	-- --	-- --	-- --	-- --	**15000**	-- --	-- --	-- --
B-10	02/04/1991	10.5	--	2.5 U	2.5 U	-- --	-- --	2.5 U	**17000**	2.5 U	-- --	-- --
B-10	02/04/1991	16	--	-- --	-- --	-- --	-- --	-- --	7700	-- --	-- --	-- --
B-100	07/08/1998	15	--	-- --	-- --	10000 U	25000 U	-- --	-- --	-- --	-- --	-- --
B-100	07/08/1998	45	--	10 U	10 U	-- --	-- --	9	100 U	10 U	-- --	-- --
B-100	07/08/1998	65	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-101	07/08/1998	10	--	10 U	10 U	-- --	-- --	9	100 U	10 U	-- --	-- --
B-101	07/08/1998	33	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-103	07/08/1998	2.5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-104	06/03/1999	5	--	-- --	-- --	-- --	-- --	-- --	8	-- --	-- --	-- --
B-104	06/03/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-104	06/03/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-105	06/03/1999	5	--	-- --	-- --	-- --	-- --	-- --	120	-- --	-- --	-- --
B-105	06/03/1999	10	--	-- --	-- --	-- --	-- --	-- --	400	-- --	-- --	-- --
B-105	06/03/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-106	06/04/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-106	06/04/1999	15	--	-- --	-- --	-- --	-- --	-- --	65	-- --	-- --	-- --
B-107	06/04/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-107	06/04/1999	15	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-107	06/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-107	06/07/1999	45	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-108	06/07/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-108	06/07/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-109	06/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-109	06/08/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-109	06/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	6.3	-- --	-- --	-- --
B-109	06/08/1999	40	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-11	02/04/1991	3	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-11	02/04/1991	13.5	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-110	06/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	46 U	-- --	-- --	-- --
B-110	06/08/1999	10	--	-- --	-- --	-- --	-- --	-- --	26	-- --	-- --	-- --
B-110	06/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-110	06/08/1999	43	--	-- --	-- --	-- --	-- --	-- --	660	-- --	-- --	-- --
B-111	06/10/1999	30	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-112	06/10/1999	10	--	-- --	-- --	-- --	-- --	-- --	65	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-112	06/10/1999	30	--	-- --	-- --	-- --	-- --	-- --	10	-- --	-- --	-- --
B-113	06/11/1999	25	--	-- --	-- --	-- --	-- --	-- --	88	-- --	-- --	-- --
B-114	06/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-114	06/11/1999	15	--	-- --	-- --	-- --	-- --	-- --	13	-- --	-- --	-- --
B-114	06/14/1999	30	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-115	06/14/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-115	06/14/1999	15	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-116	06/14/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-116	06/15/1999	40	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-116	06/15/1999	95	--	-- --	-- --	-- --	-- --	-- --	24	-- --	-- --	-- --
B-117	06/15/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-117	06/15/1999	15	--	-- --	-- --	-- --	-- --	-- --	16	-- --	-- --	-- --
B-117	06/16/1999	65	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-117	06/16/1999	90	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-119	06/17/1999	2.5	--	-- --	-- --	10000 U	25000 U	-- --	5 U	-- --	-- --	-- --
B-119	06/17/1999	5	--	-- --	-- --	10000 U	34000	-- --	5 U	-- --	-- --	-- --
B-119	06/17/1999	15	--	-- --	-- --	10000 U	25000 U	-- --	5 U	-- --	-- --	-- --
B-12	02/05/1991	3	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-12	02/05/1991	13	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-13	02/05/1991	15.5	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-139	10/04/1999	2.5	--	-- --	-- --	-- --	-- --	20 U	5 U	-- --	5 U	-- --
B-139	10/04/1999	5	--	-- --	-- --	-- --	-- --	20 U	5 U	-- --	5 U	-- --
B-139	10/04/1999	20	--	-- --	-- --	-- --	-- --	20 U	5 U	-- --	5 U	-- --
B-14	02/05/1991	8	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-14	02/05/1991	13	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-140	10/06/1999	10	--	29	180	10000 U	25000 U	1100	59	18	-- --	89000
B-147	10/08/1999	20	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-149	10/08/1999	20	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-15	02/05/1991	3	--	-- --	-- --	-- --	-- --	-- --	4300	-- --	-- --	-- --
B-15	02/05/1991	15.5	--	-- --	-- --	-- --	-- --	-- --	**30000**	-- --	-- --	-- --
B-153	10/11/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-153	10/11/1999	10	--	18	22	10000 U	25000 U	68	53	14	100 U	73000
B-155	10/12/1999	5	--	450	240	10000 U	110000	14000	37	340	200 U	83000
B-155	10/12/1999	9	--	20	13	10000 U	25000 U	37000	6.4	17	200 U	92000
B-160	10/13/1999	10	--	10 U	31	10000 U	25000 U	28	14	10 U	5 U	-- --
B-161	10/13/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-162	10/13/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	15	-- --	-- --	-- --
B-165	10/13/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-167	10/14/1999	20	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-170	10/15/1999	7.5	--	-- --	-- --	-- --	-- --	-- --	790 --	-- --	-- --	-- --
B-18	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-18	05/03/1993	15	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-18	05/03/1993	25	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-187	10/21/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-188	10/21/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-188	10/21/1999	11.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-189	10/22/1999	2.5	--	-- --	-- --	-- --	-- --	400 U	5 U	-- --	100 U	-- --
B-189	10/22/1999	12	--	-- --	-- --	-- --	-- --	2000 U	5 U	-- --	2000 U	-- --
B-19	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	1100	-- --	-- --	-- --
B-190	10/25/1999	2.5	--	-- --	-- --	-- --	-- --	200 U	5 U	-- --	50 U	-- --
B-190	10/25/1999	5	--	-- --	-- --	-- --	-- --	200 U	5 U	-- --	50 U	-- --
B-190	10/25/1999	10	--	-- --	-- --	-- --	-- --	200 U	5 U	-- --	50 U	-- --
B-191	10/25/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-191	10/25/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	5 U	10 U	-- --	25000
B-192	10/25/1999	2.5	--	10 U	10 U	-- --	-- --	10 U	5.5	10 U	-- --	26000
B-192	10/25/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-193	10/25/1999	2.5	--	270	180	10000 U	25000 U	36	1200	230	-- --	46000
B-193	10/25/1999	5	--	3700	390	10000 U	25000 U	62	440	3900	-- --	191000
B-193	10/25/1999	10	--	10 U	10 U	10000 U	25000 U	10 U	9.5	10 U	-- --	59000
B-194	10/25/1999	2.5	--	1900	1400	10000 U	25000 U	23000	8300	1500	-- --	85000
B-194	10/25/1999	5	--	44	10 U	10000 U	25000 U	880	1900	37	-- --	85000
B-194	10/25/1999	10	--	4400	3000	10000 U	25000 U	18000	4700	3300	-- --	68000
B-195	10/26/1999	2.5	--	2300	390	10000 U	25000 U	93	3000	1700	-- --	**626000**
B-195	10/26/1999	5	--	90	13	10000 U	25000 U	10 U	440	100	-- --	72000
B-195	10/26/1999	10	--	61	14	10000 U	25000 U	120	14	57	-- --	79000
B-196	10/26/1999	3	--	10 U	10 U	10000 U	25000 U	10 U	9.6	10 U	-- --	11000
B-196	10/26/1999	9	--	430	140	10000 U	25000 U	790	**17000**	310	-- --	60000
B-197	10/26/1999	2.5	--	66	10 U	10000 U	140000	20	210	55	5 U	73000
B-197	10/26/1999	5	--	42	10 U	10000 U	25000 U	10 U	980	38	-- --	72000
B-197	10/26/1999	10	--	10 U	10 U	10000 U	25000 U	10 U	41	10 U	5 U	72000
B-198	10/27/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	**230000**	10 U	5 U	24000
B-198	10/27/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	**40000**	10 U	5 U	26000

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-199	10/27/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	140	10 U	-- --	27000
B-199	10/27/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	5.3	10 U	-- --	23000
B-199	10/27/1999	10	--	10 U	10 U	10000 U	25000 U	10 U	81	10 U	5 U	64000
B-199	10/27/1999	15	--	10 U	10 U	10000 U	25000 U	10 U	5 U	10 U	5 U	41000
B-2	11/07/2000	0	--	-- --	-- --	20000 U	810000 --	-- --	-- --	-- --	-- --	-- --
B-20	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-20	05/03/1993	20	--	200000	150000	-- --	-- --	34000	-- --	130000	-- --	-- --
B-21	04/02/1996	26	--	2600	2000	-- --	-- --	2700	3600	2500	-- --	-- --
B-21	04/02/1996	31	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	37300
B-22	04/02/1996	21	--	1300	580	-- --	-- --	380	**43000**	920 U	-- --	-- --
B-22	04/02/1996	49	--	180 U	180 U	-- --	-- --	37	380	180 U	-- --	-- --
B-23	04/02/1996	16	--	220 U	220 U	-- --	-- --	220 U	2100 U	220 U	-- --	-- --
B-23	04/02/1996	21	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	117000
B-24	04/02/1996	26	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	61000
B-25	04/02/1996	11	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-26	04/02/1996	8.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	27400
B-200	10/27/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	19	10 U	-- --	40000
B-200	10/27/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	5 U	10 U	5 U	27000
B-201	10/28/1999	2.5	--	10 U	10 U	10000 U	25000 U	61	17	10 U	-- --	101000
B-201	10/28/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	10	10 U	-- --	27000
B-201	10/28/1999	10	--	-- --	-- --	-- --	-- --	20 U	5 U	-- --	5 U	-- --
B-201	10/28/1999	15	--	3100	5400	10000 U	25000 U	59000	19	2300	-- --	82000
B-201	10/28/1999	20	--	10 U	230	10000 U	25000 U	810	9.9	10 U	-- --	43000
B-202	10/28/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	18	10 U	-- --	101000
B-202	10/28/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	5 U	10 U	5 U	37000
B-202	10/28/1999	15	--	-- --	-- --	10000 U	25000 U	140	5 U	-- --	5 U	-- --
B-203	10/28/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	21	10 U	-- --	40000
B-203	10/28/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	11	10 U	-- --	28000
B-203	10/28/1999	10	--	4400	700	10000 U	25000 U	880	1300	4300	-- --	81000
B-221	11/09/1999	2.5	--	10	10 U	10000 U	65000 --	10 U	40	18	-- --	75000
B-221	11/09/1999	7.5	--	38	24	10000 U	25000 U	58	490	40	-- --	51000
B-222	11/10/1999	2.5	--	24000	22000	10000 U	25000 U	3000	320	17000	-- --	-- --
B-222	11/10/1999	5	--	1900	1200	10000 U	25000 U	810	61	1400	-- --	58000
B-222	11/10/1999	10	--	10 U	81	10000 U	25000 U	10 U	25	10 U	-- --	74000
B-223	11/10/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-223	11/10/1999	5	--	17 --	10 U	10000 U	25000 U	10 U	7	17	-- --	55000

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-223	11/10/1999	10	--	10 U	14	10000 U	25000 U	10 U	7	10 U	-- --	79000
B-224	11/10/1999	2.5	--	11	10 U	10000 U	25000 U	10 U	45	11	-- --	71000
B-224	11/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-224	11/10/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-225	11/10/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-225	11/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-226	11/11/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-226	11/11/1999	5	--	-- --	-- --	10000 U	25000 U	-- --	9 --	-- --	-- --	39000
B-226	11/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-227	11/11/1999	2.5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-227	11/11/1999	5	--	-- --	-- --	10000 U	25000 U	-- --	14	-- --	-- --	61000
B-228	11/11/1999	5	--	-- --	-- --	10000 U	25000 U	-- --	140	-- --	-- --	26000
B-229	11/11/1999	2.5	--	-- --	-- --	10000 U	25000 U	-- --	19	-- --	-- --	66000
B-229	11/11/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-229	11/11/1999	10	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-230	11/12/1999	2.5	--	97	48	10000 U	25000 U	250	**120000**	87	-- --	26000
B-230	11/12/1999	5	--	10 U	10 U	10000 U	25000 U	10 U	330	10 U	-- --	-- --
B-231	11/12/1999	2.5	--	10 U	10 U	10000 U	25000 U	10 U	160	10 U	-- --	-- --
B-231	11/12/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-231	11/12/1999	7	--	190	68	10000 U	25000 U	63	**9600**	140	5 U	30000
B-232	12/07/1999	5	--	-- --	-- --	-- --	-- --	26 U	5 U	-- --	6.5 U	-- --
B-232	12/07/1999	25	--	-- --	-- --	-- --	-- --	95	5 U	-- --	6.6 U	-- --
B-233	12/07/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-233	12/07/1999	15	--	49	790	10000 U	25000 U	27000	130	29	-- --	76000
B-233	12/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-234	12/07/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-235	12/08/1999	25	--	13 --	47	10000 U	25000 U	1900	5.4	10 U	-- --	69000
B-236	12/08/1999	10	--	220	220	10000 U	25000 U	2900	20	160	-- --	184000
B-236	12/08/1999	15	--	45	430	10000 U	25000 U	7400	71	29	-- --	64000
B-236	12/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-237	12/08/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-237	12/08/1999	15	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-237	12/08/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-238	12/09/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-239	12/09/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-240	12/10/1999	5	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-240	12/10/1999	15	--	240	570	10000 U	25000 U	200	20	160	-- --	68000
B-240	12/10/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-241	12/10/1999	5	--	250	600	10000 U	25000 U	45000	100	180	-- --	162000
B-241	12/10/1999	15	--	230	780	10000 U	25000 U	10000	91	150	-- --	67000
B-241	12/10/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-242	12/13/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-243	12/14/1999	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-244	12/15/1999	25	--	-- --	-- --	10000 U	25000 U	22 U	5 U	-- --	5.5 U	-- --
B-244	12/15/1999	30	--	-- --	-- --	10000 U	25000 U	-- --	-- --	-- --	-- --	-- --
B-244	12/15/1999	35	--	10 U	10 U	10000 U	25000 U	2110 U	33	10 U	5.3 U	-- --
B-245	12/15/1999	15	--	23 --	10 U	10000 U	25000 U	10 U	**17000**	18	-- --	-- --
B-245	12/15/1999	30	--	330	140	10000 U	25000 U	76	96	250	-- --	-- --
B-246	12/16/1999	5	--	10 U	10 U	10000 U	63000	2210 U	9	10 U	5.4 U	-- --
B-246	12/16/1999	10	--	-- --	-- --	10000 U	25000 U	21 U	5 U	-- --	5.2 U	-- --
B-246	12/16/1999	20	--	-- --	-- --	10000 U	25000 U	22 U	5 U	-- --	5.6 U	-- --
B-247	12/17/1999	2.5	--	-- --	-- --	10000 U	57000 --	24 U	5 U	-- --	5.9 U	-- --
B-247	12/17/1999	5	--	-- --	-- --	10000 U	86000 --	23 U	13	-- --	5.6 U	52000
B-247	12/17/1999	16	--	-- --	-- --	-- --	-- --	22 U	5 U	-- --	5.5 U	-- --
B-248	12/20/1999	2.5	--	-- --	-- --	10000 U	25000 U	18 U	5 U	-- --	4.5 U	-- --
B-248	12/20/1999	15	--	-- --	-- --	10000 U	25000 U	21 U	5 U	-- --	5.2 U	-- --
B-248	12/20/1999	25	--	-- --	-- --	10000 U	25000 U	21 U	5 U	-- --	5.3 U	-- --
B-249	12/20/1999	2.5	--	-- --	-- --	10000 U	92000	22 U	5 U	-- --	5.4 U	-- --
B-249	12/20/1999	20	--	-- --	-- --	10000 U	25000 U	23 U	5 U	-- --	5.7 U	-- --
B-249	12/20/1999	25	--	-- --	-- --	10000 U	25000 U	20 U	5 U	-- --	5 U	-- --
B-250	12/21/1999	20	--	19	10 U	10000 U	25000 U	10 U	110	16	5.4 U	42000
B-250	12/21/1999	25	--	39	69	10000 U	25000 U	13	8	30	5.5 U	27000
B-250	12/21/1999	35	--	480	260	10000 U	25000 U	10 U	6	380	5.9 U	22000
B-251	12/22/1999	2.5	--	-- --	-- --	10000 U	25000 U	25 U	5 U	-- --	6.1 U	-- --
B-251	12/22/1999	10	--	-- --	-- --	10000 U	25000 U	22 U	5 U	-- --	5.6 U	-- --
B-251	12/22/1999	25	--	-- --	-- --	10000 U	25000 U	22 U	5 U	-- --	5.5 U	-- --
B-252	12/22/1999	15	--	10 U	10 U	10000 U	25000 U	10 U	3800	10 U	-- --	78000
B-252	12/22/1999	20	--	10 U	10 U	10000 U	25000 U	13	4300	10 U	-- --	75000
B-252	12/22/1999	25	--	10 U	10 U	10000 U	25000 U	10 U	57	10 U	-- --	87000
B-253	12/23/1999	25	--	340	400	10000 U	25000 U	2300	420	270	-- --	84000
B-255	01/14/2000	10	--	16000	9500	10000 U	25000 U	360000	7700	13000	-- --	64000
B-255	01/14/2000	15	--	10 U	10 U	10000 U	25000 U	190	49	10 U	-- --	199000

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-255	01/14/2000	25	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-256	01/14/2000	5	--	10 U	10 U	10000 U	25000 U	24	15	10 U	-- --	45000
B-256	01/14/2000	10	--	44 --	44	10000 U	25000 U	49	14	36	-- --	58000
B-256	01/14/2000	20	--	-- --	-- --	-- --	-- --	-- --	5 U	-- --	-- --	-- --
B-261	01/20/2000	10	--	10 U	10 U	10000 U	25000 U	10 U	420	10 U	-- --	61000
B-261	01/20/2000	15	--	1200	780	10000 U	25000 U	850	1800	930 --	-- --	37000
B-261	01/20/2000	30	--	10 U	10 U	10000 U	25000 U	10 U	110	10 U	-- --	30000
B-264	08/17/2001	2.5	--	15 --	14 U	13000 U	85000	120	66 U	14	-- --	-- --
B-264	08/17/2001	10	--	13 U	13 U	13000 U	76000	13 U	65 U	13 U	-- --	-- --
B-265	08/17/2001	5	--	13 U	13 U	12000 U	30000 U	13 U	62 U	13 U	-- --	-- --
B-266	08/17/2001	5	--	16 U	16 U	16000 U	100000	52	80 U	16 U	-- --	-- --
B-272	08/17/2001	5	--	710	490	17000	170000	2400	58 U	540	-- --	-- --
B-273	08/20/2001	5	--	390	360	18000	49000	1700	74 U	290	-- --	-- --
B-274	08/20/2001	5	--	76	14 U	14000 U	35000 U	1300	70 U	67	-- --	-- --
B-3	11/07/2000	0	--	-- --	-- --	20000 U	1300000	-- --	-- --	-- --	-- --	-- --
B-302	09/23/2005	20	--	500 U	92.4	-- --	-- --	85.2 U	53.7 U	564 U	-- --	-- --
B-303	09/26/2005	20	--	2280 U	1060 U	-- --	-- --	61.1 U	180 U	1370 U	-- --	-- --
B-304	06/12/2008	10	--	28300	1570	-- --	**3270000**	596	**119000**	32400	11.4 U	324000
B-304	06/12/2008	19.5	--	45.6 U	79.8	-- --	68400 U	13.7 U	68.4 U	45.6 U	13.7 U	56300
B-305	06/12/2008	10	--	46.3 U	46.3 U	-- --	69400 U	46.3 U	69.4 U	46.3 U	69.4 U	82600
B-305	06/12/2008	19	--	45.9 U	181	-- --	68900 U	13.8	68.9 U	45.9 U	13.8 U	78300
B-306	03/11/2009	15	**6600**	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-306	03/11/2009	18	--	55800	1530	-- --	-- --	61.4	853	55300	-- --	63500
B-313	05/21/2009	2.5	0.43	35.3 U	35.3 U	-- --	53000 U	35.3 U	53 U	35.3 U	-- --	32800
B-313	05/21/2009	5	0.36	35.8 U	35.8 U	-- --	-- --	35.8 U	53.7 U	35.8 U	-- --	47200
B-313	05/21/2009	10	0.32	43 U	43 U	-- --	80300	43 U	64.5 U	43 U	-- --	59000
B-313	05/21/2009	15	0.31	44.3 U	44.3 U	-- --	66500 U	44.3 U	66.5 U	44.3 U	-- --	59000
B-321	11/17/2011	2	--	2520	1230	-- --	-- --	347	-- --	1500	-- --	-- --
B-325	11/17/2011	10	--	28.8	8.02 U	-- --	-- --	8.02 U	-- --	20	-- --	-- --
B-326	11/17/2011	4.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
B-42	12/09/1997	8	--	5000	1220	-- --	-- --	200	5000	4700	-- --	48000
B-42	12/09/1997	12.5	--	-- --	-- --	10000 U	-- --	-- --	55	-- --	-- --	38000
B-42	12/09/1997	15.5	--	13000	9000	-- --	-- --	68000	**55000**	13000	-- --	40000
B-47	11/18/1997	3.5	--	1000 U	1000 U	-- --	-- --	1000 U	3000	1000 U	-- --	52000
B-47	11/18/1997	9.5	--	5	5 U	-- --	-- --	10	1700	5 U	-- --	73000
B-47	11/18/1997	15.5	--	33000	20000	-- --	-- --	66000	**32000**	25000	-- --	38000

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-49	11/25/1997	5	--	1000 U	1000 U	-- --	-- --	1000 U	560	1000 U	-- --	55000
B-49	11/25/1997	9.5	--	5000	6000	-- --	-- --	52000	6000	5000	-- --	40000
B-50	11/21/1997	3.5	--	1000 U	1000 U	-- --	-- --	1000	2000	1000 U	-- --	62000
B-50	11/21/1997	8	--	32	10	-- --	-- --	42	1000	30	-- --	44000
B-51	11/24/1997	3.5	--	18000	13000	-- --	-- --	20000	**13000**	11000	-- --	55000
B-51	11/24/1997	9.5	--	50	20 U	10000 U	-- --	100 U	780	20 U	-- --	48000
B-52	11/20/1997	3.5	--	1050	168	-- --	-- --	964	3700	844	-- --	153000
B-52	11/20/1997	9.5	--	38000	37000	-- --	-- --	322000 --	**39000**	27000	-- --	36000
B-53	01/14/1998	9.5	--	5 U	5 U	-- --	-- --	5 U	15	5 U	-- --	38000
B-53	01/14/1998	15.5	--	833	287	-- --	-- --	26	200	742	-- --	48000
B-54	01/14/1998	8	--	168	161	-- --	-- --	27	600	150	-- --	59000
B-54	01/14/1998	15.5	--	1000 U	1000 U	-- --	-- --	1000 U	1000 U	1000 U	-- --	33000
B-55	01/15/1998	8	--	16	49	-- --	-- --	340	49	11	-- --	59000
B-55	01/15/1998	17	--	5000	3000	-- --	-- --	68000	**21000**	5000	-- --	37000
B-56	01/15/1998	6.5	--	5 U	5 U	-- --	-- --	252	35	5 U	-- --	53000
B-56	01/15/1998	12.5	--	4000	2000	-- --	-- --	8000	**15000**	2000	-- --	36000
B-57	01/16/1998	8	--	5 U	5 U	-- --	-- --	13	31	5 U	-- --	63000
B-57	01/16/1998	14	--	18000	13000	-- --	-- --	30000	**94000**	13000	-- --	44000
B-58	01/16/1998	6.5	--	11	5 U	-- --	-- --	5 U	69	10	-- --	38000
B-58	01/16/1998	14	--	21000	11000	-- --	-- --	11000	**123000**	18000	-- --	23000
B-58A	06/12/1998	5	--	15	10 U	-- --	-- --	5 U	100 U	17	-- --	-- --
B-58A	06/12/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-6	02/04/1991	33	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-62	06/12/1998	5	--	10	10 U	-- --	-- --	5 U	100 U	11 --	-- --	-- --
B-62	06/12/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-63	06/12/1998	5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-63	06/12/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-66	06/12/1998	5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-66	06/12/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-69	06/16/1998	0.5	--	1500	13	10000 U	219000 --	5 U	1300	2200	-- --	63000
B-69	06/16/1998	2.5	--	10 U	10 U	10000 U	25000 U	5 U	100 U	10 U	-- --	52000
B-69	06/16/1998	5	--	10 U	10 U	10000 U	25000 U	5 U	100 U	10 U	-- --	44000
B-69	06/16/1998	10	--	10 U	10 U	10000 U	25000 U	5 U	100 U	10 U	-- --	34000
B-69	06/16/1998	17	--	10 U	10 U	10000 U	25000 U	5 U	100 U	10 U	-- --	32000
B-7	02/04/1991	5.5	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
B-7	02/04/1991	13.5	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-72	06/17/1998	0.5	--	220000	130000	-- --	-- --	220000	20000 U	160000	-- --	111000
B-72	06/17/1998	5	--	220	51	-- --	-- --	5 U	100 U	160	-- --	32000
B-72	06/17/1998	10	--	330	31	-- --	-- --	5 U	100 U	250	-- --	41000
B-72	06/17/1998	17	--	40	10 U	-- --	-- --	5 U	100 U	32	-- --	34000
B-73	06/17/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-74	06/17/1998	2.5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-74	06/17/1998	17	--	12	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-75	06/17/1998	2.5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-75	06/17/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-76	06/17/1998	10	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-76	06/17/1998	27	--	110	10 U	-- --	-- --	5 U	100 U	90	-- --	-- --
B-77	06/17/1998	2.5	--	22	10 U	-- --	-- --	50	100 U	20	-- --	-- --
B-77	06/17/1998	5	--	10 U	10 U	-- --	-- --	17	100 U	10 U	-- --	-- --
B-77	06/17/1998	17	--	73000	58000	-- --	-- --	370000	50000 U	57000	-- --	-- --
B-78	06/18/1998	0.5	--	37000	9400	-- --	-- --	200	3900	32000	-- --	-- --
B-78	06/18/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-79	06/18/1998	2.5	--	140	1600	-- --	-- --	50 U	1000 U	140	-- --	-- --
B-79	06/18/1998	10	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-79	06/18/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-80	06/19/1998	2.5	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-80	06/19/1998	15	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-80	06/19/1998	25	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-81	06/19/1998	2.5	--	28	16	-- --	-- --	250	**17000**	25	-- --	-- --
B-82	06/19/1998	10	--	61	34	-- --	-- --	40	1100	53	-- --	-- --
B-82	06/19/1998	20	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-83	06/23/1998	5	--	10 U	10 U	-- --	-- --	30	100 U	10 U	-- --	-- --
B-83	06/23/1998	17	--	28000	27000	-- --	-- --	530000	2000 U	20000	-- --	-- --
B-84	06/23/1998	10	--	360	380	-- --	-- --	890	100	250	-- --	-- --
B-84	06/23/1998	35	--	10 U	10 U	-- --	-- --	43	100 U	10 U	-- --	-- --
B-85	06/23/1998	5	--	270	77	-- --	-- --	1700	6500	260	-- --	-- --
B-86	06/23/1998	5	--	34	24	-- --	-- --	300	100 U	26	-- --	-- --
B-86	06/23/1998	15	--	85000	67000	-- --	-- --	520000	**230000**	64000	-- --	-- --
B-87	06/23/1998	5	--	10 U	10 U	-- --	-- --	240	100 U	10 U	-- --	-- --
B-87	06/23/1998	15	--	2100	1300	-- --	-- --	1900	3900	1600	-- --	-- --
B-88	06/23/1998	5	--	10 U	10 U	-- --	-- --	210	100 U	10 U	-- --	-- --
B-88	06/23/1998	15	--	80	23	-- --	-- --	150	170	61	-- --	-- --

Table A-2
LRIS Cell 2 Soil Cleanup Level Screening
Former PWT Site

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
B-89	06/23/1998	5	--	10 U	10 U	-- --	-- --	22	100 U	10 U	-- --	-- --
B-89	06/23/1998	15	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-90	06/23/1998	0.5	--	17000	2300	-- --	-- --	100 U	7000	14000	-- --	-- --
B-90	06/23/1998	17.5	--	100	27	-- --	-- --	5 U	100 U	82	-- --	-- --
B-91	06/23/1998	0.5	--	1400	210	-- --	-- --	700	**510000**	1000	-- --	-- --
B-91	06/23/1998	15	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-92	06/23/1998	10	--	10	10 U	-- --	-- --	16	100 U	10 U	-- --	-- --
B-92	06/23/1998	30	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-93	06/24/1998	25	--	280	380	-- --	-- --	94	100 U	200	-- --	-- --
B-93	06/24/1998	40	--	380	200	-- --	-- --	220	620	270	-- --	-- --
B-94	06/24/1998	10	--	2100	2400	-- --	-- --	35000	430	1400	-- --	-- --
B-94	06/24/1998	35	--	13	10 U	-- --	-- --	15	100 U	10 U	-- --	-- --
B-95	06/24/1998	25	--	37	28	-- --	-- --	54	100 U	29	-- --	-- --
B-95	06/24/1998	32.5	--	10 U	10 U	-- --	-- --	11	310 --	10 U	-- --	-- --
B-96	07/08/1998	10	--	-- --	-- --	10000 U	25000 U	-- --	-- --	-- --	-- --	-- --
B-96	07/08/1998	30	--	10 U	10 U	-- --	-- --	12	100 U	10 U	-- --	-- --
B-97	07/08/1998	2.5	--	10 U	10 U	-- --	-- --	14	100 U	10 U	-- --	-- --
B-97	07/08/1998	10	--	-- --	-- --	10000 U	25000 U	-- --	-- --	-- --	-- --	-- --
B-98	07/08/1998	17	--	10 U	10 U	-- --	-- --	5 U	100 U	10 U	-- --	-- --
B-99	07/08/1998	15	--	-- --	-- --	10000 U	25000 U	-- --	-- --	-- --	-- --	-- --
B-99	07/08/1998	45	--	10 U	10 U	-- --	-- --	50	100 U	10 U	-- --	-- --
B-99	07/08/1998	64	--	10 U	10 U	-- --	-- --	6	410	10 U	-- --	-- --
DS-E	06/18/1997	0	--	300 U	300 U	10000 U	-- --	300 U	**19000**	300 U	-- --	131000
DS-W	06/18/1997	0	--	300 U	300 U	10000 U	-- --	300 U	5200	300 U	-- --	150000
GP10	05/20/2009	1.5	**135**	38.7 U	38.7 U	-- --	58100 U	38.7 U	58.1 U	38.7 U	-- --	60300
GP10	05/20/2009	10	0.21	45.3 U	45.3 U	-- --	67900 U	45.3 U	67.9 U	45.3 U	-- --	57500
GP10	05/20/2009	15	0.16	44.7 U	44.7 U	-- --	67100 U	44.7 U	67.1 U	44.7 U	-- --	49400
GP11	05/21/2009	1.5	**370**	38.2 U	38.2 U	-- --	276000	38.2 U	368	38.2 U	-- --	45400
GP11	05/21/2009	5	**170**	42.2 U	42.2 U	-- --	63300 U	42.2 U	63.3 U	42.2 U	-- --	131000
GP11	05/21/2009	10	0.34	45.5 U	45.5 U	-- --	68200 U	45.5 U	68.2 U	45.5 U	-- --	58200
GP11	05/21/2009	15	0.2	43.9 U	43.9 U	-- --	65900 U	43.9 U	65.9 U	43.9 U	-- --	80800
GP8	05/22/2009	1.4	**420**	175 U	175 U	-- --	389000	175 U	726	175 U	-- --	117000
GP8	05/22/2009	5	0.94	39.2 U	63.9	-- --	58800 U	39.2 U	58.8 U	39.2 U	-- --	49500
GP8	05/22/2009	11	8.5	210 U	210 U	-- --	**11100000**	210 U	315 U	210 U	-- --	132000
GP8	05/22/2009	15	0.16	43 U	55.1	-- --	71100 U	43 U	64.5 U	43 U	-- --	95200
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
MW-10	02/05/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
MW-13	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	46	-- --	-- --	-- --
MW-13	05/03/1993	15	--	-- --	-- --	-- --	-- --	-- --	570	-- --	-- --	-- --
MW-13	05/03/1993	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-14	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	**9300**	-- --	-- --	-- --
MW-14	05/03/1993	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-15	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-15	05/03/1993	20	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-17	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	500	-- --	-- --	-- --
MW-17	05/03/1993	12.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-22	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
MW-22	05/03/1993	15	--	-- --	-- --	-- --	-- --	-- --	62	-- --	-- --	-- --
MW-24	04/02/1996	0.5	--	100	-- --	-- --	-- --	130	1700 U	320	-- --	-- --
MW-24	04/02/1996	11	--	14000	15000	-- --	-- --	4100 U	20000 U	9500	-- --	60200
MW-24	04/02/1996	21	--	38000	36000	-- --	-- --	8700 U	7800	16000	-- --	-- --
MW-25	04/02/1996	3	--	440	70	-- --	-- --	370 U	1100	380	-- --	-- --
MW-25	04/02/1996	36	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	32000
MW-26	04/02/1996	21	--	10000	9700	-- --	-- --	32000	1200	11000	-- --	-- --
MW-27	04/02/1996	6	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	47100
MW-31	04/02/1996	16	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	54900
MW-31	04/02/1996	21	--	280	100 --	-- --	-- --	50 --	73	200	-- --	-- --
MW-31	04/02/1996	26	--	430 U	430 U	-- --	-- --	430 U	2100 U	430 U	-- --	-- --
MW-31	04/02/1996	31	--	420 U	420 U	-- --	-- --	420 U	2000 U	420 U	-- --	-- --
MW-55	06/10/2008	10	--	45.7 U	45.7 U	-- --	68600 U	13.7 U	68.6 U	45.7 U	13.7 U	103000
MW-55	06/10/2008	20	--	46.9 U	51.6	-- --	70300 U	752	70.3 U	46.9 U	14.1 U	72700
MW-58D	06/18/2008	10	--	36.3 U	36.3 U	-- --	103000	36.3 U	720	36.3 U	10.9 U	117000
MW-58D	06/18/2008	13.5	--	49.7 U	68.6	-- --	96800	49.7 U	74.5 U	49.7 U	14.9 U	162000
NPY-03	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
NPY-04	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
SS-01	02/06/1991	0	--	-- --	-- --	-- --	-- --	-- --	2500 U	-- --	-- --	-- --
SS-13	02/26/2009	0.5	**65**	7.1 U	7.1 U	-- --	-- --	7.1 U	355 U	7.1 U	-- --	43700
SS-15	02/26/2009	0.5	**260**	11.8	7.87 U	-- --	-- --	16.5	393 U	17.3	-- --	64900
SS-16	02/26/2009	0.5	**300**	24	8 U	-- --	-- --	8 U	399 U	24	-- --	107000

		Analyte	Dioxin/Furan TEQ	Fluoranthene	Fluorene	Gasoline-Range Organics	Residual-Range Organics	Naphthalene	Pentachloro-phenol	Pyrene	Styrene	Zinc
		Unit	ng/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
		Soil Cleanup Level	11	3200000	3200000	30000	2000000	1600000	8300	2400000	33000	360000
		Soil Remediation Level	1500	NV	NV	NV	NV	NV	1100000	NV	NV	NV
Sample Location	Sample Date	Depth (ft bgs)	Result	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
SS-17	02/26/2009	0.5	**18**	7.46 U	7.46 U	-- --	-- --	7.46 U	372 U	7.46 U	-- --	38100
SS-18	02/26/2009	0.5	2.6	7.49 U	7.49 U	-- --	-- --	7.49 U	374 U	7.49 U	-- --	39000
SS-19	02/26/2009	0.5	**820**	5070	39.7	-- --	-- --	64.1	821	6610	-- --	119000
SS-2	04/02/1996	8.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	70400
TP-02	05/03/1993	0.2	--	-- --	-- --	-- --	-- --	-- --	160 --	-- --	-- --	-- --
TP-02	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	4000	-- --	-- --	-- --
TP-02	05/03/1993	9	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-03	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	4600	-- --	-- --	-- --
TP-04	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-04	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	**100000**	-- --	-- --	-- --
TP-04	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	**51000**	-- --	-- --	-- --
TP-05	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	-- --	1600	-- --	-- --	-- --
TP-05	05/03/1993	8	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-06	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-06	05/03/1993	3	--	940	670 U	-- --	-- --	670 U	3600	1600	-- --	-- --
TP-06	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-09	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	-- --	**13000**	-- --	-- --	-- --
TP-09	05/03/1993	4	--	300 U	-- --	-- --	-- --	12000	1600 U	300 U	-- --	-- --
TP-09	05/03/1993	9	--	43000	38000	-- --	-- --	280000	**130000**	34000	12000	-- --
TP-11	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	-- --	460	-- --	-- --	-- --
TP-11	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	40	-- --	-- --	-- --
TP-12	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	-- --	190	-- --	-- --	-- --
TP-12	05/03/1993	3	--	200000	67000 U	-- --	-- --	810000	**110000**	67000 U	-- --	-- --
TP-12	05/03/1993	6.5	--	5300	1700 U	-- --	-- --	19000	8500 U	6400	-- --	-- --
TP-13	05/03/1993	5.5	--	-- --	-- --	-- --	-- --	-- --	85	-- --	-- --	-- --
TP-13	05/03/1993	7.5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	5 U	-- --
TP-14	05/03/1993	0.5	--	-- --	-- --	-- --	-- --	-- --	730	-- --	-- --	-- --
TP-14	05/03/1993	5	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-15	05/03/1993	0.2	--	-- --	-- --	-- --	-- --	-- --	450	-- --	-- --	-- --
TP-15	05/03/1993	6	--	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
TP-16	05/03/1993	0.3	--	-- --	-- --	-- --	-- --	-- --	620	-- --	-- --	-- --
TP-16	05/03/1993	7	--	-- --	-- --	-- --	-- --	-- --	320	-- --	-- --	-- --
TP-27	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	35	-- --	-- --	-- --
TP-28	05/03/1993	7	--	-- --	-- --	-- --	-- --	-- --	33	-- --	-- --	-- --
TP-28	05/03/1993	9.5	--	240000	180000	-- --	-- --	1400000	330000 U	200000	5000 U	-- --
TP-32	05/03/1993	10	--	-- --	-- --	-- --	-- --	-- --	190	-- --	-- --	-- --

Table A-3
LRIS Cell 3 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-204	10/28/1999	2.5	**4100**	5	U	20	U	10	U	11		**11000**		--	--
B-204	10/28/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-204	10/28/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-205	10/29/1999	2.5	**520**	5	U	20	U	18	--	41		3000		--	--
B-205	10/29/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-205	10/29/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-206	11/1/1999	2.5	11	5	U	20	U	10	U	10	U	5000		--	--
B-206	11/1/1999	5	ND	5	U	20	U	10	U	10	U	--	--	--	--
B-206	11/1/1999	10	**240**	--	--	--	--	760		110		**9000**		--	--
B-207	11/1/1999	2.5	**270**	5	U	20	U	10	U	24		**8000**		--	--
B-207	11/1/1999	5	ND	--	--	--	--	10	U	10	U	**7000**		--	--
B-207	11/1/1999	10	9.7	--	--	--	--	10	U	10	U	4000		--	--
B-208	11/1/1999	2.5	**230**	5	U	34		280		540		5000		--	--
B-208	11/1/1999	5	**740**	5	U	20	U	28		84		5000		--	--
B-208	11/1/1999	10	ND	--	--	--	--	10	U	10	U	--	--	--	--
B-209	11/1/1999	2.5	19	--	--	--	--	10	U	10	U	--	--	--	--
B-209	11/1/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-209	11/1/1999	10	ND	--	--	--	--	10	U	10	U	3000		--	--
B-210	11/1/1999	2.5	9.6	5	U	20	U	10	U	10	U	--	--	--	--
B-210	11/1/1999	5	**220**	5	U	20	U	10	U	11		**6000**		--	--
B-210	11/1/1999	15	ND	--	--	--	--	10	U	10	U	5000		--	--
B-212	11/2/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-212	11/2/1999	5	16	5	U	20	U	10	U	10	U	**6000**		--	--
B-212	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-213	11/2/1999	2.5	120	--	--	--	--	10	U	10	U	**7000**		--	--
B-213	11/2/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-213	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-214	11/3/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-214	11/3/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-214	11/3/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-215	11/4/1999	2.5	**180**	5	U	20	U	10	U	10	U	**6000**		--	--
B-215	11/4/1999	5	99	5	U	20	U	10	U	10	U	5000		--	--
B-215	11/4/1999	10	7.6	--	--	--	--	10	U	10	U	5000		--	--
B-216	11/4/1999	5	ND	5	U	20	U	10	U	10	U	5000		--	--
B-216	11/4/1999	10	--	--	--	--	--	--	--	--	--	4000		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-217	11/5/1999	2.5	**590**	5	U	20	U	10	U	55		**13000**		--	--
B-217	11/5/1999	10	**200**	--	--	--	--	30		50		**52000**		--	--
B-217	11/5/1999	15	ND	--	--	--	--	10	U	10	U	**6000**		--	--
B-218	11/8/1999	5	**2500**	5	U	20	U	21		180		**11000**		--	--
B-218	11/8/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-218	11/8/1999	15	ND	--	--	--	--	10	U	10	U	5000		--	--
B-219	11/8/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-219	11/8/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-219	11/8/1999	10	9	--	--	--	--	10	U	10	U	5000		--	--
B-275	7/8/2004	0.5	**190**	--	--	--	--	13	--	10	U	**6700**		--	--
B-275	7/8/2004	5	ND	--	--	--	--	10	U	10	U	**7200**		--	--
B-275	7/8/2004	10	ND	--	--	--	--	10	U	10	U	**6000**		--	--
B-276	7/13/2004	0.5	ND	--	--	--	--	10	U	10	U	2400		--	--
B-276	7/13/2004	3	ND	--	--	--	--	10	U	10	U	1600		--	--
BH-27	4/2/1996	1	**1200**	--	--	--	--	--	--	--	--	--	--	--	--
BH-27	4/2/1996	6	**220**	--	--	--	--	--	--	380	U	--	--	--	--
BH-27	4/2/1996	26	--	--	--	--	--	--	--	--	--	1300	U	**147000**	
B-277	7/9/2004	0.5	ND	--	--	--	--	9.4	U	9.4	U	2100	U	--	--
B-277	7/9/2004	2.5	16	--	--	--	--	10	U	10	U	2600		--	--
B-277	7/9/2004	5	ND	--	--	--	--	9.6	U	9.6	U	2300	U	--	--
B-277	7/9/2004	10	ND	--	--	--	--	9.8	U	9.8	U	2600		--	--
B-278	7/9/2004	0.5	**340**	--	--	--	--	9.8	U	9.8	U	**6300**		--	--
B-278	7/9/2004	2.5	37	--	--	--	--	9.9	U	9.9	U	2900		--	--
B-278	7/9/2004	10	ND	--	--	--	--	10	U	10	U	2900		--	--
B-279	7/9/2004	0.5	ND	--	--	--	--	10	U	10	U	3000		--	--
B-279	7/9/2004	2.5	16	--	--	--	--	10	U	10	U	3900		--	--
B-279	7/9/2004	5	ND	--	--	--	--	9.8	U	9.8	U	5000		--	--
B-279	7/9/2004	10	ND	--	--	--	--	10	U	10	U	3400		--	--
BH-28	4/2/1996	0.5	**540**	--	--	--	--	--	--	--	--	--	--	--	--
BH-28	4/2/1996	6	--	--	--	--	--	--	--	--	--	3000		**134000**	
B-280	7/13/2004	0.5	38	--	--	--	--	10	U	10	U	4300		--	--
B-280	7/13/2004	5	**250**	--	--	--	--	10	U	10	U	5400		--	--
B-280	7/13/2004	10	ND	--	--	--	--	10	U	10	U	2800		--	--
B-281	7/9/2004	0.5	88	--	--	--	--	26		14		4800		--	--
B-281	7/9/2004	2.5	63	--	--	--	--	150		63		2900		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-281	7/9/2004	10	ND	--	--	--	--	9.9	U	9.9	U	**10100**		--	--
B-282	7/8/2004	0.5	**890**	--	--	--	--	100	U	100	U	**25900**		--	--
B-282	7/8/2004	5	41	--	--	--	--	10	U	10	U	**6200**		--	--
B-282	7/8/2004	10	ND	--	--	--	--	10	U	10	U	**6700**		--	--
B-283	7/12/2004	0.5	ND	--	--	--	--	9.9	U	9.9	U	1300		--	--
B-283	38180	3	10	--	--	--	--	10	U	10	U	1100	U	--	--
B-283	7/12/2004	5	ND	--	--	--	--	10	U	10	U	1400		--	--
B-284	7/13/2004	0.5	110	--	--	--	--	230		100	U	**17500**		--	--
B-284	7/13/2004	2.5	33	--	--	--	--	11	U	11	U	3600		--	--
B-284	7/13/2004	5	ND	--	--	--	--	10	U	10	U	4800		--	--
B-284	7/13/2004	10	ND	--	--	--	--	10	U	10	U	4200		--	--
B-285	7/13/2004	0.5	**930**	--	--	--	--	200	U	200	U	**37200**		--	--
B-285	7/13/2004	5	136	--	--	--	--	110		130		5600		--	--
B-285	7/13/2004	10	ND	--	--	--	--	10	U	10	U	2900		--	--
B-286	7/8/2004	0.5	**440**	--	--	--	--	100	U	100	U	**8400**		--	--
B-286	7/8/2004	2.5	26	--	--	--	--	75		10	U	4400		--	--
B-286	7/8/2004	5	ND	--	--	--	--	10	U	10	U	3500		--	--
B-286	7/8/2004	10	ND	--	--	--	--	10	U	10	U	**8200**		--	--
B-287	7/12/2004	0.5	**320**	--	--	--	--	51	U	51	U	**7700**		--	--
B-287	7/12/2004	2.5	45	--	--	--	--	9.8	U	9.8	U	1900		--	--
B-287	7/12/2004	5	94	--	--	--	--	10	U	10	U	3200		--	--
B-287	7/12/2004	10	ND	--	--	--	--	9.7	U	9.7	U	4500		--	--
B-288	7/8/2004	0.5	**170**	--	--	--	--	36		10	U	**13300**		--	--
B-288	7/8/2004	10	ND	--	--	--	--	10	U	10	U	5700		--	--
B-289	7/12/2004	0.5	ND	--	--	--	--	9.1	U	9.1	U	4300		--	--
B-289	7/12/2004	2.5	**1300**	--	--	--	--	830		99	U	2400		--	--
B-289	7/12/2004	5	16	--	--	--	--	13		10	U	1800		--	--
B-289	7/12/2004	10	ND	--	--	--	--	10	U	10	U	4200		--	--
BH-29	4/2/1996	6	--	--	--	--	--	--	--	--	--	**9300**		**160000**	
B-290	7/13/2004	0.5	**310**	--	--	--	--	100	U	100	U	**13800**		--	--
B-290	7/13/2004	2.5	**790**	--	--	--	--	120	--	360		**28900**		--	--
B-290	7/13/2004	5	**230**	--	--	--	--	100	U	210		5600		--	--
B-290	7/13/2004	10	ND	--	--	--	--	10	U	10	U	2800		--	--
B-291	7/12/2004	0.5	**400**	--	--	--	--	100	U	100	U	**33500**		--	--
B-291	7/12/2004	2.5	**430**	--	--	--	--	100	U	110		**10400**		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-291	7/12/2004	5	9.4	--	--	--	--	10	U	10	U	5200		--	--
B-291	7/12/2004	10	ND	--	--	--	--	11	U	11	U	2600		--	--
B-292	7/8/2004	0.5	**300**	--	--	--	--	110	U	110	U	**14900**		--	--
B-292	7/8/2004	2.5	23	--	--	--	--	10	U	10	U	4400		--	--
B-292	7/8/2004	5	ND	--	--	--	--	10	U	10	U	4300		--	--
B-292	7/8/2004	10	ND	--	--	--	--	10	U	10	U	**7600**		--	--
B-293	7/12/2004	0.5	**210**	--	--	--	--	9.6	U	11		**12800**		--	--
B-293	7/12/2004	2.5	**890**	--	--	--	--	470		290		**17200**		--	--
B-293	7/12/2004	5	ND	--	--	--	--	9.9	U	9.9	U	2200		--	--
B-293	7/12/2004	10	ND	--	--	--	--	10	U	10	U	4500		--	--
B-294	7/12/2004	0.5	30	--	--	--	--	10	U	10	U	1000		--	--
B-294	7/12/2004	2.5	**730**	--	--	--	--	99	U	380		**8900**		--	--
B-294	7/12/2004	5	62	--	--	--	--	9.5	U	9.5	U	**29400**		--	--
B-294	7/12/2004	10	ND	--	--	--	--	9.8	U	9.8	U	3100		--	--
B-295	7/12/2004	0.5	**620**	--	--	--	--	110	U	110	U	**13800**		--	--
B-295	7/12/2004	2.5	**190**	--	--	--	--	10	U	24		2500		--	--
B-295	7/12/2004	5	ND	--	--	--	--	10	U	10	U	3200		--	--
B-295	7/12/2004	10	ND	--	--	--	--	9.7	U	9.7	U	3200		--	--
B-296	7/9/2004	0.5	**3600**	--	--	--	--	100	U	100	U	**38700**		--	--
B-296	7/9/2004	2.5	ND	--	--	--	--	67		10	U	**6300**		--	--
B-296	7/9/2004	5	48	--	--	--	--	23000		3100		5000		--	--
B-296	7/9/2004	10	18	--	--	--	--	1500		690		**7500**		--	--
B-297	7/9/2004	1	**540**	--	--	--	--	100	U	210		**27600**		--	--
B-297	7/9/2004	2.5	38	--	--	--	--	10	U	10	U	**8100**		--	--
B-297	7/9/2004	5	ND	--	--	--	--	10	U	10	U	**7900**		--	--
B-297	7/9/2004	10	ND	--	--	--	--	10	U	10	U	3400		--	--
B-297	7/9/2004	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-299	7/21/2004	0.5	51	--	--	--	--	10	U	10	U	2100	U	--	--
B-299	7/21/2004	2.5	**150**	--	--	--	--	10	U	10	U	**11200**		--	--
B-299	7/21/2004	5	20	--	--	--	--	10	U	10	U	**19600**		--	--
B-299	7/21/2004	10	110	--	--	--	--	220		700		**15500**		--	--
B-300	7/21/2004	0.5	28	--	--	--	--	10	U	54		2300		--	--
B-300	7/21/2004	2.5	52	--	--	--	--	11	U	11	U	**6900**		--	--
B-300	7/21/2004	10	ND	--	--	--	--	10	U	10	U	5400		--	--
B-301	7/21/2004	0.5	**6200**	--	--	--	--	500	U	500	U	**61200**		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-301	7/21/2004	2.5	71	--	--	--	--	10	U	10	U	**25900**		--	--
B-301	7/21/2004	5	ND	--	--	--	--	10	U	10	U	3000		--	--
B-307	2/26/2009	0.5	**145**	--	--	--	--	--	--	7.12	U	**9120**		--	--
B-307	2/26/2009	2.5	27.1	--	--	--	--	--	--	7.43	U	3830		--	--
B-307	2/26/2009	20	ND	--	--	--	--	--	--	7.93	U	1890		--	--
MW-19	5/3/1993	20	--	--	--	--	--	--	--	--	--	2800		--	--
MW-19	5/3/1993	5	--	--	--	--	--	--	--	--	--	5200		--	--
MW-20S	5/3/1993	20	--	--	--	--	--	--	--	--	--	3100		--	--
MW-20S	5/3/1993	5	--	--	--	--	--	--	--	--	--	2800		--	--
MW-28S	4/2/1996	0.5	**2400**	--	--	--	--	--	--	--	--	--	--	--	--
MW-28S	4/2/1996	6	120	--	--	--	--	--	--	380	U	3900		**235000**	
MW-29	4/2/1996	8.5	--	--	--	--	--	--	--	--	--	5300		**182000**	
MW-29	4/2/1996	11	--	--	--	--	--	--	--	--	--	**5900**		**180000**	
MW-29	4/2/1996	16	--	--	--	--	--	--	--	--	--	**6400**		**212000**	
MW-45D	7/20/2004	0.5	**440**	--	--	--	--	11	U	11	U	**17400**		--	--
MW-45D	7/20/2004	2.5	ND	--	--	--	--	11	U	11	U	1900		--	--
MW-45D	7/20/2004	5	ND	--	--	--	--	10	U	10	U	1800		--	--
MW-45D	7/20/2004	10	ND	--	--	--	--	10	U	10	U	5300		--	--
MW-9S	7/14/2004	2.5	**1400**	--	--	--	--	4900		13000		**9300**		--	--
MW-9S	7/14/2004	5	120	--	--	--	--	780		2500		**8200**		--	--
MW-9S	7/14/2004	10	24	--	--	--	--	19		78		4700		--	--
SPY-01A	5/9/2002	5	36	--	--	--	--	13	U	13	U	3100		--	--
SPY-01A	5/9/2002	10	ND	--	--	--	--	26	U	26	U	**10900**		--	--
SPY-01B	5/9/2002	10	**1400**	--	--	--	--	2100		12000		**11200**		--	--
SPY-01C	5/9/2002	1	**3200**	--	--	--	--	11	U	16		**27900**		--	--
SPY-01C	5/9/2002	5	10	--	--	--	--	13	U	13	U	2300		--	--
SPY-01C	5/9/2002	10	ND	--	--	--	--	13	U	13	U	6800		--	--
SPY-01D	5/9/2002	1	**160**	--	--	--	--	31		77		**12900**		--	--
SPY-01D	5/9/2002	5	ND	--	--	--	--	12	U	12	U	2300		--	--
SPY-01D	5/9/2002	10	ND	--	--	--	--	24	U	24	U	5600		--	--
SPY-01E	5/9/2002	1	**1600**	--	--	--	--	11	U	32		**17300**		--	--
SPY-01E	5/9/2002	5	16	--	--	--	--	22		13	U	**8000**		--	--
SPY-01E	5/9/2002	10	ND	--	--	--	--	13	U	13	U	**7900**		--	--
SPY-01F	5/9/2002	1	**320**	--	--	--	--	11	U	11	U	**12000**		--	--
SPY-01F	5/9/2002	5	ND	--	--	--	--	11	U	11	U	1400		--	--

Table A-3
LRIS Cell 3 Soil Cleanup Level Screening
Former PWT Site

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
SPY-01F	5/9/2002	10	ND	--	--	--	--	13	U	13	U	**8000**		--	--
SPY-01G	5/9/2002	1	**660**	--	--	--	--	58	U	90		**16800**		--	--
SPY-01G	5/9/2002	3	11	--	--	--	--	12	U	12	U	3500		--	--
SPY-01G	5/9/2002	5	ND	--	--	--	--	12	U	12	U	3600		--	--
SPY-01G	5/9/2002	10	ND	--	--	--	--	12	U	12	U	**6300**		--	--
SPY-01H	5/9/2002	1	**330**	--	--	--	--	11	U	11	U	**9400**		--	--
SPY-01H	5/9/2002	5	110	--	--	--	--	13	U	13	U	4400		--	--
SPY-01H	5/9/2002	10	ND	--	--	--	--	13	U	13	U	**5900**		--	--
SPY-02A	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02A	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02B	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02B	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02C	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02C	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02D	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02D	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02E	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02E	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02F	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02F	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02G	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02G	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02H	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02H	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02I	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02I	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-03	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-04	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-1	4/2/1996	1	**186**	--	--	--	--	--	--	52		2600		**266000**	
SS-8	7/17/2008	1.5	**615**	--	--	--	--	11.1		7.92	U	3720		--	--
SS-10	2/26/2009	0.5	8.69	--	--	--	--	--	--	7.62	U	1820		--	--
SS-11	2/26/2009	0.5	**1197**	--	--	--	--	--	--	7.59	U	**6050**		--	--
SS-12	2/26/2009	0.5	7.43	--	--	--	--	--	--	7.4	U	**34400**		--	--
SS-40	6/17/2010	0	7.972	--	--	--	--	--	--	8.67	U	**8540**		--	--
TP-17	5/3/1993	0.5	**917**	--	--	--	--	--	--	--	--	**9100**		--	--

		Analyte	cPAH TEQ	1,1,2,2-Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Barium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		102000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
TP-17	5/3/1993	5	--	--	--	--	--	--	--	--	--	2800		--	--
TP-18	5/3/1993	0.3	--	--	--	--	--	--	--	--	--	**17800**		--	--
TP-18	5/3/1993	3	**233**	--	--	--	--	--	--	--	--	3100		--	--
TP-18A	4/16/2002	7	--	--	--	--	--	--	--	--	--	**6100**		--	--
TP-18A	4/16/2002	9	--	--	--	--	--	--	--	--	--	**7100**		--	--
TP-18B	4/16/2002	7	--	--	--	--	--	--	--	--	--	4500		--	--
TP-18B	4/16/2002	9	--	--	--	--	--	--	--	--	--	**7100**		--	--
TP-18C	4/16/2002	7	--	--	--	--	--	--	--	--	--	2900		--	--
TP-18C	4/16/2002	9	--	--	--	--	--	--	--	--	--	**9900**		--	--
TP-18CEN	4/25/2002	7	--	--	--	--	--	--	--	--	--	**12900**		--	--
TP-18CEN	4/25/2002	9	--	--	--	--	--	--	--	--	--	**8500**		--	--
TP-18D	4/16/2002	7	--	--	--	--	--	--	--	--	--	1300		--	--
TP-18D	4/16/2002	9	--	--	--	--	--	--	--	--	--	5300		--	--
TP-18E	4/16/2002	7	--	--	--	--	--	--	--	--	--	4900		--	--
TP-18E	4/16/2002	9	--	--	--	--	--	--	--	--	--	5800		--	--
TP-18F	4/16/2002	7	--	--	--	--	--	--	--	--	--	**9700**		--	--
TP-18F	4/16/2002	9	--	--	--	--	--	--	--	--	--	**6800**		--	--
TP-18G	4/16/2002	7	--	--	--	--	--	--	--	--	--	5600		--	--
TP-18G	4/16/2002	9	--	--	--	--	--	--	--	--	--	4400		--	--
TP-18H	4/16/2002	7	--	--	--	--	--	--	--	--	--	5600		--	--
TP-18H	4/16/2002	9	--	--	--	--	--	--	--	--	--	5100		--	--
TP-19	5/3/1993	0.5	**8260**	--	--	--	--	--	--	--	--	**29600**		--	--
TP-19	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	1000		--	--
TP-20	5/3/1993	0.2	--	--	--	--	--	--	--	--	--	**16800**		--	--
TP-20	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	3400		--	--
TP-22	5/3/1993	0.5	**1557**	--	--	--	--	--	--	--	--	**36700**		--	--
TP-22	5/3/1993	6	--	--	--	--	--	--	--	--	--	3400		--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-204	10/28/1999	2.5	32000		41000		11		670000		--	1600		16		10000	U
B-204	10/28/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-204	10/28/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-205	10/29/1999	2.5	18000		23000		17		160000		--	250		34		10000	U
B-205	10/29/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-205	10/29/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-206	11/1/1999	2.5	21000		20000		10	U	112000		--	43		10	U	10000	U
B-206	11/1/1999	5	--	--	--	--	10	U	--	--	--	10	U	10	U	--	--
B-206	11/1/1999	10	27000		24000		170		1090000		--	2000		440		10000	U
B-207	11/1/1999	2.5	18000		18000		10	U	884000		--	380		25		10000	U
B-207	11/1/1999	5	31000		27000		10	U	10000	U	--	10	U	10	U	10000	U
B-207	11/1/1999	10	30000		27000		10	U	10000	U	--	10	U	10	U	10000	U
B-208	11/1/1999	2.5	27000		23000		670		**3390000**		--	3800		1200		10000	U
B-208	11/1/1999	5	28000		34000		52		214000		--	940		110		10000	U
B-208	11/1/1999	10	--	--	--	--	10	U	--	--	--	10	U	10	U	--	--
B-209	11/1/1999	2.5	--	--	--	--	10	U	--	--	--	51		10	U	--	--
B-209	11/1/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-209	11/1/1999	10	24000		24000		10	U	10000	U	--	11		10	U	10000	U
B-210	11/1/1999	2.5	--	--	--	--	10	U	--	--	--	34		10	U	--	--
B-210	11/1/1999	5	29000		20000		30		10000	U	--	2000		71		10000	U
B-210	11/1/1999	15	28000		31000		10	U	10000	U	--	10	U	10	U	10000	U
B-212	11/2/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-212	11/2/1999	5	22000		45000		10	U	10000	U	--	23		10	U	10000	U
B-212	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-213	11/2/1999	2.5	25000		28000		10	U	--	--	--	52		10	U	--	--
B-213	11/2/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-213	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-214	11/3/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-214	11/3/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-214	11/3/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-215	11/4/1999	2.5	16000		18000		10	U	10000	U	--	230		10	U	10000	U
B-215	11/4/1999	5	28000		22000		10	U	82000	--	--	180		10	U	10000	U
B-215	11/4/1999	10	20000		23000		10	U	10000	U	--	10	U	10	U	10000	U
B-216	11/4/1999	5	21000		22000		10	U	10000	U	--	10	U	10	U	10000	U
B-216	11/4/1999	10	22000		25000		--	--	10000	U	--	--	--	--	--	10000	U

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-217	11/5/1999	2.5	17000		25000		28		520000		--	1400		91		10000	U
B-217	11/5/1999	10	32000		70000		36		10000	U	--	450		86		10000	U
B-217	11/5/1999	15	30000		32000		33		10000	U	--	10	U	43		10000	U
B-218	11/8/1999	5	21000		25000		200		1400000		--	7400		790		10000	U
B-218	11/8/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-218	11/8/1999	15	27000		24000		110		10000	U	--	10	U	140		10000	U
B-219	11/8/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-219	11/8/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-219	11/8/1999	10	23000		24000		10	U	10000	U	--	10		10	U	10000	U
B-275	7/8/2004	0.5	15300		24200		10	U	33000	--	--	140		11		--	--
B-275	7/8/2004	5	21000		17000		10	U	15000	U	--	10	U	10	U	--	--
B-275	7/8/2004	10	15000		20700		10	U	15000	U	--	10	U	10	U	--	--
B-276	7/13/2004	0.5	15100		32100		10	U	13000	U	--	10	U	10	U	--	--
B-276	7/13/2004	3	30400		20600		10	U	13000	U	--	10	U	10	U	--	--
BH-27	4/2/1996	1	--	--	--	--	--	--	--	--	--	350		--	--	--	--
BH-27	4/2/1996	6	--	--	--	--	--	--	--	--	--	220		--	--	--	--
BH-27	4/2/1996	26	15600		27500		--	--	--	--	--	--	--	--	--	--	--
B-277	7/9/2004	0.5	7700		14500		9.4	U	13000	U	--	9.4	U	9.4	U	--	--
B-277	7/9/2004	2.5	20200		18700		10	U	15000	U	--	13		10	U	--	--
B-277	7/9/2004	5	23100		19900		9.6	U	15000	U	--	9.6	U	9.6	U	--	--
B-277	7/9/2004	10	21000		21700		9.8	U	16000	U	--	9.8	U	9.8	U	--	--
B-278	7/9/2004	0.5	26100		29800		12		44000		--	220		29		--	--
B-278	7/9/2004	2.5	12900		20700		9.9	U	25000		--	57		11		--	--
B-278	7/9/2004	10	26500		28500		10	U	16000	U	--	10	U	10	U	--	--
B-279	7/9/2004	0.5	14000		17400		10	U	14000	U	--	15		10	U	--	--
B-279	7/9/2004	2.5	15100		13800		10	U	14000	U	--	17		10	U	--	--
B-279	7/9/2004	5	20900		22800		9.8	U	17000	U	--	9.8	U	9.8	U	--	--
B-279	7/9/2004	10	26100		28200		10	U	17000	U	--	10	U	10	U	--	--
BH-28	4/2/1996	0.5	--	--	--	--	--	--	--	--	--	260		--	--	--	--
BH-28	4/2/1996	6	16000		22700		--	--	--	--	--	--	--	--	--	--	--
B-280	7/13/2004	0.5	13500		44800		10	U	13000	U	--	40		10	U	--	--
B-280	7/13/2004	5	22200		32500		10	U	43000		--	150		10	U	--	--
B-280	7/13/2004	10	20300		21300		10	U	13000	U	--	10	U	10	U	--	--
B-281	7/9/2004	0.5	17400		19900		16		22000		--	130		11	--	--	--
B-281	7/9/2004	2.5	10400		27000		38		23000		--	150		26		--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-281	7/9/2004	10	22400		27900		9.9	U	16000	U	--	9.9	U	9.9	U	--	--
B-282	7/8/2004	0.5	24000		31700		100	U	290000		--	240		100	U	--	--
B-282	7/8/2004	5	20800		15000		10	U	160000		--	210		10	U	--	--
B-282	7/8/2004	10	15900		20700		10	U	15000	U	--	10		10	U	--	--
B-283	7/12/2004	0.5	11100		10100		9.9	U	13000	U	--	16		9.9	U	--	--
B-283	38180	3	12500		19500		10	U	92000		--	19		10	U	--	--
B-283	7/12/2004	5	15100		20900		10	U	13000	U	--	10	U	10	U	--	--
B-284	7/13/2004	0.5	32200		44200		100	U	330000		--	880		100	U	--	--
B-284	7/13/2004	2.5	19200		22900		11	U	36000		--	120		11	U	--	--
B-284	7/13/2004	5	26700		36100		10	U	13000	U	--	10	U	10	U	--	--
B-284	7/13/2004	10	26600		31000		10	U	13000	U	--	10	U	10	U	--	--
B-285	7/13/2004	0.5	50300		38800		200	U	140000		--	760		200	U	--	--
B-285	7/13/2004	5	31600		29900		140		200000		--	460		85	--	--	--
B-285	7/13/2004	10	17200		21800		10	U	13000	U	--	10	U	10	U	--	--
B-286	7/8/2004	0.5	37800		22900		100	U	**5100000**		--	8900		100	U	--	--
B-286	7/8/2004	2.5	20000		22100		24		24000		--	92		10	U	--	--
B-286	7/8/2004	5	18000		12000		10	U	16000	U	--	10	U	10	U	--	--
B-286	7/8/2004	10	19500		19500		10	U	15000	U	--	10	U	10	U	--	--
B-287	7/12/2004	0.5	46100		27400		51	U	60000		--	270		51	U	--	--
B-287	7/12/2004	2.5	16200		18700		9.8	U	13000	U	--	29		9.8	U	--	--
B-287	7/12/2004	5	29600		26900		10	U	19000		--	64		10	U	--	--
B-287	7/12/2004	10	32600		27300		9.7	U	13000	U	--	9.7	U	9.7	U	--	--
B-288	7/8/2004	0.5	21400		26600		24		67000		--	180		13		--	--
B-288	7/8/2004	10	13100		18400		10	U	15000	U	--	10	U	10	U	--	--
B-289	7/12/2004	0.5	9300		9800		9.1	U	140000		--	9.1	U	9.1	U	--	--
B-289	7/12/2004	2.5	22000		22600		1400		13000	U	--	10000		5600		--	--
B-289	7/12/2004	5	16400		17800		19		13000	U	--	57		54		--	--
B-289	7/12/2004	10	49400		28300		10	U	15000	U	--	13		11		--	--
BH-29	4/2/1996	6	19200		23400		--	--	--	--	--	--	--	--	--	--	--
B-290	7/13/2004	0.5	21100		50600		100	U	89000		--	360		100	U	--	--
B-290	7/13/2004	2.5	**134000**		51900		240		650000		--	2100		440		--	--
B-290	7/13/2004	5	33800		32500		100	U	88000		--	320		100	U	--	--
B-290	7/13/2004	10	28700		27100		10	U	13000	U	--	10	U	10	U	--	--
B-291	7/12/2004	0.5	**256000**		58500		100	U	97000		--	220		100	U	--	--
B-291	7/12/2004	2.5	41500		38200		100	U	450000		--	1400		100		--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-291	7/12/2004	5	27200		25600		10	U	58000		--	32		10	U	--	--
B-291	7/12/2004	10	26800		27900		11	U	42000		--	11	U	11	U	--	--
B-292	7/8/2004	0.5	31600		26800		110	U	230000		--	720		110	U	--	--
B-292	7/8/2004	2.5	19300		15100		10	U	16000	U	--	10	U	10	U	--	--
B-292	7/8/2004	5	19200		12800		10	U	67000		--	10	U	10	U	--	--
B-292	7/8/2004	10	16400		19400		10	U	16000	U	--	10	U	10	U	--	--
B-293	7/12/2004	0.5	14400		39700		12		37000		--	600		19		--	--
B-293	7/12/2004	2.5	42000		31300		260		840000		--	14000		480		--	--
B-293	7/12/2004	5	18100		18300		9.9	U	13000	U	--	9.9	U	9.9	U	--	--
B-293	7/12/2004	10	29600		30900		10	U	13000	U	--	10	U	10	U	--	--
B-294	7/12/2004	0.5	10100		19400		10	U	13000	U	--	20		10	U	--	--
B-294	7/12/2004	2.5	33300		36500		120		36000		--	6200		240		--	--
B-294	7/12/2004	5	35700		32200		9.5	U	330000		--	73		9.5	U	--	--
B-294	7/12/2004	10	27200		32200		9.8	U	13000	U	--	9.8	U	9.8	U	--	--
B-295	7/12/2004	0.5	32200		56300		110	U	310000		--	550		110	U	--	--
B-295	7/12/2004	2.5	23800		25100		10	U	64000		--	1300		16		--	--
B-295	7/12/2004	5	22400		22200		10	U	17000		--	12		10	U	--	--
B-295	7/12/2004	10	23500		29000		9.7	U	13000	U	--	9.7	U	9.7	U	--	--
B-296	7/9/2004	0.5	**95900**		115000		100	U	110000		--	6000		100	U	--	--
B-296	7/9/2004	2.5	19900		16100		22		28000		--	10	U	10	U	--	--
B-296	7/9/2004	5	31500		22500		2700		1800000		--	590		1800		--	--
B-296	7/9/2004	10	15000		25500		400		41000		--	71		270		--	--
B-297	7/9/2004	1	60900		70300		160		560000		--	4300		450		--	--
B-297	7/9/2004	2.5	23500		17500		10	U	16000	U	--	230		10	U	--	--
B-297	7/9/2004	5	21700		19800		10	U	16000	U	--	12		10	U	--	--
B-297	7/9/2004	10	29500		25000		10	U	17000	U	--	10	U	10	U	--	--
B-297	7/9/2004	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-299	7/21/2004	0.5	21300		18300		10	U	14000	U	--	39		10	U	--	--
B-299	7/21/2004	2.5	22300		20500		34		150000		--	1000		73		--	--
B-299	7/21/2004	5	37800		26900		10	U	330000		--	31		10	U	--	--
B-299	7/21/2004	10	63200		33700		400		560000		--	1700		650		--	--
B-300	7/21/2004	0.5	11000		19300		10	U	14000	U	--	32		10	U	--	--
B-300	7/21/2004	2.5	18900		15700		11	U	29000		--	40		11	U	--	--
B-300	7/21/2004	10	25400		25500		10	U	17000	U	--	10	U	10	U	--	--
B-301	7/21/2004	0.5	**125000**		119000		500	U	730000		--	2300		500	U	--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-301	7/21/2004	2.5	40500		29900		10	U	170000		--	100		10	U	--	--
B-301	7/21/2004	5	35300		15300		10	U	15000	U	--	10	U	10	U	--	--
B-307	2/26/2009	0.5	15400		24600		--	--	--	--	--	72.6		7.12	U	--	--
B-307	2/26/2009	2.5	14800		15300		--	--	--	--	**370**	17.8		7.43	U	--	--
B-307	2/26/2009	20	9110		12600		--	--	--	--	1.8	7.93	U	7.93	U	--	--
MW-19	5/3/1993	20	13100		15200		--	--	--	--	--	--	--	--	--	--	--
MW-19	5/3/1993	5	11200		7400		--	--	--	--	--	--	--	--	--	--	--
MW-20S	5/3/1993	20	15500		17500		--	--	--	--	--	--	--	--	--	--	--
MW-20S	5/3/1993	5	15100		13400		--	--	--	--	--	--	--	--	--	--	--
MW-28S	4/2/1996	0.5	--	--	--	--	--	--	--	--	--	1200		--	--	--	--
MW-28S	4/2/1996	6	10800		20600		--	--	--	--	--	93		--	--	--	--
MW-29	4/2/1996	8.5	20300		26300		--	--	--	--	--	--	--	--	--	--	--
MW-29	4/2/1996	11	18700		24900		--	--	--	--	--	--	--	--	--	--	--
MW-29	4/2/1996	16	22800		31400		--	--	--	--	--	--	--	--	--	--	--
MW-45D	7/20/2004	0.5	35900		62000		11	U	130000	--	--	310		16		--	--
MW-45D	7/20/2004	2.5	19000		16900		11	U	15000	U	--	11	U	11	U	--	--
MW-45D	7/20/2004	5	18100		16400		10	U	15000	U	--	10	U	10	U	--	--
MW-45D	7/20/2004	10	26000		27500		10	U	17000	U	--	10	U	10	U	--	--
MW-9S	7/14/2004	2.5	31500		21900		8200		**4500000**		--	17000		11000		--	--
MW-9S	7/14/2004	5	30500		20000		2100		78000		--	1700		2200		--	--
MW-9S	7/14/2004	10	23100		22600		140		13000	U	--	280		130		--	--
SPY-01A	5/9/2002	5	21200		19800		13	U	--	--	--	68		13	U	--	--
SPY-01A	5/9/2002	10	23300		13000		26	U	--	--	--	26	U	26	U	--	--
SPY-01B	5/9/2002	10	31500		21200		7900		--	--	--	26000		11000		--	--
SPY-01C	5/9/2002	1	75400		77000		11	U	--	--	--	1300		22		--	--
SPY-01C	5/9/2002	5	20300		20700		13	U	--	--	--	13	U	13	U	--	--
SPY-01C	5/9/2002	10	17000		11600		13	U	--	--	--	13	U	13	U	--	--
SPY-01D	5/9/2002	1	34600		23900		68		--	--	--	840		96		--	--
SPY-01D	5/9/2002	5	20700		21000		12	U	--	--	--	12	U	12	U	--	--
SPY-01D	5/9/2002	10	20300		11200		24	U	--	--	--	24	U	24	U	--	--
SPY-01E	5/9/2002	1	17600		21800		14		--	--	--	1800		26		--	--
SPY-01E	5/9/2002	5	20700		16600		13	U	--	--	--	13	U	13	U	--	--
SPY-01E	5/9/2002	10	19600		12200		13	U	--	--	--	13	U	13	U	--	--
SPY-01F	5/9/2002	1	19100		30000		11	U	--	--	--	490		11	U	--	--
SPY-01F	5/9/2002	5	14100		19900		11	U	--	--	--	11	U	11	U	--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
SPY-01F	5/9/2002	10	20000		12200		13	U	--	--	--	13	U	13	U	--	--
SPY-01G	5/9/2002	1	25100		13600		66		--	--	--	2100		170		--	--
SPY-01G	5/9/2002	3	15500		17700		12	U	--	--	--	15	--	12	U	--	--
SPY-01G	5/9/2002	5	19800		16900		12	U	--	--	--	12	U	12	U	--	--
SPY-01G	5/9/2002	10	19900		12000		12	U	--	--	--	12	U	12	U	--	--
SPY-01H	5/9/2002	1	12700		19700		11	U	--	--	--	190		11	U	--	--
SPY-01H	5/9/2002	5	16900		21600		13	U	--	--	--	63		13	U	--	--
SPY-01H	5/9/2002	10	18400		10900		13	U	--	--	--	13	U	13	U	--	--
SPY-02A	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02A	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02B	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02B	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02C	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02C	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02D	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02D	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02E	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02E	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02F	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02F	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02G	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02G	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02H	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02H	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02I	5/9/2002	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-02I	5/9/2002	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-03	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPY-04	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-1	4/2/1996	1	30300		20800		--	--	--	--	--	2300		--	--	--	--
SS-8	7/17/2008	1.5	15100		20800		--	--	--	--	**19**	716		7.92	U	--	--
SS-10	2/26/2009	0.5	11600		15100		--	--	--	--	**100**	7.62	U	7.62	U	--	--
SS-11	2/26/2009	0.5	18600		22500		--	--	--	--	**710**	381		11.4		--	--
SS-12	2/26/2009	0.5	32100		22000		--	--	--	--	**230**	7.4	U	7.4	U	--	--
SS-40	6/17/2010	0	18500		19200		--	--	--	--	**82**	47.7		8.67	U	--	--
TP-17	5/3/1993	0.5	23800		24800		1300	U	--	--	--	1300	U	--	--	--	--

		Analyte	Chromium		Copper		Dibenzofuran		Diesel		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	67000		217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
TP-17	5/3/1993	5	18500		14200		--	--	--	--	--	--	--	--	--	--	--
TP-18	5/3/1993	0.3	31200		56300		--	--	--	--	--	--	--	--	--	--	--
TP-18	5/3/1993	3	19100		12900		330	U	--	--	--	370		--	--	--	--
TP-18A	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18A	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18B	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18B	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18C	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18C	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18CEN	4/25/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18CEN	4/25/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18D	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18D	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18E	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18E	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18F	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18F	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18G	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18G	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18H	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-18H	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-19	5/3/1993	0.5	37000		59700		4000	U	--	--	--	41000		--	--	--	--
TP-19	5/3/1993	4.5	4100		4100		--	--	--	--	--	--	--	--	--	--	--
TP-20	5/3/1993	0.2	20100		27000		--	--	--	--	--	--	--	--	--	--	--
TP-20	5/3/1993	4.5	24000		20600		--	--	--	--	--	--	--	--	--	--	--
TP-22	5/3/1993	0.5	36700		48200		1700	U	--	--	--	1700	U	--	--	--	--
TP-22	5/3/1993	6	9600		8100		--	--	--	--	--	--	--	--	--	--	--

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-204	10/28/1999	2.5	25000	U	10	U	4300		9700		5	U	49000	
B-204	10/28/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-204	10/28/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-205	10/29/1999	2.5	25000	U	53		330		300		5	U	58000	
B-205	10/29/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-205	10/29/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-206	11/1/1999	2.5	25000	U	10	U	1800		39		5	U	46000	
B-206	11/1/1999	5	--	--	10	U	5	U	10	U	5	U	--	--
B-206	11/1/1999	10	25000	U	1600		**340000**		1700		--	--	62000	
B-207	11/1/1999	2.5	25000	U	10	U	1100		470		5	U	87000	
B-207	11/1/1999	5	25000	U	10	U	6.1		10	U	--	--	79000	
B-207	11/1/1999	10	25000	U	10	U	8		22		--	--	69000	
B-208	11/1/1999	2.5	25000	U	190		**43000**		2900		5	U	57000	
B-208	11/1/1999	5	25000	U	20		1400		950		5	U	85000	
B-208	11/1/1999	10	--	--	10	U	5	U	10	U	--	--	--	--
B-209	11/1/1999	2.5	--	--	12		5	U	63		--	--	--	--
B-209	11/1/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-209	11/1/1999	10	25000	U	10	U	5		10		--	--	66000	
B-210	11/1/1999	2.5	--	--	10	U	47		38		5	U	--	--
B-210	11/1/1999	5	190000		10	U	1800		1800		5	U	74000	
B-210	11/1/1999	15	25000	U	10	U	11		10	U	--	--	75000	
B-212	11/2/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-212	11/2/1999	5	297000		10	U	14	--	22		5	U	181000	
B-212	11/2/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-213	11/2/1999	2.5	--	--	10	U	43	--	60		--	--	80000	
B-213	11/2/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-213	11/2/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-214	11/3/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-214	11/3/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-214	11/3/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-215	11/4/1999	2.5	25000	U	10	U	620		230		5	U	40000	
B-215	11/4/1999	5	25000	U	10	U	430		170		5	U	53000	
B-215	11/4/1999	10	500000		10	U	780		12		--	--	56000	
B-216	11/4/1999	5	25000	U	10	U	91		10	U	5	U	63000	
B-216	11/4/1999	10	25000	U	--	--	5	U	--	--	--	--	63000	

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-217	11/5/1999	2.5	25000	U	10	U	500		1300		5	U	59000	
B-217	11/5/1999	10	25000	U	30		180		430		--	--	163000	
B-217	11/5/1999	15	25000	U	10	U	2000		10	U	--	--	73000	
B-218	11/8/1999	5	25000	U	10	U	5100		7800		5	U	63000	
B-218	11/8/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-218	11/8/1999	15	25000	U	10	U	1200		10	U	--	--	64000	
B-219	11/8/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-219	11/8/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-219	11/8/1999	10	25000	U	10	U	8.8		10		--	--	64000	
B-275	7/8/2004	0.5	130000		36		50	U	180		--	--	--	--
B-275	7/8/2004	5	57000	U	10	U	50	U	10	U	--	--	--	--
B-275	7/8/2004	10	60000	U	10	U	50	U	10	U	--	--	--	--
B-276	7/13/2004	0.5	71000		10	U	50	U	10	U	--	--	--	--
B-276	7/13/2004	3	50000	U	10	U	47	U	10	U	--	--	--	--
BH-27	4/2/1996	1	--	--	--	--	190		490		--	--	--	--
BH-27	4/2/1996	6	--	--	--	--	340		390		--	--	--	--
BH-27	4/2/1996	26	--	--	--	--	--	--	--	--	--	--	55500	
B-277	7/9/2004	0.5	51000	U	9.4	U	50	U	9.4	U	--	--	--	--
B-277	7/9/2004	2.5	58000	U	10	U	48	U	10	U	--	--	--	--
B-277	7/9/2004	5	58000	U	9.6	U	49	U	9.6	U	--	--	--	--
B-277	7/9/2004	10	62000	U	11		600		10		--	--	--	--
B-278	7/9/2004	0.5	97000		13		120		240		--	--	--	--
B-278	7/9/2004	2.5	57000	U	9.9	U	50	U	88		--	--	--	--
B-278	7/9/2004	10	64000	U	10	U	50	U	10	U	--	--	--	--
B-279	7/9/2004	0.5	55000	U	48		50	U	16		--	--	--	--
B-279	7/9/2004	2.5	54000	U	10	U	49	U	20		--	--	--	--
B-279	7/9/2004	5	67000	U	9.8	U	50	U	9.8	U	--	--	--	--
B-279	7/9/2004	10	67000	U	10	U	200		10	U	--	--	--	--
BH-28	4/2/1996	0.5	--	--	--	--	270		390		--	--	--	--
BH-28	4/2/1996	6	--	--	--	--	--	--	--	--	--	--	54700	
B-280	7/13/2004	0.5	50000	U	26		280		47		--	--	--	--
B-280	7/13/2004	5	110000		10	U	50	U	190		--	--	--	--
B-280	7/13/2004	10	50000	U	10	U	1300		10	U	--	--	--	--
B-281	7/9/2004	0.5	55000		63		1400		110		--	--	--	--
B-281	7/9/2004	2.5	60000	U	320		270		130		--	--	--	--

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-281	7/9/2004	10	63000	U	9.9	U	6100		9.9	U	--	--	--	--
B-282	7/8/2004	0.5	390000		100	U	3600		100	U	--	--	--	--
B-282	7/8/2004	5	58000	U	10	U	86		200		--	--	--	--
B-282	7/8/2004	10	59000	U	10	U	50	U	10	U	--	--	--	--
B-283	7/12/2004	0.5	50000	U	9.9	U	350		14		--	--	--	--
B-283	38180	3	50000	U	10	U	50	U	19		--	--	--	--
B-283	7/12/2004	5	49000	U	10	U	**110000**		10	U	--	--	--	--
B-284	7/13/2004	0.5	230000		220		6800		710		--	--	--	--
B-284	7/13/2004	2.5	50000	U	13		50	U	100		--	--	--	--
B-284	7/13/2004	5	50000	U	10	U	50	U	10	U	--	--	--	--
B-284	7/13/2004	10	50000	U	10	U	**8900**		10	U	--	--	--	--
B-285	7/13/2004	0.5	580000		200	U	3900		790		--	--	--	--
B-285	7/13/2004	5	600000		85		50	U	400		--	--	--	--
B-285	7/13/2004	10	50000	U	10	U	**110000**		10	U	--	--	--	--
B-286	7/8/2004	0.5	**3900000**		100	U	1100		7700		--	--	--	--
B-286	7/8/2004	2.5	57000	U	71		50	U	420		--	--	--	--
B-286	7/8/2004	5	61000	U	10	U	50	U	10	U	--	--	--	--
B-286	7/8/2004	10	60000	U	10	U	950		10	U	--	--	--	--
B-287	7/12/2004	0.5	140000		51	U	160		250		--	--	--	--
B-287	7/12/2004	2.5	50000	U	9.8	U	250		33		--	--	--	--
B-287	7/12/2004	5	50000	U	10	U	95		65		--	--	--	--
B-287	7/12/2004	10	50000	U	9.7	U	1100		9.7	U	--	--	--	--
B-288	7/8/2004	0.5	260000		120		50	U	220		--	--	--	--
B-288	7/8/2004	10	58000	U	10	U	46	U	10	U	--	--	--	--
B-289	7/12/2004	0.5	240000		9.1	U	500	U	9.1	U	--	--	--	--
B-289	7/12/2004	2.5	49000	U	410		50	U	9200		--	--	--	--
B-289	7/12/2004	5	49000	U	10	U	50	U	53		--	--	--	--
B-289	7/12/2004	10	59000	U	10	U	690		10	U	--	--	--	--
BH-29	4/2/1996	6	--	--	--	--	--	--	--	--	--	--	55000	
B-290	7/13/2004	0.5	240000		100	U	7200		310		--	--	--	--
B-290	7/13/2004	2.5	640000		370	--	500	U	2200		--	--	--	--
B-290	7/13/2004	5	72000		100	U	50	U	340		--	--	--	--
B-290	7/13/2004	10	50000	U	10	U	730		10	U	--	--	--	--
B-291	7/12/2004	0.5	190000		100	U	**12000**		380		--	--	--	--
B-291	7/12/2004	2.5	1000000		100	U	110		1400		--	--	--	--

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-291	7/12/2004	5	94000		10	U	51	U	37		--	--	--	--
B-291	7/12/2004	10	200000		11	U	**16000**		11	U	--	--	--	--
B-292	7/8/2004	0.5	190000		110	U	50	U	1000		--	--	--	--
B-292	7/8/2004	2.5	62000	U	10	U	50	U	53		--	--	--	--
B-292	7/8/2004	5	59000	U	10	U	50	U	10	U	--	--	--	--
B-292	7/8/2004	10	63000	U	10	U	370		10	U	--	--	--	--
B-293	7/12/2004	0.5	82000		9.6	U	**130000**		510		--	--	--	--
B-293	7/12/2004	2.5	280000		1000		76		11000		--	--	--	--
B-293	7/12/2004	5	50000	U	9.9	U	50	U	9.9	U	--	--	--	--
B-293	7/12/2004	10	50000	U	10	U	89		10	U	--	--	--	--
B-294	7/12/2004	0.5	51000	U	10	U	3300		20		--	--	--	--
B-294	7/12/2004	2.5	50000	U	99	U	240		6800		--	--	--	--
B-294	7/12/2004	5	500000		9.5	U	49	U	87		--	--	--	--
B-294	7/12/2004	10	51000	U	9.8	U	4200		9.8	U	--	--	--	--
B-295	7/12/2004	0.5	160000		110	U	1700		630		--	--	--	--
B-295	7/12/2004	2.5	51000	U	10	U	50	U	1200		--	--	--	--
B-295	7/12/2004	5	50000	U	10	U	49	U	10	U	--	--	--	--
B-295	7/12/2004	10	50000	U	9.7	U	**11000**		9.7	U	--	--	--	--
B-296	7/9/2004	0.5	130000		100	U	**27000**		5300		--	--	--	--
B-296	7/9/2004	2.5	58000	U	1900		**620000**		10	U	--	--	--	--
B-296	7/9/2004	5	590000		110000		7800		460		--	--	--	--
B-296	7/9/2004	10	61000	U	4400		**120000**		59		--	--	--	--
B-297	7/9/2004	1	890000		100	U	200		1300		--	--	--	--
B-297	7/9/2004	2.5	61000	U	10	U	50	U	180		--	--	--	--
B-297	7/9/2004	5	62000	U	10	U	50	U	13		--	--	--	--
B-297	7/9/2004	10	66000	U	10	U	--	--	10	U	--	--	--	--
B-297	7/9/2004	15	--	--	--	--	120		--	--	--	--	--	--
B-299	7/21/2004	0.5	54000	U	10	U	270		36		--	--	--	--
B-299	7/21/2004	2.5	190000		10	U	91		800		--	--	--	--
B-299	7/21/2004	5	270000		10	U	1200		31		--	--	--	--
B-299	7/21/2004	10	120000		660		120		1300		--	--	--	--
B-300	7/21/2004	0.5	54000	U	57		130		14		--	--	--	--
B-300	7/21/2004	2.5	84000		11	U	50	U	38		--	--	--	--
B-300	7/21/2004	10	65000	U	10	U	**15000**		10	U	--	--	--	--
B-301	7/21/2004	0.5	1800000		500	U	1100		2100		--	--	--	--

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-301	7/21/2004	2.5	360000		10	U	50	U	130		--	--	--	--
B-301	7/21/2004	5	57000	U	10	U	--	--	10	U	--	--	--	--
B-307	2/26/2009	0.5	--	--	7.12	U	885		109		--	--	46800	
B-307	2/26/2009	2.5	--	--	7.43	U	909		28.2		--	--	60100	
B-307	2/26/2009	20	--	--	7.93	U	396	U	7.93	U	--	--	33200	
MW-19	5/3/1993	20	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	5/3/1993	5	--	--	--	--	--	--	--	--	--	--	--	--
MW-20S	5/3/1993	20	--	--	--	--	--	--	--	--	--	--	--	--
MW-20S	5/3/1993	5	--	--	--	--	--	--	--	--	--	--	--	--
MW-28S	4/2/1996	0.5	--	--	--	--	2000		2200		--	--	--	--
MW-28S	4/2/1996	6	--	--	--	--	3000		86		--	--	58500	
MW-29	4/2/1996	8.5	--	--	--	--	--	--	--	--	--	--	65900	
MW-29	4/2/1996	11	--	--	--	--	--	--	--	--	--	--	75100	
MW-29	4/2/1996	16	--	--	--	--	--	--	--	--	--	--	78200	
MW-45D	7/20/2004	0.5	520000		11	U	1900		370		--	--	--	--
MW-45D	7/20/2004	2.5	58000	U	11	U	51	U	11	U	--	--	--	--
MW-45D	7/20/2004	5	62000		10	U	50	U	10	U	--	--	--	--
MW-45D	7/20/2004	10	66000	U	10	U	50	U	10	U	--	--	--	--
MW-9S	7/14/2004	2.5	540000		3500		4600		13000		--	--	--	--
MW-9S	7/14/2004	5	56000		860		5600		1300		--	--	--	--
MW-9S	7/14/2004	10	51000	U	15		89		210		--	--	--	--
SPY-01A	5/9/2002	5	--	--	13	U	62	U	120		--	--	48700	
SPY-01A	5/9/2002	10	--	--	26	U	130	U	26	U	--	--	55500	
SPY-01B	5/9/2002	10	--	--	170		**130000**		19000		--	--	73500	
SPY-01C	5/9/2002	1	--	--	11	U	3600		1400		--	--	70500	
SPY-01C	5/9/2002	5	--	--	13	U	63	U	13	U	--	--	50200	
SPY-01C	5/9/2002	10	--	--	13	U	61	U	13	U	--	--	60500	
SPY-01D	5/9/2002	1	--	--	44		4900		730		--	--	111000	
SPY-01D	5/9/2002	5	--	--	12	U	140		17		--	--	59900	
SPY-01D	5/9/2002	10	--	--	24	U	120	U	24	U	--	--	60300	
SPY-01E	5/9/2002	1	--	--	11	U	1700		2000		--	--	43100	
SPY-01E	5/9/2002	5	--	--	16		61	U	37		--	--	80800	
SPY-01E	5/9/2002	10	--	--	13	U	61	U	13	U	--	--	58900	
SPY-01F	5/9/2002	1	--	--	11	U	660		440		--	--	66600	
SPY-01F	5/9/2002	5	--	--	11	U	54	U	11	U	--	--	43100	

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
SPY-01F	5/9/2002	10	--	--	13	U	61	U	13	U	--	--	56400	
SPY-01G	5/9/2002	1	--	--	58	U	**130000**		6900		--	--	80300	
SPY-01G	5/9/2002	3	--	--	12	U	220		30		--	--	54100	
SPY-01G	5/9/2002	5	--	--	12	U	57	U	12	U	--	--	58700	
SPY-01G	5/9/2002	10	--	--	12	U	59	U	12	U	--	--	64100	
SPY-01H	5/9/2002	1	--	--	11	U	390		200		--	--	35900	
SPY-01H	5/9/2002	5	--	--	13	U	350	--	62		--	--	65500	
SPY-01H	5/9/2002	10	--	--	13	U	62	U	13	U	--	--	63100	
SPY-02A	5/9/2002	0.5	--	--	--	--	170		--	--	--	--	--	--
SPY-02A	5/9/2002	1.5	--	--	--	--	130		--	--	--	--	--	--
SPY-02B	5/9/2002	0.5	--	--	--	--	650		--	--	--	--	--	--
SPY-02B	5/9/2002	1.5	--	--	--	--	80		--	--	--	--	--	--
SPY-02C	5/9/2002	0.5	--	--	--	--	2600		--	--	--	--	--	--
SPY-02C	5/9/2002	1.5	--	--	--	--	**63000**		--	--	--	--	--	--
SPY-02D	5/9/2002	0.5	--	--	--	--	630		--	--	--	--	--	--
SPY-02D	5/9/2002	1.5	--	--	--	--	**470000**		--	--	--	--	--	--
SPY-02E	5/9/2002	0.5	--	--	--	--	1500		--	--	--	--	--	--
SPY-02E	5/9/2002	1.5	--	--	--	--	570		--	--	--	--	--	--
SPY-02F	5/9/2002	0.5	--	--	--	--	780		--	--	--	--	--	--
SPY-02F	5/9/2002	1.5	--	--	--	--	**320000**		--	--	--	--	--	--
SPY-02G	5/9/2002	0.5	--	--	--	--	2400		--	--	--	--	--	--
SPY-02G	5/9/2002	1.5	--	--	--	--	1400		--	--	--	--	--	--
SPY-02H	5/9/2002	0.5	--	--	--	--	**16000**		--	--	--	--	--	--
SPY-02H	5/9/2002	1.5	--	--	--	--	**68000**		--	--	--	--	--	--
SPY-02I	5/9/2002	0.5	--	--	--	--	550		--	--	--	--	--	--
SPY-02I	5/9/2002	1.5	--	--	--	--	1300		--	--	--	--	--	--
SPY-03	2/6/1991	0	--	--	--	--	**8400**		--	--	--	--	--	--
SPY-04	2/6/1991	0	--	--	--	--	**14000**		--	--	--	--	--	--
SS-1	4/2/1996	1	--	--	--	--	950		1500		--	--	50900	
SS-8	7/17/2008	1.5	--	--	20.6		374		802		--	--	90600	
SS-10	2/26/2009	0.5	--	--	7.62	U	381	U	15.2		--	--	44100	
SS-11	2/26/2009	0.5	--	--	9.86		2950		601		--	--	43300	
SS-12	2/26/2009	0.5	--	--	7.4	U	369	U	7.4	U	--	--	78300	
SS-40	6/17/2010	0	--	--	8.67	U	19.5	U	32.9		--	--	105000	
TP-17	5/3/1993	0.5	--	--	1300	U	**72000**		1300	U	--	--	--	--

		Analyte	Residual Range Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
TP-17	5/3/1993	5	--	--	--	--	--	--	--	--	--	--	--	--
TP-18	5/3/1993	0.3	--	--	--	--	560		--	--	--	--	--	--
TP-18	5/3/1993	3	--	--	330	U	1600	U	350	--	--	--	--	--
TP-18A	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18A	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18B	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18B	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18C	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18C	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18CEN	4/25/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18CEN	4/25/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18D	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18D	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18E	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18E	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18F	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18F	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18G	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18G	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-18H	4/16/2002	7	--	--	--	--	--	--	--	--	--	--	--	--
TP-18H	4/16/2002	9	--	--	--	--	--	--	--	--	--	--	--	--
TP-19	5/3/1993	0.5	--	--	4000	U	**22000**		38000		--	--	--	--
TP-19	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	--	--	--
TP-20	5/3/1993	0.2	--	--	--	--	--	--	--	--	--	--	--	--
TP-20	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	--	--	--
TP-22	5/3/1993	0.5	--	--	1700	U	8300	U	1700	U	--	--	--	--
TP-22	5/3/1993	6	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	cPAH TEQ	Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Chromium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		67000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-120	6/17/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-120	6/17/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-120	6/17/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-121	6/18/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-121	6/18/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-121	6/18/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-122	9/21/1999	2.5	ND	--	--	--	--	10	U	10	U	**9000**		13000	
B-122	9/21/1999	15	ND	--	--	--	--	10	U	10	U	--	--	--	--
B-122	9/21/1999	20	ND	--	--	--	--	10	U	10	U	--	--	--	--
B-123	9/22/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	5	ND	--	--	--	--	10	U	10	U	--	--	--	--
B-123	9/22/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-124	9/23/1999	2.5	11	--	--	--	--	10	U	10	U	4000		15000	
B-124	9/23/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-124	9/23/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-125	9/24/1999	2.5	ND	--	--	--	--	10	U	10	U	5000		12000	
B-125	9/24/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-125	9/24/1999	10	ND	--	--	--	--	34		18		4000		15000	
B-125	9/24/1999	15	ND	--	--	--	--	10	U	10	U	2000		13000	
B-125	9/24/1999	20	11	--	--	--	--	10	U	10	U	3000		13000	
B-126	9/24/1999	5	**190**	--	--	--	--	10	U	10	U	3000		12000	
B-126	9/24/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-126	9/24/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-126	9/24/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-127	9/27/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-128	9/27/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-128	9/27/1999	10	--	5	U	20	U	--	--	--	--	--	--	--	--
B-128	9/27/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-129	9/28/1999	2.5	**190**	--	--	--	--	5	U	5	U	4000		14000	

		Analyte	cPAH TEQ	Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Chromium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		67000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-129	9/28/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-129	9/28/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-130	9/28/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-130	9/28/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-130	9/28/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-131	9/29/1999	2.5	5	--	--	--	--	5	U	5	U	**9000**		14000	
B-131	9/29/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-131	9/29/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-132	9/29/1999	2.5	11	--	--	--	--	5	U	5	U	3000		20000	
B-132	9/29/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-132	9/29/1999	15	--	5	U	20	U	--	--	--	--	--	--	--	--
B-132	9/29/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-133	9/29/1999	2.5	11	--	--	--	--	5	U	5	U	2000		18000	
B-133	9/29/1999	10	--	5	U	20	U	--	--	--	--	--	--	--	--
B-133	9/29/1999	20	--	5	U	20	U	--	--	--	--	--	--	--	--
B-134	9/30/1999	3	**200**	5	U	20	U	41		120		2000		17000	
B-134	9/30/1999	10	32	5	U	20	U	32		660		**10000**		26000	
B-134	9/30/1999	20	12	--	--	--	--	11		33		3000		19000	
B-135	9/30/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-135	9/30/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-135	9/30/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-135	9/30/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	10/1/1999	0	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	9/30/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-136	9/30/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-136	9/30/1999	10	--	5	U	20	U	--	--	--	--	--	--	--	--
B-136	10/1/1999	15	--	5	U	20	U	--	--	--	--	--	--	--	--
B-136	10/1/1999	20	--	5	U	20	U	--	--	--	--	--	--	--	--
B-137	10/4/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-137	10/4/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-137	10/4/1999	20	--	5	U	20	U	--	--	--	--	--	--	--	--
B-138	10/4/1999	2.5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-138	10/4/1999	5	--	5	U	20	U	--	--	--	--	--	--	--	--
B-138	10/4/1999	20	--	5	U	20	U	--	--	--	--	--	--	--	--
B-211	11/2/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	cPAH TEQ	Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Chromium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		67000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-211	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-211	11/2/1999	20	ND	--	--	--	--	10	U	10	U	2000		9000	
B-211	11/2/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-309	2/26/2009	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-310	2/27/2009	5	--	--	--	--	--	--	--	--	--	--	--	--	--
NPY-01	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
NPY-02	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-20	2/18/2009	0.5	ND	--	--	--	--	--	--	7.83	U	2400		16200	
SS-21	2/18/2009	0.5	24	--	--	--	--	--	--	7.31	U	2540		8590	
SS-21	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-22	2/18/2009	0.5	ND	--	--	--	--	--	--	8.08	U	1510		7680	
SS-23	2/18/2009	0.5	6.3	--	--	--	--	--	--	7.36	U	3040		13800	
SS-23	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-24	2/18/2009	0.5	53.8	--	--	--	--	--	--	7.14	U	**6260**		13500	
SS-24	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-25	2/18/2009	0.5	45.7	--	--	--	--	--	--	7.92	U	1580		6490	
SS-25	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-26	2/18/2009	0.5	9.67	--	--	--	--	--	--	7.89	U	3370		19600	
SS-26	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-27	2/18/2009	0.5	14.7	--	--	--	--	--	--	7.13	U	**7460**		8190	
SS-27	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-28	2/18/2009	0.5	ND	--	--	--	--	--	--	7.46	U	1450		2610	
SS-28	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-29	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-29	2/19/2009	0.5	42.2	--	--	--	--	--	--	7.39	U	3830		5180	
SS-5	7/16/2008	0.3	**190**	--	--	--	--	7.1	U	8.51		5620		17600	
TP-23	5/3/1993	0.3	--	--	--	--	--	--	--	--	--	1900		9400	
TP-23	5/3/1993	4	--	--	--	--	--	--	--	--	--	4400		12800	
TP-24	5/3/1993	0.5	--	--	--	--	--	--	--	--	--	**14900**		9600	
TP-24	5/3/1993	3	--	--	--	--	--	--	--	--	--	3100		11000	
TP-25	5/3/1993	0.5	**1700**	--	--	--	--	--	--	--	--	**59200**		57600	
TP-25	5/3/1993	5	--	--	--	--	--	--	--	--	--	5100		14600	
TP-26	5/3/1993	0.4	--	--	--	--	--	--	--	--	--	**10400**		14200	
TP-26	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	5600		7600	
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	cPAH TEQ	Tetrachloroethane		1,2,4-Trimethylbenzene		2-Methylnaphthalene		Acenaphthene		Arsenic		Chromium	
		Unit	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	140	5000		4000000		320000		4800000		5810		67000	
		Soil Remediation Level	18000	NV		NV		NV		NV		88000		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	Copper		Dibenzofuran		Diesel Range Organics		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline Range Organics	
		Unit	ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-120	6/17/1999	2.5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-120	6/17/1999	5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-120	6/17/1999	15	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-121	6/18/1999	2.5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-121	6/18/1999	5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-121	6/18/1999	20	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-122	9/21/1999	2.5	21000		10	U	10000	U	--	10	U	10	U	10000	U
B-122	9/21/1999	15	--	--	10	U	--	--	--	10	U	10	U	--	--
B-122	9/21/1999	20	--	--	10	U	--	--	--	10	U	10	U	--	--
B-123	9/22/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	5	--	--	10	U	--	--	--	10	U	10	U	--	--
B-123	9/22/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-123	9/22/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-124	9/23/1999	2.5	19000		10	U	10000	U	--	73		10	U	10000	U
B-124	9/23/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-124	9/23/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-125	9/24/1999	2.5	17000		10	U	10000	U	--	10	U	10	U	10000	U
B-125	9/24/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-125	9/24/1999	10	19000		11		10000	U	--	10	U	10		10000	U
B-125	9/24/1999	15	26000		10	U	10000	U	--	10	U	10	U	10000	U
B-125	9/24/1999	20	22000		10	U	10000	U	--	18		10	U	10000	U
B-126	9/24/1999	5	14000		10	U	10000	U	--	380		10	U	10000	U
B-126	9/24/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-126	9/24/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-126	9/24/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	2.5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-127	9/27/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	10	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-127	9/27/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-127	9/27/1999	20	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-128	9/27/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-128	9/27/1999	10	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-128	9/27/1999	20	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-129	9/28/1999	2.5	24000		5	U	10000	U	--	430		5	U	10000	U

		Analyte	Copper		Dibenzofuran		Diesel Range Organics		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline Range Organics	
		Unit	ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-129	9/28/1999	5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-129	9/28/1999	20	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-130	9/28/1999	2.5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-130	9/28/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-130	9/28/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-131	9/29/1999	2.5	22000		5	U	10000	U	--	5	U	5	U	10000	U
B-131	9/29/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-131	9/29/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-132	9/29/1999	2.5	19000		5	U	10000	U	--	12		5	U	10000	U
B-132	9/29/1999	5	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-132	9/29/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-132	9/29/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-133	9/29/1999	2.5	14000		5	U	10000	U	--	28		5	U	10000	U
B-133	9/29/1999	10	--	--	--	--	10000	U	--	--	--	--	--	10000	U
B-133	9/29/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-134	9/30/1999	3	23000		93		89000		--	1700		170		10000	U
B-134	9/30/1999	10	18000		300		70000		--	440		260		10000	U
B-134	9/30/1999	20	27000		20		10000	U	--	240		26		10000	U
B-135	9/30/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-135	9/30/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-135	9/30/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-135	9/30/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	10/1/1999	0	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	9/30/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	9/30/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	9/30/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	10/1/1999	15	--	--	--	--	--	--	--	--	--	--	--	--	--
B-136	10/1/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-137	10/4/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-137	10/4/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-137	10/4/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-138	10/4/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-138	10/4/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-138	10/4/1999	20	--	--	--	--	--	--	--	--	--	--	--	--	--
B-211	11/2/1999	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--

Table A-4
LRIS Cell 4 Soil Cleanup Level Screening
Former PWT Site

		Analyte	Copper		Dibenzofuran		Diesel Range Organics		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline Range Organics	
		Unit	ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
B-211	11/2/1999	10	--	--	--	--	--	--	--	--	--	--	--	--	--
B-211	11/2/1999	20	24000		10	U	10000	U	--	10	U	10	U	10000	U
B-211	11/2/1999	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-309	2/26/2009	5	--	--	--	--	--	--	**102**	--	--	--	--	--	--
B-310	2/27/2009	5	--	--	--	--	--	--	**89**	--	--	--	--	--	--
NPY-01	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
NPY-02	2/6/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-20	2/18/2009	0.5	14800		--	--	--	--	1.7	7.83	U	7.83	U	--	--
SS-21	2/18/2009	0.5	13800		--	--	--	--	**150**	40.2		7.31	U	--	--
SS-21	2/18/2009	1.5	--	--	--	--	--	--	**84**	--	--	--	--	--	--
SS-22	2/18/2009	0.5	5100		--	--	--	--	9.3	8.08	U	8.08	U	--	--
SS-23	2/18/2009	0.5	18200		--	--	--	--	**74**	7.36	U	7.36	U	--	--
SS-23	2/18/2009	1.5	--	--	--	--	--	--	4.2	--	--	--	--	--	--
SS-24	2/18/2009	0.5	15200		--	--	--	--	**920**	34.3		7.14	U	--	--
SS-24	2/18/2009	1.5	--	--	--	--	--	--	**16**	--	--	--	--	--	--
SS-25	2/18/2009	0.5	39100		--	--	--	--	**54**	26.9		7.92	U	--	--
SS-25	2/18/2009	1.5	--	--	--	--	--	--	3.3	--	--	--	--	--	--
SS-26	2/18/2009	0.5	17200		--	--	--	--	**69**	7.89	U	7.89	U	--	--
SS-26	2/18/2009	1.5	--	--	--	--	--	--	**440**	--	--	--	--	--	--
SS-27	2/18/2009	0.5	11300		--	--	--	--	**58**	12.1		7.13	U	--	--
SS-27	2/18/2009	1.5	--	--	--	--	--	--	**16**	--	--	--	--	--	--
SS-28	2/18/2009	0.5	36100		--	--	--	--	**130**	7.46	U	7.46	U	--	--
SS-28	2/18/2009	1.5	--	--	--	--	--	--	**400**	--	--	--	--	--	--
SS-29	2/18/2009	1.5	--	--	--	--	--	--	5.5	--	--	--	--	--	--
SS-29	2/19/2009	0.5	14700		--	--	--	--	**41**	17		7.39	U	--	--
SS-5	7/16/2008	0.3	14100		--	--	--	--	**100**	514		14.9		--	--
TP-23	5/3/1993	0.3	13800		--	--	--	--	--	--	--	--	--	--	--
TP-23	5/3/1993	4	8500		--	--	--	--	--	--	--	--	--	--	--
TP-24	5/3/1993	0.5	39500		--	--	--	--	--	--	--	--	--	--	--
TP-24	5/3/1993	3	12800		--	--	--	--	--	--	--	--	--	--	--
TP-25	5/3/1993	0.5	65000		--	--	--	--	--	4900		--	--	--	--
TP-25	5/3/1993	5	13800		--	--	--	--	--	--	--	--	--	--	--
TP-26	5/3/1993	0.4	18000		--	--	--	--	--	--	--	--	--	--	--
TP-26	5/3/1993	4.5	13400		--	--	--	--	--	--	--	--	--	--	--
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	Copper		Dibenzofuran		Diesel Range Organics		Dioxin/Furan TEQ	Fluoranthene		Fluorene		Gasoline Range Organics	
		Unit	ug/kg		ug/kg		ug/kg		ng/kg	ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	217000		160000		2000000		11	3200000		3200000		30000	
		Soil Remediation Level	NV		NV		NV		1500	NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Result	Q	Result	Q	Result	Q
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--
W-9	2/4/1991	0	--	--	--	--	--	--	--	--	--	--	--	--	--

		Analyte	Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-120	6/17/1999	2.5	25000	U	--	--	9		--	--	--	--	--	--
B-120	6/17/1999	5	25000	U	--	--	10		--	--	--	--	--	--
B-120	6/17/1999	15	25000	U	--	--	6		--	--	--	--	--	--
B-121	6/18/1999	2.5	25000	U	--	--	5	U	--	--	--	--	--	--
B-121	6/18/1999	5	25000	U	--	--	5	U	--	--	--	--	--	--
B-121	6/18/1999	20	25000	U	--	--	5	U	--	--	--	--	--	--
B-122	9/21/1999	2.5	25000	U	10	U	6	--	10	U	--	--	67000	
B-122	9/21/1999	15	--	--	10	U	5	U	10	U	--	--	--	--
B-122	9/21/1999	20	--	--	10	U	5	U	10	U	--	--	--	--
B-123	9/22/1999	2.5	--	--	--	--	5	U	--	--	--	--	--	--
B-123	9/22/1999	5	--	--	10	U	5	U	10	U	--	--	--	--
B-123	9/22/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-123	9/22/1999	15	--	--	--	--	5	U	--	--	--	--	--	--
B-123	9/22/1999	20	--	--	--	--	5	U	--	--	--	--	--	--
B-124	9/23/1999	2.5	25000	U	10	U	20		62		--	--	61000	
B-124	9/23/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-124	9/23/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-125	9/24/1999	2.5	25000	U	10	U	340		10	U	--	--	53000	
B-125	9/24/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-125	9/24/1999	10	25000	U	40		22		10	U	--	--	45000	
B-125	9/24/1999	15	25000	U	10	U	11		10	U	--	--	43000	
B-125	9/24/1999	20	25000	U	21		9		27		--	--	36000	
B-126	9/24/1999	5	25000	U	10	U	250		880		--	--	47000	
B-126	9/24/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-126	9/24/1999	15	--	--	--	--	5	U	--	--	--	--	--	--
B-126	9/24/1999	20	--	--	--	--	5	U	--	--	--	--	--	--
B-127	9/27/1999	2.5	25000	U	20	U	5	U	--	--	5	U	--	--
B-127	9/27/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-127	9/27/1999	10	25000	U	--	--	5	U	--	--	--	--	--	--
B-127	9/27/1999	15	--	--	--	--	5	U	--	--	--	--	--	--
B-127	9/27/1999	20	25000	U	--	--	5	U	--	--	--	--	--	--
B-128	9/27/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-128	9/27/1999	10	25000	U	20	U	5	U	--	--	5	U	--	--
B-128	9/27/1999	20	25000	U	--	--	5	U	--	--	--	--	--	--
B-129	9/28/1999	2.5	180000		5	U	34		370		--	--	47000	

		Analyte	Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-129	9/28/1999	5	25000	U	--	--	5	U	--	--	--	--	--	--
B-129	9/28/1999	20	25000	U	--	--	5	U	--	--	--	--	--	--
B-130	9/28/1999	2.5	25000	U	--	--	5	U	--	--	--	--	--	--
B-130	9/28/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-130	9/28/1999	15	--	--	--	--	5	U	--	--	--	--	--	--
B-131	9/29/1999	2.5	25000	U	5	U	18		5	U	--	--	54000	
B-131	9/29/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-131	9/29/1999	20	--	--	--	--	5	U	--	--	--	--	--	--
B-132	9/29/1999	2.5	25000	U	5	U	5.3		9		--	--	36000	
B-132	9/29/1999	5	25000	U	20	U	5	U	--	--	5	U	--	--
B-132	9/29/1999	15	--	--	20	U	--	--	--	--	5	U	--	--
B-132	9/29/1999	20	--	--	--	--	5	U	--	--	--	--	--	--
B-133	9/29/1999	2.5	25000	U	5	U	5.1		24		--	--	37000	
B-133	9/29/1999	10	25000	U	20	U	5	U	--	--	5	U	--	--
B-133	9/29/1999	20	--	--	20	U	5	U	--	--	5	U	--	--
B-134	9/30/1999	3	25000	U	60		--	--	1100		5	U	55000	
B-134	9/30/1999	10	64000		140		470		300		5	U	59000	
B-134	9/30/1999	20	25000	U	39		130		150		--	--	48000	
B-135	9/30/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-135	9/30/1999	5	--	--	20	U	--	--	--	--	5	U	--	--
B-135	9/30/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-135	9/30/1999	20	--	--	--	--	5	U	--	--	--	--	--	--
B-136	10/1/1999	0	--	--	--	--	5	U	--	--	--	--	--	--
B-136	9/30/1999	2.5	--	--	20	U	--	--	--	--	5	U	--	--
B-136	9/30/1999	5	--	--	20	U	--	--	--	--	5	U	--	--
B-136	9/30/1999	10	--	--	20	U	--	--	--	--	5	U	--	--
B-136	10/1/1999	15	--	--	20	U	--	--	--	--	5	U	--	--
B-136	10/1/1999	20	--	--	20	U	--	--	--	--	5	U	--	--
B-137	10/4/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-137	10/4/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-137	10/4/1999	20	--	--	20	U	5	U	--	--	5	U	--	--
B-138	10/4/1999	2.5	--	--	20	U	5	U	--	--	5	U	--	--
B-138	10/4/1999	5	--	--	20	U	5	U	--	--	5	U	--	--
B-138	10/4/1999	20	--	--	20	U	5	U	--	--	5	U	--	--
B-211	11/2/1999	2.5	--	--	--	--	5	U	--	--	--	--	--	--

		Analyte	Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
B-211	11/2/1999	10	--	--	--	--	5	U	--	--	--	--	--	--
B-211	11/2/1999	20	25000	U	10	U	5.3	--	10	U	--	--	40000	
B-211	11/2/1999	5	--	--	--	--	5	U	--	--	--	--	--	--
B-309	2/26/2009	5	--	--	--	--	--	--	--	--	--	--	--	--
B-310	2/27/2009	5	--	--	--	--	--	--	--	--	--	--	--	--
NPY-01	2/6/1991	0	--	--	--	--	2500		--	--	--	--	--	--
NPY-02	2/6/1991	0	--	--	--	--	8000		--	--	--	--	--	--
SS-20	2/18/2009	0.5	--	--	7.83	U	391	U	15.7	U	--	--	49400	
SS-21	2/18/2009	0.5	--	--	7.31	U	365	U	31.4		--	--	40800	
SS-21	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-22	2/18/2009	0.5	--	--	8.08	U	404	U	16.2	U	--	--	17200	
SS-23	2/18/2009	0.5	--	--	7.36	U	367	U	7.36	U	--	--	98800	
SS-23	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-24	2/18/2009	0.5	--	--	7.14	U	1540		42.8		--	--	50100	
SS-24	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-25	2/18/2009	0.5	--	--	7.92	U	395	U	21.4		--	--	41000	
SS-25	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-26	2/18/2009	0.5	--	--	7.89	U	394	U	7.89	U	--	--	65600	
SS-26	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-27	2/18/2009	0.5	--	--	7.13	U	356	U	10.7		--	--	34600	
SS-27	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-28	2/18/2009	0.5	--	--	7.46	U	372	U	7.46	U	--	--	35700	
SS-28	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-29	2/18/2009	1.5	--	--	--	--	--	--	--	--	--	--	--	--
SS-29	2/19/2009	0.5	--	--	7.39	U	369	U	17		--	--	38500	
SS-5	7/16/2008	0.3	--	--	7.8		116		392		--	--	50700	
TP-23	5/3/1993	0.3	--	--	--	--	1100		--	--	--	--	--	--
TP-23	5/3/1993	4	--	--	--	--	--	--	--	--	--	--	--	--
TP-24	5/3/1993	0.5	--	--	--	--	4400		--	--	--	--	--	--
TP-24	5/3/1993	3	--	--	--	--	--	--	--	--	--	--	--	--
TP-25	5/3/1993	0.5	--	--	--	--	--	--	2600		--	--	--	--
TP-25	5/3/1993	5	--	--	--	--	--	--	--	--	--	--	--	--
TP-26	5/3/1993	0.4	--	--	--	--	--	--	--	--	--	--	--	--
TP-26	5/3/1993	4.5	--	--	--	--	--	--	--	--	--	--	--	--
W-9	2/4/1991	0	--	--	--	--	2500	U	--	--	--	--	--	--

Table A-4
LRIS Cell 4 Soil Cleanup Level Screening
Former PWT Site

		Analyte	Organics		Naphthalene		Pentachlorophenol		Pyrene		Styrene		Zinc	
		Unit	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
		Soil Cleanup Level	2000000		1600000		8300		2400000		33000		360000	
		Soil Remediation Level	NV		NV		1100000		NV		NV		NV	
Sample Location	Sample Date	Depth (ft bgs)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
W-9	2/4/1991	0	--	--	--	--	2500	U	--	--	--	--	--	--
W-9	2/4/1991	0	--	--	--	--	2500	U	--	--	--	--	--	--

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
UWBZ: Cells 1 and 2																					
Cell 1 (UWBZ)																					
MW-7	01/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	3.93	3.17	0.951 U	0.951 U	50 U	2.29	4.6	0.3 U	0.951 U	3.8	1 U	6	1 U
	08/24/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	2.6	0.3 U	0.951 U	0.951 U	1 U	6.8	1 U
	01/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.958 U	0.958 U	1.44	0.958 U	0.958 U	50 U	1.25	4.44	0.3 U	0.958 U	1.74	1 U	5 U	1 U
	09/01/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	2.08	0.3 U	0.957 U	0.957 U	1 U	7.2	1 U
MW-44	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	**3.39**	1 U	1 U	1 U	1 U	1 U	1.98	0.963 U	0.963 U	0.963 U	7.21	55.6	14.5	**9.7**	0.3 U	0.963 U	**7.4**	1 U	8.1	1 U
	01/24/2011	**0.791**	1 U	1 U	1 U	1 U	1 U	0.961 U	0.961 U	1.25	0.961 U	1.95	50 U	2.74	2.71	0.3 U	0.961 U	3.32	1 U	6.9	1 U
	09/02/2011	**7.51**	1 U	1 U	1 U	1 U	1 U	1.34	0.961 U	9.5	0.961 U	1.86	50 U	3.93	**9.54**	0.3 U	0.961 U	3.24	1 U	8.5	1 U
EPA-4S	01/29/2010	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	50 U	0.95 U	1.1	0.3 U	0.95 U	0.95 U	1 U	5.1	1 U
	08/24/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	2.8	0.3 U	0.948 U	0.948 U	1 U	6.7	1 U
	01/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	4.65	0.3 U	0.952 U	0.952 U	1 U	6.1	1 U
	09/01/2011	ND	1 U	1 U	1 U	1 U	1 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	50 U	0.962 U	**6.9**	0.3 U	0.962 U	0.962 U	1 U	6.9	1 U
EPA-4D	01/29/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1 U	0.3 U	0.951 U	0.951 U	1 U	8.2	1 U
	08/24/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	1 U	0.3 U	0.947 U	0.947 U	1 U	9.8	1 U
	01/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	50 U	0.955 U	0.766	0.3 U	0.955 U	0.955 U	1 U	8	1 U
	09/01/2011	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	50 U	0.96 U	0.974	0.3 U	0.96 U	0.96 U	1 U	7.5	1 U
Cell 2 (UWBZ)																					
MW-4	01/19/2010	ND	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U	0.945 U	0.945 U	40.9	50 U	0.945 U	**43**	0.3 U	0.945 U	0.945 U	1 U	6.8	1 U
	08/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	34.6	50 U	0.95 U	**48**	0.3 U	0.95 U	0.95 U	1 U	11.6	1 U
	01/20/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	52.6	50 U	0.951 U	**42.7**	0.3 U	0.951 U	0.951 U	1 U	10	1 U
	08/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	22.9	50 U	0.954 U	**45.2**	0.3 U	0.954 U	0.954 U	1 U	9.3	1 U
MW-5	01/22/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	37.9	50 U	0.947 U	**38**	0.3 U	0.947 U	0.947 U	1 U	6.3	1 U
	08/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	21.2	50 U	0.946 U	**35**	0.3 U	0.946 U	0.946 U	1 U	10.9	1 U
	01/20/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	41.1	50 U	0.952 U	**26.5**	0.3 U	0.952 U	0.952 U	1 U	10.3	1 U
	08/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	26.3	50 U	0.951 U	**30**	0.3 U	0.951 U	0.951 U	1 U	6.9	1 U
PZ-06	01/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	**23**	0.3 U	0.948 U	0.948 U	1 U	9.2	1 U
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	**25.2**	0.3 U	0.952 U	0.952 U	1 U	7.4	1 U
	08/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	**27.8**	0.3 U	0.954 U	0.954 U	1 U	9.6	1 U
MW-13	01/11/2010	ND	1 U	1 U	1 U	**95.2**	**32.9**	**128**	0.951 U	0.951 U	0.951 U	140	50 U	2.83	**35**	0.3 U	3.85	1.1	1 U	6.5	1 U
	08/11/2010	ND	1 U	1 U	1 U	23.4	3.58	21.3	0.952 U	0.952 U	0.952 U	85.3	50 U	1.77	**26**	0.3 U	1.77	0.952 U	1 U	9.1	1 U
	01/12/2011	ND	**1.04**	1 U	1 U	12.1	3.35	20.9	0.956 U	0.956 U	0.956 U	51	50 U	1.21	0.264	0.3 U	0.956 U	0.956 U	1 U	7.5	1 U

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
	08/23/2011	ND	1 U	1 U	1 U	3.48	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	**20.3**	0.3 U	0.953 U	0.953 U	1 U	8.2	1 U
MW-15	01/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	94.2	5.19	0.947 U	0.947 U	50 U	0.947 U	1.9	0.3 U	0.947 U	1.62	1 U	6.1	4.53
	08/11/2010	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	19.8	3.45	0.956 U	0.956 U	50 U	0.956 U	1.3	0.49	0.956 U	0.956 U	1 U	7.9	1.76
	01/13/2011	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	5.94	1.53	0.95 U	0.95 U	50 U	0.95 U	1.39	0.3 U	0.95 U	0.95 U	1 U	6.2	1.25
	08/23/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	50 U	0.955 U	1.57	0.3 U	0.955 U	0.955 U	1 U	8.3	1 U
MW-16	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	1.66	50 U	0.946 U	1 U	0.3 U	0.946 U	0.946 U	1 U	5 U	1 U
	08/17/2010	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	1.35	50 U	0.95 U	10 U	0.46	0.95 U	0.95 U	1 U	7.7	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	2.81	50 U	0.953 U	0.722	0.69	0.953 U	0.953 U	1 U	7.3	1 U
	08/30/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	0.956 U	0.956 U	0.956 U	2.38	50 U	0.956 U	1.95	0.3 U	0.956 U	0.956 U	1 U	8.5	1 U
MW-21	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	2.8	0.3 U	0.953 U	0.953 U	1 U	6.9	1 U
	08/17/2010	ND	1 U	1 U	1 U	**244**	**67.6**	2.32	0.962 U	0.962 U	0.962 U	20.7	50 U	1.76	10 U	**4.1**	0.962 U	**16.8**	1 U	9.5	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	1.16	50 U	0.96 U	**7.67**	0.53	0.96 U	0.96 U	1 U	7.3	1 U
	08/30/2011	ND	1 U	1 U	1 U	1 U	1 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	50 U	0.959 U	**17.8**	**0.88**	0.959 U	0.959 U	1 U	7.8	1 U
MW-23	01/11/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	2.1	0.3 U	0.948 U	0.948 U	1 U	7.9	1 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	01/27/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	50 U	0.949 U	1 U	0.3 U	0.949 U	0.949 U	1 U	5.8	1 U
	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	50 U	0.959 U	1	0.3 U	0.959 U	0.959 U	1 U	8	1 U
MW-26	01/25/2010	**1.37**	1 U	1 U	1 U	**248**	**754**	**921**	0.951 U	4.75 U	4.75 U	311	50 U	14	**76**	**36.1**	0.951 U	**181**	1 U	5.6	2.43
	08/16/2010	**0.14**	1 U	1 U	1 U	**532**	**161**	**590**	0.952 U	0.952 U	0.952 U	187	50 U	6.71	**93**	**56.3**	0.952 U	**85.3**	1 U	9	3.85
	01/20/2011	ND	1 U	1 U	1 U	**186**	**509**	**946**	0.957 U	0.957 U	0.957 U	269	50 U	9.23	**114**	**42.2**	0.957 U	**167**	1 U	9.4	2.94
	08/30/2011	ND	1 U	1 U	1 U	**641**	**205**	**450**	0.956 U	0.956 U	0.956 U	155	50 U	5.61	**103**	**30**	0.956 U	**120**	1 U	9	2.86
MW-27	08/29/2011	ND	1 U	1 U	1 U	2.03	1 U	9.25	0.953 U	0.953 U	0.953 U	5.63	50 U	0.953 U	3.04	**8.02**	0.953 U	0.953 U	1.18	6.9	1 U
MW-38	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.977	0.949 U	0.949 U	0.949 U	50 U	0.949 U	1 U	0.3 U	0.949 U	0.949 U	1 U	5.1	1 U
dup	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	1.22	0.952 U	0.952 U	0.952 U	50 U	0.952 U	1 U	0.3 U	0.952 U	0.952 U	1 U	5 U	1 U
	08/17/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1.2	0.3 U	0.951 U	0.951 U	1 U	8	1 U
dup	08/17/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1.2	0.3 U	0.951 U	0.951 U	1 U	6.4	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	50 U	0.956 U	1.02	0.3 U	0.956 U	0.956 U	1 U	7	1 U
	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	1.13	0.3 U	0.957 U	0.957 U	1 U	7.3	1 U
dup	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	1.15	0.3 U	0.954 U	0.954 U	1 U	7.9	1 U
MW-39	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	50 U	0.95 U	1.6	0.3 U	0.95 U	0.95 U	1 U	6.7	1 U
dup	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	1.6	0.3 U	0.948 U	0.948 U	1 U	5 U	1 U
	08/17/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	1.92	50 U	1.14	**12**	0.3 U	0.949 U	**4.45**	1 U	6.5	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.506	0.3 U	0.951 U	0.951 U	1 U	6.8	1 U
	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	1.13	0.3 U	0.953 U	0.982	1 U	7.5	1 U

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
dup	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	1.2	0.3 U	0.953 U	0.953 U	1 U	7.4	1 U
MW-48S	01/27/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	**12**	0.3 U	0.948 U	0.948 U	1 U	6.4	1 U
	08/17/2010	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	2.23	**18**	0.3 U	0.952 U	0.962	1 U	7.7	1 U
	01/24/2011	ND	1 U	1 U	1 U	2.12	9.07	28.4	0.956 U	0.956 U	0.956 U	20.5	50 U	2.52	**20.6**	0.39	0.956 U	**15.6**	1 U	6.7	1 U
	08/31/2011	**0.869**	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	1.86	50 U	1.21	**27.2**	0.3 U	0.96 U	2.61	1 U	7.1	1 U
MW-49D	01/12/2010	ND	1 U	1 U	1 U	1 U	1 U	1.5	213	5.69	0.967 U	2.67	50 U	0.967 U	**14**	0.3 U	0.967 U	**11.8**	1 U	7.8	1.19
	08/11/2010	**0.27**	1 U	1 U	1 U	1.65	1 U	15.1	0.973 U	0.973 U	0.973 U	70.1	68.7	10.7	**21**	0.74	0.973 U	**13.5**	1 U	6.3	1.16
	01/13/2011	**0.911**	1 U	1 U	1 U	1 U	1 U	4.19	0.966 U	0.966 U	0.966 U	37.4	50 U	11.7	**33.4**	0.44	0.966 U	3.61	1 U	5 U	1 U
	08/23/2011	**1.05**	1 U	1 U	1 U	1 U	1 U	9.85	0.979 U	0.979 U	0.979 U	22.5	50 U	10.2	**51.1**	0.38	0.979 U	**5.53**	1 U	8.3	1 U
MW-50S	01/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	**21**	0.3 U	0.946 U	0.946 U	1 U	5.8	1 U
	08/16/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	**13**	0.3 U	0.951 U	0.951 U	1 U	10.2	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	**15**	0.3 U	0.953 U	0.953 U	1 U	9.6	1 U
	08/30/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	**21.8**	0.3 U	0.952 U	0.952 U	1 U	10.5	1 U
MW-51D	01/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	50 U	0.944 U	1.3	0.3 U	0.944 U	0.944 U	1 U	6.8	1 U
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	1.9	0.955 U	0.955 U	0.955 U	50 U	0.955 U	1	0.3 U	1	0.955 U	1 U	5.1	1 U
	01/13/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	1.97	0.956 U	0.956 U	0.956 U	50 U	0.956 U	0.868	0.3 U	0.956 U	0.956 U	1 U	5 U	1.45
	08/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	0.872	0.3 U	0.954 U	0.954 U	1 U	6.9	1 U
MW-52D	01/25/2010	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	78.8	9.41	0.955 U	1.62	50 U	0.955 U	**53**	0.67	0.955 U	1.22	1 U	5 U	1.11
	08/16/2010	ND	1 U	1 U	1 U	1 U	1 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	50 U	0.961 U	**51**	0.71	0.961 U	0.961 U	1 U	8.9	1 U
	01/20/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	1.05	1.05	0.956 U	0.956 U	50 U	0.956 U	**37.2**	0.35	0.956 U	0.956 U	1 U	8	1 U
	08/30/2011	ND	1 U	1 U	1 U	1 U	1 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	50 U	0.961 U	**54.3**	0.44	0.961 U	0.961 U	1 U	8.1	1 U
MW-53S	01/20/2010	ND	1 U	1 U	1 U	**32.1**	2.07	**44.9**	0.949 U	0.949 U	0.949 U	144	50 U	0.949 U	**39**	**8.51**	0.949 U	**124**	1 U	6.3	4.22
	08/16/2010	ND	1 U	1 U	1 U	**29**	1 U	**39.7**	0.949 U	0.949 U	0.949 U	62.6	50 U	0.949 U	**25**	**10.2**	0.949 U	**64.4**	1 U	9	1 U
	01/18/2011	ND	1 U	1 U	1 U	1.72	**33.2**	**177**	0.952 U	0.952 U	0.952 U	179	50 U	1.32	**48.5**	**6.6**	0.952 U	**206**	1 U	12.3	1 U
	08/11/2011	ND	1 U	1 U	1 U	**35**	1 U	**154**	0.957 U	0.957 U	0.957 U	93.4	50 U	2.03	**57.9**	**2.85**	0.957 U	**87.2**	1 U	9.1	1 U
MW-53D	01/20/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	93.6	3.36	0.951 U	0.951 U	50 U	0.951 U	**9.4**	**1.29**	0.951 U	**5.81**	1 U	8.9	7.47
	08/16/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	1.76	1.34	0.951 U	0.951 U	50 U	0.951 U	**7.4**	0.67	0.951 U	0.951 U	1 U	6.8	1.86
	01/18/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	2.77	1.26	0.956 U	0.956 U	50 U	0.956 U	**9.6**	0.3 U	0.956 U	0.956 U	1 U	6.4	1.02
	08/11/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	**12.4**	0.3 U	0.954 U	0.954 U	1 U	7.3	1 U
MW-55S	08/20/2010	ND	1 U	1 U	1 U	4.74	2.29	**248**	0.953 U	0.953 U	0.953 U	202	50 U	5	**35**	**3.47**	1.22	**43.5**	1 U	12.1	1 U
	01/14/2011	ND	1 U	1 U	1 U	3.37	1 U	**214**	0.953 U	0.953 U	0.953 U	267	50 U	4.05	**36.7**	0.34	0.953 U	**61.2**	1 U	9.9	1 U
	08/08/2011	ND	1 U	1 U	1 U	4.09	1 U	**66.1**	0.96 U	0.96 U	0.96 U	95.8	50 U	2.61	**36.5**	0.3 U	0.96 U	**41.7**	1 U	12.2	1 U
MW-55D	09/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.982 U	8.74	0.982 U	1.45	0.982 U	50 U	0.982 U	**7.4**	0.3 U	0.982 U	0.982 U	1 U	6.8	1 U
	01/14/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	12.4	2.16	0.951 U	0.951 U	50 U	0.951 U	**9.18**	**3.81**	0.951 U	0.951 U	1 U	5 U	3.22

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
	08/08/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	4.25	1.54	0.953 U	0.953 U	50 U	0.953 U	**8**	0.4	0.953 U	0.953 U	1 U	7.5	3.1
MW-57S	01/13/2010	ND	1 U	1 U	1 U	**813**	**85.7**	**667**	0.948 U	0.948 U	0.948 U	196	50 U	8.5	**61**	0.64	0.948 U	**154**	1 U	9.6	1 U
	08/12/2010	ND	1 U	1 U	1 U	**567**	**93.5**	**784**	0.948 U	0.948 U	0.948 U	180	50 U	10.7	**40**	**2.08**	0.948 U	**152**	1 U	11	1 U
	01/14/2011	ND	1 U	1 U	1 U	**816**	**104**	**1150**	0.954 U	0.954 U	0.954 U	201	50 U	9.32	**38.5**	**2.13**	0.954 U	**149**	1 U	10.4	1 U
	08/25/2011	ND	1 U	1 U	1 U	**541**	**90.3**	**588**	0.964 U	0.964 U	0.964 U	142	50 U	0.964 U	**36.9**	**1.76**	0.964 U	**64.2**	1 U	10.1	1 U
MW-57D	01/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	89.9	2.65	0.947 U	0.947 U	50 U	0.947 U	**21**	**33.6**	0.947 U	**9.32**	1 U	6.5	15
dup	01/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	92.1	2.89	0.947 U	0.947 U	50 U	0.947 U	**22**	**31.6**	0.947 U	**9.39**	1 U	6.7	15
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	1.04	139	3.03	0.948 U	0.948 U	50 U	0.948 U	**19**	**31.3**	0.948 U	**10.3**	1 U	10.5	20.4
dup	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	119	2.91	0.947 U	0.947 U	50 U	0.947 U	**14**	**25.4**	0.947 U	**8.3**	1 U	7.2	17
	01/14/2011	ND	1 U	1 U	1 U	1 U	1 U	1.27	201	5.31	0.953 U	0.953 U	50 U	0.953 U	**18.6**	**30.6**	0.953 U	**13.3**	1 U	7.7	22.7
dup	01/14/2011	ND	1 U	1 U	1 U	1 U	1 U	1.07	189	4.11	0.951 U	0.951 U	50 U	0.951 U	**17.6**	**32.5**	0.951 U	**10.1**	1 U	7.2	24
	08/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	**20.4**	**27.1**	0.952 U	**7.86**	1 U	7.7	20.2
dup	08/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	50 U	0.955 U	**21**	**28.7**	0.955 U	**8.27**	1 U	6.7	21.6
MW-58D	01/14/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	**13**	**16.1**	0.947 U	0.947 U	1 U	5	1 U
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	**10**	**13.6**	0.947 U	0.947 U	1 U	5 U	1 U
	01/19/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	**2.72**	**19.5**	0.951 U	0.951 U	1 U	5 U	1 U
	08/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	**10.3**	**18.3**	0.957 U	0.957 U	1 U	5 U	1 U
EPA-5S	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	50 U	0.945 U	1 U	0.3 U	0.945 U	0.945 U	1 U	20.7	1 U
	08/11/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	50 U	0.949 U	--	0.3 U	0.949 U	0.949 U	1 U	--	1 U
	01/12/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	0.311	0.3 U	0.953 U	0.953 U	1 U	20.8	1 U
	08/09/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	**5.74**	0.3 U	0.952 U	0.952 U	1 U	20.5	1 U
EPA-5D	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	1 U	0.3 U	0.954 U	0.954 U	1 U	11.5	1 U
	08/11/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1 U	0.3 U	0.951 U	0.951 U	1 U	10.1	1 U
	01/12/2011	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	50 U	0.95 U	**13.3**	0.3 U	0.95 U	0.95 U	1 U	9.4	1 U
	08/09/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	50 U	0.955 U	0.486	0.3 U	0.955 U	0.955 U	1 U	8.4	1 U
EPA-6S	01/25/2010	ND	1 U	1 U	1 U	1 U	1 U	2.33	0.946 U	0.946 U	0.946 U	79.3	50 U	5.42	**78**	0.44	0.946 U	1.14	1 U	6.7	1 U
	08/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.97	0.951 U	0.951 U	0.951 U	39.7	50 U	2.52	**78**	0.65	0.951 U	0.951 U	1 U	9.6	1 U
	01/19/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	52.4	50 U	3.32	**63.1**	0.33	0.954 U	0.954 U	1 U	7.9	1 U
dup	01/19/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	51.1	50 U	3.41	**63.6**	0.32	0.952 U	0.952 U	1 U	8.3	1 U
	08/10/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	40.1	50 U	3.29	**66.9**	0.3 U	0.954 U	0.954 U	1 U	6.9	1 U
EPA-6D	01/25/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	3	0.3 U	0.948 U	0.948 U	1 U	5.8	1 U
	08/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	50 U	0.949 U	10 U	**3.37**	0.949 U	0.949 U	1 U	7.7	1 U
	01/19/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	**8.08**	**5.25**	0.957 U	0.957 U	1 U	5 U	1 U
	08/10/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	**7.15**	**1.93**	0.957 U	0.957 U	1 U	6.8	1 U

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
Carty Lake Monitoring Wells (UWBZ)																					
USDFW-1	01/28/2010	ND	1 U	1 U	1 U	1 U	1 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	50 U	1.01 U	1.9	0.3 U	1.01 U	1.01 U	1 U	8	1.94
	08/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	2.2	0.3 U	0.946 U	0.946 U	1 U	11.5	1 U
	01/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1.79	0.3 U	0.951 U	0.951 U	1 U	12.8	1.11
	09/06/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	2.04	0.3 U	0.954 U	0.954 U	1 U	11.6	3.45
USDFW-3	08/26/2010	ND	--	--	--	--	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	--	--	0.946 U	0.946 U	--	--	--
RMW-2S	01/28/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	2.9	0.3 U	0.947 U	0.947 U	1 U	6.3	1 U
	08/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	3.3	0.3 U	0.948 U	0.948 U	1 U	8.4	1 U
	01/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.503	0.3 U	0.951 U	0.951 U	1 U	6.5	2.46
	09/06/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	4.46	0.3 U	0.952 U	0.952 U	1 U	6.8	1 U
RMW-2D	01/28/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	1 U	0.3 U	0.948 U	0.948 U	1 U	5.3	1 U
	08/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	50 U	0.945 U	1 U	0.3 U	0.945 U	0.945 U	1 U	6.1	1 U
	01/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	2.8	0.3 U	0.952 U	0.952 U	1 U	7.9	1 U
	09/06/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.481	0.3 U	0.951 U	0.951 U	1 U	7.8	1 U
LWBZ: Cells 1 and 2 and Carty Lake																					
Cell 1 (LWBZ)																					
MW-40	01/29/2010	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	1 U	0.3 U	0.952 U	1.33	1 U	5.2	1 U
	08/25/2010	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	3.4	0.96 U	0.96 U	0.96 U	50 U	0.96 U	1.1	0.3 U	0.96 U	1.64	1 U	6.5	1 U
	01/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	3.01	0.955 U	0.955 U	0.955 U	50 U	0.955 U	1.1	0.3 U	0.955 U	0.955 U	1 U	7.6	1 U
	09/02/2011	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	0.979	0.96 U	0.96 U	0.96 U	50 U	0.96 U	1.1	0.3 U	0.96 U	0.96 U	1 U	8.1	1 U
Cell 2 (LWBZ)																					
MW-33	01/11/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	1.1	0.3 U	0.946 U	0.946 U	1 U	6.6	6.85
	08/09/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.993	0.3 U	0.951 U	0.951 U	1 U	6.7	1.5
MW-35	01/22/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	77.5	4.81	0.951 U	0.951 U	50 U	0.951 U	3.4	**7.93**	0.951 U	**4.88**	1 U	6.3	3.35
	08/16/2010	ND	1 U	1 U	1 U	1.13	1 U	0.949 U	33.4	1.67	0.949 U	0.949 U	50 U	0.949 U	2.7	**7.8**	0.949 U	2.31	1 U	8.6	5.43
	01/20/2011	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	50.4	10.2	0.953 U	0.953 U	50 U	0.953 U	3.18	**7.75**	0.953 U	4.3	1 U	5 U	5.26
	08/29/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	39.7	2.05	0.956 U	0.956 U	50 U	0.956 U	3.28	**6.14**	0.956 U	3.52	1 U	8.9	4.97
MW-36	01/26/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	1 U	0.3 U	0.947 U	0.947 U	1 U	5.6	1 U
	08/16/2010	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	1.72	0.957 U	0.957 U	0.957 U	50 U	0.957 U	1 U	0.3 U	0.957 U	0.957 U	1 U	7.8	1 U
	01/21/2011	ND	1 U	1 U	1 U	1 U	1 U	0.955 U	2.37	0.955 U	0.955 U	0.955 U	50 U	0.955 U	0.66	0.3 U	0.955 U	0.955 U	1 U	5.8	1 U
	08/30/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	2.4	0.954 U	0.954 U	0.954 U	50 U	0.954 U	0.671	0.3 U	0.954 U	0.954 U	1 U	6.5	1 U
MW-37	01/27/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	1 U	0.3 U	0.948 U	0.948 U	1 U	6.4	1 U
	08/31/2011	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	50 U	0.96 U	0.639	0.3 U	0.96 U	0.96 U	1 U	7.1	1 U
MW-54	01/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	50 U	0.953 U	1.1	0.3 U	0.953 U	0.953 U	1 U	6.5	1 U

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	1 U	0.3 U	0.947 U	0.947 U	1 U	8.1	1 U
	01/13/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	50 U	0.957 U	0.675	0.3 U	0.957 U	0.957 U	1 U	5.7	1 U
	08/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	50 U	0.956 U	0.808	0.3 U	0.956 U	0.956 U	1 U	7.9	1 U
MW-55	01/14/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	7.04	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1	0.3 U	0.951 U	0.951 U	1 U	6	1.45
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	7.66	1.13	0.949 U	0.949 U	50 U	0.949 U	1 U	0.3 U	0.949 U	0.949 U	1 U	7.7	3.53
	01/14/2011	ND	1 U	1 U	1 U	1 U	1 U	0.957 U	8.91	1.23	0.957 U	0.957 U	50 U	0.957 U	1 U	0.3 U	0.957 U	0.957 U	1 U	6	3.26
	08/08/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	4.9	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.938	0.3 U	0.951 U	0.951 U	1 U	8	2.41
MW-56	01/14/2010	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	2.9	0.3 U	0.952 U	0.952 U	1 U	8.5	1 U
	08/12/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	2.8	0.3 U	0.951 U	0.951 U	1 U	7.8	1 U
	01/19/2011	ND	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	50 U	0.952 U	2.78	0.3 U	0.952 U	0.952 U	1 U	6.1	1 U
	08/26/2011	ND	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	50 U	0.96 U	2.87	0.3 U	0.96 U	0.96 U	1 U	6.6	1 U
MW-59	01/21/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	50 U	0.949 U	1.8	0.3 U	0.949 U	0.949 U	1 U	6.5	1 U
	08/13/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	4.7	0.3 U	0.946 U	0.946 U	1 U	6.9	1 U
	01/20/2011	ND	1 U	1 U	1 U	1 U	1 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	50 U	0.964 U	3.36	0.3 U	0.964 U	0.964 U	1 U	8.4	1 U
	08/29/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	3.72	0.3 U	0.954 U	0.954 U	1 U	7.3	1 U
MW-62	09/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	50 U	0.985 U	1	0.3 U	0.985 U	0.985 U	1 U	7.2	1 U
	01/14/2011	**1.60**	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	1.19	1 U	0.3 U	1.14	1.1	1 U	6.2	1 U
	08/25/2011	ND	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	50 U	0.954 U	0.889	0.3 U	0.954 U	0.954 U	1 U	6.6	1 U
Carty Lake (LWBZ)																					
MW-60	01/28/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	1 U	0.3 U	0.948 U	0.948 U	1 U	6.9	10
	08/25/2010	ND	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	50 U	0.95 U	1 U	0.3 U	0.95 U	0.95 U	1 U	7.8	8.46
	01/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.556	0.3 U	0.951 U	0.951 U	1 U	7.4	9.48
	09/06/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	2.5	0.951 U	0.951 U	0.951 U	50 U	0.951 U	0.81	0.3 U	0.951 U	0.951 U	1 U	8.2	11.5
MW-61	09/03/2010	ND	1 U	1 U	1 U	1 U	1 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	50 U	1.01 U	1.7	0.3 U	1.01 U	1.01 U	1 U	6.3	1 U
	01/24/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1.34	0.3 U	0.951 U	0.951 U	1 U	7.9	1 U
	09/02/2011	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	1.47	0.3 U	0.951 U	0.951 U	1 U	10	1 U
Cell 3 Shallow and Deep UWBZ																					
Cell 3 Shallow UWBZ																					
MW-9S	01/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	4.12	50 U	1.42	98	0.3 U	0.949 U	0.949 U	1 U	7.7	1 U
MW-20S	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	2.6	0.3 U	0.947 U	0.947 U	1 U	5 U	1 U
MW-45S	01/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	2.2	0.3 U	0.946 U	0.946 U	1 U	7.6	1 U
MW-46S	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	50 U	0.949 U	**32**	0.3 U	0.949 U	0.949 U	1 U	5	1 U
	08/24/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	**24.1**	--	--	--	--	--	--
MW-47S	01/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	50 U	0.948 U	3.1	0.3 U	0.948 U	0.948 U	1 U	7.3	1 U

Location	Date Collected	cPAH TEQ	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2-Methyl-naphthalene	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaph-thene	Acetone	Anthracene	Arsenic	Benzene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Chloro-methane	Chromium	cis-1,2-Dichloroethene
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	0.012	0.22	0.77	0.0063	24	25	32	480	800	4	960	800	4800	5	0.8	6.3	4.4	5.2	48	80
Cell 3 Deep UWBZ																					
MW-20D	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	50 U	0.951 U	3.5	0.3 U	0.951 U	0.951 U	1 U	5 U	1 U
MW-29D	01/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	1.1	0.3 U	0.946 U	0.946 U	1 U	6.8	1 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-45D	01/08/2010	ND	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	50 U	0.947 U	1 U	0.3 U	0.947 U	0.947 U	1 U	5 U	1 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-46D	01/08/2010		--	--	--	--	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	1 U	--	0.947 U	0.947 U	--	6.3	--
MW-47D	01/07/2010	ND	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	50 U	0.946 U	1.4	0.3 U	0.946 U	0.946 U	1 U	6.5	1 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
UWBZ: Cells 1 and 2																				
Cell 1 (UWBZ)																				
MW-7	01/26/2010	0.951 U	1 U	**1.97**	1 U	3.67	0.951 U	1 U	2 U	1 U	1 U	**38.4**	**2.42**	1 U	1 U	1 U	1 U	1 U	1.33	2.28
	08/24/2010	0.951 U	1 U	**0.503**	1 U	1.09	0.951 U	1 U	2 U	1 U	1 U	**19.2**	0.432	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	01/25/2011	0.958 U	1 U	**1.44**	1 U	1.57	0.958 U	1 U	2 U	1 U	1 U	**15.1**	**1.1**	1 U	1 U	1 U	1 U	1 U	0.958 U	0.958 U
	09/01/2011	0.957 U	1 U	0.0995	1 U	0.957 U	0.957 U	1 U	2 U	1 U	1 U	**6.17**	0.193 U	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U
MW-44	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	3.59	1 U	**4.65**	1 U	64.5	18.7	1 U	2 U	4.17	1 U	**9.04**	**2.76**	1 U	1 U	1 U	1 U	1 U	2.19	53.2
	01/24/2011	0.961 U	1 U	0.449	1 U	11	4.73	1 U	2 U	61.5	1 U	1.44 U	**1.17**	1 U	1 U	1 U	1 U	1 U	0.961 U	6.32
	09/02/2011	1.6	1 U	**6.53**	1 U	37.3	11.3	1 U	2 U	4.48	1 U	**4.36**	**3.67**	1 U	1 U	1 U	1 U	1 U	2.98	32.8
EPA-4S	01/29/2010	0.95 U	1 U	0.0833	1 U	0.95 U	0.95 U	1 U	2 U	1 U	1 U	1.42 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U
	08/24/2010	0.948 U	1 U	0.163	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	0.436	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	01/25/2011	0.952 U	1 U	0.119	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	1.43 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	09/01/2011	0.962 U	1 U	0.243	1 U	0.962 U	0.962 U	1 U	2 U	1 U	1 U	**17**	0.305	1 U	1 U	1 U	1 U	1 U	0.962 U	0.962 U
EPA-4D	01/29/2010	0.951 U	1 U	0.076 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	08/24/2010	0.947 U	1 U	0.076 U	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	1.42 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	01/25/2011	0.955 U	1 U	0.0763 U	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	1.43 U	0.191 U	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
	09/01/2011	0.96 U	1 U	0.077 U	1 U	0.96 U	0.96 U	1 U	2 U	1 U	1 U	1.44 U	0.192 U	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U
Cell 2 (UWBZ)																				
MW-4	01/19/2010	0.945 U	1 U	--	1 U	0.945 U	12.1	1 U	2 U	2.47	1 U	1.42 U	--	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U
	08/13/2010	0.95 U	1 U	--	1 U	0.95 U	11.6	1 U	2 U	1 U	1 U	**3.68**	--	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U
	01/20/2011	0.951 U	1 U	--	1 U	0.951 U	18	1 U	2 U	1.06	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	08/26/2011	0.954 U	1 U	--	1 U	0.954 U	7.27	1 U	2 U	1.62	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
MW-5	01/22/2010	0.947 U	1 U	--	1 U	0.947 U	3.54	1 U	2 U	1 U	2.72	1.42 U	--	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	08/13/2010	0.946 U	1 U	--	1 U	0.946 U	1.85	1 U	2 U	1 U	2.39	1.42 U	--	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
	01/20/2011	0.952 U	1 U	--	1 U	0.952 U	3.23	1 U	2 U	1 U	1.73	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/26/2011	0.951 U	1 U	--	1 U	0.951 U	1.21	1 U	2 U	1.22	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
PZ-06	01/13/2010	0.948 U	1 U	--	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	--	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/01/2010	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	0.952 U	1 U	--	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/24/2011	0.954 U	1 U	--	1 U	0.954 U	0.954 U	1 U	2 U	1.8	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
MW-13	01/11/2010	**47.9**	1 U	--	3.58	2.25	45.1	1 U	2.51	**3200**	4.52	1.43 U	--	1 U	1 U	1 U	1 U	1 U	**379**	1.64
	08/11/2010	**35.2**	1 U	--	1 U	0.952 U	31.1	1 U	2 U	**186**	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	51.5 B	0.952 U
	01/12/2011	21.2	1 U	--	1 U	0.956 U	19	1 U	2 U	150	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	36.6	0.956 U

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
	08/23/2011	0.953 U	1 U	--	1 U	0.953 U	0.953 U	1 U	2 U	6.4	1 U	1.43 U	--	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
MW-15	01/12/2010	4.7	1 U	**0.996**	1 U	0.947 U	0.994	1 U	2 U	2.76	1 U	**464**	**0.854**	1 U	**10.9**	1 U	**5.09**	**1.1**	0.947 U	0.947 U
	08/11/2010	1.36	1 U	**1.75**	1 U	0.956 U	0.956 U	1 U	2 U	1 U	1 U	**341**	**2.43**	1 U	**2.4**	1 U	**1.31**	1 U	0.956 U	0.956 U
	01/13/2011	0.95 U	1 U	0.348	1 U	0.95 U	0.95 U	1 U	2 U	1 U	1 U	**89.4**	0.293	1 U	1 U	1 U	1 U	**1.58**	0.95 U	0.95 U
	08/23/2011	0.955 U	1 U	0.27	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	1.43 U	0.323	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
MW-16	01/21/2010	0.946 U	1 U	0.353	1.27	0.946 U	1.05	1 U	2 U	1 U	2.96	1.42 U	0.335	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
	08/17/2010	0.95 U	1 U	**1.72**	1.07	0.95 U	0.95 U	1 U	2 U	1 U	3.27	1.42 U	**0.598**	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U
	01/21/2011	1.19	1 U	0.133	1.33	0.953 U	1.78	1 U	2 U	1 U	1.7	1.43 U	0.191 U	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
	08/30/2011	0.956 U	1 U	**1.41**	1 U	0.956 U	1.57	1 U	2 U	1 U	1 U	1.43 U	0.449	1 U	1 U	1 U	1 U	1 U	0.956 U	0.956 U
MW-21	01/21/2010	0.953 U	1 U	0.491	1 U	0.953 U	0.953 U	1 U	2 U	1 U	1 U	1.43 U	**0.682**	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
	08/17/2010	10.2	1 U	**2.55**	49	9.66	11.1	1 U	79.7	107	62.2	**2.47**	**0.968**	1.36	1 U	10.8	1 U	1 U	22.5 B	4.64
	01/21/2011	0.96 U	1 U	0.15	1.81	3.18	0.96 U	1 U	2 U	24.6	1.83	1.44 U	0.192 U	1 U	1 U	1 U	1 U	1 U	8.49	2.16
	08/30/2011	0.959 U	1 U	**0.867**	1 U	5.2	0.959 U	1 U	2 U	1 U	1 U	**7.79**	1.22	1 U	1 U	1 U	1 U	1 U	0.959 U	3.6
MW-23	01/11/2010	0.948 U	1 U	**0.851**	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	**10.7**	0.461	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	01/27/2010	0.949 U	1 U	--	1 U	0.949 U	0.949 U	1 U	2 U	1 U	1 U	**13.3**	--	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
	08/31/2011	0.959 U	1 U	--	1 U	0.959 U	0.959 U	1 U	2 U	1 U	1 U	**15.2**	--	1 U	1 U	1 U	1 U	1 U	0.959 U	0.959 U
MW-26	01/25/2010	**154**	1 U	**15.9**	**1440**	13.8	90.1	1 U	**909**	**12300**	**543**	**19.7**	**0.972**	**31.5**	**1.34**	334	**1.76**	**1.31**	**13600**	11.2
	08/16/2010	**54.1**	1 U	**8.45**	**1120**	7.32	43.4	1 U	**706**	**17200**	**433**	**1.88**	**1.07**	**9.51**	**1.17**	291	**2.34**	**1.55**	**7640**	5.35
	01/20/2011	**92.1**	1 U	**22.2**	**1090**	6.38	68.7	1 U	**895**	**28100**	**549**	1.44 U	**1.25**	**91.6**	**2.01**	420	**3.51**	1 U	**12700**	3.94
	08/30/2011	**46.9**	1 U	**19**	**1380**	4.64	39.4	1 U	**1060**	**16000**	**615**	**2.59**	**0.789**	**89.4**	**1.69**	487	**3.48**	**1.24**	**4640**	2.99
MW-27	08/29/2011	0.953 U	1 U	**1.53**	57.2	0.953 U	0.991	1 U	2 U	**1040**	4.88	1.43 U	0.192 U	1 U	1 U	1.39	1 U	1 U	**331**	0.953 U
MW-38	01/21/2010	0.949 U	1 U	0.305	1 U	0.949 U	0.949 U	1 U	2 U	1.16	1 U	**6.34**	**0.51**	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
dup	01/21/2010	0.952 U	1 U	0.252	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	**6.81**	0.316	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/17/2010	0.951 U	1 U	0.249	1 U	0.951 U	0.951 U	1 U	2 U	3.7	1 U	**2.39**	0.312	1 U	1 U	1 U	1 U	1 U	1.42 B	0.951 U
dup	08/17/2010	0.951 U	1 U	0.265	1 U	0.951 U	0.951 U	1 U	2 U	3.3	1 U	**1.86**	0.308	1 U	1 U	1 U	1 U	1 U	1.67 B	0.951 U
	01/21/2011	0.956 U	1 U	0.125	1 U	0.956 U	0.956 U	1 U	2 U	1 U	1 U	1.43 U	0.476	1 U	1 U	1 U	1 U	1 U	0.956 U	1.42
	08/31/2011	0.957 U	1 U	**0.567**	1 U	1.96	0.957 U	1 U	2 U	1 U	1 U	**2.69**	**0.785**	1 U	1 U	1 U	1 U	1 U	0.957 U	3.36
dup	08/31/2011	0.954 U	1 U	0.395	1 U	2.04	0.954 U	1 U	2 U	1 U	1 U	**2.69**	0.365	1 U	1 U	1 U	1 U	1 U	0.954 U	3.55
MW-39	01/21/2010	0.95 U	1 U	0.131	1 U	0.95 U	0.95 U	1 U	2 U	1 U	1 U	1.42 U	0.281	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U
dup	01/21/2010	0.948 U	1 U	0.138	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	0.305	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/17/2010	3.69	1 U	**1.4**	1 U	0.949 U	3.14	1 U	2 U	8.17	1 U	**8.91**	**0.994**	1 U	1 U	1 U	1 U	1 U	2.52 B	0.949 U
	01/21/2011	0.951 U	1 U	0.0764 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.191 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	08/31/2011	1.19	1 U	0.254	1 U	1.12	0.953 U	1 U	2 U	1 U	1 U	1.43 U	0.293	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
dup	08/31/2011	1.07	1 U	0.213	1 U	0.982	0.953 U	1 U	2 U	1 U	1 U	1.43 U	0.247	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
MW-48S	01/27/2010	0.948 U	1 U	**0.514**	1 U	2.36	0.948 U	1 U	2 U	1 U	1 U	1.42 U	**1**	1 U	1 U	1 U	1 U	1 U	0.948 U	1.52
	08/17/2010	0.952 U	1 U	**2.12**	1 U	7.86	0.952 U	1 U	2 U	5.65	3.26	1.43 U	**2.21**	1 U	1 U	1 U	1 U	1 U	0.952 U	6.17
	01/24/2011	13.9	1 U	0.11	5.75	3.53	19.3	1 U	4.91	**1010**	3.09	1.43 U	0.193 U	**2.33**	1 U	1 U	1 U	1 U	**219**	3.45
	08/31/2011	0.96 U	1 U	**0.823**	1 U	10.4	0.96 U	1 U	2 U	1 U	1 U	**2.31**	**0.973**	1 U	1 U	1 U	1 U	1 U	0.96 U	8.8
MW-49D	01/12/2010	2.32	1 U	**1.1**	1 U	1.57	1.27	1 U	2 U	6.78	1 U	**461**	**0.598**	1 U	**1.54**	1 U	**1.57**	1 U	10.2	1.09
	08/11/2010	11.1	1 U	**1.94**	1 U	51.3	18	1 U	2 U	115	1 U	**10.9**	**0.554**	1 U	1 U	1 U	1 U	1 U	74.1 B	39.1
	01/13/2011	0.966 U	1 U	**1.85**	1 U	37.8	6.02	1 U	2 U	68.1	1 U	1.45 U	**0.902**	1 U	1 U	1 U	1 U	1 U	22.2	29.9
	08/23/2011	0.979 U	1 U	**1.24**	1 U	39.9	11.3	1 U	2 U	70.9	1 U	1.47 U	**1.02**	1 U	1 U	1 U	1 U	1 U	28.4	31.3
MW-50S	01/26/2010	0.946 U	1 U	0.243	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	**6.37**	0.317	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
	08/16/2010	0.951 U	1 U	0.202	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.261	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	01/21/2011	0.953 U	1 U	0.0763 U	1 U	0.953 U	0.953 U	1 U	2 U	1 U	1 U	1.43 U	0.191 U	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
	08/30/2011	0.952 U	1 U	0.174	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	1.43 U	0.205 U	1 U	1 U	1 U	1 U	1 U	1.16	0.952 U
MW-51D	01/13/2010	0.944 U	1 U	0.359	1 U	0.944 U	0.944 U	1 U	2 U	1 U	1 U	**95.8**	0.231	1 U	1 U	1 U	1 U	**1.43**	0.944 U	0.944 U
	08/12/2010	0.955 U	1 U	0.301	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	**116**	0.191 U	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
	01/13/2011	0.956 U	1 U	0.128	1 U	0.956 U	0.956 U	1 U	2 U	1 U	1 U	**109**	0.192 U	1 U	1 U	1 U	1 U	**2.34**	0.956 U	0.956 U
	08/24/2011	0.954 U	1 U	0.252	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	1.43 U	0.201 U	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
MW-52D	01/25/2010	0.955 U	1 U	0.466	1 U	1.38	0.955 U	1 U	2 U	6.51	1 U	**211**	**1.09**	1 U	1 U	1 U	**1.27**	1 U	13.4	1.19
	08/16/2010	0.961 U	1 U	0.35	1 U	0.961 U	0.961 U	1 U	2 U	2.73	1 U	**22.6**	**0.557**	1 U	1 U	1 U	1 U	1 U	2.62 B	0.961 U
	01/20/2011	0.956 U	1 U	0.404	1 U	1.21	0.956 U	1 U	2 U	1.91	1 U	**14**	**0.536**	1 U	1 U	1 U	1 U	1 U	2.87	0.956 U
	08/30/2011	0.961 U	1 U	**0.595**	1 U	2.02	0.961 U	1 U	2 U	2.23	1 U	1.44 U	**2.04**	1 U	1 U	1 U	1 U	1 U	0.98	1.48
MW-53S	01/20/2010	**58.2**	1 U	**18.1**	178	0.949 U	51.9	1 U	50.4	**9630**	31.5	1.42 U	**0.614**	1.31	1 U	9.06	1 U	1 U	**14200**	0.949 U
	08/16/2010	28.1	1 U	**2.55**	159	0.949 U	24.3	1 U	39.2	**15500**	23.1	**3.9**	0.385	1 U	1 U	8.9	1 U	1 U	**3730**	0.949 U
	01/18/2011	**60.1**	1 U	**14.3**	174	0.952 U	53	1 U	53.3	**26300**	25.8	1.43 U	**0.744**	**2.85**	1 U	8.71	1 U	1 U	**11100**	0.952 U
	08/11/2011	**48.2**	1 U	**13.1**	132	0.957 U	46.8	1 U	29.1	**24200**	16.5	1.44 U	**0.528**	1 U	1 U	4.09	1 U	1 U	**7280**	0.957 U
MW-53D	01/20/2010	1.5	1 U	**0.591**	1 U	0.951 U	2.09	1 U	2 U	10	1 U	**254**	**0.526**	1 U	**2.37**	1 U	**2.89**	1 U	6.69	0.951 U
	08/16/2010	0.951 U	1 U	**0.707**	1 U	1.37	0.951 U	1 U	2 U	1 U	1 U	**44**	**0.524**	1 U	1 U	1 U	**1.94**	1 U	0.951 U	0.998
	01/18/2011	0.956 U	1 U	**0.803**	1 U	3.2	0.956 U	1 U	2 U	1 U	1 U	**30.3**	**1.59**	1 U	1 U	1 U	**1.25**	1 U	1.46	2.16
	08/11/2011	0.954 U	1 U	0.483	1 U	4.06	0.954 U	1 U	2 U	1 U	1 U	**2.35**	0.339	1 U	1 U	1 U	1 U	1 U	0.954 U	2.6
MW-55S	08/20/2010	**51.5**	1 U	**3.39**	19.7	1.03	42.4	1 U	2 U	**2490**	5.54	1.43 U	**0.776**	1 U	1 U	1 U	1 U	1 U	**582**	0.953 U
	01/14/2011	**64.6**	1 U	**4.04**	24.5	0.953 U	50.9	1 U	4.73	**1900**	5.49	**2.61**	0.5	1 U	1 U	1 U	1 U	1 U	**625**	0.953 U
	08/08/2011	**41**	1 U	**2.99**	24.3	0.96 U	33.8	1 U	2.93	**938**	4.51	1.44 U	0.419	1 U	1 U	1 U	1 U	1 U	**322**	0.96 U
MW-55D	09/07/2010	0.982 U	1 U	0.649 U	1 U	0.982 U	0.982 U	1 U	2 U	1 U	1 U	**632**	0.332 U	1 U	1 U	1 U	1 U	1 U	0.982 U	0.982 U
	01/14/2011	0.951 U	1 U	0.463	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**185**	0.235	1 U	**5.98**	1 U	**3.06**	1 U	0.951 U	0.951 U

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
	08/08/2011	0.953 U	1 U	**0.628**	1 U	0.953 U	0.953 U	1 U	2 U	1 U	1 U	7.15 U	0.204 U	1 U	**7.2**	1 U	**3.52**	1 U	0.953 U	0.953 U
MW-57S	01/13/2010	**86.4**	1 U	**23**	135	3.26	67.6	1 U	147	**16300**	119	**1.87**	**1.34**	1 U	1 U	13.3	1 U	1 U	**11100**	2.22
	08/12/2010	**64.6**	1 U	**5.99**	228	3.54	50.7	1 U	202	**16600**	144	1.42 U	**0.606**	1 U	1 U	15	1 U	1 U	**9680**	2.12
	01/14/2011	**68.8**	1 U	**25.3**	340	3.94	56.3	1 U	241	**22800**	161	**1.46**	**0.734**	1 U	1 U	15.1	1 U	1 U	**12700**	2.52
	08/25/2011	0.964 U	1 U	**13.9**	164	2.64	36.4	1 U	190	**18700**	136	1.45 U	**0.502**	1 U	1 U	13.4	1 U	1 U	**4380**	1.71
MW-57D	01/13/2010	3.96	1 U	**3.48**	1 U	0.947 U	0.947 U	1 U	2 U	96.4	13.2	**3640**	**0.707**	1 U	**97.6**	1 U	**14.4**	**5.6**	49.1	0.947 U
dup	01/13/2010	4.08	1 U	**3.85**	1 U	0.947 U	0.947 U	1 U	2 U	131	12.7	**3580**	**0.761**	1 U	**91.1**	1 U	**13.3**	**6**	48.9	0.947 U
	08/12/2010	5.09	1 U	**3.37**	1 U	0.948 U	0.948 U	1 U	2 U	134	16.4	**4160**	0.419	1 U	**98.3**	1 U	**16.6**	**4.2**	49.3 B	0.948 U
dup	08/12/2010	3.95	1 U	**4.02**	1 U	0.947 U	0.947 U	1 U	2 U	107	12.5	**3700**	0.424	1 U	**71**	1 U	**12.8**	**3.26**	45.4 B	0.947 U
	01/14/2011	7.62	1 U	**4.08**	1 U	0.953 U	0.953 U	1 U	2 U	**161**	18.9	**4800**	0.49	1 U	**103**	1 U	**14.2**	**3.52**	84.7	0.953 U
dup	01/14/2011	5.8	1 U	**4.01**	1 U	0.951 U	0.951 U	1 U	2 U	**177**	15.5	**4480**	0.462	1 U	**113**	1 U	**14.5**	**3.73**	74.6	0.951 U
	08/25/2011	0.952 U	1 U	**1.58**	1 U	0.952 U	0.952 U	1 U	2 U	128	14	**1820**	0.257	1 U	**87.4**	1 U	**14.2**	**4.55**	35.7	0.952 U
dup	08/25/2011	4.14	1 U	**1.83**	1 U	0.955 U	0.955 U	1 U	2 U	132	14.6	**2430**	0.277	1 U	**93.5**	1 U	**14.5**	**5.03**	38.8	0.955 U
MW-58D	01/14/2010	0.947 U	1 U	0.328	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	**5.33**	0.302	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	08/12/2010	0.947 U	1 U	0.278	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	**2.73**	0.19 U	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	01/19/2011	0.951 U	1 U	**0.507**	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.26	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	08/26/2011	0.957 U	1 U	0.37	1 U	0.957 U	0.957 U	1 U	2 U	1 U	1 U	1.44 U	0.194 U	1 U	1 U	1 U	1 U	1 U	0.957 U	0.957 U
EPA-5S	01/08/2010	0.945 U	1 U	0.0756 U	1 U	0.945 U	0.945 U	1 U	2 U	1 U	1 U	1.42 U	0.223	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U
	08/11/2010	0.949 U	1 U	0.0759 U	1 U	0.949 U	0.949 U	1 U	2 U	1 U	1 U	1.42 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
	01/12/2011	0.953 U	1 U	0.0765 U	1 U	0.953 U	0.953 U	1 U	2 U	1 U	1 U	1.43 U	0.262	1 U	1 U	1 U	1 U	1 U	0.953 U	0.953 U
	08/09/2011	0.952 U	1 U	0.131	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	1.43 U	0.204 U	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
EPA-5D	01/08/2010	0.954 U	1 U	0.0963	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	1.43 U	0.245	1 U	**1.72**	1 U	1 U	1 U	0.954 U	0.954 U
	08/11/2010	0.951 U	1 U	0.0936	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.398	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	01/12/2011	0.95 U	1 U	0.0765 U	1 U	0.95 U	0.95 U	1 U	2 U	1 U	1 U	1.42 U	0.482	1 U	1 U	1 U	1 U	1 U	0.95 U	0.95 U
	08/09/2011	0.955 U	1 U	0.232	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	1.43 U	0.205 U	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
EPA-6S	01/25/2010	6.48	1 U	**0.931**	1 U	10.1	14.5	1 U	2 U	1.63	1 U	**23**	0.307	1 U	1 U	1 U	1 U	1 U	0.946 U	7.96
	08/13/2010	2.86	1 U	**0.771**	1 U	5.22	6.59	1 U	2 U	10.1	1.53	1.43 U	0.19 U	1 U	1 U	1 U	1 U	1 U	3.53	3.89
	01/19/2011	2.63	1 U	**0.912**	1 U	6.58	7.24	1 U	2 U	1.72	1.12	1.43 U	0.326	1 U	1 U	1 U	1 U	1 U	0.954 U	4.27
dup	01/19/2011	2.62	1 U	**1.04**	1 U	6.71	7.2	1 U	2 U	1.74	1.13	1.43 U	0.388	1 U	1 U	1 U	1 U	1 U	0.952 U	4.3
	08/10/2011	2.43	1 U	**0.652**	1 U	6.53	6.67	1 U	2 U	1.51	1 U	1.43 U	0.204 U	1 U	1 U	1 U	1 U	1 U	0.954 U	4.42
EPA-6D	01/25/2010	0.948 U	1 U	0.106	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	**0.687**	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/13/2010	0.949 U	1 U	0.482	2.89	0.949 U	0.949 U	1 U	2.12	**196**	3.62	1.42 U	0.191 U	1 U	1 U	1.1	1 U	1 U	62.1	0.949 U
	01/19/2011	0.957 U	1 U	**0.68**	1.7	0.957 U	0.957 U	1 U	2 U	69.4	2.76	1.44 U	0.342	1 U	1 U	1.41	1 U	1 U	25.7	0.957 U
	08/10/2011	0.957 U	1 U	0.469	1.4	0.957 U	0.957 U	1 U	2 U	53.2	1.16	1.44 U	0.203 U	1 U	1 U	1.29	1 U	1 U	16.1	0.957 U

Table A-5
LRIS Groundwater Cleanup Level Screening
Former PWT Site

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
Carty Lake Monitoring Wells																				
USDFW-1	01/28/2010	1.01 U	1 U	0.277	1 U	1.01 U	1.01 U	1 U	2 U	1 U	1 U	1.52 U	0.282	1 U	1 U	1 U	1 U	1 U	1.01 U	1.01 U
	08/26/2010	0.946 U	1 U	0.316	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	1.42 U	0.323	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
	01/26/2011	0.951 U	1 U	0.338	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.326	1 U	1 U	1 U	**2.07**	1 U	0.951 U	0.951 U
	09/06/2011	0.954 U	1 U	0.401	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	1.43 U	0.193 U	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
USDFW-3	08/26/2010	0.946 U	--	--	--	0.946 U	0.946 U	--	--	--	--	1.42 U	--	--	--	--	--	--	0.946 U	0.946 U
RMW-2S	01/28/2010	0.947 U	1 U	0.108	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	1.42 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	08/26/2010	0.948 U	1 U	0.342	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	0.437	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	01/26/2011	0.951 U	1 U	0.179	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.245	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	09/06/2011	0.952 U	1 U	0.434	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	1.43 U	0.319	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
RMW-2D	01/28/2010	0.948 U	1 U	0.13	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	0.189 U	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/26/2010	0.945 U	1 U	0.084	1 U	0.945 U	0.945 U	1 U	2 U	1 U	1 U	**3.53**	0.19 U	1 U	1 U	1 U	1 U	1 U	0.945 U	0.945 U
	01/26/2011	0.952 U	1 U	0.134	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	**1.74**	0.219	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	09/06/2011	0.951 U	1 U	0.158	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**3.04**	0.194 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
LWBZ: Cells 1 and 2 and Ca																				
Cell 1 (LWBZ)																				
MW-40	01/29/2010	2.35	1 U	0.317	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	**184**	0.191 U	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/25/2010	0.969	1 U	0.308	1 U	0.96 U	0.96 U	1 U	2 U	1 U	1 U	**159**	0.202	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U
	01/24/2011	0.955 U	1 U	0.111	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	**102**	0.191 U	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
	09/02/2011	0.96 U	1 U	0.251	1 U	0.96 U	0.96 U	1 U	2 U	1 U	1 U	**95.3**	0.269	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U
Cell 2 (LWBZ)																				
MW-33	01/11/2010	0.946 U	1 U	--	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	**94.7**	--	1 U	**1.83**	1 U	1 U	1 U	0.946 U	0.946 U
	08/09/2011	0.951 U	1 U	--	**1 U**	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**37.3**	--	1 U	**2.03**	1 U	1 U	1 U	0.951 U	0.951 U
MW-35	01/22/2010	3.6	1 U	1.6	1 U	0.951 U	0.951 U	1 U	2 U	6.49	1 U	**1990**	0.317	1 U	**23.9**	1 U	**4.5**	1 U	12.9	0.951 U
	08/16/2010	1.78	1 U	1.31	1 U	0.949 U	0.949 U	1 U	2 U	9.76	1.23	**1270**	0.261	1 U	**19.4**	1 U	**5.73**	**1.98**	3.46 B	0.949 U
	01/20/2011	4.11	1 U	1.41	1 U	0.953 U	0.953 U	1 U	2 U	4.38	1 U	**1200**	0.396	1 U	**20**	1 U	**5.43**	**2.34**	3.42	0.953 U
	08/29/2011	3.39	1 U	1.25	1 U	0.956 U	0.956 U	1 U	2 U	12.3	1 U	**1110**	0.218	1 U	**16.1**	1 U	**4.76**	**2.62**	7.66	0.956 U
MW-36	01/26/2010	1.06	1 U	--	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	**61.4**	--	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
	08/16/2010	1.09	1 U	--	1 U	0.957 U	0.957 U	1 U	2 U	1 U	1 U	**109**	--	1 U	**1.01**	1 U	**1.07**	1 U	0.957 U	0.957 U
	01/21/2011	1.78	1 U	--	1 U	0.955 U	0.955 U	1 U	2 U	1 U	1 U	**94.7**	--	1 U	1 U	1 U	1 U	1 U	0.955 U	0.955 U
	08/30/2011	1.42	1 U	--	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	**102**	--	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
MW-37	01/27/2010	0.948 U	1 U	--	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	**1.63**	--	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U
	08/31/2011	0.96 U	1 U	--	1 U	0.96 U	0.96 U	1 U	2 U	1 U	1 U	**8.15**	--	1 U	1 U	1 U	1 U	1 U	0.96 U	0.96 U
MW-54	01/13/2010	0.953 U	1 U	0.135	1 U	0.953 U	0.953 U	1 U	2 U	1 U	1 U	**40.2**	0.198	1 U	1 U	1 U	**1.21**	1 U	0.953 U	0.953 U

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
	08/12/2010	0.947 U	1 U	0.0833	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	**74.2**	0.189 U	1 U	1 U	1 U	**1.6**	1 U	0.947 U	0.947 U
	01/13/2011	0.957 U	1 U	0.0764 U	1 U	0.957 U	0.957 U	1 U	2 U	1 U	1 U	**63.7**	0.191 U	1 U	1 U	1 U	**1.59**	1 U	0.957 U	0.957 U
	08/24/2011	0.956 U	1 U	0.122	1 U	0.956 U	0.956 U	1 U	2 U	1 U	1 U	1.43 U	0.201 U	1 U	1 U	1 U	**1.55**	1 U	0.956 U	0.956 U
MW-55	01/14/2010	0.951 U	1 U	**0.64**	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**293**	0.477	1 U	**3.75**	1 U	**4.05**	1 U	0.951 U	0.951 U
	08/12/2010	1.34	1 U	**1.89**	1 U	0.949 U	0.949 U	1 U	2 U	1 U	1 U	**632**	0.206	1 U	**5.16**	1 U	**5.03**	1 U	0.949 U	0.949 U
	01/14/2011	1.39	1 U	**0.563**	1 U	0.957 U	0.957 U	1 U	2 U	1 U	1 U	**544**	0.257	1 U	**4.79**	1 U	**3.77**	1 U	0.957 U	0.957 U
	08/08/2011	1.2	1 U	**0.538**	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	7.13 U	0.204 U	1 U	**2.91**	1 U	**3.12**	1 U	0.951 U	0.951 U
MW-56	01/14/2010	0.952 U	1 U	0.0755 U	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	**10.1**	0.337	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/12/2010	0.951 U	1 U	0.0764 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**31.9**	0.191 U	1 U	1 U	1 U	**1.01**	1 U	0.951 U	0.951 U
	01/19/2011	0.952 U	1 U	0.107	1 U	0.952 U	0.952 U	1 U	2 U	1 U	1 U	**23.3**	0.22	1 U	1 U	1 U	1 U	1 U	0.952 U	0.952 U
	08/26/2011	0.96 U	1 U	0.0908	1 U	0.96 U	0.96 U	1 U	2 U	1 U	1 U	**26.1**	0.193 U	1 U	1 U	1 U	**1.08**	1 U	0.96 U	0.96 U
MW-59	01/21/2010	0.949 U	1 U	0.0798	1 U	0.949 U	0.949 U	1 U	2 U	3.53	1 U	1.42 U	0.189 U	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
	08/13/2010	0.946 U	1 U	0.0758 U	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	**18**	0.189 U	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
	01/20/2011	0.964 U	1 U	0.113	1 U	0.964 U	0.964 U	1 U	2 U	1 U	1 U	**2.19**	0.259	1 U	1 U	1 U	1 U	1 U	0.964 U	0.964 U
	08/29/2011	0.954 U	1 U	0.0771 U	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	**5.09**	0.193 U	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
MW-62	09/08/2010	0.985 U	1 U	0.140 U	1 U	0.985 U	0.985 U	1 U	2 U	1 U	1 U	**22.4**	0.321 U	1 U	1 U	1 U	1 U	1 U	0.985 U	0.985 U
	01/14/2011	0.951 U	1 U	0.0763 U	1 U	1.25	0.951 U	1 U	2 U	1 U	1 U	**10.7**	0.191 U	1 U	1 U	1 U	1 U	1 U	0.951 U	1.12
	08/25/2011	0.954 U	1 U	0.126	1 U	0.954 U	0.954 U	1 U	2 U	1 U	1 U	1.43 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.954 U	0.954 U
Carty Lake (LWBZ)																				
MW-60	01/28/2010	0.948 U	1 U	0.207	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	**70.2**	0.197	1 U	1 U	1 U	**7.17**	**2.19**	0.948 U	0.948 U
	08/25/2010	0.95 U	1 U	0.208	1 U	0.95 U	0.95 U	1 U	2 U	1 U	1 U	**72.2**	0.292	1 U	1 U	1 U	**6.87**	1 U	0.95 U	0.95 U
	01/24/2011	0.951 U	1 U	0.0904	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**80.4**	0.19 U	1 U	1 U	1 U	**8.19**	**2.96**	0.951 U	0.951 U
	09/06/2011	0.951 U	1 U	0.273	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	**94.4**	0.194 U	1 U	1 U	1 U	**6.47**	**4.92**	0.951 U	0.951 U
MW-61	09/03/2010	1.01 U	1 U	0.0789 U	1 U	1.01 U	1.01 U	1 U	2 U	1 U	1 U	1.51 U	0.197 U	1 U	1 U	1 U	1 U	1 U	1.01 U	1.01 U
	01/24/2011	0.951 U	1 U	0.0762 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.19 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
	09/02/2011	0.951 U	1 U	0.0773 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.193 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
Cell 3 Shallow and Deep UW																				
Cell 3 Shallow UWBZ																				
MW-9S	01/07/2010	0.949 U	1 U	**0.985**	1 U	0.949 U	3.84	1 U	2 U	1 U	1 U	1.42 U	**0.887**	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
MW-20S	01/08/2010	0.947 U	1 U	0.26	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	1.42 U	0.473 U	1 U	1 U	1 U	1 U	1 U	0.947 U	0.947 U
MW-45S	01/07/2010	0.946 U	1 U	0.368	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	1.42 U	0.474 U	1 U	1 U	1 U	1 U	1 U	0.946 U	0.946 U
MW-46S	01/08/2010	0.949 U	1 U	0.398	1 U	0.949 U	0.949 U	1 U	2 U	1 U	1 U	1.42 U	0.474 U	1 U	1 U	1 U	1 U	1 U	0.949 U	0.949 U
	08/24/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-47S	01/07/2010	0.948 U	1 U	0.237 U	1 U	0.948 U	0.948 U	1 U	2 U	1 U	1 U	1.42 U	0.473 U	1 U	1 U	1 U	1 U	1 U	0.948 U	0.948 U

Location	Date Collected	Dibenzo-furan	Dichloro-difluoromethane	Diesel-Range Organics	Ethyl-benzene	Fluoranthene	Fluorene	Hexachloro-butadiene	m,p-Xylene	Naphtha-lene	o-Xylene	Pentachloro-phenol (PCP)	Residual-Range Organics	Styrene	Tetrachloro-ethene (PCE)	Toluene	Trichloro-ethene (TCE)	Vinyl chloride	Naphthalene	Pyrene
	Unit	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Cleanup Level	32	9.9	0.5	800	640	640	0.56	310	160	440	0.73	0.5	1.5	0.081	640	0.42	0.029	160	480
Cell 3 Deep UWBZ																				
MW-20D	01/08/2010	0.951 U	1 U	0.237 U	1 U	0.951 U	0.951 U	1 U	2 U	1 U	1 U	1.43 U	0.474 U	1 U	1 U	1 U	1 U	1 U	0.951 U	0.951 U
MW-29D	01/07/2010	0.946 U	1 U	--	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	1.42 U	--	1 U	**12.1**	1 U	1 U	1 U	0.946 U	0.946 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.85**	--	--	--	--	--
MW-45D	01/08/2010	0.947 U	1 U	0.255	1 U	0.947 U	0.947 U	1 U	2 U	1 U	1 U	**35.5**	0.473 U	1 U	**6.4**	1 U	1 U	1 U	0.947 U	0.947 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	**19.4**	--	--	**6.9**	--	--	--	--	--
MW-46D	01/08/2010	0.947 U	--	0.237 U	--	0.947 U	0.947 U	--	--	--	--	1.42 U	0.474 U	--	--	--	--	--	0.947 U	0.947 U
MW-47D	01/07/2010	0.946 U	1 U	0.237 U	1 U	0.946 U	0.946 U	1 U	2 U	1 U	1 U	1.42 U	0.474 U	1 U	**7.86**	1 U	1 U	1 U	0.946 U	0.946 U
	08/22/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	**15.4**	--	--	--	--	--

Table A-6
Port-owned Properties Soil Cleanup Level Screening
Former PWT Site

		Analyte	Dioxin (p-dibenzo) TEQ[a]	Furan TEQ[a]
		Unit	ng/kg	ng/kg
		Cleanup Level	9.8[a]	11.4[a]
Sample Location	Sample Date	Depth (ft bgs)	Result	Result
SS-6	7/17/2008	0.3	**24**	**20**
SS-37	6/17/2010	0	**29**	**24**
SS-38	6/17/2010	0	**37**	**24**
SS-39	6/17/2010	0	3.3	4.3
SS-41	8/9/2010	0	**13**	9.9
SS-41-DUP	8/9/2010	0	**15**	**12**
SS-42	8/10/2010	0	**76**	**59**
SS-50	5/24/2011	0	**23**	**24**
SS-50-Comp-0-6	9/20/2012	0-6	**11**	5.1

		Analyte	Dioxin/Furan TEQ	1,2,3,4,6,7,8,9-OCDF	1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD
		Unit	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg
		Sediment Cleanup Level	5	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
		Remediation Level	NV	4600000	4600000	110000	140000	110000	430	86	430	540	430	540	240	43	430	2.9	38	1.4
Sample Location	Sample Date	Depth	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
LRIS-LR-01-SS	4/19/2010	0-10 cm	**37**[b]	470 J	13000 J	190 J	1400 J	13	14	5.8	7.5	70	0.94 J	13 J	5.2	2.8 J	6.5	**5.9 J**	2.4	0.28 U
LRIS-LR-02-SS	4/19/2010	0-10 cm	3.3	38	1000	16	100	1 J	1.5 J	0.86 J	0.75 J	4.9	0.09 J	1.8 J	0.41 U	0.41 J	0.49 J	0.66 J	0.7 J	0.12 U
LRIS-LR-04-SS	4/19/2010	0-10 cm	1.6	13 J	420 J	6.2 J	45 J	0.59 U	0.72 U	0.46 U	0.46 U	2 J	0.4 U	1 U	0.38 U	0.68 UJ	0.36 U	0.45 U	0.81	0.19 U
LRIS-LR-05-SS	4/19/2010	0-10 cm	**30**[b]	300 J	9700 J	140 J	1100 J	9.9	21	3.4 J	6.2	45	0.68 J	10 J	5.2	2.5 J	4.7	**7.7 J**	2.5	0.44 J
LRIS-LR-07-SS	4/19/2010	0-10 cm	1.4	21	360	8.1	40	0.58 U	0.93 J	0.29 U	0.5 U	1.9 J	0.17 U	0.68 U	0.42 U	0.41 U	0.22 J	0.55 U	0.45 U	0.19 U
LRIS-LR-08-SS	4/19/2010	0-10 cm	**220**[b]	640 J	120000 J	770 J	8700 J	47	190	14	55	240	4	45 J	30	8.5 J	39	**56 J**	7.4	0.59 J
LRIS-LR-09-SS	4/19/2010	0-10 cm	**580**[b]	250	2100	180 J	5400 J	140	45	**730 J**	31	**720**	16	**1800**	6.1	**180**	5.3	0.87 U	0.38 U	**5.2**
LRIS-LR-10-SS	4/19/2010	0-10 cm	**57**[b]	180 J	15000 J	150 J	1600 J	10	27	11	10	69	0.75 J	51 J	5.7	11 J	11	**9.7 J**	2.9	**2.3**
LRIS-LR-11-SS	4/20/2010	0-10 cm	2.5	26	900	12	89	0.67 U	2.1 J	1.1 J	0.79 J	3.8 U	0.24 U	1.9 U	0.4 U	0.37 U	0.59 J	0.46 U	0.57 U	0.24 U
LRIS-LR-12-SS	4/20/2010	0-10 cm	**61**[b]	180 J	18000 J	160 J	2000 J	9.5	25	20	9.9	80	1.4 J	41 J	4.6	13 J	5.7	**5.8 J**	1.2	0.83
LRIS-LR-13-SS	4/20/2010	0-10 cm	**16**	210	7900 J	56	540	3.3 J	6.6	3.5 J	2.8 J	28	0.27 U	8.1	1.4 J	1.9 J	1.6 J	1.9 J	0.97 J	0.45 U
LRIS-LR-14-SS	4/20/2010	0-10 cm	**13**	92 J	4600 J	71 J	510 J	4.5	8.2	3.1 J	3.7	17	0.75 J	4.1 J	1.9 J	1.1 J	2.7 J	2 J	0.84	0.22 U
LRIS-LR-15-SS	4/20/2010	0-10 cm	1.2	19	370	0.19 U	44	0.28 U	0.51 U	0.42 U	0.49 J	2.1 U	0.27 U	1 U	0.38 U	0.36 U	0.31 U	0.45 U	0.58 U	0.2 U
LRIS-LR-16-SS	4/20/2010	0-10 cm	**14**	170 J	5500 J	60 J	600 J	3.7 J	4.4	2.8 J	2.4 J	22	0.59 J	5 J	1.5 J	1.3 U	1.9 J	1.6 J	1.2	0.3 U
LRIS-LR-17-SS	4/20/2010	0-10 cm	4.3	55	1100	32	190	2.1 U	0.2 U	0.47 U	1.1 J	9.4	0.2 U	1.8 J	0.32 U	0.32 U	0.98 J	0.39 U	0.41 J	0.14 U
LRIS-LR-18-SS	4/20/2010	0-10 cm	1.7	14	270	4.8 U	30	0.49 J	0.37 U	0.66 U	0.36 U	2 J	0.28 U	1.2 U	0.83 U	0.75 U	0.29 U	0.96 U	0.87	0.54 U
LRIS-LR-19-SS	4/21/2010	0-10 cm	**110**[b]	3500 J	40000 J	780 J	4800 J	54 J	49 J	17 J	20 J	180	2.4 U	27 J	6.1 U	3.5 J	17 J	**9.3 J**	3.5 U	1.2 U
LRIS-LR-20-SS	4/21/2010	0-10 cm	**260**[b]	2600 J	92000 J	1000 J	11000 J	61	99	36	40	520	3.9 J	81 J	35	14 J	39	**36 J**	15	1.2 U
LRIS-LR-21-SS	4/21/2010	0-10 cm	0.51	3.9 J	96 J	1.7 U	13 J	0.21 U	0.23 J	0.15 U	0.089 U	0.62 J	0.094 U	0.23 U	0.15 U	0.24 UJ	0.079 U	0.16 U	0.15 U	0.14 U
LRIS-LR-23-SS	4/21/2010	0-10 cm	0.59	5.6 J	120 J	2.5 J	14 J	0.17 U	0.34 U	0.17 U	0.62 J	0.58 J	0.26 U	0.47 J	0.14 U	0.15 UJ	0.24 U	0.15 U	0.3 J	0.084 U
LRIS-LR-24-SS	4/21/2010	0-10 cm	**170**[b]	570 J	70000 J	700 J	5600 J	44	210	26	55	220	4.8 J	48 J	28	8.9 J	30	**58 J**	7.5	1.1 J
LRIS-LR-25-SS	4/21/2010	0-10 cm	**260**[b]	980 J	68000 J	680 J	7800 J	43	100	53	38	320	3.7 J	120 J	24	**58 J**	27	**31 J**	10	**15**
LRIS-LR-27-SS	4/21/2010	0-10 cm	0.93	14 J	170 J	4.2 J	23 J	0.52 U	0.51 J	0.26 J	0.46 U	0.98 J	0.24 U	0.46 J	0.24 U	0.26 UJ	0.2 U	0.28 U	0.58 J	0.21 U
LRIS-LR-28-SS	4/21/2010	0-10 cm	0.84	3.9 J	260 J	3.3 J	30 J	0.19 U	0.23 U	0.22 J	0.3 J	1.3 J	0.22 U	0.35 J	0.15 U	0.17 UJ	0.22 J	0.17 U	0.25 U	0.085 U
LRIS-LR-103	12/4/2012	0-10 cm	4.2	32	1300	16	120 J	0.64 J	3.2 J	0.53 U	1.2 J	6.7	0.054 U	2.1 J	1 J	0.45 U	1.7 J	1.1 J	0.73 J	0.21 J
LRIS-LR-106	12/4/2012	0-10 cm	**14**	88	4500	56	450 J	2.5 J	10	2.7 J	3.4 J	23	0.084 U	6.6	2.2 J	0.91 J	2.5 J	**3.1 J**	0.94 J	0.35 J
LRIS-LR-122	12/4/2012	0-10 cm	**250**[b]	490	73000	1000 J	8300	49 J	330 J	21	110 J	340	4.9	66	51	7.2	58 J	**91**	14 J	0.53 U
LRIS-LR-126	12/4/2012	0-10 cm	**140**[b]	550	37000	620	4300 J	28 J	110	37	33	260	1.2 U	120	18 J	11	19 J	19 J	6.3 J	2 J
LRIS-LR-129	12/4/2012	0-10 cm	2.2	19	540	8.8	60 J	0.15 U	1.5 J	0.52 U	0.67 J	3.2 J	0.066 U	1.1 U	0.31 J	0.27 J	0.63 U	0.66 J	0.65 J	0.31 U
LRIS-LR-130	12/4/2012	0-10 cm	0.68	13	250	2.9 U	25 J	0.083 U	0.68 J	0.19 J	0.27 J	1.2 U	0.035 U	0.54 J	0.11 U	0.074 U	0.24 J	0.073 U	0.24 U	0.044 U
LRIS-LR-130-FD-1	12/4/2012	0-10 cm	0.62	7.2	170	2.9 J	19 J	0.056 U	0.47 J	0.23 U	0.22 J	1 J	0.025 U	0.42 U	0.15 J	0.051 U	0.25 J	0.15 J	0.3 J	0.029 U
LRIS-LR-131	12/4/2012	0-10 cm	0.62	7.4	200	3.4	22 J	0.12 U	0.5 J	0.18 J	0.21 J	1 U	0.05 U	0.55 J	0.089 U	0.099 U	0.043 U	0.11 U	0.059 U	0.062 U
LRIS-LR-132	12/4/2012	0-10 cm	**5.8**	66	1600	24 J	180	1.6 J	3.5 J	0.9 U	1.5 J	8.9	0.19 U	4.4 J	0.77 U	0.74 J	0.91 J	1.4 J	0.19 U	0.13 U
LRIS-LR-133	12/4/2012	0-10 cm	**5.4**	73	1600	27 J	190	1.5 J	3.8 J	1.4 J	1.5 U	8.5	0.17 U	2.7 U	1.2 J	0.72 J	0.98 J	1.1 U	0.82 J	0.092 U
LRIS-LR-134	12/4/2012	0-10 cm	**28**	710	9500	150 J	1100	8.9 J	14 J	4.8	6.2 J	44	0.23 U	13	2.9 J	1.7 J	4.6 J	**3.7 J**	1.6 J	0.34 U
LRIS-LR-137	12/4/2012	0-10 cm	1.2	15	350	6	36 J	0.24 U	0.83 J	0.36 J	0.35 U	2 J	0.057 U	0.88 J	0.14 U	0.1 U	0.48 U	0.33 J	0.47 J	0.057 U

		Analyte	Dioxin/Furan TEQ	1,2,3,4,6,7,8,9-OCDF	1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD
		Unit	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg
		Sediment Cleanup Level	5	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
		Remediation Level	NV	4600000	4600000	110000	140000	110000	430	86	430	540	430	540	240	43	430	2.9	38	1.4
LRIS-LR-01-SB-1-2	4/26/2010	1-2 ft	**6.4**	27	2,200	27	210	2.2 J	4.7	1.5 U	2.7 J	8.8	0.2 J	4.4	1.5 J	0.75 U	1.2 J	1.6 U	1.7	0.54 U
LRIS-LR-05-SB-1-2	4/27/2010	1-2 ft	**17**	120	8800 J	55	600	3.3	6.1	3.5	4.5	30	0.45 J	7.3 J	2.5 J	1 J	2.1 J	2.3 J	1.5	0.36 J
LRIS-LR-08-SB-1-2	4/28/2010	1-2 ft	**910[b]**	1400 J	260000 J	4100 J	30000 J	200	**1300**	70	380	**1200**	48 J	120 J	200	15 J	190	**410 J**	**93**	**3.9 J**
LRIS-LR-09-SB-1-2	4/29/2010	1-2 ft	1.5	20	460	8.3	49	0.77 J	0.72 J	0.4 U	0.43 U	2.1 J	0.16 U	0.68 J	0.26 U	0.29 U	0.25 J	0.34 J	0.56 U	0.18 U
LRIS-LR-10-SB-1-2	4/28/2010	1-2 ft	**79[b]**	290	19000 J	200	3200 J	15	22	38	14 U	150	3 U	95	7.4	7.2 U	5.7 U	**8.6 U**	3.7	**4 U**
LRIS-LR-12-SB-1-2	4/28/2010	1-2 ft	**9.7**	47	3500 J	48	300	3.6	7.6	2 J	3.5	13	0.32 U	4.4	1.8 J	1 J	1.5 J	1.9 J	1.1	0.28 U
LRIS-LR-103-2	12/3/2012	1-2 ft	**6.1**	41	1600	22 J	190	0.63 U	3.3 J	1.2 U	1.8 U	12	0.14 U	5.5	1.7 J	0.62 U	1.3 J	1.2 U	1.8 J	0.37 J
LRIS-LR-106-2	12/2/2012	1-2 ft	0.06	0.15 U	2 U	0.077 U	0.38 U	0.03 U	0.019 U	0.026 U	0.018 U	0.084 J	0.024 U	0.076 U	0.034 U	0.044 U	0.018 U	0.032 U	0.033 U	0.023 U
LRIS-LR-119-2	12/3/2012	1-2 ft	**33[b]**	290	9000	120 J	1100	7.7 J	14 J	6.5	9.4 J	65	7.1	19	5.6	2.7 J	5.5 J	4.7	3.2 J	0.69 J
LRIS-LR-120-2	12/3/2012	1-2 ft	**26**	120	9500	92	930 J	4.3 J	12	7.2	8.6	46	0.12 U	17	3.9	1.7 J	3.5 J	**3 J**	2.1 J	0.46 J
LRIS-LR-122-2	12/3/2012	1-2 ft	**38[b]**	180	15000	190	1400 J	9.9 J	36	6.4	15	58	0.22 U	17	6.8 J	1.4 J	6.9 J	**6.6 J**	2.1 J	0.081 U
LRIS-LR-124-2	12/3/2012	1-2 ft	**113[b]**	330	33000	490	3300 J	33 J	160	14	53	170	0.59 U	42	25 J	2.9 J	23 J	**41 J**	12 J	1.1 J
LRIS-LR-125-2	12/2/2012	1-2 ft	**170[b]**	450	42000	460 J	7300	16 J	58 J	73	27 J	230	2.6 J	240	12	11	18 J	**11**	5.6 J	**2.5 J**
LRIS-LR-126-2	12/2/2012	1-2 ft	**12**	42	3400	31	420 J	2.4 J	8.7	4.4	3.3	14	0.057 U	12	1.1 J	0.63 J	1.3 U	1.2 J	1.1 J	0.56 J
LRIS-LR-129-2	12/2/2012	1-2 ft	2.0	22	510	8.2	57 J	0.47 U	1.2 J	0.61 U	0.99 J	2.9 J	0.063 U	1.2 U	0.25 U	0.25 U	1.4 J	0.3 J	0.66 J	0.29 U
LRIS-LR-130-2	12/2/2012	1-2 ft	0.82	6.8	270	3.2	27 J	0.053 U	0.28 U	0.3 U	0.19 J	1.4 J	0.026 U	0.61 J	0.044 U	0.056 U	0.3 J	0.098 J	0.32 U	0.16 U
LRIS-LR-130-FD	12/2/2012	1-2 ft	1.9	14	660	7.1	72 J	0.19 U	0.57 U	0.54 J	0.35 J	3.6	0.091 U	0.96 J	0.18 U	0.19 U	0.72 J	0.2 U	0.12 U	0.16 U
LRIS-LR-131-2	12/2/2012	1-2 ft	1.7	9.8	440	5.2	52 J	0.086 U	1.1 J	0.5 J	0.63 U	2.4 J	0.038 U	1.1 U	0.089 U	0.22 U	0.58 U	0.27 U	0.61 J	0.26 J
LRIS-LR-132-2	12/3/2012	1-2 ft	2.1	11	240	6.8	31 U	0.22 U	0.3 U	0.64 J	0.33 U	1.4 J	0.11 U	2.1 U	0.2 U	0.27 U	0.093 U	0.25 U	0.48 J	1.2 J
LRIS-LR-133-2	12/3/2012	1-2 ft	1.0	17	330	6.3	31 J	0.15 U	0.74 J	0.31 J	0.52 J	1.6 J	0.062 U	0.85 U	0.19 U	0.11 U	0.47 U	0.21 U	0.56 J	0.064 U
LRIS-LR-134-2	12/2/2012	1-2 ft	**17**	290	5700	79	550 J	3.7 J	8	3.5	5.1	32	0.097 U	9.4	2.5 J	1.6 J	3 J	2.3 U	1.8 J	0.51 J
LRIS-LR-108-3	12/3/2012	2-3 ft	**41[b]**	160	14000	170 J	1300	7.3 J	46 J	7.6	21 J	51	0.33 U	14	11	1.6 J	8.3 J	**12**	5 J	0.83 J
LRIS-LR-109-3	12/2/2012	2-3 ft	3.5	14	920	12	100 J	0.62 U	2.1 J	0.97 J	1.2 J	5.9	0.058 U	2.2 U	0.73 J	0.34 J	0.7 J	1.1 J	1 J	0.14 U
LRIS-LR-110-3	12/3/2012	2-3 ft	**78[b]**	250	20000	180	2100 J	9.8 J	38	23	16	110	0.23 U	84	9.5 J	14	9.2 J	11 J	4 J	3.2 J
LRIS-LR-119-3	12/3/2012	2-3 ft	**3.8**	20 J	1100	17	99	0.78 J	2.8 J	0.94 J	1.9 J	4.8	0.15 U	2.1 J	1 J	0.42 J	1 J	1 J	1.2 J	0.2 U
LRIS-LR-122-3	12/3/2012	2-3 ft	1.6	5.2 J	560	7	47	0.38 U	2.1 J	0.1 U	0.99 J	2.2 J	0.062 U	0.52 J	0.41 J	0.051 U	0.46 J	0.49 J	0.57 J	0.023 U
LRIS-LR-124-3	12/3/2012	2-3 ft	**56[b]**	170 J	18000	240	1800	13	83	5	30	67	1 J	16	12	1.5 J	15	**17**	4.4 J	0.51 J
LRIS-LR-125-3	12/2/2012	2-3 ft	2.4	9.8 J	970	10	63	0.52 U	2.6	0.38 U	1.2 J	2.9	0.095 J	0.98 J	0.59 J	0.061 U	0.55 J	0.43 J	0.26 J	0.33 J
LRIS-LR-08-SB-3-4	4/28/2010	3-4 ft	**6.9**	18 J	1300 J	31 J	140 J	1.6 J	12	1.4 J	3.4 J	6.2	0.63 U	1.5 J	1 J	0.53 UJ	2.2 J	1.8 J	1.6	1.1
LRIS-LR-110-4	12/3/2012	3-4 ft	**46**	130 J	11000	110	1400	6.9	21	20	12	63	1.2 J	45	6.4	7.1	5.7	**5.2**	2.4 J	1.4
LRIS-LR-124-4	12/3/2012	3-4 ft	0.86	3.3 J	280	4.1	26	0.057 U	1.2 J	0.025 U	0.65 J	1.3 U	0.036 U	0.35 U	0.23 U	0.065 U	0.58 U	0.39 U	0.39 J	0.079 U
LRIS-LR-09-SB-4-5	4/29/2010	4-5 ft	3.1	19	800	12	84	2 J	0.35 U	0.96 U	1.3 J	5.4	0.38 U	2 U	0.93 U	0.79 U	0.31 J	1.1 U	0.93	0.6 U
LRIS-LR-110-5	12/3/2012	4-5 ft	**62**	180	14000	160	2100	9.3	39	14	19	98	1.8 U	48	8.6	6.8	9.1	**8.3**	3.7	**2.4**
LRIS-LR-132-5	12/3/2012	4-5 ft	0.14	0.22 U	6.6	0.23 U	0.83 J	0.038 U	0.071 U	0.037 U	0.059 U	0.11 U	0.061 U	0.092 U	0.04 U	0.055 U	0.023 U	0.041 U	0.13 J	0.11 U

Table A-8
Carty Lake Sediment Cleanup Level Screening
Former PWT Site

Analyte		Dioxin/Furan TEQ	1,2,3,4,6,7,8,9-OCDF	1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD
Units		ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg	ng/kg
Sediment Cleanup Level		5	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Remediation Level		NV	10000000	10000000	250000	310000	250000	980	200	980	1200	980	1200	550	98	980	6.5	86	3.3
Sample Location	Depth	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
LRIS-BKG-04-SS	0-10 cm	**18**	44	3,000	41	510	2.9	6.9	7.4	5.2	27	0.5 U	22	3.4	3.2	2.4	3	1.4	0.23
LRIS-CL-01-SS	0-10 cm	**140**[b]	590	38,000	480	4,600	27	91	41	31	250	2.1 J	71	21	13	24	**39**	9.4	1.4
LRIS-CL-02-SS	0-10 cm	**1400**[b]	2800 J	220000 J	6200 J	63000 J	430	**1000**	**450**	510	350	67 J	810 J	320	**140 J**	360	**390 J**	**120**	**12 U**
LRIS-CL-03-SS	0-10 cm	**24**	91	4800 J	83	800	3.9 J	12	8.1	5.2	43	0.44 J	16	3 J	3.1 J	4.5	4.5	1.8	0.29 U
LRIS-CL-04-SS	0-10 cm	**300**[b]	790 J	64000 J	1100 J	12000 J	48 U	170	77 J	82 J	540	24 U	140 J	42 J	22 J	65 J	**50 J**	18	**7.1 U**
LRIS-CL-05-SS	0-10 cm	1.8	5.3 J	400	5.3	62	0.46 U	0.81 J	0.78 J	0.47 U	3.3	0.28 U	1.6 J	0.39 U	0.32 U	0.35 J	0.31 U	0.33 U	0.12 U
LRIS-CL-06-SS	0-10 cm	**22**	54 J	5000 J	51 J	780 J	4.4 U	6.8	8.5	5.6	34	1.4 U	17 J	3 J	3.3 J	2.9 U	2.9 J	1.4	0.38 U
LRIS-CL-07-SS	0-10 cm	**32**	110 J	8700 J	100 J	1300 J	5	10	8.3	7	55	1.6 U	17 J	4.1	3.1 J	5.2	3.9 J	2.1	0.27 U
LRIS-CL-08-SS	0-10 cm	**27**	66	4800 J	60	840	3 J	8.9	12	7.5	41	0.54 J	30	4.3 UJ	5.2	4.1 J	4 UJ	3	0.44 J
LRIS-CL-09-SS	0-10 cm	**54**	140	11000 J	130	2000	5.1 U	16	22	13	76	0.81 U	53	6.7 UJ	8.6	8	6.3 UJ	2.9	0.65 J
LRIS-CL-10-SS	0-10 cm	**15**	45	2500	35	400	1.9 U	5.3	7.2	5	26	0.39 J	16	2.7 UJ	3.3 J	3.1 J	2.4 UJ	0.81 U	0.15 U
LRIS-CL-11-SS	0-10 cm	**27**	64	3400	50	620	4 J	8.5	13	8.2	46	0.47 J	28	5.3	6.7	4.9 J	5 UJ	2.2	0.53 J
LRIS-CL-12-SS	0-10 cm	**20**	51	2800	41	490	3 U	6.9	9.5	6.3	32	0.51 J	21	4.1 UJ	5.2	4 J	4 UJ	1.8	0.4 U
LRIS-CL-13-SS	0-10 cm	1.9	7.2	330	5.3	53	0.85 UJ	0.99 UJ	0.62 J	0.5 U	2.7 J	0.08 U	2.6 UJ	0.24 U	0.35 J	0.41 J	0.35 J	0.32 U	0.38 UJ
LRIS-CL-14-SS	0-10 cm	**26**	65	3400	51	620	3.7 U	8.1	13	7.4	43	0.41 J	28	4.4 UJ	6.2	4.8 J	4.3 UJ	2.3	0.46 J
LRIS-CL-15-SS	0-10 cm	**25**	67	3500	51	620	3.4 J	8.6	13	7.3	39	0.42 U	25	4.8 UJ	6.1	5.6 J	4.5 UJ	2.6 U	0.57 J
LRIS-CL-01-SB-1-2	1-2 ft	**5.5**	25	1,700	18	190	1 U	2.7 J	1.7 J	1.2 J	7.5	0.52 J	2 J	1.1 U	0.63 J	0.78 J	1.7 J	0.56 J	0.14 U
LRIS-CL-02-SB-1-2	1-2 ft	**130**[b]	330	32000 J	420	4600 J	23	71	40	31	250	3.4 J	56	25	11	19	**30**	13	0.56 U
LRIS-CL-03-SB-1-2	1-2 ft	1.1	3.7 J	490	2.9 J	24	0.41 U	0.57 U	0.61 J	0.44 U	1.2 J	0.5 U	0.91 J	0.5 U	0.32 U	0.38 U	0.57 U	0.2 J	0.13 U
LRIS-CL-04-SB-1-2	1-2 ft	2.1	5.5 J	510	6.8	78	0.39 U	1.4 J	0.58 J	0.54 J	3.8	0.29 U	1.4 J	0.45 J	0.23 U	0.24 U	0.41 U	0.49 J	0.081 U
LRIS-CL-05-SB-1-2	1-2 ft	0.74	0.99 U	37	0.61 U	5	0.19 U	0.24 U	0.16 J	0.14 U	0.35 J	0.18 J	3.1 U	0.17 U	0.091 U	0.12 U	0.14 U	0.47 J	0.61 U
LRIS-CL-06-SB-1-2	1-2 ft	0.31	0.43 U	43	0.49 U	6.4	0.11 U	0.067 U	0.13 J	0.064 U	0.4 J	0.069 U	0.27 J	0.17 U	0.13 U	0.061 U	0.19 U	0.28 U	0.057 U
LRIS-CL-07-SB-1-2	1-2 ft	0.65	2 U	130	1.9 J	19	0.54 U	0.31 J	0.22 U	0.16 U	1 J	0.15 U	0.52 U	0.16 U	0.24 U	0.16 U	0.2 U	0.11 U	0.093 U
LRIS-CL-02-SB-2-3	2-3 ft	2.5	3.5 U	280	6.2	39	2.7	0.93 UJ	0.42 U	0.44 U	2.3 J	0.49 U	4.6 U	0.8 U	1.7 U	0.44 U	0.81 U	0.64 U	0.66 U