

**FIVE-YEAR REVIEW REPORT FOR
TAYLOR LUMBER AND TREATING SUPERFUND SITE
YAMHILL COUNTY, OREGON**

EPA ID: ORD009042532



Prepared by

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5/15/12

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LIST OF ABBREVIATIONS

ARAR	Applicable or Relevant and Appropriate Requirement
bgs	below ground surface
BMP	Best Management Practices
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm/sec	centimeters per second
DEQ	Department of Environmental Quality
DNAPL	Dense Non-Aqueous-Phase Liquid
DOT	Department of Transportation
EES	Easement and Equitable Servitude
EPA	United States Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
FS	Feasibility Study
FYR	Five-Year Review
gpm	gallons per minute
IC	Institutional Control
IDW	Investigation Derived Waste
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
NCP	National Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OMP	Operations and Maintenance Plan
OSWER	Office of Solid Waste and Emergency Response
OU	Operable Unit
O&F	Operational and Functional
PCP	Pentachlorophenol
ppb	parts per billion
PRG	Preliminary Remediation Goal

PWPO	Pacific Wood Preserving of Oregon
RA	Remedial Action
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RD/RA	Remedial Design/Remedial Action
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
TEQ	Dioxin Toxic Equivalent
TLT	Taylor Lumber and Treating
TPS-1	Treated Pole Storage Area - 1
TPS-2	Treated Pole Storage Area – 2
ug/L	microgram per liter
UU/UE	Unlimited Use and Unrestricted Exposure
WPS	White Pole Storage Area

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) conducted this first five-year review of the Taylor Lumber and Treating Superfund Site (“the TLT Site” or “Site”). This is a statutory review required pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The TLT Site is located in Sheridan, Yamhill County, Oregon. The TLT Site was listed on the EPA National Priorities List (NPL) on June 14, 2001, and EPA issued a Record of Decision on September 30, 2005. The entire site is included in one operable unit (OU1). EPA is the lead Agency for this fund-financed Site. The Oregon Department of Environmental Quality (Oregon DEQ) is the support agency and has assumed responsibility for implementation and/or oversight of operation and maintenance at the Site. Pacific Wood Preserving of Oregon (PWPO) currently operates a wood-treating facility at the site.

The remedy at the Taylor Lumber and Treating Superfund Site is protective of human health and the environment. Remedial action construction is complete, the remedy is functioning as intended, and exposure pathways that would result in unacceptable risks are being controlled by restrictive covenants and other institutional controls.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Taylor Lumber and Treating Superfund Site		
EPA ID: ORD009042532		
Region: 10	State: OR	City/County: Yamhill County
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: EPA If "Other Federal Agency" was selected above, enter Agency name:		
Author name (Federal or State Project Manager): Karen Keeley		
Author affiliation: EPA Region 10		
Review period: May 2007 – May 2012		
Date of site inspection: April 27, 2012		
Type of review: Statutory		
Review number: 1		
Triggering action date: May 15, 2007		
Due date (five years after triggering action date): May 15, 2012		

Five-Year Review Summary Form (continued)

The table below is for the purpose of the summary form and associated data entry and does not replace the two tables required in Section VIII and IX by the FYR guidance. Instead, data entry in this section should match information in Section VIII and IX of the FYR report.

Issues/Recommendations				
OU(s) without Issues/Recommendations Identified in the Five-Year Review:				
OU1				
Issues and Recommendations Identified in the Five-Year Review:				
OU(s):	Issue Category:			
	Issue:			
	Recommendation:			
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date

To add additional issues/recommendations here, copy and paste the above table as many times as necessary to document all issues/recommendations identified in the FYR report.

Protectiveness Statement(s)		
<i>Include each individual OU protectiveness determination and statement. If you need to add more protectiveness determinations and statements for additional OUs, copy and paste the table below as many times as necessary to complete for each OU evaluated in the FYR report.</i>		
<i>Operable Unit:</i>	<i>Protectiveness Determination:</i>	<i>Addendum Due Date (if applicable):</i>
<i>Protectiveness Statement:</i>		

Sitewide Protectiveness Statement (if applicable)	
<i>For sites that have achieved construction completion, enter a sitewide protectiveness determination and statement.</i>	
<i>Protectiveness Determination:</i> Protective	<i>Addendum Due Date (if applicable):</i>
<i>Protectiveness Statement:</i> The remedial action construction is complete and the remedy is functioning as intended. The remedy is protective of human health and the environment and exposure pathways that would result in unacceptable risks are being controlled by institutional controls and restrictive covenants.	

TAYLOR LUMBER AND TREATING SUPERFUND SITE SHERIDAN, OREGON

1 INTRODUCTION

The purpose of this first Five-Year Review (FYR) is to ensure that remedial actions selected in the Record of Decision (ROD) for the Taylor Lumber and Treating (TLT) Superfund Site are being implemented, that they continue to be protective of human health and the environment, and that the remedial actions are functioning as designed. To achieve this purpose, this review evaluates the status of implementation of the selected remedy, identifies any significant variances from the ROD, and makes recommendations for reconciling variances and/or for improving performance of the remedial action. In addition, the review identifies any new information that becomes evident, documents that no new contaminant sources or exposure pathways were discovered, and verifies that no new work was performed that was not identified in the ROD. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues or deficiencies found during the review, if any, and recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this Five-Year Review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121 and the National Contingency Plan (NCP). CERCLA Section 121(c) states that:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The EPA interpreted this requirement further in the NCP, at 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii), which states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

The location of the TLT Site is shown in Figure 1-1 and the general site layout is shown on Figure 1-2. The TLT Site was listed on the EPA National Priorities List (NPL) on June 14, 2001, and the EPA identification number is ORD009042532. The entire site is included in one operable unit (OU1). The EPA is the lead Agency for this fund-financed Site. The Oregon

Department of Environmental Quality (Oregon DEQ) is the support agency and has assumed responsibility for implementation and/or oversight of operation and maintenance at the Site. This is the first five-year review for the Site. The triggering action for this statutory review is the date of the initiation of remedial action, which is May 15, 2007 as shown in EPA's WasteLAN database. The first five-year review is required because hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

This report documents the results of the first five-year review for the TLT Site.

2 SITE CHRONOLOGY

A general chronology of site events is provided below in Table 2-1.

Table 2-1. Site Chronology	
Event	Date
EPA Removal Action	2000
NPL Site Listing	June 14, 2001
ROD signed for TLT Site	September 2005
Remedial Design (RD) - Final Design Basis Report, Construction Quality Assurance Plan, Soil Sampling and Analysis Plan, Construction Schedule, and Final Design Specifications and Drawings	December 2006
EPA Approval of Design Documents	December 11, 2006
EPA Superfund State Contract with Oregon DEQ	February 21, 2007
Remedial Action (RA) Contract Award Date	March 30, 2007
RA Start Date	April 2, 2007
Onsite Construction Start	May 15, 2007
RA Fieldwork - Majority of Work	May 2007 – October 2007
EPA Emergency Response Unit response (Rock Creek Road Ditch/Highway 18B culvert)	August 22, 2007
EPA Emergency and Rapid Response Services (ERRS) - Fieldwork by Removal Contractor - Rock Creek Road Ditch/Hwy 18B Culvert	August 2007 and August 2008
RA Preliminary Assessment of Incomplete Work	August 31, 2007
RA Prefinal Inspection	September 17 and 18, 2007
EPA Removal Action Memorandum for Rock Creek Road Ditch/Highway 18B Culvert	September 21, 2007
RA Final Inspection (Majority of Work)	October 15, 2007
RA Contract - Baker Rock Warranty for Pavement Repair	January 2, 2008
RA Contract - Low Permeability Asphalt Cap Materials and Workmanship Warranty	March 3, 2008

Table 2-1. Site Chronology	
Event	Date
RA Final Inspection (Remaining Issues)	May 7, 2008
EPA ERRS – Mobilization by Removal Contractor – Trench Drains Replacement	July 26, 2008
EPA ERRS - Fieldwork by Removal Contractor - Trench Drains Replacement	July through September 2008
First Annual Inspection of MatCon Asphalt Cap	August 11, 2008
EPA ERRS - Prefinal Inspection - Trench Drains Replacement	September 5, 2008 (documentation dated September 9, 2008)
EPA Preliminary Close Out Report and Construction Completion	September 24, 2008
EPA ERRS – Corrective Action Plan - Trench Drains Replacement	November 20, 2008
Oregon Department of Transportation (DOT)/Northwest Natural - Redesign of Culvert at Rock Creek Road Ditch/Highway 18B	November 2008
RA Final Construction Report	March 2009
EPA ERRS - Emergency Response and Removal Site Evaluation Report	March 2009
EPA ERRS - Removal Action Report	March 2009
EPA Approval of RA Final Construction Rpt	April 2, 2009
Final Inspection of Oregon DOT/Northwest Natural work at Rock Creek Road Ditch/Highway 18B	June 22, 2009
Low Permeability Asphalt Cap Operation and Maintenance Plan	August 10, 2009
EPA Site Inspection (re-vegetation of gully/extraction wells) and Second Annual Inspection of MatCon Asphalt Cap	September 11, 2009 (documentation dated September 30, 2009)
EPA ERRS – Final Inspection - Trench Drains Replacement	September 11, 2009
RA Contractor – Final Invoice Approval	September 18, 2009
Operational & Functional Determination	September 30, 2009
EPA Technical Memorandum summarizing RA Actions	October 5, 2009

Table 2-1. Site Chronology	
Event	Date
Operation and Maintenance Plan for TLT Site	October 2009
Long-term Groundwater Monitoring and Reporting Plan for TLT Site	March 2010
Final Remedial Action Report	March 2010
Third Annual Inspection of MatCon Asphalt Cap	March 10, 2011
Third Annual Inspection of MatCon Asphalt Cap, Final Inspection Report	August 31, 2011
Amended Prospective Purchaser Agreement (Amendment to Agreement and Covenant not to Sue, Docket CERCLA-10-2002-0034; PWPO and EPA)	May 26, 2011(Effective Date)
2011 Groundwater Monitoring Event	April 2011
Amended Prospective Purchaser Agreement (PWPO and Oregon DEQ)	June 7, 2011 (Effective Date)
Easement and Equitable Servitude	July 29, 2011 (Date Recorded)
Sitewide Ready for Anticipated Reuse Certification	August 23, 2011
EPA Request to Oregon DEQ for Modifications to Long-term Groundwater Monitoring and Reporting Plan	September 8, 2011
Revised Final 2011 Annual Groundwater Monitoring Report	September 14, 2011
Final PWPO Soil Management Plan for Electrical Vault Work	September 19, 2011
Draft PWPO Best Management Practices Plan (currently under revision by PWPO per EPA comments sent through Oregon DEQ to PWPO on January 25, 2012)	December 6, 2011
TLT Site entered into One Call Dig (“Oregon One Call”) by Oregon DEQ	December 5, 2011
PWPO Penta Block Dissolver Building Report	December 31, 2011
EPA Approval of PWPO Penta Block Dissolver Building Report	January 5, 2012
PWPO Draft 2011 Environmental Audit Report (first annual audit report)	February 2012

Table 2-1. Site Chronology	
Event	Date
PWPO Final Storm Water Treatment System Operation and Maintenance Plan	February 3, 2012
PWPO Final Soil Management Report for Electrical Vault Work	April 9, 2012
PWPO Final 2012 Environmental Audit Report	April 26, 2012
Site Inspection for Five-Year Review	April 27, 2012
PWPO Tank Integrity Test Results	May 3, 2012
PWPO Final BMP Plan	May 4, 2012
EPA Acceptance of Final BMP Plan	May 15, 2012

3 BACKGROUND

This section discusses background information for the TLT Site, including physical characteristics, land resource use, history of contamination, initial response, and the basis for taking action.

3.1 *Physical Characteristics*

The TLT Site (see Figure 1-1) is generally located at 22125 Southwest Rock Creek Road, about 1 mile west of Sheridan in Yamhill County, Oregon. The property lies north of and adjacent to the intersection of Rock Creek Road and the West Valley Highway. The site is comprised of uplands, and is approximately 34 acres. The site is located on the relatively flat floodplain of the South Yamhill River. The South Yamhill River and Rock Creek are located as close as 150 feet from the southern boundary of the facility.

At the TLT Site, four distinct geologic units have been observed: fill material, fine-grained upper alluvium, coarse-grained lower alluvium, and siltstone. The fill material consists of silty to gravelly clay and road gravel, and ranges up to 5 feet thick. The unconsolidated alluvial and lower river terrace deposits of Holocene age overlie the siltstone. The upper alluvium consists of silty clay and or clayey silt, and ranges in thickness from approximately 3.5 to 10.5 feet. The lower alluvium consists of sandy silt and silty sand that grades to sand gravel with depth. The lower alluvium ranges in thickness from approximately 3 to 13 feet, averaging approximately 7 feet. The siltstone, which is classified as the Yamhill Formation, is estimated to be approximately 2,000 feet thick. Overall, the siltstone is massive in character and did not exhibit significant primary or secondary permeability.

The relatively thin layer of alluvium forms a modest, local-scale water-bearing zone beneath the site. The thick sequence of siltstone underlying the site is a low-yielding hydrogeologic unit viewed as the basement confining unit for the western Willamette Valley. Water levels measured in monitor wells at the site indicate depth to groundwater at between approximately 2 and 10 feet below ground surface (bgs). The lower alluvium has a greater hydraulic conductivity and is the primary water-bearing zone at the site, where groundwater occurs under semi-confined conditions.

3.2 *Land and Resource Use*

TLT operated a sawmill and wood treating facility at the Site from 1946 to 2001. Wood-treating operations commenced in 1966 in the western portion of the facility, and predominantly consisted of the treatment of Douglas fir logs for utility poles and pilings. The primary wood-treating chemicals used by TLT included creosote, pentachlorophenol (PCP), and Chemonite (a solution of arsenic, copper, zinc and ammonia). All operations ceased when TLT filed for bankruptcy in 2001. Pacific Wood Preserving of Oregon entered into a Prospective Purchaser Agreement (an Agreement and Covenant Not to Sue; referred to as the “2002 Original Agreement”) with EPA and purchased the wood-treating portion of the facility. PWPO also entered into a Prospective Purchaser Agreement (DEQ No. 02-03) with Oregon DEQ on February 5, 2002. PWPO began wood-treating operations in June 2002. The 2002 Original Agreement required, among other things, that PWPO not treat wood with solutions containing

ammoniacal copper zinc arsenate, chromate copper arsenate, pentachlorophenol, creosote, or any arsenical wood-preserving compounds.

Since 2002, PWPO has conducted wood-treating operations and the storage of poles on the same portions of the property where these activities were conducted by TLT. Wood treatment is conducted in the eastern portion of the facility, and untreated wood is handled and stored on the western portion of the facility (see Figure 1-2). Treatment plant features are shown in Figure 3-1. Between 2002 and 2011, PWPO performed wood-treating operations using copper- and borate-based treating solutions. In 2011, the 2002 Original Agreement was modified¹ (effective May 26, 2011) to allow PWPO to treat wood using pentachlorophenol. The Oregon DEQ Prospective Purchaser Agreement with PWPO was also amended (effective June 6, 2011) to include similar provisions.

Currently, the PWPO facility manufactures wood products treated with “General Use” and “Restricted Use” preservatives. Treated wood products include transmission poles, telephone and utility poles, distribution poles, dimensional lumber, laminated beams and fence posts. Water-borne “General Use” preservatives include ACQ Preserve® and borates. Oil-borne “General Use” preservatives include copper naphthenate and the “Restricted Use” preservative pentachlorophenol. PWPO began using pentachlorophenol in Retort 4 on June 7, 2011 and in Retort 5 on June 22, 2011.

The site is zoned industrial and is expected to remain industrial. The current land use for the surrounding area is recreational, residential, commercial, and industrial. There is no current or anticipated future use of groundwater at the site, and groundwater at the site has never been used for drinking water purposes. Institutional controls are in place for soil and groundwater at the site (see Section 4.9). Groundwater at the site flows in a southern direction towards the South Yamhill River, which is approximately 150 feet from the site. Surface water at the site also drains via ditches towards the South Yamhill River.

3.3 History of Contamination

In 1966, John Taylor purchased the land on the west side of Rock Creek Road for the wood-treating facility. The primary wood-treating chemicals used by TLT included creosote, pentachlorophenol, and Chemonite. TLT operated wood-treating operations until 2001. The primary areas of contamination and their sources at the TLT Site include:

- Subsurface groundwater contamination, including dense non-aqueous phase liquid (DNAPL), in the vicinity of the Treatment Plant Area resulting from past drips, spills, and leaks of wood-treating chemicals from aboveground chemical storage tanks, drip pads, and tank farms

¹ The 2002 Original Agreement with PWPO provided a covenant not to sue for response costs at the TLT Site, which PWPO was acquiring, in exchange for several obligations related to site operation and a commitment not to use certain hazardous products, including pentachlorophenol, at the site. The 2011 Amendment removes the restriction on PCP use and extends PWPO’s commitment to collect and treat groundwater and maintain the asphalt cap until January 31, 2022, or for as long as PWPO owns or operates on the property, whichever is later. The 2011 Amendment includes additional commitments including submittal of annual environmental audit reports; implementation of institutional controls; payment of EPA future oversight costs, and a revised Statement of Work for future work to be performed by PWPO at the site.

- Surface soil contamination in the vicinity of the Treatment Plant Area and areas of former treated lumber storage
- Surface soil contamination in roadside ditches that abut the West Facility (contamination resulted from surface water runoff from the West Facility; spills associated with wood-treating operations; and deposition of contaminated dust from the West Facility).

Also, contaminated soils from interim and early measures conducted at the Site were consolidated in the Contaminated Soil Storage Cells in the western portion of the West Facility.

3.4 Initial Response

Beginning with the first groundwater assessment in 1988, TLT was the subject of over a dozen inspections, investigations, and actions through state and federal Resource Conservation and Recovery Act (RCRA), National Pollutant Discharge Elimination System (NPDES), and Superfund programs. In 1988, an NPL Preliminary Assessment and Site Inspection was conducted for the site. In 1990, an NPL Listing Site Inspection was completed, and a RCRA characterization of soils under the drip pad was performed.

In 2000, EPA completed a removal action at the site. In addition to soil and groundwater sampling efforts, the following actions were implemented: a 2-acre section of contaminated soils in the Treated Pole Storage Area was paved with asphalt; and a soil-bentonite slurry barrier wall was constructed beneath the Treatment Plant Area to contain DNAPL. The wall was keyed into the underlying siltstone, an asphalt cap was placed above the area within the slurry wall, and a groundwater extraction system was constructed within the contained area to maintain hydraulic control of groundwater. In addition, at EPA's request, TLT removed high concentrations of arsenic from certain sections of ditches that abut the West Facility. All excavated soils were consolidated onsite in the Contaminated Soil Storage Area at the site.

In 2001, the TLT Site was listed on the NPL, and EPA initiated the Remedial Investigation and Feasibility Study (RI/FS). The Phase 1 RI Report (evaluation of nature and extent based on existing data) was completed in January 2002, and the Phase 2 RI (field investigation needed to fill data gaps for the RI/FS) was conducted in 2002 and 2003. The RI Report summarizes the site investigation activities and presents data on the nature and extent of contamination at the Site. RI data were used to conduct a baseline human health risk assessment and ecological risk assessment. Contaminated media associated with the Site include groundwater, soils, ditch soils, and gully soils.

The FS was conducted in 2003 and 2004. The FS Report describes the development and evaluation of remedial action alternatives for affected soil and groundwater. The RI/FS was finalized in May 2005.

In November 2004, EPA conducted a removal action at the residence at 22150 Rock Creek Road, located directly east of the former TLT facility. Soil contamination by dioxins/furans was found to present unacceptable risk to residents at this location. Approximately six inches of surface soil, gravel, and grass were excavated from the front and side yards and replaced with clean topsoil and grass. Approximately 510 tons of materials were removed and disposed of at an offsite landfill. In summer 2005, EPA continued this removal action by excavating soils from an adjacent ditch. Excavated soils (approximately 138 cubic yards) were consolidated at the TLT Site.

EPA released the Proposed Plan for formal public comment on July 28, 2005.

3.5 Basis for Taking Action

At the TLT Site, the RI/FS identified contaminants in surface and subsurface soils and in shallow groundwater at the site. The RI findings indicated that historical wood treatment processes were the source of contamination. The need for remediation was based on the results of human health and ecological risk assessments, which found that the greatest risks to human health and the environment were through direct contact, ingestion, and inhalation of contaminated soils and groundwater.

In the human health risk assessment, the chemicals of concern were arsenic and dioxin/furans for soils, and pentachlorophenol for groundwater outside the barrier wall. The primary contributors to potential risk from exposure to groundwater inside the barrier wall (and under the asphalt cap) were arsenic, PCP, polycyclic aromatic hydrocarbons, and dioxin/furans.

In the ecological risk assessment, roadside ditch soils were the only ecological habitat where chemicals of concern were identified. Risk to terrestrial wildlife species was identified from exposure to copper, zinc, and dioxin/furans in off-property ditch soil.

The general areas of the site subject to response actions are shown in Figure 3-2. The basis for response actions are described below:

- Because of the risk to onsite workers from potential exposure to arsenic and dioxin in surface and subsurface soils, action was warranted to address these soils in the Treatment Plant and Treated Pole Storage Areas of the West Facility.
- Because of the potential for off-property migration of contaminated surface soils to pose unacceptable risk to ecological receptors in an adjacent ditch, action was warranted to address these soils in the southern portion of the White Pole Storage Area in the West Facility.
- Because of the risk to recreational and tribal users from potential exposure to arsenic and total dioxin in off-property ditch soil, action was warranted to address the ditches adjacent to the West Facility.
- Because of the risk to hypothetical residential users from potential exposure to contaminants in groundwater, media inside the barrier wall was addressed.
- Because of risk to hypothetical residential users from potential exposure to pentachlorophenol in groundwater, groundwater outside the barrier wall and within the site boundaries will be addressed. Although this shallow groundwater is not used currently for drinking, there was a potential risk to hypothetical future residents.
- Because of risk to terrestrial wildlife endpoint species from contaminated ditch soils, action was warranted to address the ditches adjacent to the West Facility.
- Previously-excavated soils stored in the Contaminated Soil Cells at the site must be addressed.

- Through completion of an early action prior to the ROD, the migration of PCP-contaminated shallow groundwater and DNAPL at the facility was controlled by installation of an underground barrier wall and an asphalt cap over the area encompassed by the wall. The barrier wall ensures that the groundwater and DNAPL does not pose a future risk to human exposure to groundwater contaminated with contaminant concentrations that exceed the federal drinking water standards and to ecological receptors in the South Yamhill River and Rock Creek. Thus, the RAOs for groundwater and DNAPL ensure that the previously completed early action remains protective of human health and the environment. With regards to the barrier wall that was constructed as an early action, the ROD stated that what was selected as an early action is the final action.

The response actions taken were deemed necessary to protect the public health, welfare, or the environment from actual or threatened releases of hazardous substances in the environment. Consistent with the NCP and EPA policy, a remedial action was determined to be warranted to address these potential risks.

4 REMEDIAL ACTIONS

4.1 Record of Decision and Remedial Action Objectives

The Record of Decision (ROD) for the TLT Site was signed September 30, 2005.

Based on the potential risks identified, remedial action objectives (RAOs) were developed for soil and groundwater at the site to protect human health and the environment. The RAOs established in the ROD are as follows:

- Prevent migration of the DNAPL and contaminated groundwater to outside of the barrier wall
- Restrict human exposure to groundwater with contaminant concentrations that exceed federal drinking water standards both inside and outside the barrier wall
- Minimize future migration of contaminated groundwater to adjacent surface water (Rock Creek, South Yamhill River) to protect ecological receptors
- Reduce or eliminate human exposure through direct contact (incidental soil ingestion, skin contact with soil, and inhalation of dust) with contaminated soils that exceed protective regulatory levels
- Reduce or eliminate risks to ecological receptors from contaminated soils in ditches.

In the ROD, cleanup and action levels were set for arsenic in soils and pentachlorophenol in groundwater. Impacted media and cleanup levels for the TLT Site are shown in Table 4-1.

Table 4-1. Impacted Media and Cleanup Levels for the TLT Site	
Impacted Media	Cleanup Level
Surface and subsurface soil	<p>Arsenic 159 mg/kg based on site-specific risk calculations</p> <p>[Cleanup of soils is driven by human health risk from arsenic and dioxins. Because of the greater number and better distribution of arsenic data, the extent of the remedial action was guided by arsenic cleanup levels and a cleanup level for dioxins was not set. Because dioxins are co-located with arsenic, it follows that the remedy will also address dioxin contamination.]</p>
Groundwater	<p>Pentachlorophenol 1 microgram per liter (ug/L) (Federal MCL)</p> <p>[For groundwater, CERCLA specifies that federal MCLs are also relevant and appropriate cleanup goals for groundwater. The groundwater cleanup level applies to all groundwater outside the barrier wall. The groundwater cleanup level does not apply to groundwater inside the barrier wall because this area is a waste management area per the NCP preamble. The federal MCL for PCP is also protective of surface water, as the PCP freshwater standards range between 13 and 20 ug/L (standards are pH dependent.)</p>

As described in Table 4-1 above, a soil cleanup level was not set for dioxins, which were analyzed in soil samples from throughout the Site. Region 9 Preliminary Remediation Goals (PRGs) were used as screening values for dioxin total equivalent (TEQ) in soil (the screening value used was 10 ppt dioxin TEQ). In addition, dioxin TEQs were compared to EPA's 1998 Office of Solid Waste and Emergency Response (OSWER) directive (EPA 1998)². Dioxin TEQ exceeded the EPA OSWER generally recommended commercial/industrial range (5-20 ppb) in two surface soil samples collected from the Treated Pole Storage and Treatment Plant Areas, and in one surface soil sample [5.3 parts per billion (ppb) dioxin TEQ] collected from an off-property ditch near the West Facility. Dioxins exceeded the Region 9 Industrial PRG screening value in samples collected from the White Pole Storage Area, but did not exceed the EPA OSWER generally recommended commercial/industrial range.

Dioxin cleanup levels were not set for ditch soils. Given the relatively small volume of ditch soils, EPA determined that the all ditches would simply be remediated without spending additional time and funds to define specific cleanup areas and cleanup levels. Post-cleanup data was collected to ensure that the ditches did not pose unacceptable risk to people or animals after the cleanup.

4.2 Remedy Selection

For the TLT Site, the remedy documented in the ROD was designed to protect human health and the environment by containing and preventing contact with the wastes from the former wood-treating facility.

The major components of the remedy selected in the ROD are described below in Section 4.3 and key components of the physical remedy are shown on Figure 4-1.

4.3 Remedy Implementation

For the TLT Site remedial design documents were completed in 2006 (CH2M HILL, December 2006). Cleanup activities at the site were implemented by EPA under various federal contracting authorities in 2007 and 2008. The Remedial Action start date was April 2, 2007.

In 2008, the long-term cleanup of the Site was completed. Contaminated soils were excavated from nearly five acres of the site and soils were disposed off-site at a hazardous waste landfill; all adjacent roadside ditches and two ditches flowing to the South Yamhill River were cleaned and restored; the existing asphalt cap in the wood-treating area was replaced with a new low

² Dioxin/furans exist as a complex mixture of congeners, which are analyzed individually in each sample. To represent the combined toxicity of this mixture, a single numerical value or total equivalent (TEQ) is calculated. At the time the ROD was written, EPA had established OSWER generally recommended residential and commercial/industrial ranges for dioxin TEQ in soils (EPA 1998); EPA 1998 stated that the generally recommended residential range is 1 microgram per kilogram (ug/kg), and the generally recommended commercial/industrial range is 5 to 20 ug/kg. At the time the ROD was written, the Industrial Region 9 PRG (Screening Value) for dioxin TEQ was 0.01 ug/kg (10 ppt). Analytical methods used for analyses of dioxin in soils for the RI/FS have detection limits that are low enough to allow comparisons to PRGs that may be calculated in the future using the new revised TCDD Reference Dose (RfD).

permeability asphalt cap; soils contained in the historical stockpiled soil storage cells were disposed off-site; groundwater monitoring wells no longer in use were permanently closed; and the storm water conveyance systems were upgraded.

The Final Construction Completion Report was completed in 2009 (CH2M HILL, March 2009). EPA determined that the remedy was constructed in accordance with the Remedial Design plans and specifications, and no further construction work is anticipated.

The Site achieved Construction Completion on September 24, 2008, when EPA issued the Preliminary Close Out Report. A summary of contracts and construction completion documents is provided in EPA's Remedial Action Report, dated March 10, 2010.

EPA determined that the TLT Site was operational and functional (O&F) on September 30, 2009. Since completion of the O&F determination, the Oregon DEQ is the State agency responsible for ensuring that operation and maintenance, including groundwater monitoring, is carried out at the Site (EPA Superfund State Contract, 2007). In addition, under the state and federal Amendments to the Agreement and Covenant Not to Sue/Prospective Purchaser Agreements, PWPO is required to perform operation and maintenance of the MatCon asphalt cap, groundwater extraction system, and storm water collection and treatment system; prepare and implement a Best Management Practices Plan; record an Easement and Equitable Servitude (EES) implementing institutional controls (ICs) as set forth in the 2005 Record of Decision; and prepare and submit to EPA and Oregon DEQ an annual environmental audit report.

The remedy selected in the ROD is detailed below in italicized text. Following each component of the remedy that was listed in the ROD is text describing actual construction and implementation of the remedy:

1. *Excavation or capping and consolidation of contaminated soils located within the West Facility and in ditches that abut the West Facility, in coordination with applicable state and federal regulations. If cost-effective, excess soil that is not consolidated onsite may be sent offsite to an acceptable disposal facility.*

EPA determined that it would be cost-effective to dispose of excavated contaminated soils at an acceptable off-site disposal facility (see EPA Memorandum: "Comparison of Onsite Consolidation versus Offsite Disposal of Contaminated Soils, dated July 17, 2006"). Thus, all excavated contaminated soils were sent off-site, and none of the contaminated soils were consolidated onsite (as set forth in the remedy in the ROD, contaminated soils remain under the asphalt cap within the barrier wall).

In 2007, approximately 15,700 cubic yards of contaminated soils were excavated from three soil removal areas covering 4.68 acres. The three areas where soils were excavated were the Treated Pole Storage-1 (TPS-1) Area (2.67 acres), the Treated Pole Storage-2 (TPS-2) Area (1.61 acres), and the White Pole Storage (WPS) Area (0.4 acres). Contaminated soils were also excavated from 3,890 lineal feet of ditches that abut the property, including the railroad ditch western and eastern segments adjacent to the north edge of the site, the ditch along Rock Creek Road, and the ditch along Highway 18B. Soils were also excavated from the Rock Creek Gully, located between the site and the South Yamhill River. Based on excavation depths, the design estimate for volumes excavated from the ditches and the gully is 2,585 cubic yards.

Sediment was also removed from three culverts underneath Highway 18B, and ten culverts located within the Highway 18B ditch and Rock Creek Road Ditch alignments.

In 2007, previously-unidentified contamination was found in and around a culvert near the intersection of Rock Creek Road and Highway 18B. In 2008, under CERCLA removal authority, an EPA removal contractor excavated contaminated soils from beneath Highway 18B, in an area where a culvert (approximately 40 to 50 feet) crossed from the ditches near the site to the South Yamhill River. Contaminated soils were also excavated from the areas upstream (Rock Creek Road Ditch) and downstream (Yamhill Drainage Ditch, or “East Gully”) of that culvert. This excavation resulted in an additional 1,217.2 tons transported for off-site Subtitle C disposal in 2008.

All hazardous soils excavated from the site were disposed at Chemical Waste Management of the Northwest Landfill, which is a RCRA Subtitle C permitted disposal facility in Arlington, Oregon. In 2007, a total of 27,553.41 tons were disposed at the facility. An additional 16.69 tons of soils were generated by the EPA remedial program in 2007, but these soils were not disposed at Arlington until 2008, under a site-specific variance from land disposal restriction treatment standards (Oregon DEQ; July 18, 2008). In 2008, a total of 1,233.89 tons (including the 16.69 tons of soil from 2007) were disposed at the facility.

All non-hazardous soils in Soil Storage Cells 1, 2, and 3 were disposed of off-site. The 26,351 tons of non-hazardous soils from these cells were disposed at the Riverbend Landfill in McMinnville, Oregon, a RCRA Subtitle D permitted disposal facility, under a Contained-In Determination made by EPA Region 10 in accordance with 40 CFR 261 (see EPA Memorandum: “Taylor Lumber and Treating Superfund Site – Soil Storage Cell Contained-In Determination,” dated November 28, 2006).

During soil excavations, a hand-held XRF analyzer (Innov-X Systems Inc. 4000a SL) was used to provide near real-time analysis of arsenic concentration in soil, and for comparison to arsenic cleanup levels. Based on results of the XRF readings, technical decisions to excavate additional soils proceeded until arsenic concentrations were below the cleanup level. Based on XRF field observations, soils were found to be either contaminated with arsenic above 159 milligrams per kilogram (mg/kg), or were far below 159 mg/kg (often within range of background arsenic concentrations).

After excavation was completed, confirmational soil samples were collected for laboratory analysis of arsenic. Confirmational sampling results show that the cleanup level of 159 mg/kg arsenic was achieved at the Site (see Table 2-3 from the Final Construction Report, reproduced herein as Attachment A). In fact, soils remaining after excavation were far below 159 mg/kg, and were much closer to background concentrations of arsenic (a background concentration of 12 mg/kg arsenic has been determined for the Site)³. Only one of 42 samples exceeded 63 mg/kg (140 mg/kg in Cell A of TPS-2). The average arsenic

³ Previously, EPA and Oregon DEQ evaluated arsenic concentrations that remained in soils outside of the areas that were excavated and within the boundary of the Site. The evaluation reported that the average arsenic concentration in soil in the “Remaining Area” was 10.8 ppm, and the area-weighted 90% UCL was 10.69 ppm arsenic. Both of these concentrations are below the natural background concentration of arsenic (12 ppm) determined for the Site. Additional information is provided in Table A-1 and Figure A-1 of the Design Basis Report for the TLT Site.

concentration for all 42 confirmation samples was 19.6 mg/kg. The average arsenic concentrations for confirmation samples at TPS-1 (2.67 acres), TPS-2 (1.61 acres) and WPS (0.4 acres) were 14.5 mg/kg, 29.6 mg/kg and 10.7 mg/kg, respectively. The average arsenic concentration for confirmation samples in the ditches (identified as RRD-E, RRD-W, RCRD and HWYD) and Rock Creek Gully was 14.4 mg/kg.

2. *Continued operation and maintenance of the underground barrier wall system at the Site, including continuing extraction and treatment of groundwater from within the slurry wall, to prevent migration of contaminated groundwater and dense non-aqueous phase liquid (DNAPL) to the outside of the wall. Groundwater will continue to be treated in the existing onsite stormwater treatment system and discharged pursuant to the existing Oregon DEQ NPDES permit.*

An Operation and Maintenance Plan for the barrier wall system shall be prepared. This plan will include a periodic evaluation of the long-term effectiveness and protectiveness of the barrier wall system.

A completed pre-ROD removal action in 2000 addressed remediation of source materials, which included contaminated soils and DNAPL at the Site, by installation of a slurry barrier wall, and an asphalt cap that covered the area enclosed by the wall. Through extraction of groundwater from four wells inside the wall, hydraulic containment is used to prevent contaminants from migrating beyond the barrier wall and to lower water levels to ensure the structural integrity of the cap. Groundwater from within the slurry wall continues to be extracted and treated in PWPO's onsite stormwater treatment system prior to a NPDES-permitted discharge to the South Yamhill River (see Figure 1-2). The treatment system is adequately treating extracted groundwater to meet discharge standards established in the NPDES permit (further details are below in Section 4.7). In February 2012, EPA and Oregon DEQ approved a final Operation and Maintenance Plan for the Storm Water Treatment System.

Regarding the slurry wall, the ROD notes that "Early cleanup actions were completed to address threats posed by contaminated soil and groundwater and DNAPL in the Treatment Plant Area of the West Facility. Included in these actions was the installation of an underground slurry wall and placement of a temporary cap over the wall. The wall was designed to control the flow of contaminated groundwater and DNAPL off-property and to the river. Data indicate that the barrier wall is effectively containing DNAPL and groundwater contaminants. A natural competent confining layer exists beneath this area to protect deeper groundwater. Additional engineered remedial measures are not necessary for containment. What was selected as an early action is the final action, and the development and detailed evaluation of a series of other cleanup alternatives was not required for this media."

Further, Section 5.5.4 of the ROD notes that "Studies in and around the barrier wall indicate that the soil-bentonite slurry wall is effectively containing DNAPL and groundwater contaminants. DNAPL does not occur outside the barrier wall. As long as the barrier wall, groundwater extraction wells, and cap are functioning as designed, potential sources of contamination to groundwater (DNAPL and contaminated groundwater inside the barrier wall) are physically and hydraulically contained." The capped area encompassed by the slurry wall that is tied into the confining layer beneath the site constitutes a waste

management area for the residual DNAPL/groundwater contamination at the site, and in accordance with the NCP preamble, the point of compliance for groundwater was established in the ROD in groundwater at and beyond the boundary of the waste management area. Shallow groundwater outside the slurry wall has some pentachlorophenol contamination. The contamination existed prior to installation of the wall and does not indicate failure of the barrier wall. Current evidence indicates the pentachlorophenol is not migrating off the West Facility, the rate of groundwater migration is very slow, and there is no evidence of plume migration or expansion. The elevated pentachlorophenol concentrations located outside the barrier wall are located within a stagnation zone created by installation of the barrier wall. DNAPL does not occur outside the barrier wall. Potential exposure of humans to pentachlorophenol in shallow groundwater is controlled by implementation of institutional controls. Institutional controls are in place for the entire site, which restricts the use of groundwater for drinking water purposes (as well as for industrial and agricultural purposes).

EPA, with DEQ input, developed an Operation and Maintenance Plan for the Taylor Lumber and Treating Superfund Site (OMP; CH2M HILL, October 2009). A summary of operation and maintenance requirements for the subsurface barrier wall is provided in Section 3 of the OMP. The subsurface barrier wall system is a passive containment system that, by design, requires little long-term operation and maintenance. However, the long-term effectiveness of the barrier needs to be assessed through periodic performance monitoring (evaluation of groundwater analytical data and hydraulic head data) to ensure that the integrity of the barrier is intact and that the wall is functioning as intended.

- 3. Replacement of the existing 4.6-acre asphalt cap [acreage estimate as reported by the EPA removal contractor in 2000], which is above the area within the existing slurry wall, with a more durable low permeability cap to protect human exposure through direct contact with contaminated soils. The asphalt cap shall be designed and constructed with due consideration given to traffic volumes, loads, and traffic patterns of the existing onsite wood-treating operations, as contemplated by the PPA with PWPO. The asphalt cap also serves to impede the infiltration of stormwater into the groundwater beneath the area encompassed by the barrier wall.*

Operation and maintenance of the low permeability asphalt cap shall be implemented to ensure protection of human health and the environment. The Operation and Maintenance Plan shall include scheduled visual cap inspections and specific repair and maintenance protocols.

The asphalt cap, which is above the area encompassed by the underground slurry wall, serves to impede the infiltration of stormwater into the groundwater in the area encompassed by the barrier wall and protect people from direct contact with contaminated soils located within the barrier wall. The existing asphalt cap was replaced with a more durable low permeability cap, which consisted of a 4-inch-thick layer of proprietary (MatCon) low permeability asphalt to achieve a permeability of no greater than 1×10^{-8} centimeters per second (cm/sec). A total area of 5.4 acres (measured from the final As-Built Survey) was paved. In addition, drainage modifications were completed to replace existing open swales within the barrier wall area with concrete trench drains. Extraction well vault frames and covers (PW-01, PW-03 and PW-03) were modified during remedial action construction to accommodate the grade of the low permeability asphalt cap.

EPA, with Oregon DEQ input, developed the OMP for the Site (CH2M HILL, October 2009). A summary of asphalt cap operation and maintenance requirements is provided in Section 2 of the OMP. These requirements will primarily be implemented by PWPO pursuant to the legal agreements between PWPO and EPA and Oregon DEQ.

Additionally, a MatCon Material and Workmanship Warranty from Wilder Construction Company is in place for a five-year period, under which MatCon performs annual inspections of the asphalt for five years. The first, second, and third annual inspections were completed and results are summarized in documents submitted to EPA and Oregon DEQ. The fourth and fifth annual inspections will occur in the summer of 2012 and 2013. No significant actions have been required as a result of the inspections.

4. *Long-term monitoring of groundwater for pentachlorophenol to ensure that contaminated groundwater does not pose an unacceptable risk to human health or the environment. The focus of this effort will be to protect ecological receptors in adjacent surface water (Rock Creek, South Yamhill River), and will include installation of a new monitoring well near a former Geoprobe sample (GP-03) to fill a data gap on the eastern side of the site. Periodic monitoring of groundwater in two nearby residential wells will be analyzed for pentachlorophenol (existing data have not identified a problem, but EPA believes that it is prudent to continue sampling these wells).*

EPA, with Oregon DEQ input, developed a Long-term Groundwater Monitoring and Reporting Plan (EPA 2010). The plan describes the objectives, sampling, analysis, quality assurance/quality control, health and safety, and reporting procedures for the long-term groundwater monitoring activities as related to the needs identified in the ROD for the Site. Groundwater sampling at the facility and at the two residential wells will be implemented in accordance with the approved plan. As specified in the ROD, the new monitoring well was installed and sampled in December 2005.

Pursuant to the State Superfund Contract for the TLT Site, Oregon DEQ conducted groundwater sampling in 2011 (sampling scheduled for 2010 was not implemented by Oregon DEQ; the state now has a contract in place so future sampling events should occur on schedule). The second round of sampling occurred in April 2012, and data are not yet available.

5. *Implementation of institutional controls (ICs) for the property defined as the West Facility, which is currently owned and operated by PWPO. The ROD identified that institutional controls were necessary to ensure that:*
 - *There will be no future non-industrial use of the West Facility at the property.*
 - *Any breaching of the low-permeability MatCon asphalt cap at the property will be conducted in a manner that is protective of human health and the environment.*
 - *Excavation and movement of soils from within the West Facility will be conducted in a manner that is protective of human health and the environment.*
 - *Shallow groundwater at the West Facility will not be used as drinking water, and any well drilling and groundwater use will be conducted in a manner that is protective of human health and the environment.*

Specific language in the ROD is provided below:

“Implementation of institutional controls to reduce the potential for human exposure to contaminated soil and groundwater. The ICs are necessary to ensure that the use of the West Facility remains industrial, that the caps are maintained in place for protection of current and future use by onsite workers, and that the groundwater is not used.

- *A legal description of the real property with a corresponding map will be prepared to clearly identify the property where the ICs will be implemented.*
- *A restrictive easement or covenant that runs with the land will be required to ensure that there will be no future non-industrial land use of the West Facility (for example, no residential or recreational land use). The restrictive easement or covenant will also have provisions that set forth requirements for future use of the property, such as:*
 - *Breeching of asphalt caps must be conducted in a manner that is protective of human health and the environment.*
 - *Excavation and movement of soils from within the West Facility property must be conducted in a manner that is protective of human health and the environment.*
 - *Limitations on the use of shallow groundwater at the West Facility property, including a prohibition on use as drinking water. Well drilling and any groundwater use must be conducted in a manner that is protective of human health and the environment.*
- *Registration with a One-Call Dig System and any similar systems will be implemented to protect the physical components of the remedy and to ensure that no inappropriate contact with contaminated soil and groundwater occurs by utility companies or other authorized entities.”*

Institutional controls for the TLT Site have been implemented as required in the ROD, as detailed below (see Section 4.9). ICs are in place for all soils and groundwater within the boundaries of the entire site.

In 2011, PWPO conducted a professional survey of the West Facility and provided the EPA and Oregon DEQ with an updated and revised metes and bounds description of the West Facility, and an updated and revised map of the West Facility showing property tax parcels (Figures 4-2 and 4-3). Using that information, PWPO, Oregon DEQ, and EPA prepared an Easement and Equitable Servitude for the property. The EES is a Grant of Easement and acceptance of Equitable Servitude between Pacific Wood Preserving of Oregon, Incorporated and the State of Oregon, acting by and through the Oregon DEQ. A summary of Restrictions on Use in the EES is provided in Table 4-2.

Table 4-2. Institutional Controls – Summary of Restrictions on Use in EES
<p>3.1. General Restrictions.</p> <p>a. Excavation of soils from within the West Facility shall be conducted in a manner that is protective of human health and the environment. Owner shall submit a written plan for soil management and obtain Oregon DEQ approval before excavating soils from within the West Facility. Any soil excavated from within the slurry wall and beneath the MatCon asphalt cap (locations shown on Exhibit B) would be classified under Resource Conservation and Recovery Act as F032, F034, or F035 listed wastes based on the wood-preserving formulations used at the facility.</p>
<p>b. Investigation derived wastes (IDW) must be handled and disposed of properly in accordance with state and federal regulations. IDW soil and water from within the slurry wall and beneath the MatCon asphalt cap would be classified under Resource Conservation and Recovery Act as F032, F034, or F035 listed wastes based on the wood-preserving formulations used at the facility.</p>
<p>c. Owner shall operate on the Property in such a manner as to protect the ground water monitoring wells located on the Property. These ground water monitoring wells are operated and maintained by Oregon DEQ for long-term monitoring of shallow ground water at the site.</p>
<p>d. Owner shall require on-site workers to wear personal protective equipment when in contact with soil beneath the peeler asphalt cap (indicated as such on Exhibit B). This restriction is intended to protect workers from arsenic concentrations that exceed background levels but are below EPA's action level as set forth in the Record of Decision.</p>
<p>3.2. Ground water Use Restrictions. Shallow ground water at the West Facility may not be used for drinking water or other potable purposes. Any well drilling and any ground water use may not be performed without receiving written approval from Oregon DEQ. Unless the EPA approves an alternate method for treatment of extracted ground water in writing, Owner shall treat extracted ground water from the on-site extraction wells in the on-site storm water treatment system in accordance with Section B of the Revised Statement of Work, dated July 21, 2011, as may be amended, with DEQ and EPA approval, on file with DEQ.</p>
<p>3.3. MatCon Asphalt Cap Restrictions.</p> <p>a. Owner shall maintain the low-permeability MatCon asphalt cap in accordance with Section A of the Revised Statement of Work, to ensure the long-term structural integrity of the cap.</p> <p>b. Except upon prior written approval from DEQ, Owner may not conduct operations on the Property or use the Property in any manner (including without limitation any breaching, excavating, drilling, scraping, or eroding) that may penetrate the MatCon cap or jeopardize its function as an engineering control preventing exposure to contaminated soil.</p>
<p>3.4. Land Use Restrictions. The following operations and uses are prohibited at the West Facility:</p> <p>a. Residential use of any type;</p> <p>b. Agricultural use of any type;</p> <p>c. Recreational use of any type; and</p> <p>d. Non-industrial use of any type.</p>
<p>3.5 Notice of Transfer. Owner shall notify DEQ at least ten (10) days before the effective date of any conveyance, grant, gift, lease, or other transfer, in whole or in part, of Owner's interest in or occupancy of the Property; or the start of any development activities or change in use of the Property that might expose human or ecological receptors to hazardous substances at the Property. Notwithstanding the foregoing, Owner may not commence any development inconsistent with the conditions or restrictions in this Paragraph 3 without (a) prior written approval from DEQ, or (b) removal of the condition or restriction as provided in Paragraph 6.1 below.</p>

PWPO recorded the EES (Document Number 2011-09777) on the property on July 29, 2011 in Yamhill County, State of Oregon (Attachment B). The West Facility is defined as the former TLT facility located west of Rock Creek Road, including the Treatment Plant Area, White Pole Storage Area, and Treated Pole Storage Areas, as generally described in Exhibit A and shown in Exhibit B to the EES.

Oregon DEQ has registered the site with the One-Call Dig System.

6. *Additional Work Completed. Although not specified in the ROD, the scope of the remedial action construction included abandonment of a number of monitor wells that were no longer needed for monitoring at the Site, and wells that had been previously damaged. A total of 17 monitor wells were abandoned. A total of 4 monitor wells were altered by installing a 4-inch riser to bring the vault to the new pavement elevation. A total of 3 extraction well vaults were altered (PW-01, PW-02, and PW-03).*

The remedy for the Site was chosen in accordance with CERCLA and the National Contingency Plan. Oregon DEQ concurred on the ROD. The potential for site hazardous constituents to present an actual risk to human health and the environment, or to migrate further in the environment, have been sufficiently controlled by the removal and remedial construction activities.

There are no ROD amendments, explanation of significant differences, or technical impracticability waivers for the Site.

This Site is in productive re-use by PWPO.

Pursuant to a State Superfund Contract, the state of Oregon will perform operations and maintenance at the Site, including monitoring of groundwater and institutional controls, consistent with the OMP and Long-term Groundwater Monitoring and Reporting Plan.

4.4 Long-Term Groundwater Monitoring and Reporting

Remediation activities were completed in 2008. EPA determined that the TLT Site was operational and functional on September 30, 2009 (EPA 2009). Upon O&F, the Oregon DEQ is the State agency responsible for ensuring that operation and maintenance, including groundwater monitoring, is carried out at the Site (Superfund State Contract, 2007).

At the TLT Site, contaminated soils and groundwater remain within the treatment plant area (approximately 6 acres) and are encompassed by a soil-bentonite barrier wall (Figure 4-4). The ROD identifies pentachlorophenol as the contaminant of concern in groundwater. The depth of the barrier wall between the ground surface and the top of the siltstone ranges from 14 to 20 feet. The siltstone beneath the TLT Site functions as an aquitard. The barrier wall is keyed into the siltstone to minimize seepage along the bottom of the wall. The permeability of the wall was designed to be less than 1×10^{-7} cm/sec.

Low-permeability asphalt pavement is placed over the entire area encompassed by the barrier wall (approximately 6.7 acres). The asphalt meets the design-specified 1×10^{-8} cm/sec permeability criteria. The asphalt cap serves to impede the infiltration of stormwater into the groundwater in the area encompassed by the barrier wall and protect people from direct contact with contaminated soils located within the barrier wall. Four groundwater extraction wells, which pump less than 0.2 to 0.5 gallons per minute (gpm) (CH2M HILL, September 15, 2009), are installed within the barrier wall to induce an inward hydraulic gradient and to prevent the water level from rising above the protective asphalt cap. Control of the groundwater elevation within the barrier wall is important to ensure the structural stability of the asphalt cap and must be regularly monitored (CH2M HILL 2009). The extracted groundwater is conveyed to PWPO's onsite stormwater treatment system, which discharges to the South Yamhill River pursuant to a National Pollutant Discharge Elimination System (NPDES) permit.

Installation of the barrier wall effectively cut off the dense non-aqueous phase liquid (DNAPL) and PCP-contaminated groundwater plume. DNAPL does not occur outside the barrier wall (ROD; p. 36). However, some dissolved PCP still exists outside the barrier wall, with the highest concentrations occurring immediately downgradient from the wall and decreasing rapidly

with distance from the wall⁴. This contamination existed prior to installation of the wall, and does not indicate failure of the barrier wall (ROD; p. 36). Although the installation of the barrier wall created a groundwater stagnation zone in the area immediately downgradient of the wall, long-term groundwater monitoring will be performed to ensure that migration of PCP-contaminated groundwater is controlled to minimize risk to ecological receptors in surface waters (South Yamhill River, Rock Creek) and to monitor effectiveness of the wall.

The ROD establishes the following remedial action objectives (RAOs) for groundwater:

- Prevent migration of the DNAPL and contaminated groundwater to outside of the barrier wall.
- Minimize future migration of contaminated groundwater to adjacent surface water (Rock Creek, South Yamhill River) to protect ecological receptors.
- Restrict human exposure to groundwater with contaminant concentrations that exceed federal drinking water standards both inside and outside the barrier wall.

The RAO that addresses groundwater outside the barrier wall was developed to minimize future migration of contaminated groundwater to adjacent surface water (South Yamhill River, Rock Creek) to protect ecological receptors. Also, the RAO that addresses groundwater outside the barrier wall was developed because of elevated risks to hypothetical future residents that may drink the shallow groundwater. Although this shallow groundwater is not used currently for drinking, there was a potential risk of unacceptable excess lifetime cancer to hypothetical future residents from exposure to groundwater outside the barrier wall in a drinking water well. The primary contributor to potential cancer risk in this well is PCP, and PCP concentrations exceed the federal Maximum Contaminant Level (MCL) of 1 µg/L PCP, with the highest concentrations south and east of the barrier wall. CERCLA specifies that federal MCLs are also relevant and appropriate cleanup goals for groundwater. The groundwater cleanup level applies to all shallow groundwater outside the barrier wall. The groundwater cleanup level does not apply to groundwater inside the barrier wall because this area is a waste management area per the NCP preamble. Institutional controls have also been implemented for the entire site, and these ICs restrict the use of groundwater for drinking water, industrial, and agricultural purposes.

To achieve the RAO that addresses groundwater outside the barrier wall, the ROD specified development and implementation of a Long-term Groundwater Monitoring and Reporting Plan to include, at a minimum, the following [excerpted from Section 12.1 of the ROD]:

- Monitoring objectives, overview of monitoring approach, monitoring program design, data analysis and interpretation, reporting requirements, schedule, Field Sampling Plan, Quality Assurance Project Plan, Health and Safety Plan, field forms, and other relevant information.

⁴ Based on pre-ROD data, PCP concentrations in groundwater outside the wall did not change substantively between May 2002 and April 2005. It appears that the PCP concentrations in the vicinity of MW-15S and MW-16S (just south of the barrier wall) are located in the stagnation zone created by the barrier wall. Groundwater velocity in this area is essentially zero; that is, the PCP in the groundwater is not moving. Data from wells downgradient of MW-15S and MW-16S indicate that PCP-contaminated groundwater is not reaching the river. Recent data are discussed later in this section.

- The primary objective of the monitoring program is to provide data that can be evaluated to document that PCP-contaminated groundwater is not migrating to the South Yamhill River, and is not migrating across Rock Creek Road to the residences and wells.
- The monitoring program for shallow groundwater will include, but will not be limited to, water level measurements, field measurements of water quality parameters, collection and PCP analysis of samples from wells at the site, and comparisons of results to previous data. Wells that likely will be included in the monitoring program will be the wells located south of the barrier wall and east of the Treatment Plant Area. Additionally, a new monitoring well will be installed near the former Geoprobe location GP-03. Additional monitoring wells will be installed as needed.
- Deep groundwater from nearby residential well RW-01 will be analyzed for PCP on a periodic basis because the residents currently get their water from this well. This hand-dug well is apparently 30 feet deep, which would put the well into the siltstone aquifer. Groundwater from nearby well RW-02 will also be analyzed for PCP because groundwater has historically been extracted for on-property watering. Although groundwater PCP concentrations have not been a problem in these wells historically, EPA believes it is prudent to continue sampling these wells at least once per year for the next five years and beyond if deemed appropriate.

Consistent with the ROD, the Final Long-term Groundwater Monitoring and Reporting Plan was completed in March 2010. As set forth in the Plan, the purpose of groundwater monitoring at TLT is to answer the following questions:

- Is the barrier wall effectively containing NAPL and contaminated groundwater beneath the treatment plant area?

Groundwater concentrations of PCP outside the barrier wall will be collected and analyzed, and will results will be compared to historical concentrations. A decreasing trend will suggest that the wall is effective.

If contamination is not contained by the barrier wall, i.e., concentrations are increasing outside the wall at levels of concern, several additional wells will be required to adequately monitor groundwater quality between the treatment plant and the river. Also, as described in the OMP (CH2M HILL 2009), groundwater level monitoring will be performed to ensure that the barrier wall is functioning as intended, and that the groundwater extraction wells are maintaining an inward hydraulic gradient. Groundwater level monitoring at monitor wells inside and outside of the barrier wall will be used to determine that an inward hydraulic gradient is being maintained within the barrier wall through groundwater extraction. The OMP recommends annual monitoring.

- Is PCP-contaminated groundwater outside the barrier wall (near MW-15S and MW-16S) migrating to the South Yamhill River and/or Rock Creek, or across Rock Creek Road to residential well RW-02?

Groundwater concentrations of PCP outside the barrier wall will be compared to historical PCP groundwater concentrations, and trends analyses will be performed to evaluate whether PCP is migrating off-site.

- Are PCP concentrations in groundwater remaining undetected in residential well RW-01, which is located west of the site, and RW-02, which is located east of the site?

Groundwater concentrations of PCP will be measured in RW-01 and RW-02.

To accomplish the project objectives and answer these questions, the Plan requires that the following data be collected during each groundwater monitoring event:

- Groundwater samples will be collected for PCP analysis from 19 monitoring wells located outside the barrier wall.
- Groundwater samples will be collected for PCP analysis from residential wells RW-01 and RW-02.
- Water quality parameters will be measured prior to sampling in order to determine groundwater stability during purging and establish the representativeness of samples.
- Water levels will be measured in each sampled monitoring well and at extraction wells (PW-01 through PW-04) inside the barrier wall.
- Presence of organic vapors in well headspace prior to well monitoring and sample collection (health and safety issue).

Consistent with requirements in the ROD, a Long-term Groundwater Monitoring and Reporting Plan was approved and has been implemented. However, the Monitoring Plan states that "Sampling events will be conducted annually starting in the spring of 2010, continuing each year through 2015, after which the monitoring schedule will be determined for the next five years at a schedule no less than one time per five-year period." Oregon DEQ did not conduct sampling in the spring of 2010 due to not having a contract in place. Oregon DEQ, through a contractor, conducted the first round of groundwater monitoring from April 25 through April 27, 2011. Results were presented in a groundwater monitoring report (*Revised 2011 Annual Groundwater Monitoring Report, Taylor Lumber and Treating Superfund Site, Sheridan, Oregon*; prepared by Ash Creek Associates, Inc., for Oregon DEQ; dated September 14, 2011). Results are described in Section 6. The report was approved as final on September 22, 2011.

The second round of groundwater monitoring occurred during in April 2012. Results from that effort are not available for this first five-year review.

A discussion regarding the adequacy of the onsite stormwater treatment system to treat extracted groundwater and meet the NPDES discharge standards is in Section 4.7.

4.5 Operations and Maintenance Plan

Pursuant to the State Superfund Contract, the state of Oregon will perform operations and maintenance at the Site, including monitoring of groundwater and institutional controls, consistent with the Operations and Maintenance Plan (OMP, CH2MHILL October 2009) and Long-term Groundwater Monitoring and Reporting Plan (EPA 2010). EPA and Oregon DEQ acknowledge that, pursuant to state and federal legal agreements with PWPO, PWPO has agreed to perform certain operation and maintenance at the Site, and that DEQ is not required to perform the O&M that PWPO is adequately performing. PWPO is required to perform operations and maintenance activities for the following components of the remedy:

- MatCon Asphalt Cap
- Groundwater Extraction System
- Storm Water Collection and Treatment System.

PWPO is not responsible for Annual Inspections of the MatCon asphalt cap, Hydraulic Conductivity Monitoring, and Thin Slice Rheology Analysis described in the OMP.

Prior to 2011, certain operation and maintenance activities at the site were performed by PWPO consistent with the 2002 Original Agreement. Since 2011, PWPO performed O&M activities pursuant to the 2011 Amended Agreement (see Exhibit 3A, Revised Statement of Work), and as required by the Amended Agreement, summarized those activities in an Annual Environmental Audit Report for the 2011 calendar year. The cover page and table of contents for this report are provided in Attachment C.

4.5.1 Asphalt Cap Operation and Maintenance Requirements

The MatCon asphalt cap was constructed in 2007. Annual visual inspections by MatCon representatives were conducted in 2008 and 2009. In 2010, the MatCon representative did not perform an annual inspection of the asphalt cap as required. As a result of that missed inspection, Oregon DEQ and Mr. Thayer agreed that a manufacturer inspection would occur as planned in 2011 and in August 2012 and an additional inspection would occur in 2013 so that the required five inspections would be performed.

As scheduled by Oregon DEQ, the most recent annual inspection of the MatCon Cap was conducted on March 10, 2011 by Mr. Jerry Thayer of MatCon and representatives of ODEQ and PWPO. The MatCon Annual Inspection Report documenting the inspection was issued on April 10, 2011 (Attachment D). The report was reviewed by PWPO and several comments regarding the report were provided to the Agencies by PWPO on May 3, 2011. The report was subsequently revised by MatCon and the final report was issued on August 31, 2011. No actions were required as a result of the inspection.

In addition, as required by the OMP, on October 18, 2011, Geoff Rowe (Abatech Consulting Engineers) submitted a report (provided in Attachment E) with results for two cores collected from the MatCon asphalt cap, which were evaluated for complex shear stiffness modulus. This testing was required in response to ‘softness’ in the asphalt that was observed in 2007 when the material was first placed. As documented in 2008, the results indicate that the softness in the surface is likely due to the fact that the surface is binder rich. No follow-up actions were necessary based on the 2011 report.

As required by state and federal agreements, PWPO has conducted weekly routine (informal) inspections of the MatCon cap. In 2011, a blister area was observed in July and subsequently resealed on July 29 in accordance with instructions from MatCon.

On September 1, during construction of the new block dissolver system and placement of associated tanks, a 25,880 gallon tank rolled off stickers used to protect the MatCon Cap. A tank fitting gouged the MatCon surface to a depth of approximately 1 inch. PWPO informed the Agencies of the damage to the MatCon cap and the cap was repaired by representatives of MatCon on September 2.

PWPO also installed a power pole through the MatCon cap and repaired the area as required by the OMP.

No major repairs to the MatCon cap have occurred since construction of the asphalt cap.

PWPO also performs routine maintenance of the MatCon cap (e.g., street sweeping, cleanup of minor spills) as documented in the Annual Environmental Report. As part of this routine maintenance, PWPO is required to maintain the painting stripe line on the MatCon asphalt cap. This painting stripe marks the location of the subsurface barrier wall that is beneath the asphalt cap. In October 2011, the re-painting and lettering associated with the line was completed. In January 2012, PWPO identified that the painting stripe on the asphalt was worn in high traffic areas, and they purchased a portable striping unit that they can use in-house to maintain the line. PWPO is also considering the use of stick-on reflective flagging markers.

In summary, documentation shows that PWPO has conducted routine inspections of the MatCon cap in compliance with the requirements of the Agreements and has made repairs to the MatCon cap consistent with the requirements of Exhibit 3A, Revised Statement of Work to the Amended Agreements. PWPO has maintained the MatCon Cap consistent with Exhibit 3A, including routinely sweeping the cap and applying new pavement lettering and striping on MatCon cap.

4.5.2 Groundwater Extraction System Operation and Maintenance Requirements

PWPO performs weekly routine (informal) inspections of the Groundwater Extraction System. Leaky fittings and pipe repairs were performed and documented by PWPO. On December 31, 2011, PWPO replaced the pump in extraction well PW-4.

In September 2011, EPA requested clarification that extraction well #4 (PW-4) had been reconnected to the Storm Water Treatment System (SWTS). The reconnection of PW-4 to the SWTS is noted on the October 2009 as-built drawing of the Existing Underground Utilities for the site (Note 7, provided in Attachment F) as Pacific Wood Preserving of Oregon's (PWPO) responsibility. In a letter to EPA dated November 10, 2011, PWPO summarized actions and presented photographs (March and October, 2011) showing the connection of PW-4 to the SWTS.

The OMP requires that PWPO document the average calculated flow rate of each of the four extraction wells. Results for 2011 are shown below:

Extraction Well	Average flow (gpm)
PW-1	0.52
PW-2	0.33
PW-3	0.37
PW-4	0.19

A review of the extraction well flow rate data shows that the pumps are functioning properly.

In summary, documentation shows that PWPO has conducted routine inspections of the extraction wells and has made repairs to the extraction wells consistent with the requirements of Exhibit 3A, Revised Statement of Work to the Amended Agreements.

4.5.3 Stormwater Treatment System Operation and Maintenance Requirements

At the TLT Site, the storm water treatment system (SWTS) includes conveyance systems that route the various influent streams to the treatment system components where sediments and pollutants are removed. The Operations and Maintenance Manual for the Stormwater Treatment System was updated and submitted to Oregon DEQ and EPA in 2011 (Belunes Consulting, Inc., 2011). The OMP identified the following influent streams and approximate flow contributions to the SWTS:

- Storm water: 0 to 1.16 million gpd
- Extracted groundwater (max): 360 gpd
- Boiler blowdown (max): 1,000 gpd
- Cooling tower water (max): 3,450 gpd

The treatment system consists of the following components:

- Conveyance System
- Oil-Water Separator and Wet Well System
- Storage System
- Sedimentation System
- Filtration System
- Granular Activated Carbon System

PWPO conducts annual and routine inspections of these conveyance and treatment system components to ensure proper functioning of the SWTS. Information for 2011 is summarized in the 2011 Environmental Audit Report, and a brief summary follows:

- Conditions of the conveyance system components (i.e., catch basins, French drains, drainage ditches and manhole) were inspected in July and November 2011. Debris, sediment or other obstructions were removed from the trench basins and catch basins as needed. All components of the conveyance system were observed to be operating properly.
- The condition of the SWTS tanks was inspected and cleaned out during the annual clean out. These tanks included: oil water separator/wet well; 500,000 gallon storage tank; mix tanks (2); sedimentation tanks (4); surge tank; backwash tank; filter bag vessels (5); and, GAC vessels (2).

As part of the development of the Best Management Practices (BMP) Plan (Belunes Consulting, Inc., 2011), PWPO developed checklists that focus specifically on the storm water conveyance system to facilitate implementation and monitoring of BMPs and facilitate annual reporting requirement. These new checklists are:

- Treatment Plant Storm Water Conveyance System Inspection Checklist
- White Pole Storage Yard Storm Water Conveyance System Inspection Checklist
- French Drain and Manhole Storm Water Conveyance System Inspection Checklist.

PWPO began using these new checklists in November 2011. These new checklists have replaced

the Storm Water Treatment System Weekly Inspection Checklist and Monthly General Inspection Report used throughout most of 2011. The results of the 2011 routine inspections of the storm water conveyance system are summarized in the 2011 Environmental Audit Report. No significant events were identified.

In summary, PWPO has submitted a Storm Water Treatment System OMP and has conducted routine inspections of the storm water treatment system in compliance with the requirements of the Agreements.

4.6 Best Management Practices Plan

As required by the 2011 Amended Agreement, PWPO was required to submit a Best Management Practices Plan (BMP Plan). The BMP Plan documents the rationale for selection of facility BMPs and describes the inspection, recordkeeping, and reporting procedures PWPO will use to implement BMPs to reduce potential pollutant loading to storm water. Details are summarized in the 2011 Environmental Audit Report. PWPO states:

The inspections were conducted within the specified timeframes. Equipment has been maintained and functions as designed; leaks/spills of non-hazardous and hazardous waste are noted and addressed upon discovery; the integrity of secondary containment systems are maintained; signs are posted as required; drums are properly labeled; the perimeter of the facility is properly signed and fenced; and drainage ditches and basins/gates are maintained and operate properly.

No reportable quantity releases were reported in 2011.

4.7 RCRA/Clean Water Act

The Oregon DEQ conducted a RCRA Inspection on July 21, 2010 at the facility. No instances of non-compliance were noted.

PWPO discharges storm water from two outfalls, Outfalls 3 and 5, under a NPDES permit (No. 101267) administered by the ODEQ (see Figure 1-2). Currently, all treated effluent from the SWTS is discharged via Outfall 003 into the South Yamhill River at river mile 38.9. NPDES requirements are summarized below:

Treated Effluent – Outfall 003 Parameter	Monthly Average (ug/L)	Daily Maximum (ug/L)
Arsenic, total	48	850
Copper	12	18
Zinc	110	120
Pentachlorophenol	13	20
pH	6.0 - 9.0	6.0 - 9.0

Outfall 005 receives untreated storm water runoff collected from the western portion of the site (i.e. the White Pole Storage Yard) and discharges into Rock Creek. NPDES requirements are summarized below:

Storm Water – Outfall 005 Parameter	Limitation
Oil & Grease	Shall not exceed 10 mg/l
pH	Shall be within the range of 6.0 to 9.0
Floating Solids	No visible discharge permitted
Debris	No discharge permitted

PWPO monitors both Outfalls 003 and 005 in accordance with Schedules A and B of the NPDES permit. In 2011, with the exception of a January 2011 exceedance for copper, which was previously reported to ODEQ and remedied, PWPO has met the discharge limitations established for its NPDES Permit. A brief summary of NPDES Discharge Monitoring Reports and inspection records of the stormwater treatment system is provided in Section 3.2 and Appendix F of the 2011 Environmental Audit Report.

PWPO's NPDES Permit renewal application was submitted to ODEQ in 2009. EPA understands that ODEQ expects to renew the permit in 2015.

A review of information indicates that the onsite stormwater treatment system is adequately treating extracted groundwater to meet discharge standards set forth pursuant to the Oregon DEQ NPDES Permit.

4.8 Tank Integrity Testing

Exhibit 3A to the Agreement and Covenant Not to Sue between EPA and PWPO requires PWPO to conduct tank integrity testing as part of its BMP Plan. Tank integrity tests were conducted in September 2011. Due to quality control issues with the tank test reports, PWPO requested that the testing firm revise the reports. Final reports of the test results were provided to EPA and Oregon DEQ on May 3, 2012. The tank reports (one for each tank) included an assessment of the tank's compliance with American Petroleum Institute requirements and an assessment of whether the tank is acceptable to remain in service. Recommendations for tank repairs, future testing, and ongoing monitoring were also included in the tank test reports. ETI found all tanks to be in compliance with API requirements, with the exception of Tank 24. Ultrasonic thickness testing suggested potential internal pitting and the tank was found to be leaking at the base. PWPO removed this tank from service and the tank has been cut up and recycled. A summary of other tank test findings and recommendations were provided to the agencies, along with PWPO's schedule for completion of repair recommendations for the tanks.

4.9 Institutional Controls

The purpose of a five-year review is to evaluate the implementation and performance of a remedy in order to determine if the remedy is or will be protective of human health and the environment. FYRs generally are conducted where the chosen remedy leaves waste in place and

does not allow for unlimited use and unrestricted exposure (UU/UE) at a site (see 40 C.F.R. § 300.430(f)(4)(ii)). When an institutional control (IC) is a component of a remedial action, the current and long-term effectiveness of that IC should be evaluated and relevant information about that IC should be included as part of the protectiveness determination. In addition to the protectiveness determination, FYRs may identify IC issues and recommend the need for additional evaluation and/or follow-up actions included as highlighted issues and recommendations. The protectiveness determination and related findings of the FYR provide for a periodic analysis of the remedy within the overall strategy for long-term site stewardship.

Clarity of Use Restrictions and Exposure Pathways – ICs are a component of the remedial action for the TLT Site. Site-specific documents and legal agreements for the Site clearly articulate the substantive restrictions that are needed at the property to achieve overall remedial action objectives (RAOs) for the Site. These documents and legal agreements include the following:

- EPA Record of Decision for the TLT Site (September 30, 2005)
- Superfund State Contract between the EPA and Oregon DEQ (effective July 21, 2007)
- PWPO Agreement and Covenant Not To Sue with EPA (EPA Docket CERCLA-10-2002-0034) (“Original Agreement”; 2002)
- PWPO Amendment to Agreement and Covenant not to Sue with EPA (“Amended Agreement”; 2011)
- PWPO Prospective Purchaser Agreement with Oregon DEQ (DEQ No. 02-03), as amended June 6, 2011
- Final Construction Report (2009), Operation and Maintenance Plan (2009), Final Remedial Action Report (2010)
- Easement and Equitable Servitude.

The EES is a Grant of Easement and acceptance of Equitable Servitude between PWPO and the State of Oregon, acting by and through the Oregon DEQ. PWPO recorded the EES (Document Number 2011-09777) on the property on July 29, 2011 in Yamhill County, State of Oregon.

IC language in the EES (Section 3.1(d)) includes the following language:

Owner shall require on-site workers to wear personal protective equipment when in contact with soil beneath the peeler asphalt cap area (indicated as such in Exhibit B). This restriction is intended to protect workers from arsenic concentrations that exceed background levels but are below EPA’s action level as set forth in the ROD.

The specific rationale for this IC language regarding arsenic-contaminated soil beneath asphalt in the peeler area is described in an EPA Technical Memorandum dated April 18, 2011. The land use assumptions (i.e., the site remains industrial) that were made as part of the remedy decision continue to remain accurate.

The land use assumptions (i.e., the site remains industrial) that were made as part of the remedy decision continue to remain accurate.

Accuracy of Property Information and Mapping – As provided in Exhibits A and B of the EES, all physical areas that do not support UU/UE have been identified and the administrative record has information showing that ICs cover those areas.

Adequacy of Long-term Stewardship of ICs – Long-term Stewardship of ICs is in place, and the following documents detail the long-term roles and responsibilities for implementing, maintaining, and enforcing ICs:

- The Superfund State Contract between EPA and Oregon DEQ (effective February 21, 2007)
- Enforcement documents – Legal agreements between EPA and PWPO are in place: the Original Agreement and Covenant Not to Sue (effective February 4, 2002) and the Amended Agreement and Covenant Not to Sue (effective May 26, 2011). Legal agreements between Oregon DEQ and PWPO are in place: Prospective Purchaser Agreement (effective February 5, 2002) and the Amendment to Prospective Purchaser Agreement (effective June 7, 2011). These agreements clarify the long-term stewardship of ICs, and clarify that parties are not to modify ICs or land and/or resource use without prior approval from EPA and the State. These agreements also require that the property owner notify the EPA and the State about breaches, changes in protectiveness status because of ICs, and provide EPA and the State with property transfers plans, designs, and reports (including periodic monitoring/inspection reports as required by the Statement of Work and schedule.
- Easement and Equitable Servitude (dated 7/29/11) – A dated copy of the EES, with a Yamhill County recorder’s mark, has been obtained to confirm that the EES has been implemented. The real property title information shows that proprietary controls “run with the land.” The Oregon DEQ is a signatory on the EES Agreement, and Oregon DEQ has the perpetual right to enforce the conditions and restrictions set forth in the EES. The EPA can also enforce the EES Agreement if necessary. Updated and correct maps are attached to the EES.
- Remedy selection-related documents, including the ROD, Remedial Design and Remedial Action documents, Remedial Action Work Plan, Final Construction Report, Remedial Action Report, which include information that provide the rationale for the basis of the ICs.
- Operation and Maintenance Plans (OMP) – The OMPs for the site identify responsible person(s) or agency(s) to maintain and enforce the ICs at the Site, and the monitoring and reporting requirements in the OMPs, in concert with the legal agreements and EES, are adequate to determine whether ICs remain in place, are effective, and are sufficient to determine whether violations are occurring or are imminent. These documents include updated and correct maps relevant to site contamination and remedy components exist.
- The TLT Site has been registered with the State of Oregon one-call system. This system can protect the public and environment from uncontrolled excavation and help identify breaches to the ICs. 1-800-332-2344 or <http://www.callbeforeyoudig.org/>

Compliance with IC Obligations – EPA reviewed monitoring results, reporting (e.g., recent inspection), enforcement, and certification requirements to ensure compliance with land and/or resource use restrictions.

In September 2011, EPA sent a letter to PWPO detailing a Notice of Violation of the Amendment to Agreement and Covenant Not to Sue (CERCLA-10-2002-034), regarding Restrictions on Use set forth in the EES. PWPO failed to properly notify regulatory agencies regarding a soil excavation that was performed on the eastern side of the West Facility for a recent upgrade of electrical service, including construction of an underground electrical vault. PWPO provided a written response (September 7, 2011) to EPA, which addressed EPA's concerns. PWPO took steps to correct the noncompliance, including a communications plan and refresher training for employees, and PWPO implemented changes in personnel to provide support and oversight in complying with obligations under the Amendment. Also, PWPO submitted a Soil Management Plan for the Electrical Vault (Belunes Consulting, Inc., 2011), as required by the Amendment, which described the procedures to be implemented by PWPO to manage the excavated soil generated by the upgrade of electrical service. The final Soil Management Plan for this excavation was approved by the agencies on September 19, 2011. As required by the Soil Management Plan, PWPO submitted a Draft Soil Management Report (dated November 23, 2011), which described field activities, analytical results, data interpretation, and recommendations for soil disposal. Oregon DEQ, with input from EPA, provided a comment letter to PWPO dated November 29, 2011. PWPO submitted the revised final Soil Management Report dated April 9, 2012.

On December 31, 2011, PWPO provided a final report that documented PWPO's design considerations for constructing a new Block Dissolver Building built atop the MatCon cap. This final report was modified in response to agency comments on a draft report and was approved on January 5, 2012. The report discusses the design aspects of the building that had the potential to impact the performance of the MatCon cap, and documents that based on an engineering analysis, the underlying soil and MatCon cap were able to support a mat foundation for the new building.

In February 2012, PWPO provided notification of proposed soil excavation and submitted a Soil Management Plan for replacement of culverts in the western portion of the West Facility. Consistent with the EES, Oregon DEQ provided review and comment on the Soil Management Plan for the culvert project, and the plan is currently being revised for submittal to the agencies.

With the exception of the Notice of Violation listed above, PWPO is in compliance with the Institutional Controls set forth in the EES.

On February 1, 2012, PWPO provided the Environmental Audit Report for 2011. A revised Final Environmental Audit Report for 2011 was provided April 26, 2012, and accepted by EPA and Oregon DEQ on May 3, 2012. This annual audit report is a required submittal of Exhibit 3A of the Amendment Agreement.

On September 1, 2011, PWPO was constructing part of the new block dissolver building, which is built on top of the asphalt cap and thus did not require excavation, and an empty tank rolled off the stickers and gouged the MatCon with a pipe outlet. Within a week, Jerry Thayer, MatCon representative, made the repairs on the MatCon cap. PWPO stated that they adopted a new policy that any time a tank or other heavy object is to be placed on the MatCon asphalt cap, sheets of plywood will be placed on the surface to prevent future incidents from happening.

On November 29, 2011, PWPO's consultant (Belunes Consulting) documented in a letter to EPA that soil excavated as a result of the installation of a new power pole had been properly managed and disposed of appropriately at an off-site landfill.

On December 21, 2011, at the PWPO facility, a loader operator accidentally drove a loader into a stormwater ditch at the northwest corner of the peeler. The incident was documented in a report to the agencies ("Report of loader incident, December 21, 2011). PWPO restored the stormwater ditch to proper operation and fixed two of the bollards protecting monitoring well PZ 101 (which had been impacted in the accident). Oregon DEQ approved the final report on December 23, 2011.

In May 2011, PWPO sent a letter to Oregon DEQ and EPA indicating their intent to conduct a Baseline Assessment and Marker Strategy. PWPO wanted to perform this work as a means to evaluate environmental conditions at the site prior to PWPO's treatment with pentachlorophenol. The intent of the Marker strategy would be to distinguish existing contamination from a potential future release of pentachlorophenol or related treated chemicals. No reports are available at this time.

5 PROGRESS SINCE THE LAST FIVE-YEAR REVIEW

This is the first five-year review for the TLT Site.

6 FIVE-YEAR REVIEW PROCESS

6.1 Administrative Components

This Five-Year Review was conducted by EPA Region 10 staff. The review was conducted consistent with EPA's *Comprehensive Five-Year Review Guidance* (EPA, 2001). The evaluation was performed between January and May 2012.

6.2 Community Involvement

External stakeholders, including the state of Oregon and PWPO, were notified of the start of this five-year review in February and March 2012. A public notice, dated March 23, 2012, was mailed to stakeholders and the site mailing list. The public notice solicited public comments related to the performance of the remedy for the TLT Site.

A public notice announcing the five-year review process for the TLT Site was published in the Sheridan News in March 2012. The public notice solicited public comments related to the performance of the remedy for the TLT Site. One comment was received during the public comment period, and the comment was not within the scope of the five-year review.

There are no current active citizen groups associated with the TLT Site.

6.3 Document Review

The Five-Year Review consisted of a review of relevant documents including decision documents (e.g., RODs), remedial action completion reports, long-term monitoring plans and reports, environmental laws and regulations, and enforcement documents.

6.4 Data Review

The detailed results of the groundwater monitoring program are provided in the Revised 2011 Annual Groundwater Monitoring Report for the Taylor Lumber and Treating Superfund Site (prepared for Oregon DEQ by Ash Creek Associates, Inc., dated September 14, 2011). Groundwater data for pentachlorophenol was collected from 19 wells, and one residential well (RW-01⁵); residents currently get their water from this well) (see figure provided in Attachment G).

Residential well RW-02 was not sampled. The owners of the well could not be contacted prior to the monitoring event. The field representative from Ash Creek met the property owner at the residence during the monitoring event and was notified that the pump for the residential well had not been operable for several years. According to the resident, the well water had historically been used for washing cars and had never been used for drinking water. The property owner stated that the residence used a municipal water supply for drinking water. Therefore, RW-02 was not sampled. Future sampling efforts will confirm that the well is still inoperable.

⁵ Historically, groundwater PCP concentrations have not been a problem in residential wells RW-01 and RW-02. PCP has been undetected since the wells were initially sampled in 1999. In the Record of Decision, EPA stated "Although groundwater PCP concentrations have not been a problem in these wells historically, EPA believes it is prudent to continue sampling these wells at least once per year for the next five years and beyond if deemed appropriate."

The data from the 2011 sampling event are summarized in the Table 3 (reproduced herein in Attachment G) from the 2011 groundwater monitoring report and in the text below. A groundwater elevation contour map is also provided in Attachment G.

Concentration trends (from February 2002 through May 2011) for PCP in groundwater from wells MW-1S, MW-11S, MW-15S, MW-16S, PZ-105, and MW-103S are provided in Appendix D of the report (reproduced herein in Attachment G). These wells were selected to evaluate long-term concentration trends in site perimeter and off-site wells and to confirm that PCP in groundwater has not migrated south to the South Yamhill River or to the east under Rock Creek Road. The trend plots for wells MW-15S, MW-16, MW-103S, and PZ-105, all located to the south of the site, were either stable or decreasing. PCP concentrations in groundwater in wells located to the south of Highway 18B (MW-20s, MW10S, MW-24S and MW-9S) were non-detect during the April 2011 monitoring event. The data confirm that contaminant migration to the south towards the South Yamhill River is not occurring.

Trend plots for wells MW-1S and MW-11S were used to confirm that PCP in groundwater was not migrating beyond the site barrier wall and to the east under Rock Creek Road. PCP concentrations in MW-1S have decreased from 14 µg/L to non-detect between November 2002 and April 2011. Although concentrations of PCP in well MW-11S have been variable with concentrations slightly over reporting limits, there have been no significant increases in PCP concentrations in the well that would indicate that eastern migration is occurring.

Concentrations of PCP have been non-detect in water wells RW-01 and RW-02 since wells were initially sampled in 1999. In April 2011, the residential property owner of the well pump at RW-02 indicated that the well pump has been out of operation for several years. The residents indicated that in the past, the well had not been used for drinking water purposes, and only for occasional car washing. The residence is connected to the municipal water supply. In April 2012, RW-02 was not sampled for the same reasons cited above. It is anticipated that the water well pump will not be repaired and that well RW-02 will remain out of operation. Lack of future data for this well does not affect evaluation of the groundwater conceptual site model since the residential wells were only being sampled as a precautionary measure and no contamination was previously identified in this non-drinking water well. Further, in the Record of Decision, EPA stated “Although groundwater PCP concentrations have not been a problem in these wells [RW-01 and RW-02] historically, EPA believes it is prudent to continue sampling these wells at least once per year for the next five years and beyond if deemed appropriate.” For reasons cited above, EPA has made the determination that groundwater sampling of RW-02 will not occur in future groundwater monitoring efforts implemented by Oregon DEQ.

6.5 Review of Applicable and Relevant and Appropriate Requirements

A review of the Applicable and Relevant and Appropriate Requirements (ARARs) was conducted as part of the five-year review. The objective of the ARAR review was to identify federal or state regulatory standards promulgated since the remedy was implemented that might affect the protectiveness of the remedy. EPA’s *Comprehensive Five-year Review Guidance* (U.S. EPA, 2001) specifies that newly promulgated or revised regulatory standards, which may affect previous conclusions about the protectiveness of the remedy, be identified and evaluated during the five-year review. Requirements that are promulgated or modified after ROD

signature must be attained (or waived) only when determined to be applicable or relevant and appropriate and necessary to ensure that the remedy is protective of human health and the environment [40 CFR 300.430(f)(ii)(B)(1)].

ARARs for the selected remedy were identified in the ROD. There were no new standards or changes in standards that would affect the protectiveness of the remedy.

6.6 Site Inspection

A Site inspection was conducted on April 27, 2012, as part of the five-year review process. The Site visit was conducted to identify any problems associated with the remedy and ongoing Site O&M that might interfere with remedy protectiveness. The following individuals participated in the Site visit:

- Karen Keeley, Remedial Project Manager, EPA Region 10
- Norm Read, Project Manager, Oregon DEQ
- Terry Petko and Roland Mueller, PWPO
- Terry Belunes, Belunes Consulting, Inc., consultant to PWPO.

Oregon DEQ conducted a site inspection on March 7, 2012.

Based on the Site inspection, the remedy is performing as expected and the related O&M activities appear adequate. The Site Inspection Memorandum, including site photographs and the site checklist form, is included in Attachment H.

6.7 Site Interviews

Several individuals were contacted as part of the five-year review process. Conversations were held to identify successes or problems related to the remedy and O&M activities. The following individuals were contacted:

- Terry Petko and Roland Mueller, PWPO
- Norm Read, Oregon Department of Environmental Quality

Based on the interviews, the remedy is performing as expected and the related O&M activities appear adequate. Summaries of information discussed with these individuals are provided in email correspondence with Oregon DEQ and PWPO on recent documents that have been under preparation over the past six months, and are summarized in the Site Inspection Memorandum (Attachment H).

7 TECHNICAL ASSESSMENT

7.1 *Question A: Is the Remedy Functioning as Intended by the Decision Documents?*

Yes. Construction of the remedial action is complete, the operation and maintenance plan is approved and being fully implemented, the long-term groundwater monitoring plan is approved and monitoring efforts are ongoing, and results show that the remedy is functioning as intended.

Also, institutional controls (ICs) are in place and effective for all areas of the site that do not achieve UU/UE, and the ICs are tailored to the use restrictions specified in the decision documents. No actions related to ICs are necessary.

In addition, the 2002 Agreement and Covenant Not to Sue, signed by EPA and PWPO, was amended in 2011. The 2011 Amendment sets forth certain obligations for PWPO to collect and treat groundwater from inside the slurry wall, maintain the existing low-permeability MatCon asphalt cap, implement a Best Management Practices Plan, and submit to EPA annual environmental audit reports, to be implemented in perpetuity until January 31, 2022, or for as long as the Settling Respondent owns or operates on the Property, whichever is later.

Recently, PWPO determined that they did not own a small piece of land near the southeastern portion of the property where the facility's 500,000 gallon stormwater storage tank is located. Through an evaluation of land records, PWPO determined that John C. Taylor Lumber Sales conveyed this land to the State of Oregon, by and through its Department of Transportation, in 1977. This piece of land, which is at the intersection of Rock Creek Road and Highway 18B, was surveyed and is estimated to be approximately 0.1 acres (see Attachment I). PWPO has been pursuing a long-term lease from the Oregon Department of Transportation (Oregon DOT) to allow for its use of this property. On April 27, 2012, Oregon DOT informed PWPO that the state was now proposing a sale, rather than a lease, of that piece of land to PWPO. EPA will need to evaluate existing environmental data for this 0.1-acre land and determine whether ICs are necessary to ensure protectiveness of human health and the environment. At this time, approximately 50 percent of the 0.1 acre piece of land is covered by the 500,000 gallon storage tank, and thus, the exposure route to potential contamination is incomplete. Also, this portion of the site was not identified as an area requiring remediation based on surface soil data; in July 2006, surface soil sampling results showed that arsenic concentrations were within background levels, which suggests that workers in the area are protected in the short-term and long-term. Based on this information, EPA believes that this is not an issue that affects site protectiveness. Although EPA believes that the site is protective in the short-term and the long-term, EPA will continue to track this issue to ensure that it is resolved by incorporation of this area into the overall IC for the site.

7.2 *Question B: Are the Exposure Assumptions, Toxicity Data, Cleanup Levels, and Remedial Action Objectives (RAOs) used at the Time of the Remedy Still Valid?*

Yes, except toxicity data for dioxins have changed. Site conditions have not significantly changed since the ROD.

The exposure assumptions, toxicity data, cleanup levels, and RAOs for this project are still valid and protective. The remedy removed substantial quantities of contaminated soil and replaced these areas with clean gravel. Also, the remedy contained soil and groundwater contamination

within an underground barrier wall and under an impermeable cap with land use restrictions, institutional controls, and operation and maintenance plans that have been implemented. As long as the physical integrity of these barriers is maintained, the remedy is protective.

There are no actual or potential changes in exposure pathways that have occurred due to changes in land use or zoning, or due to changes in groundwater use. There are no changes in the standards identified as ARARs in the ROD, and there are no newly promulgated standards that might be ARARs to the site, that bear on the protectiveness of the remedy.

The ROD for the site did not identify a soil cleanup level for dioxins. However, because it was noted that some dioxin contamination existed at the site (see Section 4.1, above), a discussion of EPA's new information on dioxins is provided herein. EPA's five-year review guidance recommends that Regions generally should evaluate new toxicity information for chemicals of concern that were identified at the site.

On February 17, 2012, EPA finalized its non-cancer science assessment for dioxins. The EPA web page notice stated "On February 17, 2012, EPA finalized its final *Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments, Volume 1*. This document provides hazard identification and dose-response information on 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD) and the most up-to-date analysis of non-cancer health effects from TCDD exposure. The report also includes a reference dose (RfD) and a detailed and transparent description of the underlying data and analyses." Using EPA default exposure factors and the new RfD of 0.7 pg/kg-day (picogram per kilogram-day) for TCDD, the dioxin Preliminary Remediation Goal (PRG) that equates to a Hazard Quotient of 1 for the reasonable maximum exposure (industrial) is 665 parts per trillion (ppt) toxicity equivalence (TEQ) for commercial/industrial soil. As described previously, dioxins and arsenic were found to be co-located at the site. Dioxins in soils exceeded the EPA OSWER directive value (see Section 4.1, Footnote 2) in only two of the samples collected at the entire site (outside the waste management area contained by the barrier wall and asphalt cap). In the areas where soils were excavated as part of the remedy, the post-cleanup arsenic concentrations were reported to be near background (the average arsenic concentration for all 42 confirmation soil samples was 19.6 mg/kg arsenic, as compared to a background concentration of 12 mg/kg arsenic). These data suggest that there is a high likelihood that excavation of soils that resulted in 'near background' concentrations of the primary contaminant of concern would have also removed any dioxin contamination (no confirmation samples were collected for dioxin). Furthermore, based on a review of dioxin concentrations in surface soils that were collected during the RI/FS and were 'remaining' at the site after cleanup (i.e., dioxin concentrations in areas outside of the excavation areas and outside of the barrier wall), the 'remaining' dioxin TEQ concentrations range between 0.346 ppt and 724 ppt. Only 2 of the 18 dioxin TEQ samples exceed 665 ppt dioxin TEQ. Using the industrial exposure parameters appropriate for this area, even assuming long-term exposure to the maximum value of 724 ppt the Hazard Quotient would equal 1.088, and exposure to the range of remaining concentrations would equate to an HQ less than 1. Given these site conditions, even with the new toxicity information and the change in RfD, the remedy remains protective for the current and reasonably anticipated future land use.

Based on site-specific issues at the TLT Site, the fact that the remedial action was completed in 2008 and ICs are in place, and the fact that assumptions about exposure and the cleanup remain the same, the above-referenced change is not expected to affect the protectiveness of the remedy.

7.3 Question C: Has any Other Information Come to Light that Could Call into Question the Protectiveness of the Remedy?

No other information has come to light that could call into question the protectiveness of the remedy. Regarding ICs, there are no indications that changes in land or other resource uses have occurred; there are no changes in state or local land use law that could significantly impact ICs at the site, and there are no current conditions that warrant a change to the ICs.

7.4 Technical Assessment Summary

According to the site inspection and the documents and data reviewed, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the OU that would affect the protectiveness of the remedy. There are no newly-promulgated ARARs for the chemicals of concern at the site. There have been no changes to the standardized risk assessment methodologies and input parameters that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

8 ISSUES

This section addresses issues that, either currently or in the future, prevent the remedial action from being protective. Table 8-1 summarizes the issues.

Table 8-1. Summary of Issues		
Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
None.		

9 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Table 9-1 lists the recommended follow-up actions based on the technical assessment findings identified in Section 7 and the summary of issues presented in Section 8.

Table 9-1. Recommendations and Follow up Actions					
Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affect Protectiveness? (Y/N)	
				Current	Future
None.					

EPA has identified one issue to track regarding ICs for the site. As described in Section 7.1, EPA will continue to track and monitor resolution of 0.1 acres (estimated) of property to be leased or sold from Oregon DOT to PWPO, and implementation of ICs, as necessary.

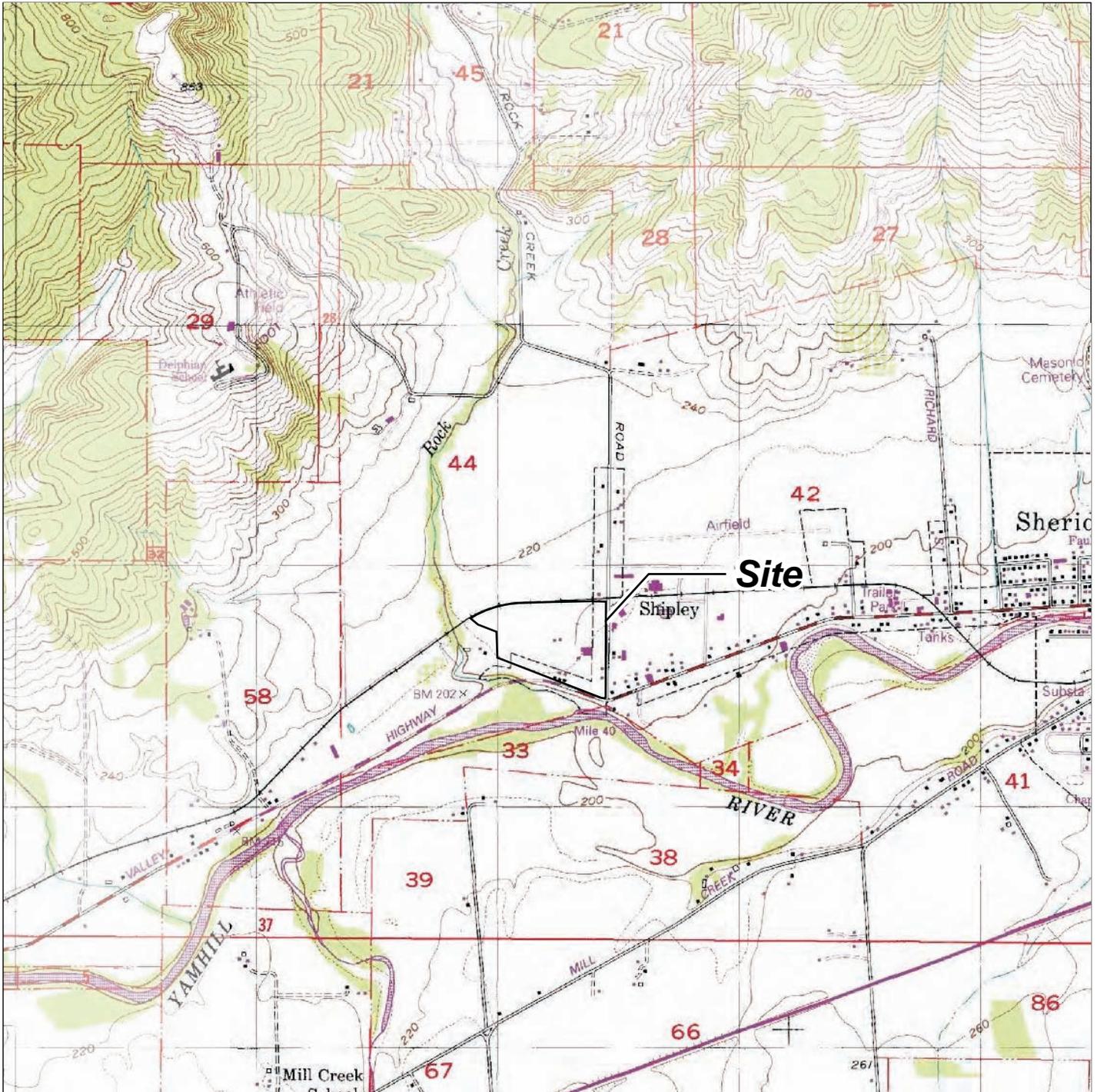
10 PROTECTIVENESS STATEMENT

The remedial action construction is complete and the remedy is functioning as intended. The remedy is protective of human health and the environment and exposure pathways that would result in unacceptable risks are being controlled by ICs and Restrictive Covenants.

11 NEXT FIVE-YEAR REVIEW

The next five-year review for the TLT Site is required five years from the date of this report.

Figure 1-1. Site Location



Note: Base map prepared from USGS 7.5-minute quadrangle of Sheridan, OR, revised 1992 as provided by MSR Maps.com.

0 2,000 4,000

Approximate Scale in Feet



Site Location Map

2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon

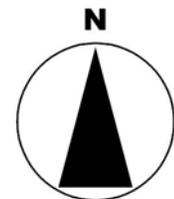
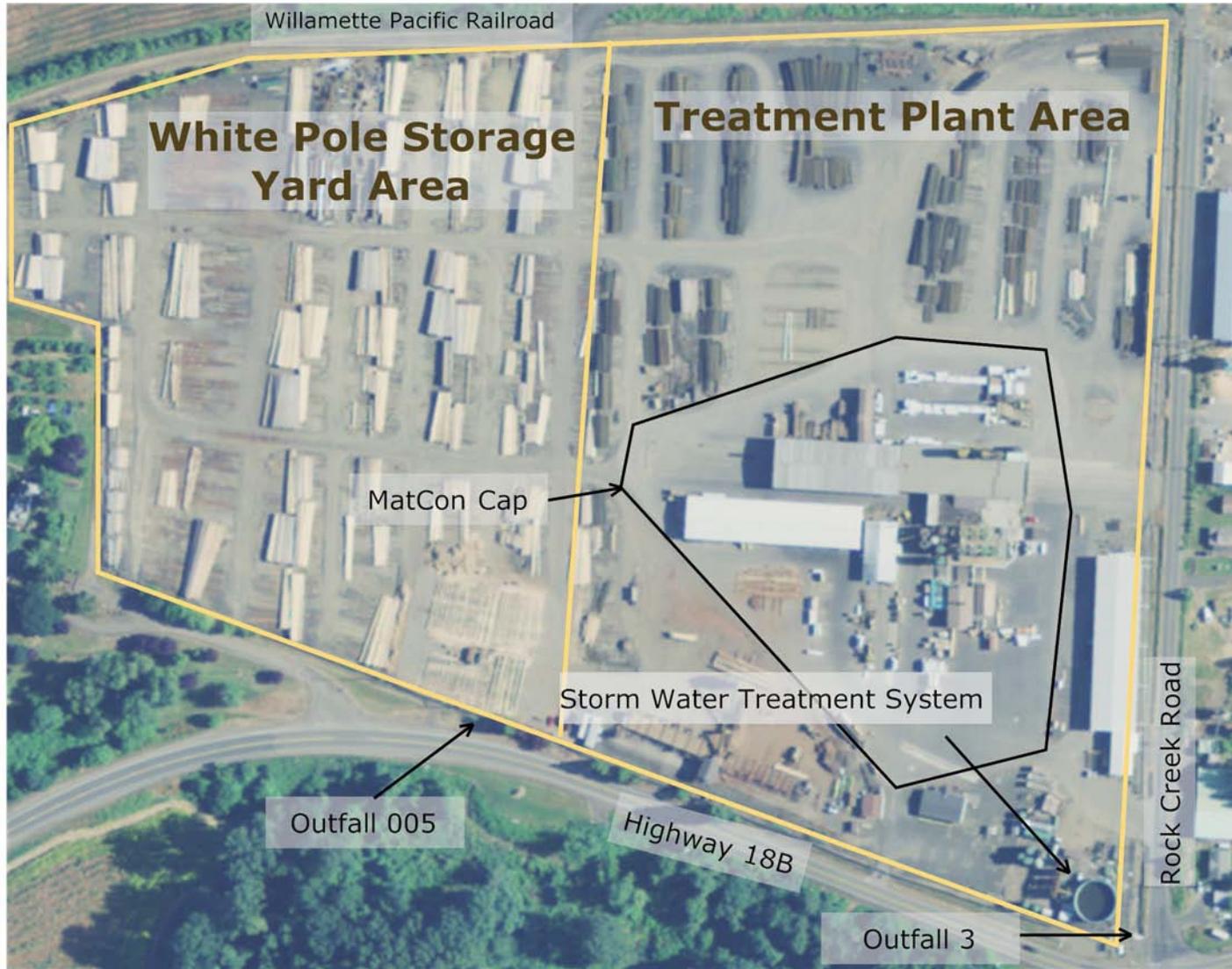
Figure 1-2. General Site Layout

Figure 1-2

Site Map

2011 Environmental
Audit Report

Pacific Wood
Preserving of Oregon



Not To Scale

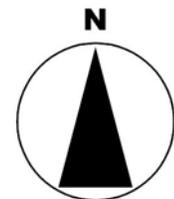
Figure 3-1. Treatment Plant Features



Figure 3-1
Treatment Plant
Features

2011 Environmental
Audit Report

Pacific Wood
Preserving of Oregon



Not To Scale

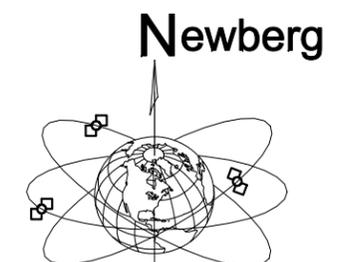
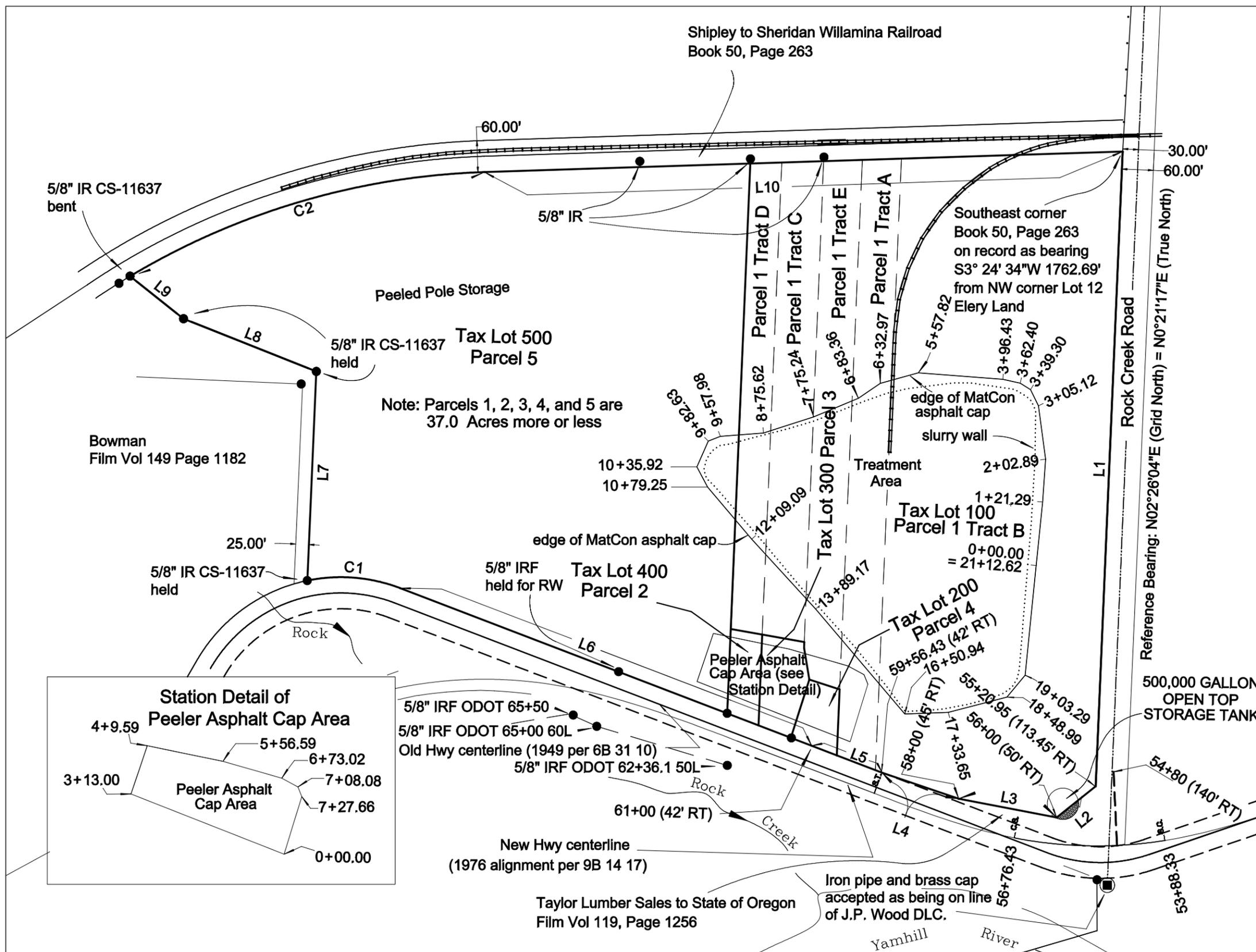
Figure 3-2. Site Photo, General Areas of Remedial Action



NOTE:
PHOTO TAKEN MARCH 27, 2008

FIGURE 3-2
SITE PHOTO - PRIOR
TO REMEDIAL ACTION
TAYLOR LUMBER AND TREATING SUPERFUND SITE

Exhibit B - ENVIRONMENTAL COVENANT PACIFIC WOOD PRESERVING OF OREGON, SHERIDAN, OREGON



Surveying

Scale: 1" = 200'
 0 100 200

Basis of Bearing Grid North as derived from CH2M Hill survey provided by EPA July 20, 2011

REGISTERED PROFESSIONAL LAND SURVEYOR

John G. Newberg
 OREGON
 June 30, 1997
 JOHN G. NEWBERG
 2838

Renewable 12-31-2012

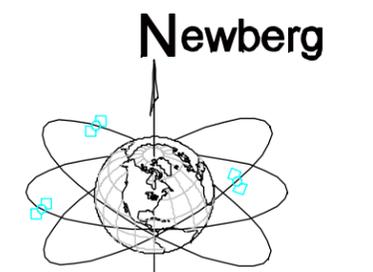
Newberg Surveying, Inc.

1205 NE Evans
 McMinnville, OR 97128

(503)-474-4742 (971)-237-1956 Cell
 (503)-474-3752 Fax newberg@viclink.com

Figure 4-3. Property Tax Parcels Overlain on Aerial Photograph

Exhibit B - ENVIRONMENTAL COVENANT PACIFIC WOOD PRESERVING OF OREGON



Surveying

Scale: 1" = 200'
 0 100 200

Basis of Bearing Grid North
 as derived from CH2M Hill
 survey provided by EPA
 July 8, 2011

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

OREGON
 June 30, 1997
 JOHN G. NEWBERG
 2838

Renewable 12-31-2012

Newberg Surveying, Inc.

1205 NE Evans
 McMinnville, OR 97128

(503)-474-4742 (971)-237-1956 Cell
 (503)-474-3752 Fax newberg@viclink.com

FOR REVIEW

Figure 4-4. Low Permeability Asphalt Pavement Overview

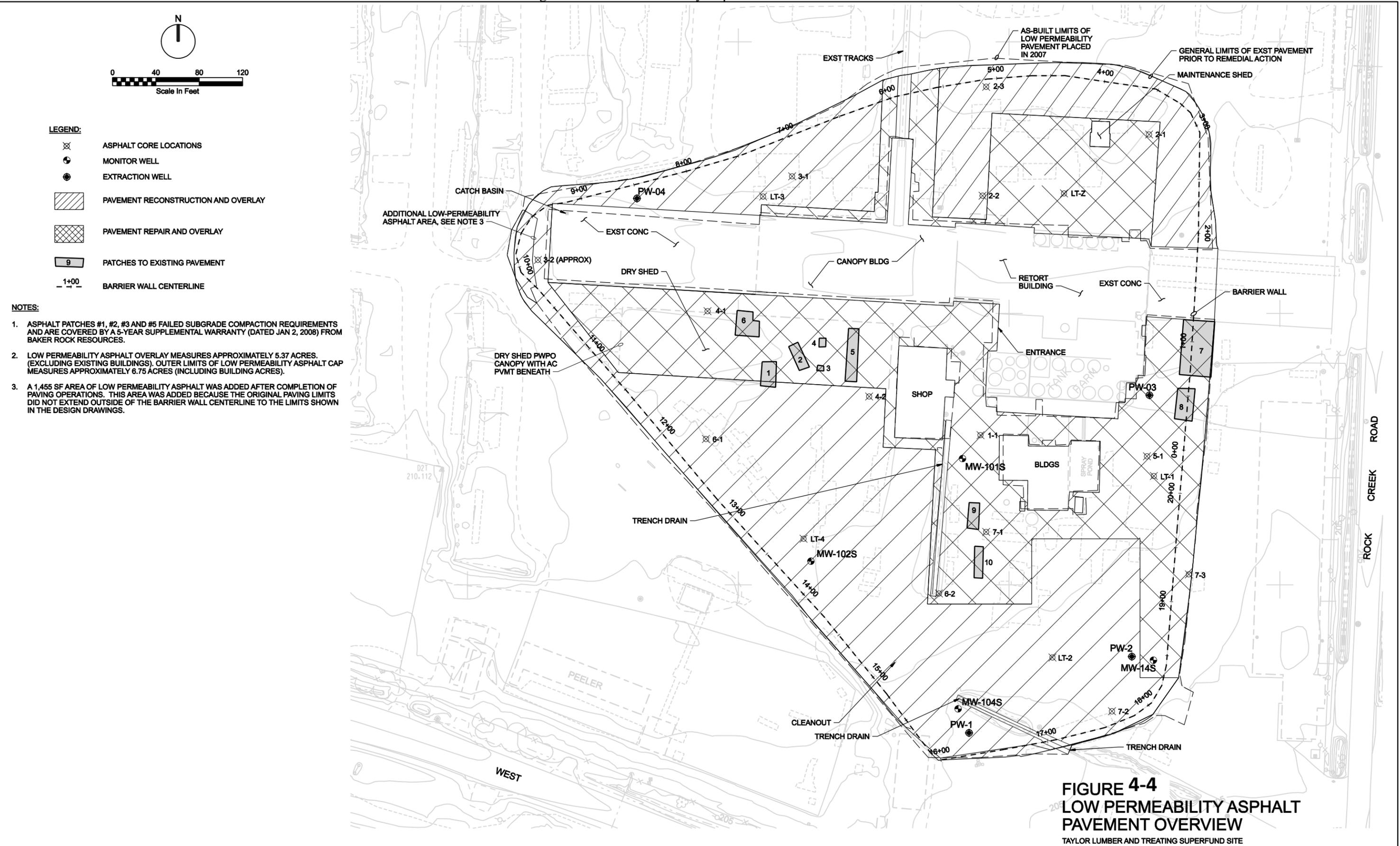


FIGURE 4-4
LOW PERMEABILITY ASPHALT
PAVEMENT OVERVIEW
 TAYLOR LUMBER AND TREATING SUPERFUND SITE

Attachment A

Confirmational Sampling Results for Arsenic in Soil

Table 2-3
Confirmation Sampling Results
Taylor Lumber and Treating Superfund Site

Sample Location	Sample ID	Date Collected	Sample Description	Result (mg/kg)
TPS-1				
TPS-1 Cell A	7264151	6/25/2007	TPSI- CELL A	7
TPS-1 Cell B	7264153	6/29/2007	CELL B COMPOSITE	9.2
TPS-1 Cell C	7272003	7/6/2007	TPS1- CELL C	7.9
TPS-1 Cell D	7284100	7/9/2007	TPS1- D COMP	6.7
TPS-1 Cell E	7264152	6/25/2007	TPS1-CELL E	8.5
TPS-1 Cell F	7264154	6/29/2007	CELL F COMPOSITE	15
TPS-1 Cell G	7272004	7/6/2007	TPS1- CELL G	8.8
TPS-1 Cell H	7334161	8/18/2007	TPSI- H COMP	10
TPS-1 Cell I	7324150	8/8/2007	TPSI CELL I COMPOSITE	12
TPS-1 Cell J	7324154	8/9/2007	TPSI CELL J	34.6
TPS-1 Cell K	7334158	8/15/2007	TPSI-K COMP	13
TPS-1 Cell L	7334160	8/18/2007	TPSI- L COMP	17
TPS-1 Cell M	7324151	8/8/2007	TPSI CELL M COMPOSITE	62.2
TPS-1 Cell N	7324155	8/9/2007	TPSI CELL N	9
TPS-1 Cell O	7344152	8/24/2007	TPS1- "O" COMPOSITE	7.1
TPS-1 Cell P	7324156	8/10/2007	TPS-I-P-COMP	11
TPS-1 Cell Q	7344150	8/21/2007	TPSI- Q COMPOSITE	7.9
TPS-2				
TPS-2 Cell A	7294155	7/20/2007	TPS2-CELL A COMPOSITE	140
TPS-2 Cell B	7294152	7/18/2007	TPS2-CELL B COMPOSITE	13
TPS-2 Cell C	7334150	8/13/2007	TPS-2-C- COMP	10
TPS-2 Cell D	7294154	7/20/2007	TPS2-CELL D COMPOSITE	14
TPS-2 Cell E	7294151	7/18/2007	TPS2-CELL E COMPOSITE	16
TPS-2 Cell F	7334151	8/13/2007	TPS-2-F- COMP	21
TPS-2 Cell G	7294156	7/20/2007	TPS2-CELL G COMPOSITE	33.2
TPS-2 Cell H	7294153	7/19/2007	TPS2-CELL H COMPOSITE	16
TPS-2 Cell I	7294150	7/18/2007	TPS2-CELL I COMPOSITE	14
TPS-2 Cell J	7334152	8/13/2007	TPS-2-J- COMP	62.3
TPS-2 Cell K	7334153	8/13/2007	TPS-2-K- COMP	13
TPS-2 Cell L	7334154	8/14/2007	TP2S-L COMP	4.8
TPS-2 Cell L	7304154	7/27/2007	TPS2-L CONF	8.3
TPS-2 Cell M	7304153	7/27/2007	TPS2-M CONF	17
TPS-2 Fenceline (East of PWPO Dryer)	7344153	8/24/2007	TPS2- G-K FENCE COMPOSITE	61.5
WPS				
WPS Cell A	7324157	8/11/2007	WPS-A- COMP	15
WPS Cell B	7324158	8/11/2007	WPS-B- COMP	11
WPS Cell C	7324159	8/11/2007	WPS-C- COMP	6.1
RRD-E				
RRD-E (All)	7334157	8/15/2007	RAIL DITCH E	5.4
RRD-W				
RRD-W (All)	7334159	8/16/2007	RAIL DITCH- W	8.7
RCRD				
RCRD North Half	7334155	8/14/2007	RCRD-N	7.6
RCRD South Half	7334156	8/14/2007	RCRD-S	7.8
RCG				
RCG (All)	7344151	8/22/2007	RCG COMPOSITE	48.6
HWYD				
HWYD (East Half)	7324152	8/8/2007	HWY DITCH 1A-E COMPOSITE	8.4
HWYD (West Half)	7324153	8/8/2007	HWY DITCH 2A-E COMPOSITE	14

Average Concentration: TPS-1
14.5

Average Concentration: TPS-2
29.6

Average Concentration: WPS
10.7

Average (RRD-E, RRD-W, RCRD, RCG,HWYD)
14.4

Overall Average (All areas)
19.6

Attachment B

Easement and Equitable Servitude, recorded July 29, 2011

Space above thi

After recording, return to:

Oregon DEQ
165 E 7th Avenue
Eugene, OR 97401
Attn: Norm Read



\$111.00

07/29/2011 01:27:02 PM

DMR-EDMR Cnt=1 Stn=2 ANITA
\$75.00 \$10.00 \$11.00 \$15.00

EASEMENT AND EQUITABLE SERVITUDE

This grant of Easement and acceptance of Equitable Servitude is made July 25, 2011 between Pacific Wood Preserving of Oregon, Inc. ("**Grantor**") and the State of Oregon, acting by and through the Oregon Department of Environmental Quality ("**DEQ**" or "**Grantee**").

RECITALS

A. Grantor is the owner of certain real property located at 22125 S.W. Rock Creek Rd., in Yamhill County, Oregon in a deed recorded May 31, 2002 and described in Instrument # 200210682 Yamhill County Deed Records and listed as Parcels 1 (Tracts A, B, C, D, and E), 2, 3, 4, and 5 lying within Section 33, Township 5 South, Range 6 West, Willamette Meridian (the "**Property**") the exterior boundary of which is more particularly described in Exhibit A to this Easement and Equitable Servitudes, and referenced under the name Taylor Lumber and Treating, ECSI #666 in the files of DEQ's Western Region Environmental Cleanup Program in Eugene, Oregon. Interested parties may contact the Eugene DEQ to review a detailed description of the residual risks present at the Property and addressed in the Record of Decision ("**ROD**") issued by the U.S. Environmental Protection Agency ("**EPA**") on September 30, 2005. The ROD and related administrative record are on file with EPA Region 10 or its successor agency, presently located at 1200 Sixth Avenue, Seattle, Washington 98101.

B. The ROD requires, among other things, institutional controls ensuring that:

- There will be no future non-industrial use of the West Facility at the Property.
- Any breaching of the low-permeability MatCon asphalt cap at the Property will be conducted in a manner that is protective of human health and the environment.
- Excavation and movement of soils from within the West Facility will be conducted in a manner that is protective of human health and the environment.
- Shallow groundwater at the West Facility will not be used as drinking water, and any well drilling and groundwater use will be conducted in a manner that is protective of human health and the environment.

C. On February 5, 2002 Grantor entered into a Prospective Purchaser Agreement with DEQ. This agreement was amended on June 6, 2011. Under the amended agreement, Grantor agreed to implement operation and maintenance activities of selected portions of the remedial action, including the required institutional controls.

D. Pursuant to a State Superfund Contract between DEQ and EPA dated February 21, 2007, DEQ agreed to obtain the institutional controls necessary to implement the ROD.

E. The provisions of this Easement and Equitable Servitude are intended to further the implementation of the selected remedial action and thereby protect human health and the environment.

1. DEFINITIONS

1.1. "DEQ" means the Oregon Department of Environmental Quality, and its employees, agents, and authorized representatives. "DEQ" also means any successor or assign of DEQ under the laws of Oregon, including but not limited to any entity or instrumentality of the State of Oregon authorized to perform any of the functions or to exercise any of the powers currently performed or exercised by DEQ.

1.2 "Owner" means any person or entity, including Grantor, who at any time owns, occupies, or acquires any right, title, or interest in or to any portion of the Property or a vendee's interest of record to any portion of the Property, including any successor, heir, assign or holder of title or a vendee's interest of record to any portion of the Property, excluding any entity or person who holds such interest solely for the security for the payment of an obligation and does not possess or control use of the Property.

1.3 "Property" means the real property described in Exhibit A to this Easement and Equitable Servitude.

1.4 "West Facility" means the former Taylor Lumber facility located west of Rock Creek Road, including the Treatment Plant Area, White Pole Storage Area, and Treated Pole Storage Area, as generally described in Exhibit A and shown in Exhibit B to this Easement and Equitable Servitude.

2. GENERAL DECLARATION

Grantor, in consideration of Grantee's approval of the Prospective Purchaser Agreement described above, grants to DEQ an Easement for access and accepts the Equitable Servitude described in this instrument and, in so doing, declares that the Property described in Exhibit A to this Easement and Equitable Servitude, is now subject to and shall in the future be conveyed, transferred, leased, encumbered, occupied, built upon, or otherwise used or improved, in whole or in part, subject to this Easement and Equitable Servitude. Each condition and restriction set forth in this Easement and Equitable Servitude touches and concerns the Property and the equitable servitudes

granted in Paragraph 3 (collectively, the "Equitable Servitude") and easement granted in Paragraph 4 (the "Easement") below, shall run with the land for all purposes, shall be binding upon all current and future owners of the Property as set forth in this Easement and Equitable Servitude, and shall inure to the benefit of the State of Oregon. Grantor further conveys to DEQ the perpetual right to enforce the conditions and restrictions set forth in this Easement and Equitable Servitude.

3. EQUITABLE SERVITUDE (RESTRICTIONS ON USE)

3.1 General Restrictions.

a. Excavation of soils from within the West Facility shall be conducted in a manner that is protective of human health and the environment. Owner shall submit a written plan for soil management and obtain DEQ approval before excavating soils from within the West Facility. Any soil excavated from within the slurry wall and beneath the MatCon asphalt cap (locations shown in Exhibit B) would be classified under Resource Conservation and Recovery Act (RCRA) as F032, F034, or F035 listed wastes based on the wood-preserving formulations used at the facility.

b. Investigation derived wastes (IDW) must be handled and disposed of properly in accordance with state and federal regulations. IDW soil and water from within the slurry wall and beneath the MatCon asphalt cap would be classified under Resource Conservation and Recovery Act (RCRA) as F032, F034, or F035 listed wastes based on the wood-preserving formulations used at the facility.

c. Owner shall operate on the Property in such a manner as to protect the groundwater monitoring wells located on the Property. These groundwater monitoring wells are operated and maintained by DEQ for long-term monitoring of shallow groundwater at the site.

d. Owner shall require on-site workers to wear personal protective equipment when in contact with soil beneath the peeler asphalt cap area (indicated as such in Exhibit B). This restriction is intended to protect workers from arsenic concentrations that exceed background levels but are below EPA's action level as set forth in the ROD.

3.2 Groundwater Use Restrictions. Shallow groundwater at the West Facility may not be used for drinking water or other potable purposes. Any well drilling and any groundwater use may not be performed without receiving written approval from DEQ. Unless EPA approves an alternate method for treatment of extracted groundwater in writing, Owner shall treat extracted groundwater from the on-site extraction wells in the on-site storm water treatment system in accordance with Section B of the Revised Statement of Work, dated July 21, 2011, as may be amended, with DEQ and EPA approval, on file with DEQ.

3.3 MatCon Asphalt Cap Restrictions.

a. Owner shall maintain the low-permeability MatCon asphalt cap in accordance with Section A of the Revised Statement of Work, to ensure the long-term structural integrity of the MatCon cap.

b. Except upon prior written approval from DEQ, Owner may not conduct operations on the Property or use the Property in any manner (including without limitation any breaching, excavating, drilling, scraping, or eroding) that may penetrate the MatCon cap or jeopardize its function as an engineering control preventing exposure to contaminated soil.

3.4 Land Use Restrictions. The following operations and uses are prohibited at the West Facility:

- a. Residential use of any type;
- b. Agricultural use of any type;
- c. Recreational use of any type; and
- d. Non-industrial use of any type.

3.5 Notice of Transfer. Owner shall notify DEQ at least ten (10) days before the effective date of any conveyance, grant, gift, lease, or other transfer, in whole or in part, of Owner's interest in or occupancy of the Property; or the start of any development activities or change in use of the Property that might expose human or ecological receptors to hazardous substances at the Property. Notwithstanding the foregoing, Owner may not commence any development inconsistent with the conditions or restrictions in this Paragraph 3 without (a) prior written approval from DEQ, or (b) removal of the condition or restriction as provided in Paragraph 6.1 below.

3.6 Cost Recovery. Owner shall pay DEQ's costs for review and oversight of implementation of and compliance with the provisions in this Easement and Equitable Servitude. This Easement and Equitable Servitude is a binding agreement by the Owner to reimburse DEQ for all such eligible review and oversight costs. DEQ will establish a cost recovery account for tracking and invoicing DEQ project costs. DEQ will provide Owner with a monthly statement and direct labor summary. DEQ costs include direct and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the State of Oregon and DEQ allocable to DEQ oversight of this Easement and Equitable Servitude and not charged as direct site-specific costs. Indirect charges are based on actual costs and are applied as a percentage of direct personal services costs.

4. EASEMENT (RIGHT OF ENTRY)

During reasonable hours and subject to reasonable advance notice and Owner's security requirements, DEQ, EPA, and their representatives, including contractors, shall have the right to enter upon and inspect any portion of the Property to determine whether the requirements of this Easement and Equitable Servitude have been or are being complied with and to conduct sampling and analysis, including that required by the Long-term Groundwater Monitoring and Reporting Plan. DEQ and EPA shall have the right, privilege, and license to enter upon the Property at any time to abate, mitigate, or cure at the expense of Owner the violation of any condition or restriction contained in this Easement and Equitable Servitude, provided DEQ or EPA first gives written notice of the violation to Owner describing what is necessary to correct the violation and Owner fails to cure the violation within a reasonable time following receipt of such notice. Any such entry by DEQ or EPA shall not be deemed a trespass, and neither DEQ nor EPA shall be subject to liability to Owner for such entry and any reasonable action taken to abate, mitigate, or cure a violation.

5. THIRD PARTY BENEFICIARY RIGHTS OF EPA

5.1 EPA shall have the right, but shall not be obliged, to monitor and to enforce, by all means available in law or equity, the terms of this Easement and Equitable Servitude as a third party beneficiary of the agreement between Grantor and Grantee contained in this Easement and Equitable Servitude.

5.2 EPA's rights provided in this Paragraph 5 are in addition to, and not in derogation of, all rights of DEQ to enforce the terms of this Easement and Equitable Servitude. Nothing in this Paragraph 5 shall be construed to create, either expressly or by implication, the relationship of agency between EPA and DEQ and neither EPA nor DEQ is authorized by this Paragraph 5 to represent or act on behalf of the other in the enforcement of rights granted under this Easement and Equitable Servitude.

5.3 Grantee represents that it has notified EPA of EPA's status as a third party beneficiary under Paragraph 5 of this Easement and Equitable Servitude.

6. GENERAL PROVISIONS

6.1 Each condition and restriction contained in this Easement and Equitable Servitude shall be recited in any deed or lease conveying the Property or any portion of the Property, and shall run with the land so burdened until such time as the condition or restriction is removed by written certification from DEQ, recorded in the deed records of the County in which the Property is located, certifying that the condition or restriction is no longer required in order to protect human health or the environment.

6.2 Upon the recording of this Easement and Equitable Servitude, all future Owners, as defined in Paragraph 1.2 above, shall be conclusively deemed to have consented and agreed to every condition and restriction contained in this Easement and Equitable Servitude, whether or not any reference to this Easement and Equitable Servitude is contained in an instrument by which such person or entity occupies or acquires an interest in the Property.

6.3 Upon any violation of any condition or restriction contained in this Easement and Equitable Servitude, DEQ, in addition to the remedies described in Paragraph 4 above, may enforce this Easement and Equitable Servitude as provided in the Amendment to the Prospective Purchaser Agreement, as amended, or may seek any other available legal or equitable remedy to enforce this Easement and Equitable Servitude.

6.4 This Easement and Equitable Servitude may be executed in counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one Easement and Equitable Servitude.

IN WITNESS WHEREOF Grantor and Grantee have executed this Easement and Equitable Servitude as of the date and year first set forth above.

GRANTOR: Pacific Wood Preserving, Inc., of Oregon

By: Elaina Jackson

Date: 7-25-11

Elaina Jackson, Chief Operating Officer

STATE OF ^{CALIFORNIA} OREGON)
County of Solano) ss.

The foregoing instrument is acknowledged before me this 25th day of July, 2011, by Elaina Jackson of Pacific Wood Preserving of Oregon, Inc., on its behalf.



[Signature]

NOTARY PUBLIC FOR OREGON CA
My commission expires: 02-20-2013

GRANTEE: State of Oregon, Department of Environmental Quality

By: Paul S. Rosenberg Date: 7/25/11
Paul S. Rosenberg, Western Region Environmental Cleanup Manager

STATE OF OREGON)
) ss.
County of Lane)

The foregoing instrument is acknowledged before me this 25th day of July, 2011, by Paul S. Rosenberg of the Oregon Department of Environmental Quality, on its behalf.



Kathy R. Jacobsen
NOTARY PUBLIC FOR OREGON
My commission expires: July 02, 2013

Exhibit A
Legal Description for Pacific Wood Preserving of Oregon, Sheridan, Oregon
Parcels 1, 2, 3, 4, and 5
(3 pages total, including cover sheet)

Exhibit A

Legal Description for Pacific Wood Preserving of Oregon, Sheridan, Oregon
Parcels 1, 2, 3, 4, and 5

A tract of land being part of the John P. Wood Donation Land Claim No. 44 in Section 33, Township 5 South, Range 6 West, Willamette Meridian, Yamhill County, Oregon said tract of land being all that land described in a deed recorded May 31, 2002 as Instrument #200210682 the exterior boundary being more particularly described as follows:

Beginning at the intersection point of the South margin of Southern Pacific Railroad with the West margin of Rock Creek Road (CR 8), said point also being on the southerly margin of a 60 foot strip of land conveyed to Sheridan and Willamina Railroad recorded October 5, 1907 in Deed Book 50, Page 263 Yamhill County Deed Records and which said point also bears South 3° 24' 34" West 1762.69 feet from a brass cap in a monument box accepted as the Northwest corner of Lot 12 Elery Land (unrecorded plat); thence South 2° 26' 04" West 1206.65 feet along the westerly margin of Rock Creek Road to the intersection point of that tract of land conveyed from John C. Taylor Lumber Sales, Inc to the State of Oregon recorded in Film Volume 119, Page 1255 Yamhill County Deed Records and described as that portion of land described as Parcel 2 of that document lying northerly of a centerline which is described in Parcel 1 of Film Volume 119, Page 1255, said intersection point being on a line between Station 54+80 (140 feet Right) and Station 56+00 (50 feet Right) from the centerline described in Parcel 1 of said Film Volume 119, Page 1255 at approximately Station 56+20.95 (113.45 feet Right); thence continuing along the northerly boundary of land described as Parcel 2 of Film Volume 119, Page 1255 Yamhill County Deed Records South 51° 15' 30" West 95.27 feet more or less in a straight line to Station 56+00 (50 feet Right); thence North 79° 08' 38" West 189.62 feet in a straight line to Station 58+00 (45 feet Right); thence North 71° 15' 21" West 154.08 feet to Station 59+56.43 (42 feet Right) said point also being 30 feet Northerly from the old highway centerline (1949); thence continuing along the Northerly margin of said highway North 69° 04' 47" West 143.53 feet to Station 63+00 (42 feet Right) more or less to the Southwest corner of Parcel 2 of land recorded in Film Volume 119, Page 1255 Yamhill County Deed Records; thence continuing along the northerly margin of the old highway North 69° 04' 47" West 838.34 feet to the point of curvature of a 316.48 foot radius curve concave to the south; thence along said radius curve a distance of 179.88 feet more or less (chord bearing North 85° 22' 06" West 177.47 feet) to a point that is 25 feet easterly when measured at

Page 1 of 2

right angles from that tract of land owned by Robert and Virginia Bowman described in Film Volume 149, Page 1182 Yamhill County Deed Records; thence 25 feet easterly and parallel with the east boundary of said Bowman tract North 2° 29' 42" East 397.61 feet to an iron rod set in CS-11637; thence North 68° 23' 22" West 271.91 feet to an iron rod set in CS-11637; thence North 51° 33' 35" West 130.09 feet more or less to the Southerly margin of the Southern Pacific Railroad as described in a deed from William and Nancy Shipley to the Sheridan and Willamina Railroad Company recorded October 5, 1907 in Deed Book 50, Page 263 Yamhill County Deed Records; thence along the southerly margin of said described railroad a distance of 710.29 feet more or less along a 1402.69 foot radius curve concave to the south (chord bearing North 73° 38' 58" East 702.72 feet); thence continuing along said southerly railroad margin North 88° 09' 22" East 1215.26 feet more or less to the Point of Beginning, containing 37.0 acres more or less.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

John G. Newberg
OREGON
JUNE 30, 1987
JOHN G. NEWBERG
2838

RENEWABLE 12-31-12
SIGNED 7-21-11

Page 2 of 2

EXHIBIT B

**Survey Diagrams of Property
(4 pages total, including cover sheet)**

Exhibit B - ENVIRONMENTAL COVENANT PACIFIC WOOD PRESERVING OF OREGON Sheridan, Oregon

LINE TABLE

NUM	BEARING	DISTANCE
L1	S2°26'04"W	1206.65'
L2	S51°15'30"W	95.27'
L3	N79°08'38"W	189.62'
L4	N71°15'21"W	154.08'
L5	N69°04'47"W	143.53'
L6	N69°04'47"W	838.34'
L7	N2°29'42"E	397.61'
L8	N68°23'22"W	271.91'
L9	N51°33'35"W	130.09'
L10	N88°09'22"E	1215.26'

CURVE TABLE

NUM	DELTA	ARC	RADIUS	BEARING	DISTANCE
C1	32°33'59"	179.88'	316.48'	N85°22'06"W	177.47'
C2	29°00'47"	710.29'	1402.69'	N73°38'58"E	702.72'

Narrative:

The purpose of this survey is to describe the exterior boundary of the five parcels (Parcels 1, 2, 3, 4, and 5) described and recorded in Instrument 200210682. The description prepared by this survey is intended to be used in an Easement and Equitable Servitude for this property and is not intended to combine the five lots of record into one. The Basis of Bearing is Grid North based from a survey done by CH2M Hill provided to me from the EPA. I have provided a reference bearing along the centerline of Rock Creek Road so this survey can be related to my survey of CS-11637. State Highway 18B was established by accepting the found position of iron rods shown on ODOT map 9B 14 7.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

John G. Newberg

OREGON
June 30, 1997
JOHN G. NEWBERG
2838

Renewable 12-31-2012

SIGNED

July 30, 2011

Newberg Surveying, Inc.

1205 NE Evans
McMinnville, OR 97128

(503)-474-4742

(503)-474-3752 Fax

(971)-237-1956 Cell

newberg@viclink.com

Page 2 of 3

**Exhibit B - ENVIRONMENTAL COVENANT
PACIFIC WOOD PRESERVING OF OREGON
Sheridan, Oregon**

State Plane Coordinates (ORN Zone 3601)

**Matcon Asphalt Cap Coordinates
(Portions of Parcels 1 and 5)**

Station	Northing	Easting
ST 0+00.00	535121.73	7446177.15
ST 1+21.29	535242.41	7446189.33
ST 2+02.89	535323.81	7446194.97
ST 3+05.12	535425.14	7446181.43
ST 3+39.30	535455.85	7446166.43
ST 3+62.40	535468.23	7446146.92
ST 3+96.43	535475.50	7446113.67
ST 5+57.82	535487.63	7445952.74
ST 6+32.97	535467.62	7445880.31
ST 6+83.36	535439.29	7445838.63
ST 7+75.24	535404.09	7445753.76
ST 8+75.62	535373.55	7445658.14
ST 9+57.98	535366.97	7445576.04
ST 9+82.63	535357.94	7445553.11
ST 10+35.92	535309.22	7445531.51
ST 10+79.25	535270.91	7445551.74
ST 12+09.09	535171.81	7445635.64
ST 13+89.17	535039.15	7445757.42
ST 16+50.94	534839.87	7445927.14
ST 17+33.65	534842.85	7446009.80
ST 18+48.99	534871.63	7446121.49
ST 19+03.29	534913.46	7446156.11
ST 21+12.62	535121.73	7446177.15

= ST 0+00

Peeler Area

Asphalt Cap Coordinates

(Portions of Parcels 1, 2, 3, 4, and 5)

Station	Northing	Easting
ST 0+00.00	534787.00	7445823.21
ST 3+13.00	534901.27	7445531.81
ST 4+9.59	534992.78	7445562.70
ST 5+56.59	534963.15	7445706.69
ST 6+73.02	534931.17	7445818.64
ST 7+08.08	534914.49	7445849.48
ST 7+27.66	534896.26	7445856.62

REGISTERED
PROFESSIONAL
LAND SURVEYOR

John G. Newberg

OREGON
June 30, 1997
JOHN G. NEWBERG
2838

Renewable 12-31-2012

Newberg Surveying, Inc.

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(503)-474-4742 (971)-237-1956 Cell
(503)-474-3752 Fax newberg@viclink.com

*SIGNED
July 20, 2011*

Attachment C

2011 Environmental Audit Report, Cover Page and Table of Contents

2011 Environmental Audit Report Pacific Wood Preserving of Oregon Sheridan, Oregon

Prepared for:

Pacific Wood Preserving of Oregon
22125 Rock Creek Road
Sheridan, Oregon 97378

Prepared by:

Belunes Consulting, Inc.
34470 Chinook Plaza, Suite 233
Scappoose, Oregon 97056

February 1, 2012 (revised April 26, 2012)
12-1952-11

CITATION

BCI 2012. 2011 Environmental Audit Report
Pacific Wood Preserving of Oregon, Inc.
Prepared by: Belunes Consulting, Inc.
Scappoose, Oregon 97056

CERTIFICATION

ENVIRONMENTAL PROFESSIONAL'S APPROVAL

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



Expires October 31, 2012

April 26, 2012

Terrence E. Belunes, RG, LHG

Date

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15. Summary of Operating Equipment, Drum, Maintenance and Transformer Inspections
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Appendices

- A. MatCon Cap Supporting Information
- B. Groundwater Extraction System Supporting Information
- C. SWTS Supporting Information
- D. BMP Plan Supporting Information
- E. RCRA Supporting Information
- F. NPDES Permit Supporting Information
- G. SPCC Plan Supporting Information
- H. Air Contaminant Discharge Permit Supporting Information
- I. Revised Annual Environmental Audit Report Outline

Attachment D

MatCon Asphalt Cap, Third Annual Inspection

MatCon, Inc

MatCon Annual Inspection Report¹

Project: Taylor Lumber Superfund Site

Number: _____

Location: Sheridan, Oregon

Date Constructed: 2007

Name of Inspector (s): Jerry Thayer

Position: President MatCon, Inc

Norm Read

Oregon DEQ

Tom Baker

Pacific Wood Treating

Terrence Belunes

Belunes Consulting

Date of Inspection: 10 March 2011 Time: Start 11:00 am - Stop 1:00 pm

Refer to Figure 1, attached site map for approximate locations (if any)

<u>Section No.</u>	<u>Site Use</u>	<u>Observed Distress²</u>
		0. None 1. Alligator Cracking 2. Block or Thermal Cracking 3. Depression or Settlement 4. Standing Water 5. Rutting 6. Raveling / Weathering / Surface Blemish 7. Hydrocarbon or Chemical Spill
	Describe Current use of each section. Note any changes since last report	For each section indicate: <ul style="list-style-type: none"> ☐ Type of distress ☐ Locate distress on site map ☐ Provide GPS coordinates ☐ Attach Photo if appropriate ☐ Provide additional description / dimension
<u>Overall Site</u>	<u>Preservative Treatment of Wood Products</u>	GPS Location: Long.: <u>Not used</u> Lat.: _____ Alt.: _____ Observed Distress: <u>See notes following</u> Dimension: Length: <u>N.A.</u> Width: _____ Depth: _____ Notes: <u>See notes on the following page.</u>

Summary of Results: Overall satisfactory condition Needs attention as noted

Action Taken: None Required Corrective action implemented

Contacted Granite Construction Report forwarded to Granite Construction

Result of action attached

Inspector Name: Jerry A. Thayer Signature:  Date 31 Aug 2011

¹ Submit report to Granite Construction. by the 15th of each month.

² Refer to Operations and Maintenance Manual for information on distress.

Notes:

1. Jerry Thayer (MatCon, Inc.) , Norm Read,(OR DEQ) Tom Baker (Pacific Wood) and Terrence Belunes (Belunes Consulting) met at the site at 11:00 am. During a brief meeting in the conference room before the site walk, Mr. Baker reported that he has been performing weekly inspections of the cap and had no areas of distress to report. He also noted that the cap has continued to "stiffen" over time and that indentations due to high summer temperatures were becoming less noticeable. Mr. Baker noted that the vehicle traffic running over the site was flattening out the indentations and that it seemed to becoming smoother over time. He offered that they were happy with the performance of the cap.
2. A walking review of the site was conducted. The entire surface was wet due to recent rains. While birdbaths were observed in several locations on the surface of the MatCon cap, per Karen Keeley's (EPA Project Manager) e-mail dated June 7, 2011 to Norm Read: the birdbaths are "not an issue that requires any remedial response and is not an issue that has been identified as a potential warranty issue." No concerns were observed with the MatCon cap itself, however, Mr. Reed noted the buildup of water at the north end where the railroad tracks enter the site. Mr. Baker agreed to see if filling-in the low spot would reduce the build-up of water. See Photo 3.
3. Mr. Reed noted that the cap had quite a bit of gravel and mud on the surface in some areas, particularly the northwest and west edges of the cap. Mr. Baker said that the cap was regularly swept and that he would have it swept again. No damage to the MatCon cap could be found due to vehicle traffic running over the gravel on the surface. See Photos 3 and 4.
4. An inspection was made of the edges of the cap to see if traffic entering and exiting the cap was causing the edges to fail.. No cracks or breaks in the MatCon cap were observed.
5. An inspection was made of the hot-melt seal that Granite placed between the concrete pad with the tracks in it that is used to load and unload the carriers for the pipettes and the MatCon cap. No problems were noted.
6. One of the earlier areas of concern, the "blister area" was reported by Mr. Baker to have only raised slightly the past summer and to not have formed a crack on the surface. Subsequent traffic re-compacted the area and it was not longer observable.
7. An inspection was made of the seal between the trench drains that were re-installed after construction of the cap. No problems were noted.
8. After the walk around another meeting was held in the conference room where the idea of placing a containment building on the MatCon cap was discussed. The conceptual design was for a concrete slab with concrete stem walls and steel siding to form an integral secondary containment system. Mr. Thayer offered that such a structure would not harm the cap as the slab would spread the load of the structure and of the internal tanks that will be used to contain a new treatment chemical. Design calculations should include the anticipated loading of the cap. Such loading should be less than 100 psi.

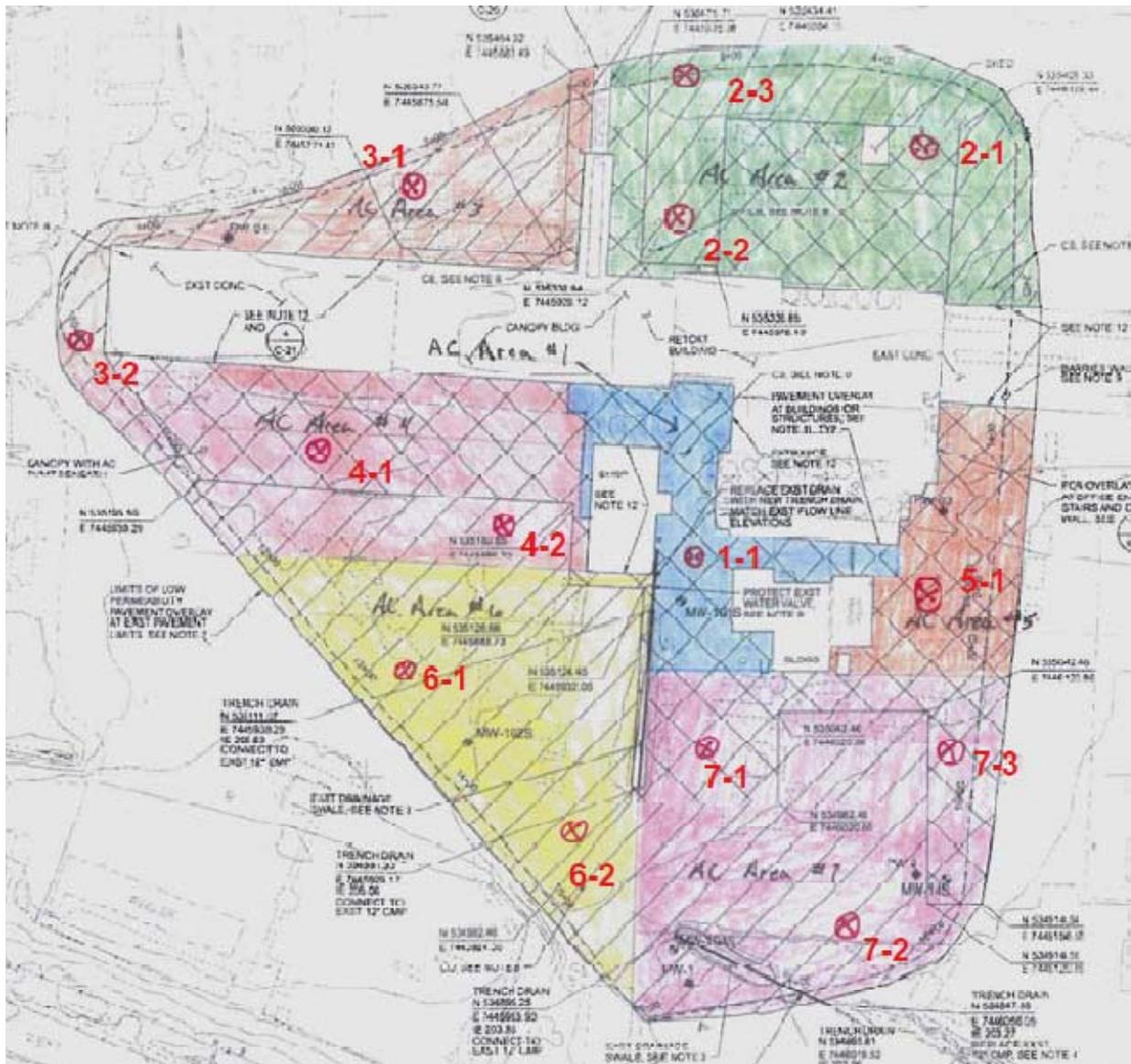


Figure1: Approximate hydraulic conductivity test locations on constructed MatCon® cap

Photos:



1. North side of MatCon cap. Area proposed for storage building.



2. North side of site.



3. North edge of site showing water build-up where the railroad tracks enter the site and gravel over the MatCon surface..



4. West edge of cap showing typical traffic path and build-up of mud and gravel on the MatCon cap's surface.



5. Typical MatCon cap surface.



6. Typical dunnage used to support pallets.



7. South side of shed area looking towards scales.

Attachment E

2011 MatCon Asphalt Stiffness Test Results



PO Box 356
Blooming Glen, PA 18911
Tel.: 1(215) 258-3640
Fax: +1(772) 679-2464

October 18, 2011

Jerry Thayer PE
MatCon, Inc.
26828 Maple Valley Hwy.
Suite 207
Maple Valley, WA 98038

Dear Sir:

Re: MatCon® Taylor Lumber – Stiffness testing of slices - 2011

Two cores were evaluated for complex shear stiffness modulus. The locations for the cores are illustrated in Figure 1. Three slices were tested from each core - the top 10 mm layer, the second 10 mm layer and a layer approximately 50 mm from the surface of the core. These we labeled as 1, 2 and 4 respectively. The complex shear modulus was evaluated of each layer using a temperature frequency sweep at 0.015% strain over the temperature range of -30°C to 60°C. For each test a G^* versus temperature mastercurve at a reference temperature of 25°C was developed as presented in Figure 2. From these isochronal plots at a frequency of 10 Hz was generated, see Figure 3 to Figure 8.

The G^* is measured in a shear test with no confinement whereas values adopted for the design of pavements will be values of E^* conducted in tests with axial loading. For a material with zero, or near zero voids, the value of Poisson's ratio will be close to 0.5. Consequently, E^* can be approximated to $3G^*$. The adjusted data (E^* averaged) are shown in Figure 9 along with the results from the Resilient Modulus test (average results shown) and the estimated dynamic complex modulus, E^* . The dynamic complex modulus was estimated using the measured stiffness response of the binder under dynamic shear rheometer testing and the mixture volumetrics. These results were then used with a model to estimate the dynamic complex modulus. Also shown is the 300,000 psi specification limit for resilient modulus ($300,000 \text{ psi} / 145 = 2,069 \text{ MPa}$).

Discussion

In the two samples tested it is noted that the short time of loading/high frequency stiffness is lower for the surface (sub-layer 1) of the cores (Figure 1). This is similar to that found for core LT-1 in our earlier (see letter dated November 13, 2007). However, in this set of testing the data is more extensive allowing the full master curve and rheology to be inspected. At the lower loading times/slow frequency the sub-layer 1 is stiffer for both cores evaluated. This implies that while these materials may be softer a more significant network exists which is most likely attributable to the polymer network. The suggestion that the surface is more binder rich made in the letter dated March 3rd, 2008 is consistent with these findings.

The stiffness at 25°C (which is comparable to the design stiffness) appears to be somewhat stiffer in this set of testing that that conducted during the original testing of the resilient modulus (see Figure 8). The stiffness at around 60 to 70°C is very similar to that obtained in 2007 with that data points at

60°C being around the average obtained for that set of earlier testing. This suggests that while some hardening has taken place at the intermediate conditions this has not translated into hardening at the higher temperatures.

We trust that this information is sufficient for your purpose.

Yours truly,



Geoffrey M. Rowe, P.E., Ph.D.
President
Abatech, Inc.

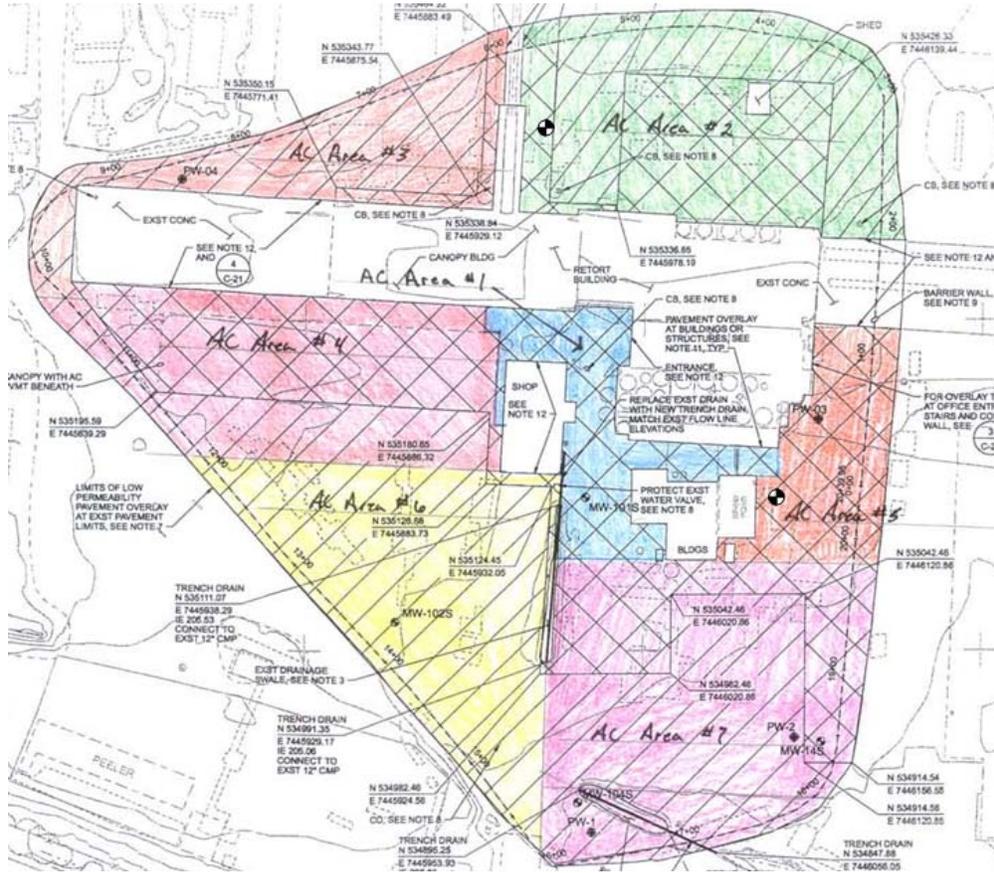


Figure 1: Core locations - N from area #2 and SE from area #5

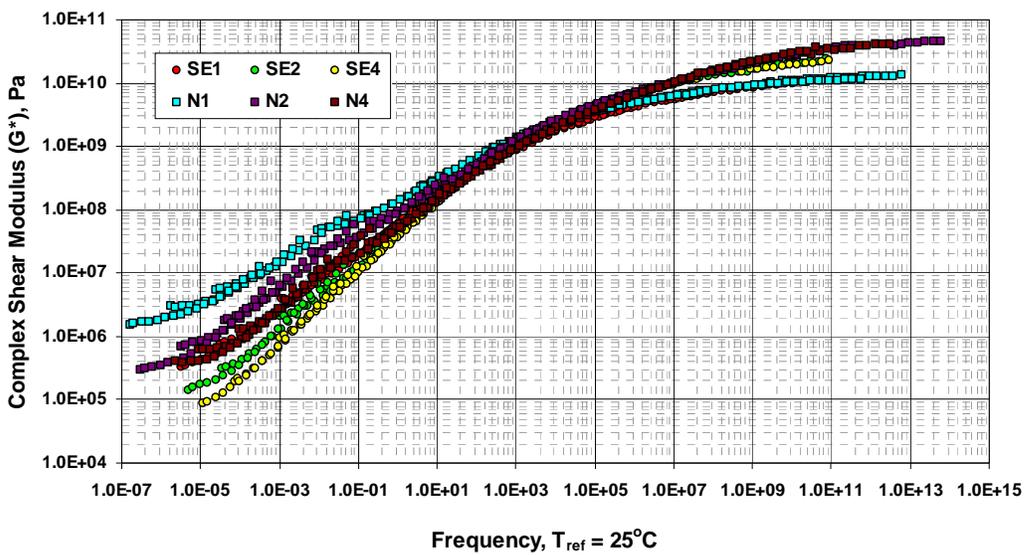


Figure 2: Mastercurve of complex shear stiffness modulus (G^*) at $25^\circ C$

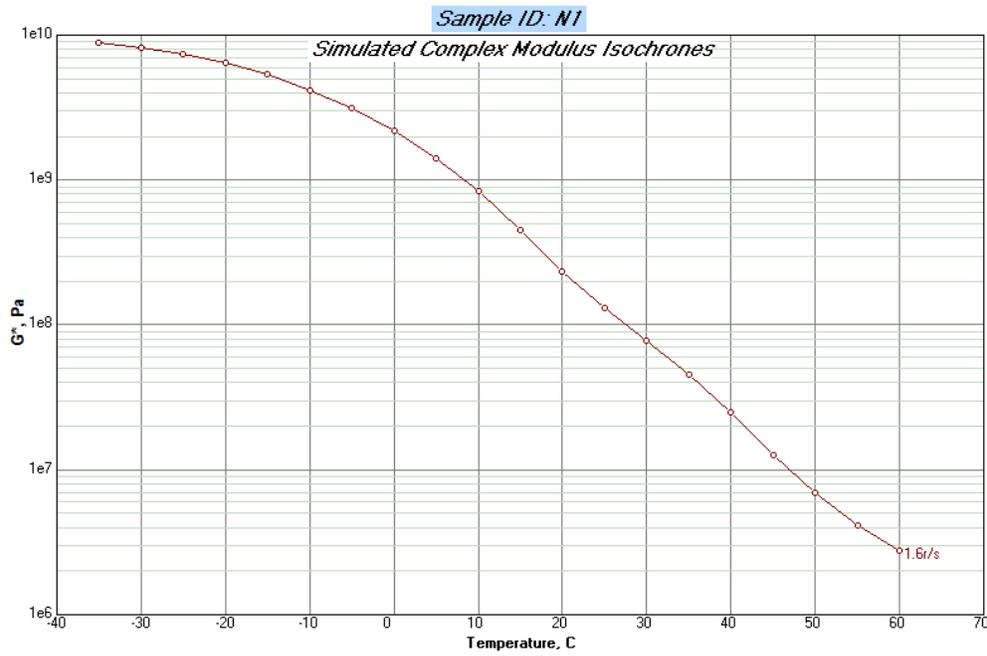


Figure 3: Isochronal plot of G^* , from master curve of core sample N, layer 1

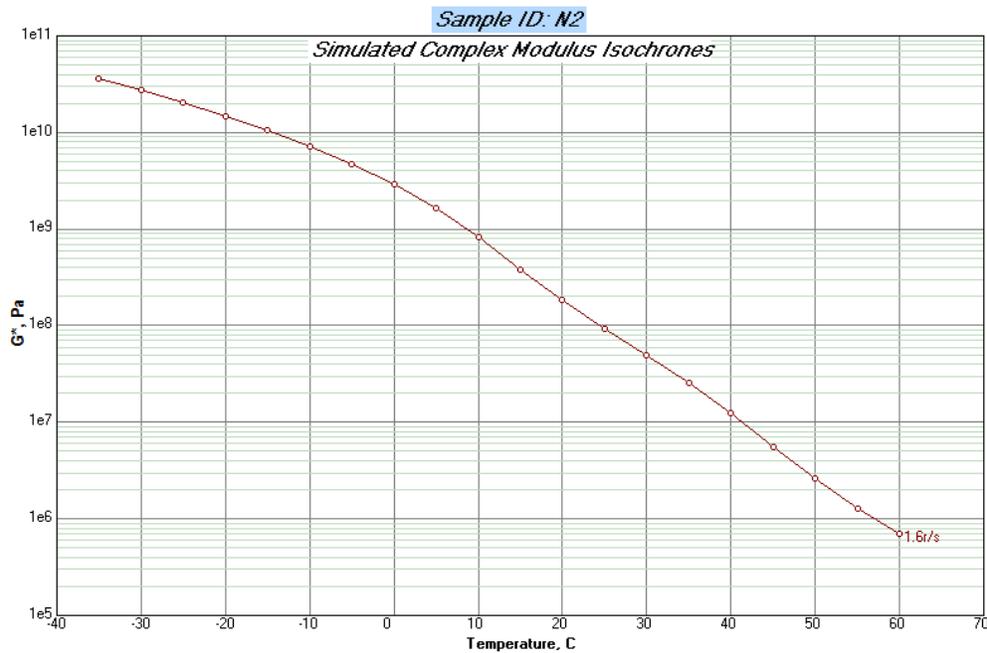


Figure 4: Isochronal plot of G^* , from master curve of core sample N, layer 2

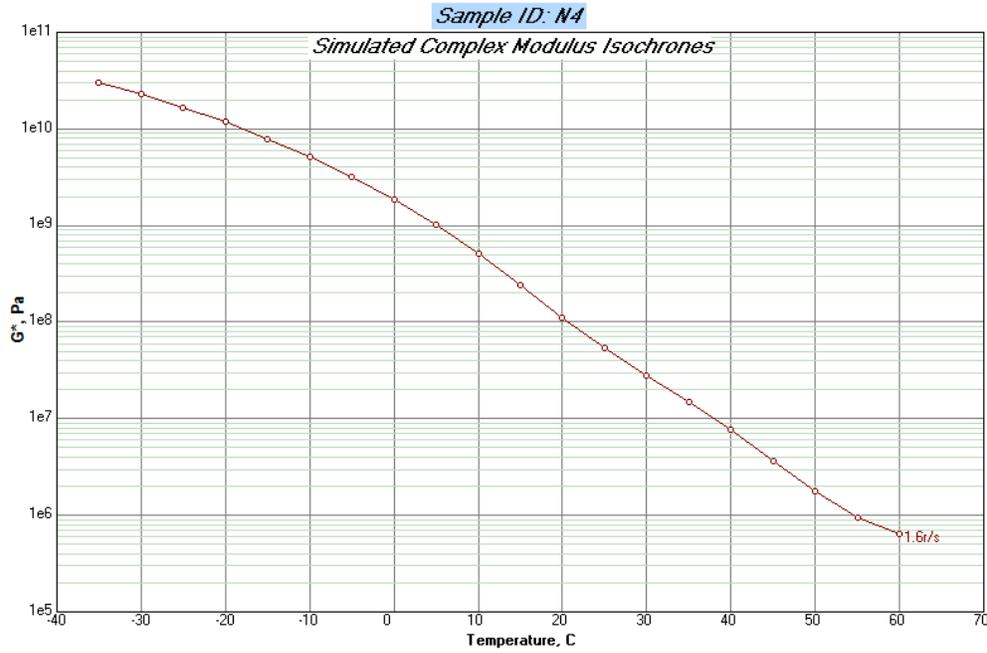


Figure 5: Isochronal plot of G*, from master curve of core sample N, layer 4

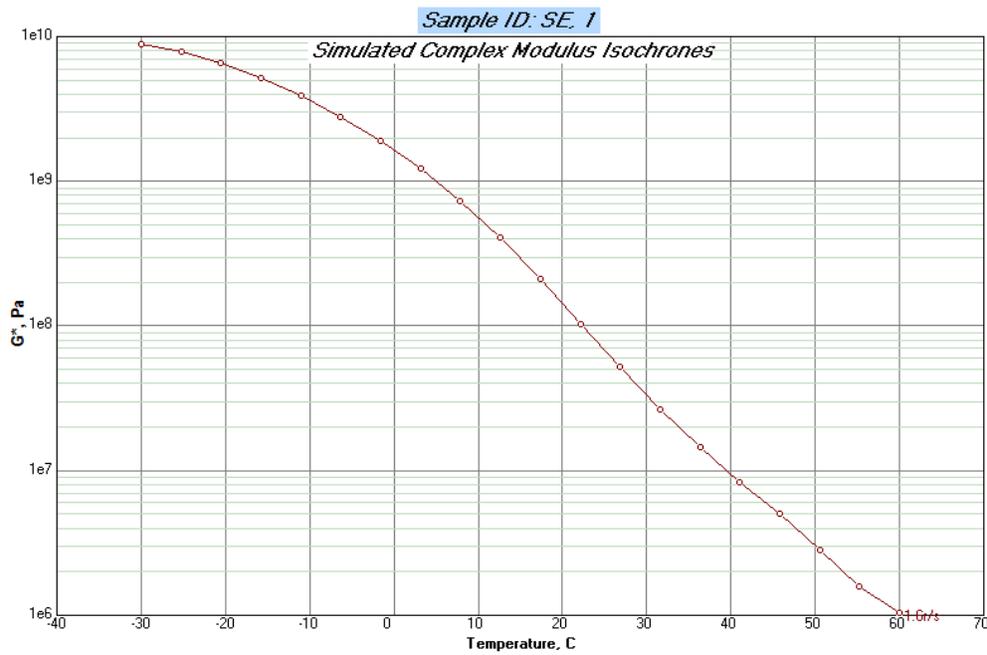


Figure 6: Isochronal plot of G*, from master curve of core sample SE, layer 1

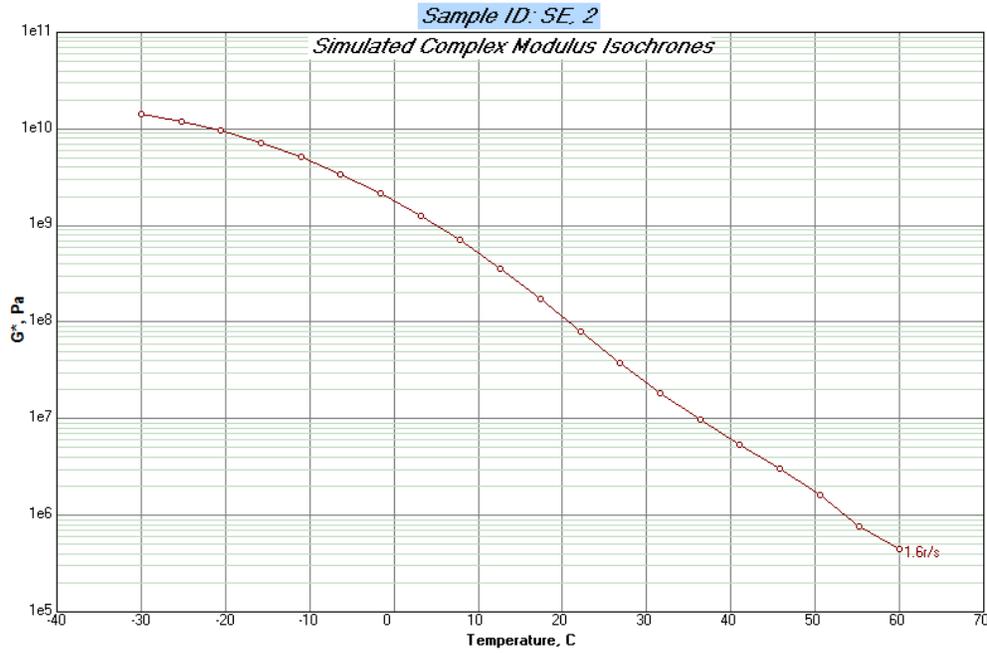


Figure 7: Isochronal plot of G*, from master curve of core sample SE, layer 2

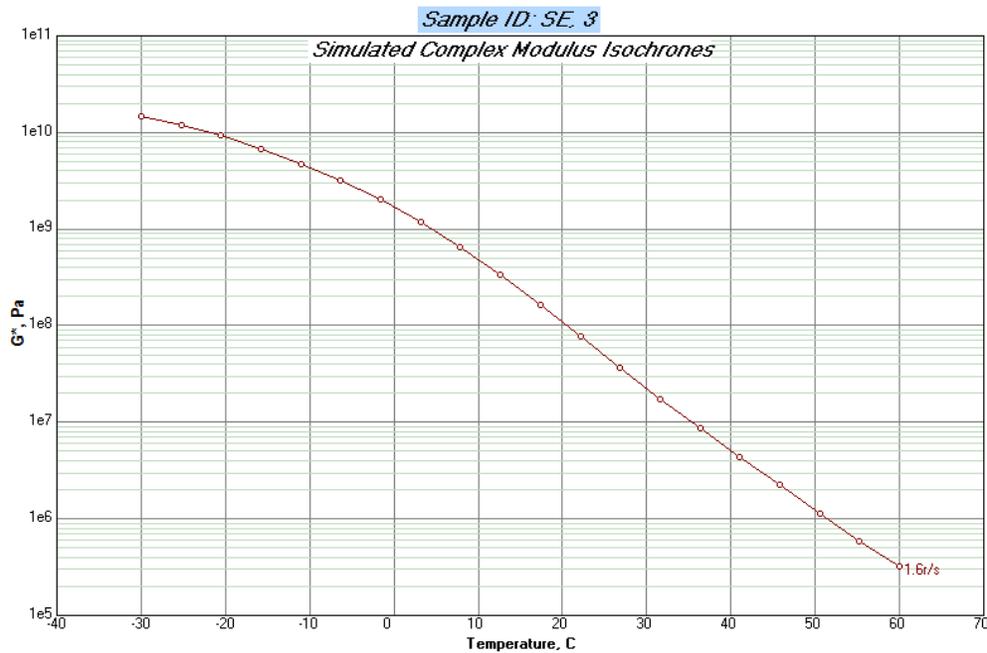


Figure 8: Isochronal plot of G*, from master curve of core sample SE, layer 4

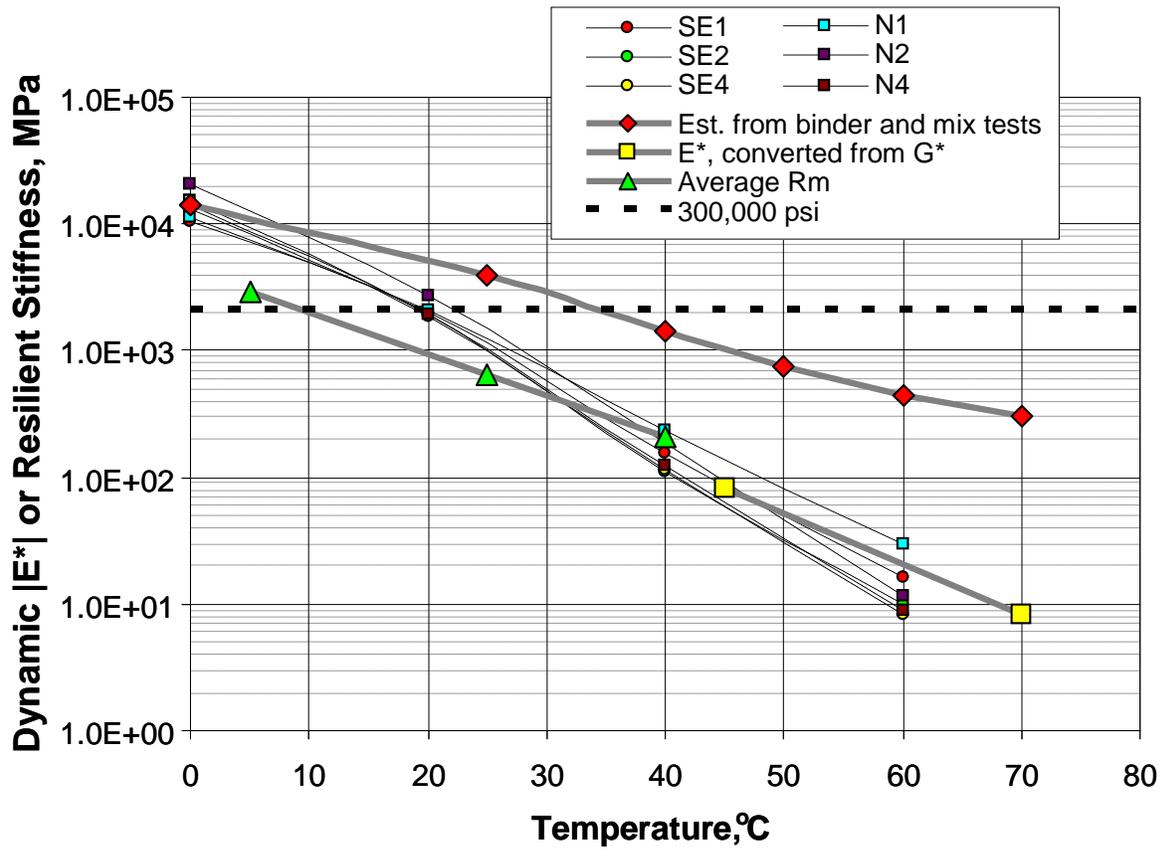
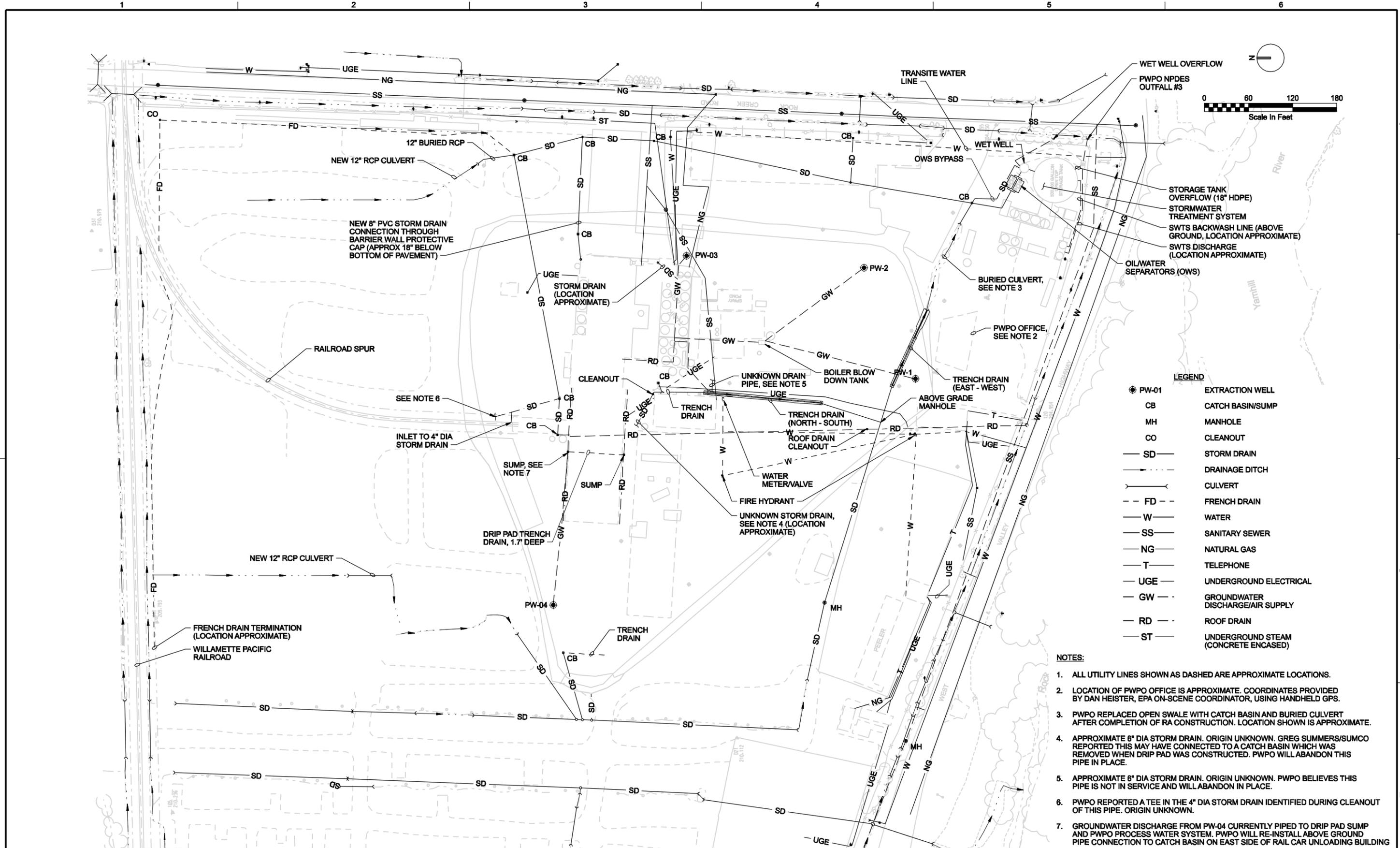


Figure 9: Stiffness over time, 1) design assumption – 300,000psi; 2) estimated from binder and mix tests; 3) from mixture specimen testing (average Rm); 4) from first set of mix slice testing (E* converted from G*); and 5) from second set of mix slice testing (SE1, SE2, SE4, N1, N2, N4)

Attachment F

Existing Underground Utility Plan, Operations and Maintenance Plan



DSGN	JA BOOTH								
DR	PA LONG								
CHK	JR TRACY	NO	DATE	DESCRIPTION	APVR	N			
APVD	TW DYE	NO.	DATE	REVISION	BY	APVD			

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



EPA
 REGION 10 SEATTLE, WASHINGTON
 TAYLOR LUMBER
 SHERIDAN, OREGON

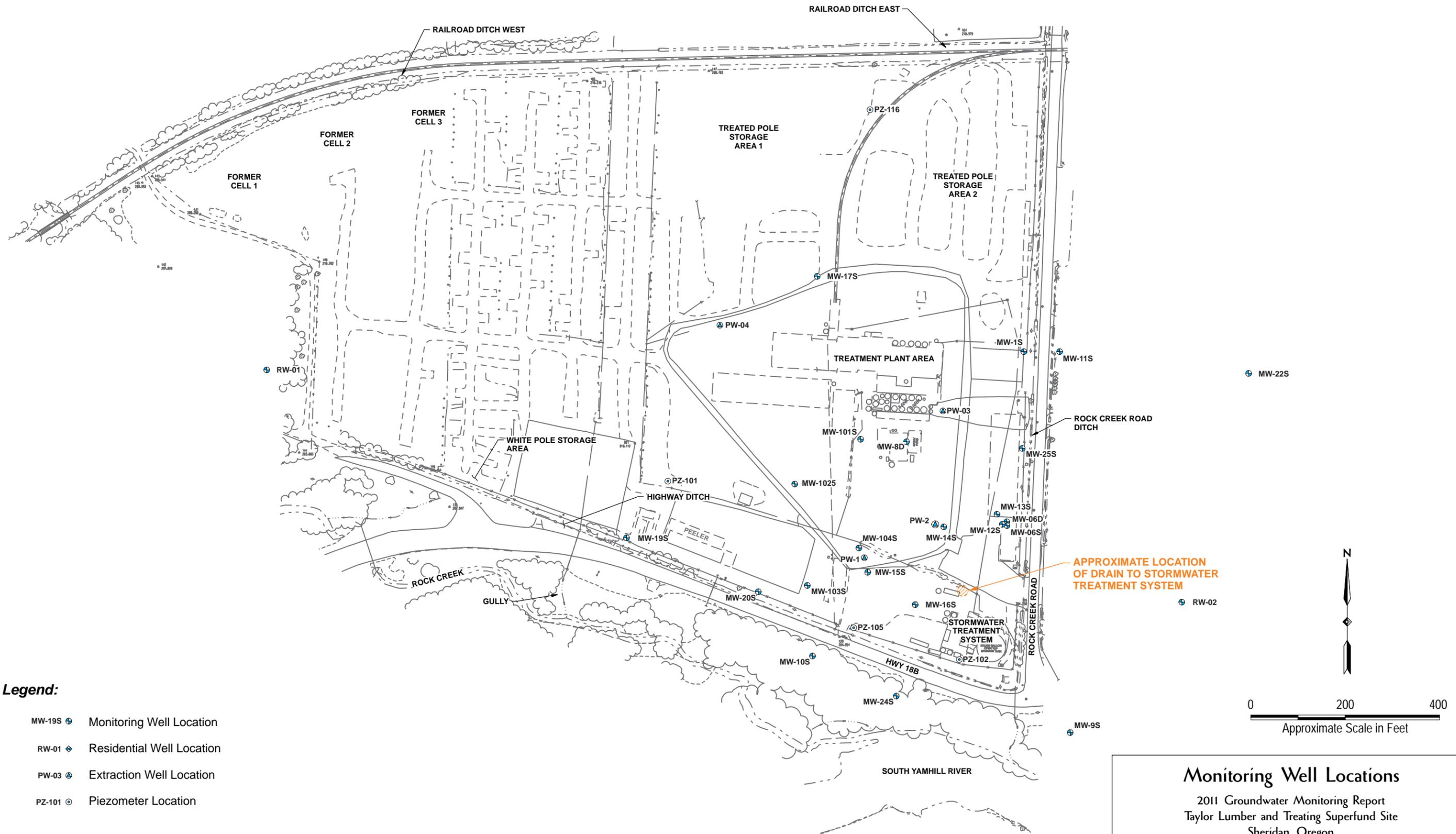
CIVIL
 EXISTING UNDERGROUND
 UTILITY PLAN

SHEET	2
DWG	C-2
DATE	OCTOBER 2009
PROJ	342790

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL. REUSE OF DOCUMENTS: CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

Attachment G

2011 Groundwater Monitoring Results, Tables and Figures



Legend:

- MW-19S ⊕ Monitoring Well Location
- RW-01 ⊕ Residential Well Location
- PW-03 ⊕ Extraction Well Location
- PZ-101 ⊕ Piezometer Location

NOTE: Base map prepared from a CH2MHILL Monitor Well Plan (6/11/2009).

Monitoring Well Locations

2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon



Project Number	1843-00	Figure	2
August 2011			

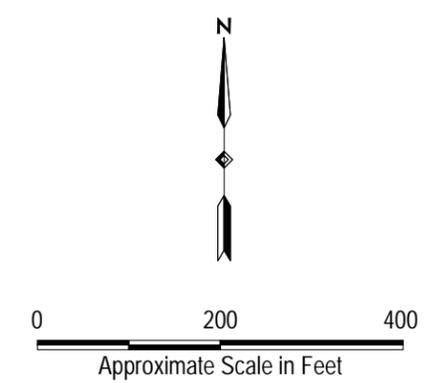


Table 3
 Groundwater Analytical Results
 Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
Outside Barrier Wall		
MW-1S	5/1/1999*	--
	Feb-02	<25
	May-02	6.9
	Aug-02	14
	Nov-02	14
	Feb-03	6 J
	May-03	3.3
	4/25/2011	<0.33
MW-6S	May-99	<25
	Feb-02	0.82
	May-02	0.88
	Aug-02	1
	Nov-02	0.88 J
	Feb-03	--
	May-03	--
	4/25/2011	<0.33
	4/25/2011 DUP	<0.33
MW-6D	4/25/2011	<0.33
MW-12S	May-99	--
	Feb-02	0.32
	May-02	0.3
	Aug-02	0.45
	Nov-02	0.22 J
	Feb-03	--
	May-03	--
	4/25/2011	<0.33
MW-13S	May-99	--
	Feb-02	0.25
	May-02	0.25
	Aug-02	2
	Nov-02	2.6 J
	Feb-03	<0.32
	May-03	<0.56
	4/25/2011	<0.33
MW-15S	May-99	--
	Feb-02	220
	May-02	220
	Aug-02	250
	Nov-02	210
	Feb-03	130
	May-03	190
	4/25/2011	12

Please refer to notes at end of table.

Table 3
 Groundwater Analytical Results
 Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
MW-16S	May-99	--
	Feb-02	10.0
	May-02	15.0
	Aug-02	28.0
	Nov-02	21 J
	Feb-03	11.0
	May-03	11.0
	4/25/2011	11.0
	4/25/2011 DUP	11.0
MW-19S	May-99	--
	Feb-02	--
	May-02	--
	Aug-02	0.067
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	0.061
	4/25/2011	<0.33
MW-20S	May-99	--
	Feb-02	--
	May-02	--
	Aug-02	0.013 J
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	0.027 J
	4/25/2011	<0.33
MW-25S	12/19/2005	424
	12/19/2005 DUP	396
	4/25/2011	230
MW-103S	May-99	5.6
	Feb-02	6.4
	May-02	7
	Aug-02	12
	Nov-02	4.7 J
	Feb-03	5
	May-03	20
	4/25/2011	1.6
PZ-101	May-99	<25
	Feb-02	0.14
	May-02	0.15
	Aug-02	0.14
	Nov-02	1.1 J
	Feb-03	--
	May-03	0.067
	4/25/2011	<0.33
PZ-102	May-99	<25
	Feb-02	0.37
	May-02	0.3
	Aug-02	0.34
	Nov-02	0.13 J
	Feb-03	0.23 J
	May-03	<0.32
	4/25/2011	<0.33

Please refer to notes at end of table.

Table 3
 Groundwater Analytical Results
 Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
PZ-105	May-99	82 J
	Feb-02	3.5
	May-02	8.2
	Aug-02	17
	Nov-02	4.0 J
	Feb-03	0.77
	May-03	2.6
	4/25/2011	<0.33
South of Highway 18B		
MW-9S	May-99	<24
	Feb-02	<0.047
	May-02	<0.049
	Aug-02	<0.023
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	<0.046
	4/25/2011	<0.33
MW-10S	May-99	<26
	Feb-02	0.099
	May-02	0.13
	Aug-02	0.38
	Nov-02	0.18 J
	Feb-03	<0.32
	May-03	0.13
	4/25/2011	<0.33
MW-24S	4/25/2011	<0.33
East of Rock Creek Road		
MW-11S	May-99	<25
	Feb-02	0.18
	May-02	0.18
	Aug-02	0.36
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	0.18
	4/25/2011	0.87 J
Residences		
RW-01	May-99	<25
	Feb-02	<0.045
	May-02	<0.049
	Aug-02	<0.046
	Nov-02	<0.32
	Feb-03	<0.045
	May-03	<0.046
	4/25/2011	<0.33

Please refer to notes at end of table.

Table 3
 Groundwater Analytical Results
 Taylor Lumber and Treating

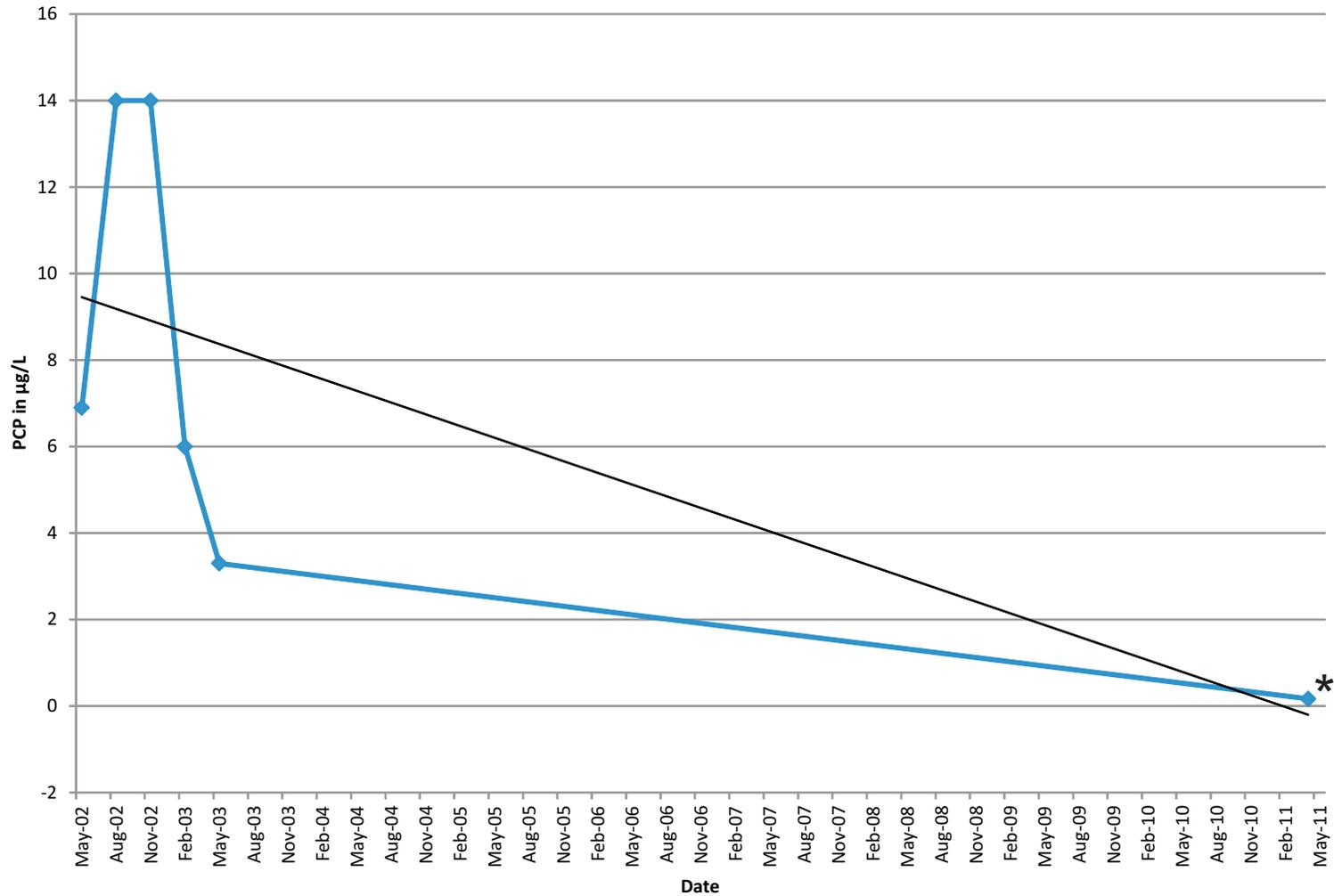
Well ID	Date of Measurement	Pentachlorophenol (µg/L)
RW-02	May-99	--
	Feb-02	<0.045
	May-02	0.026 J
	Aug-02	0.046 J
	Nov-02	<0.32
	Feb-03	--
	May-03	0.026 J
	4/25/2011	--

1. Sample dates for historical (pre-2005) data are not available; results available in month/year format only.
2. J = Detected value was below the lowest calibration point for the analysis; therefore, results are estimated.
3. -- = Not Sampled
4. **BOLD** indicates analyte detected above method reporting limit.
5. DUP = Duplicate sample.
6. * = RW-02 not sampled during April 2011 monitoring event. During the monitoring event the residential property owner indicated that the water well pump was no longer operable.

Appendix D

Trend Plots for Select Wells

MW-1S



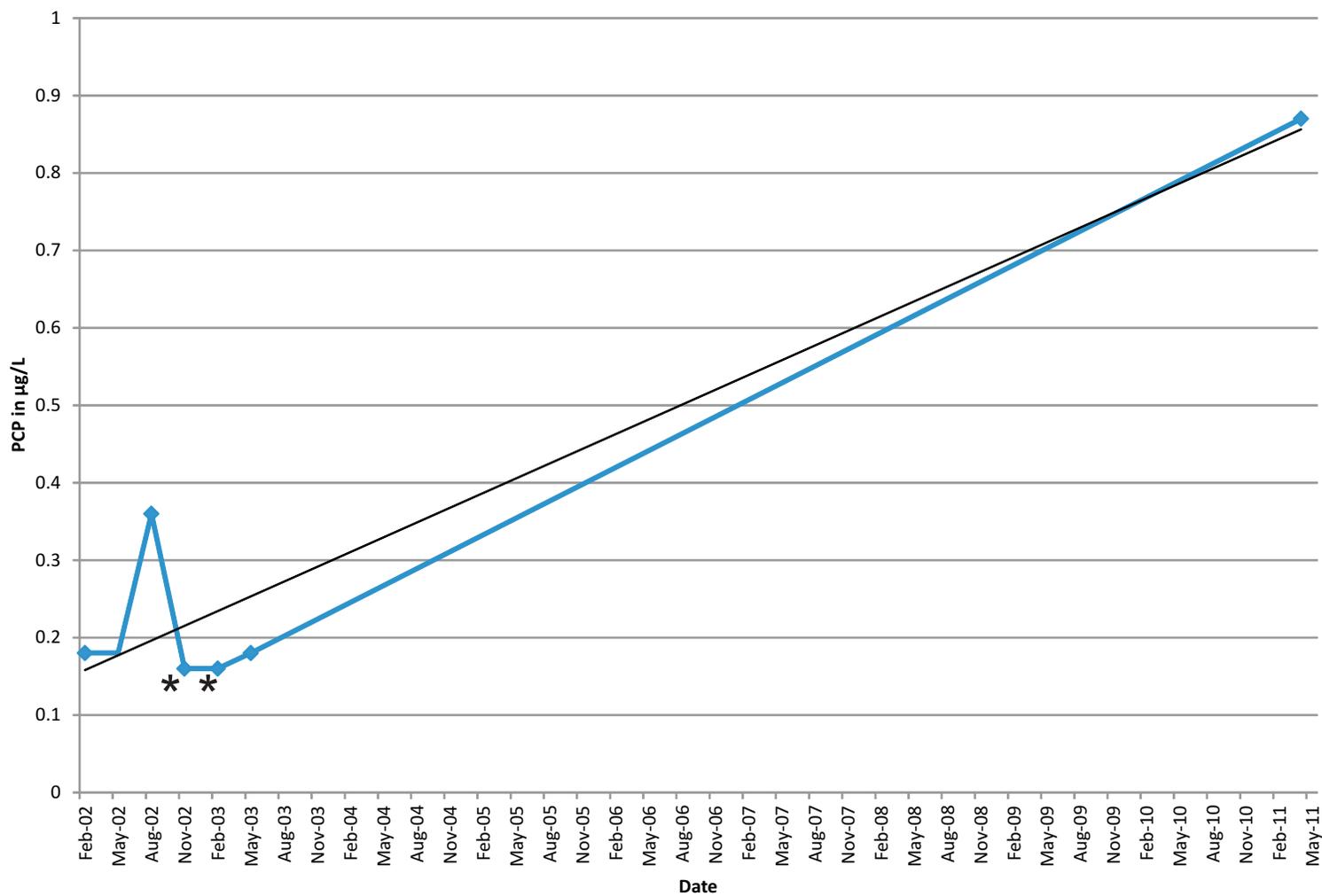
Legend:

- ◆— Pentachlorophenol Concentration (µg/L)
- Trendline
- * Value Below Method Reporting Limit (µg/L)

MW-1S
2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon

 Ash Creek Associates, Inc. Environmental and Geotechnical Consultants	Project Number	1843-00	Figure D-1
	September 2011		

MW-11S



Legend:

- ◆ Pentachlorophenol Concentration (µg/L)
- Trendline
- * Value Below Method Reporting Limit (µg/L)

MW-11S

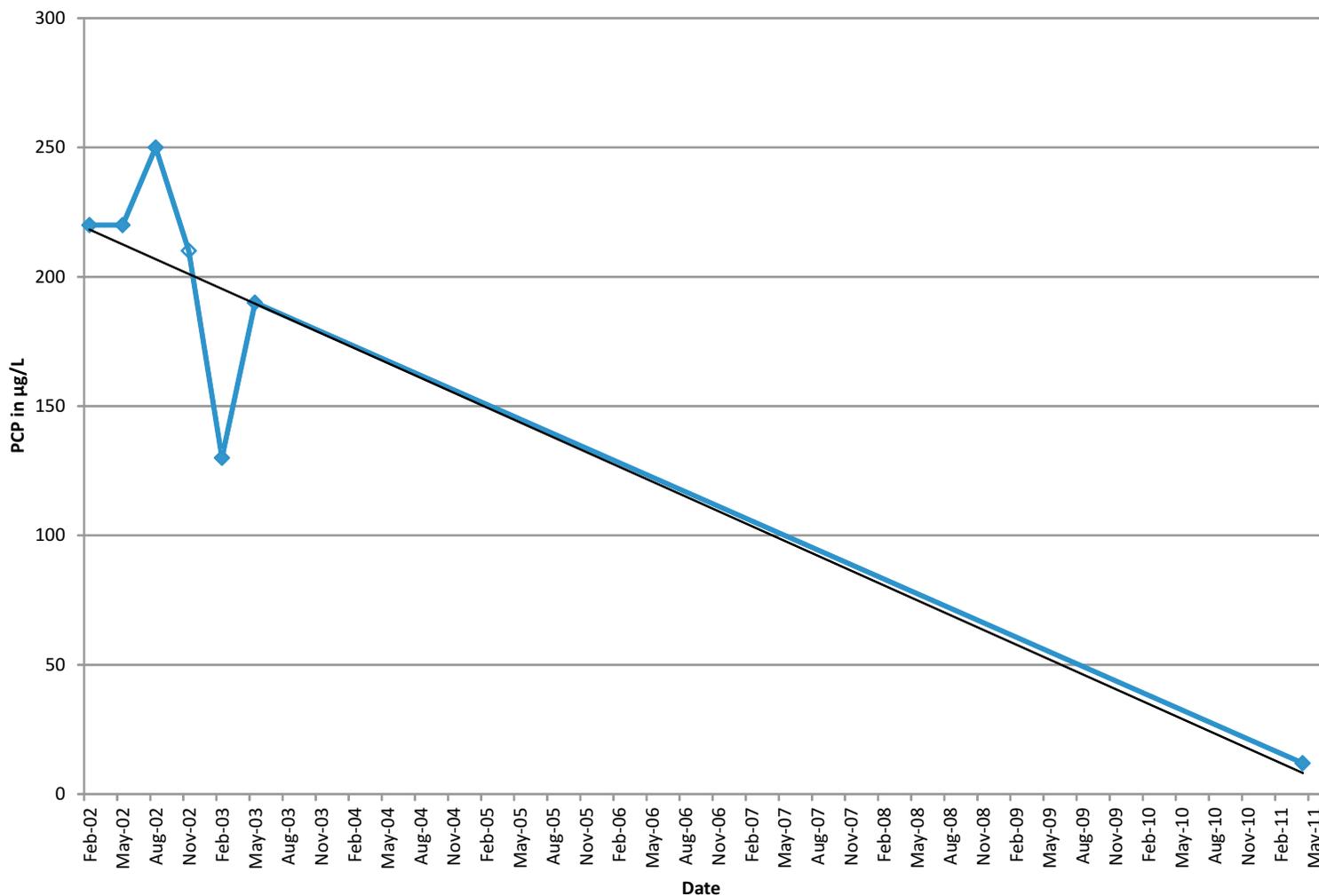
2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon



Project Number	1843-00
September 2011	

Figure
D-2

MW-15S



Legend:

- ◆— Pentachlorophenol Concentration (µg/L)
- Trendline

MW-15S

2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon

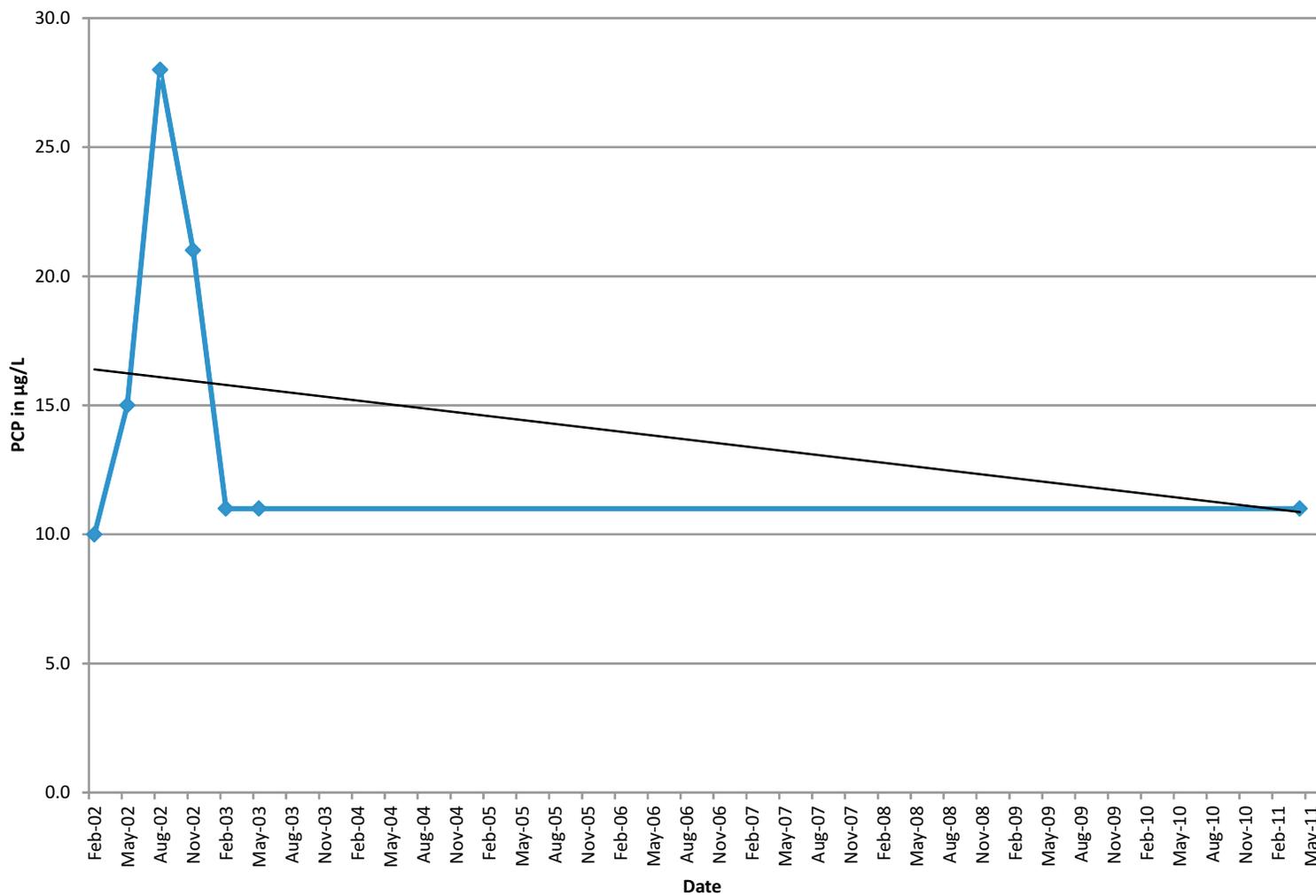


Project Number 1843-00

September 2011

Figure
D-3

MW-16S



Legend:

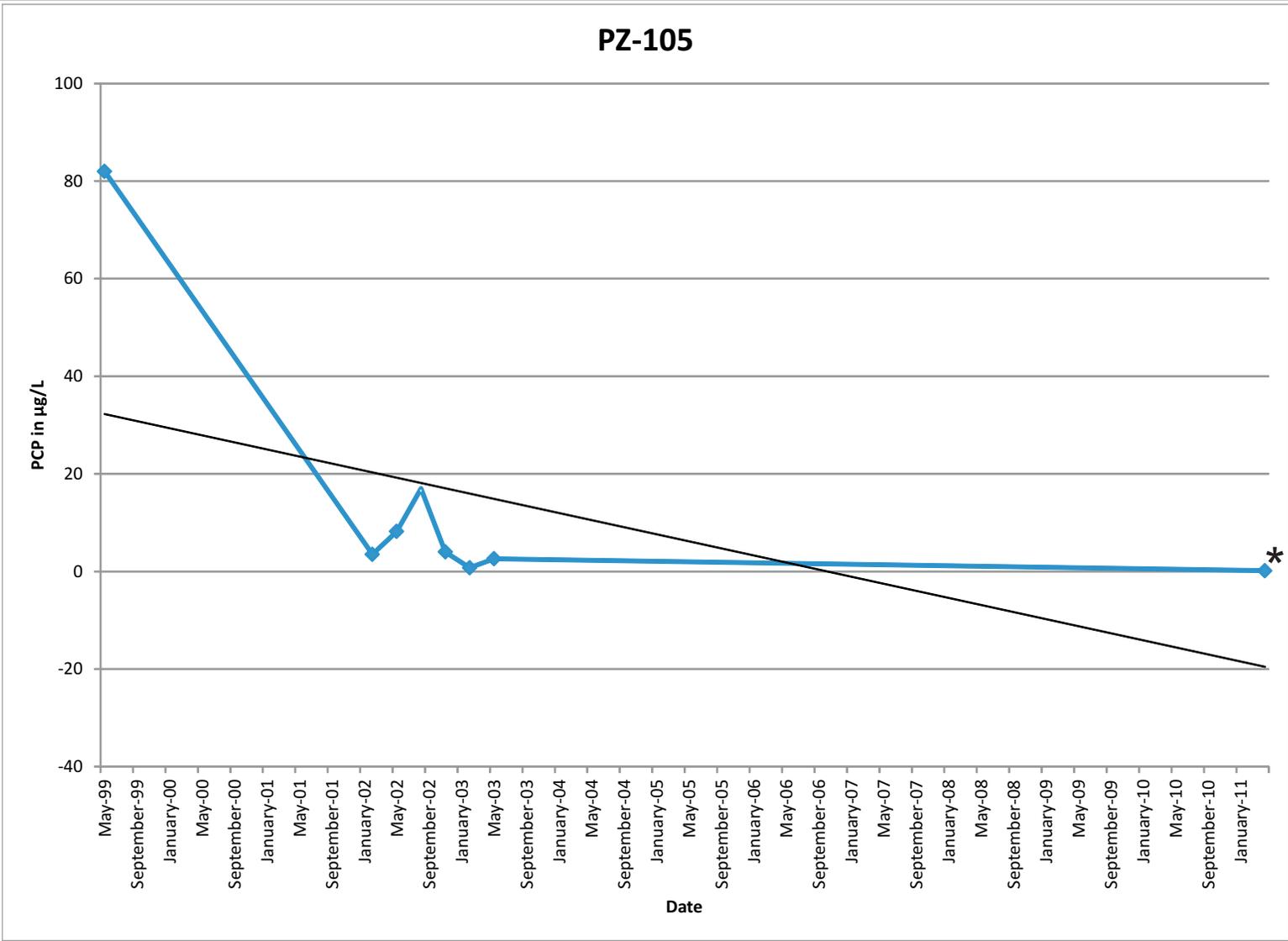
- ◆— Pentachlorophenol Concentration (µg/L)
- Trendline

MW-16S
2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon



Project Number	1843-00
September 2011	

Figure
D-4



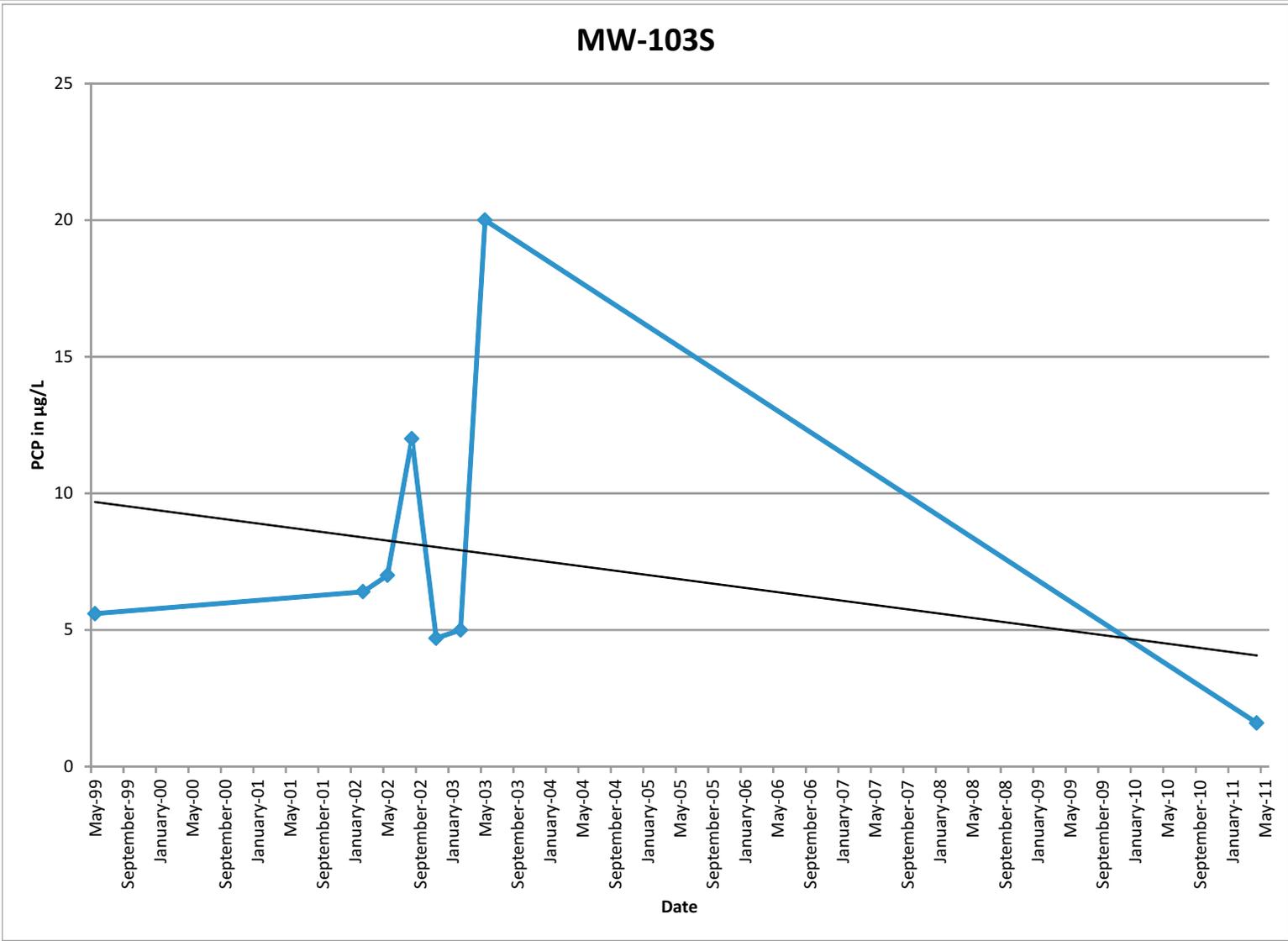
Legend:

- ◆ Pentachlorophenol Concentration (µg/L)
- Trendline
- * Value Below Method Reporting Limit (µg/L)

PZ-105

2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon

Ash Creek Associates, Inc. <small>Environmental and Geotechnical Consultants</small>	Project Number	1843-00	Figure
	September 2011		D-5



Legend:

- ◆ Pentachlorophenol Concentration (µg/L)
- Trendline

MW-103S

2011 Groundwater Monitoring Report
Taylor Lumber and Treating Superfund Site
Sheridan, Oregon

Ash Creek Associates, Inc. <small>Environmental and Geotechnical Consultants</small>	Project Number	1843-00	Figure
	September 2011		D-6

Attachment H

2012 Site Inspection Memorandum with Photographs and Checklist



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

April 27, 2012

MEMORANDUM

SUBJECT: Site Inspection for First Five-Year Review at Taylor Lumber and Treating Superfund Site, Sheridan, Oregon

FROM: Karen Keeley, EPA Superfund RPM

THRU:

TO: TLTCF Site File (Folder 6.21)

On April 27, 2012, the U.S. Environmental Protection Agency Region 10 (EPA), with Oregon Department of Environmental Quality (Oregon DEQ), conducted a site inspection at Taylor Lumber and Treating (TLT) Superfund Site, Sheridan, Oregon. The site inspection was in support of the first five-year review for the TLT Site. Participants included Karen Keeley (EPA), Norm Read (Oregon DEQ), Roland Mueller [Pacific Wood Preserving of Oregon (PWPO)], Terry Petko (PWPO), and Terry Belunes (Belunes Consulting, Inc., environmental contractor to PWPO).

Participants walked through the entire West Facility, including the Treatment Area and White Pole Area. After the site walk through, EPA and Oregon DEQ walked the ditches that abut the facility, and inspected the two gullies (South Yamhill River Gully and Rock Creek Gully) that were remediated and revegetated on the south side of Highway 18B. A short meeting was held in PWPO offices following the walk through. Notes from the day are listed below, and photographs from the site inspection are provided in Attachment A. Other recent photographs of the site are provided in recent documents submitted by PWPO to EPA (e.g., 2011 Environmental Audit Report, Soil Management Plans and Reports, Penta Block Dissolving Report). A site inspection checklist, provided as a template in EPA Five-Year Review Guidance, is completed and provided in Attachment B.

- Asphalt Cap – Issues identified are as follows: 1) two depressions (see photos in Attachment A) were noted in the southeast quadrant of the asphalt; PWPO will repair these depressions with Jerry Thayer (MatCon representative); 2) one depression (see photo in Attachment A), which was previously identified to the agency as due to a ‘fork lift’ error, will be re-repaired since the earlier fix by Jerry Thayer (MatCon rep) is not holding up; Mr. Thayer is scheduled to fix that repair on May 1, 2012; 3) Oregon DEQ will ensure that Mr. Thayer conducts the annual inspection in July or August 2012; 4) PWPO will paint the slurry wall line when weather permits (portions of the line are currently marked by acceptable glued ‘line markers’ (see photo); and, 5) PWPO will ask Mr. Thayer whether the significant accumulation of soil and woody debris (where the poles are stored near the north-south trench drain prior to going to the peeler) has the potential to adversely affect the longevity and/or permeability of the asphalt. PWPO will

specifically mention this issue in the BMP Plan and will identify the type of BMP to be implemented for this issue.

No softness in the asphalt was noted. No issues were identified near the new Penta Block Dissolving Building (which is built directly on the asphalt consistent with the Block Dissolving Report). PWPO indicated some ponding of stormwater still occurs but this issue has been discussed previously, and responded to by the EPA and Oregon DEQ. The sump pump in the rail shed continues to adequately deal with the storm water that flows into the shed.

Observations show that adequate dirt/gravel abuts the edge of the outside perimeter of the asphalt cap. In the southeastern portion of the asphalt cap, where the main truck road comes in, PWPO will be adding fill and placing a new concrete or asphalt road, which will minimize the wear to the edge of the asphalt and provide a smooth transition to the cap and work area. EPA is in agreement with this plan, and PWPO stated that they will ensure that the edge of the asphalt cap is maintained and that it will not be damaged or 'dug into' as part of the construction project.

- Groundwater extraction wells – No issues noted.
- New construction at the site. EPA observed the new kiln building, new underground conveyance system in the area of the kiln (near TPS2), and the new block dissolving building/air stripper.
- White Pole Area (northwest corner, former Soil Stockpile Area)/TPS1/TPS2 – EPA observed the areas where excavation and backfilling occurred in 2007, and no settling was noticeable, and minimal potholing was observed. Areas appeared flat and even.
- Ditches – Ditches appeared free-flowing and there did not appear to be any erosion from the edges of the ditches that had been excavated as part of the site remedy. Rock placed in the bottom and sides of ditches in 2007 appeared to be adequate and in good shape. There did not appear to be any soil erosion in the ditches along Rock Creek Road, and very minimal sediment deposition was evident in that ditch. Minimal vegetation appeared to be growing in ditches. It was clear that the railroad had 're-done' the track on the north side of the property, and that in that process some of the ditches on the north side of the site and been 're-arranged' or filled in as part of the railroad work. Dirt piles from the railroad process were obvious.

The southern ditch along Highway 18B had several areas of staining on vegetation and soil (unknown origin – tannins?) and deposition of silt (similar to an alluvial fan) in the bottom of the ditch below the stained area (see photograph in Attachment A). In the upland area adjacent to the staining, EPA observed that a clear path of water (and some oil and silt) was moving from the peeler area, off of the asphalt cap, into the mud, under the fence, and into the ditch. The oil was evident as sheening on the surface of mud and water near the peeler. PWPO was unaware of this situation, and indicated that they would remedy the problem, and would notify EPA and Oregon DEQ of the resolution.

- South Yamhill River Gully, South of Highway 18B – The main permitted discharge from PWPO that runs south under the highway appeared to be free flowing, and the construction of the ‘new’ rock/concrete face on the north culvert appeared to be in good shape (see photograph in Attachment A). On the south side of the culvert, the water flowed freely; the rocks on the bottom and side were still present; and there did not appear to be any erosion that was different than that present prior to the remediation. No sediment appeared to be deposited in the main gully.
- Rock Creek Gully, South of Highway 18B - The remediation that was performed on the drainage to Rock Creek Gully, which receives limited stormwater, was overgrown (as expected) and similar to the condition prior to EPA’s grubbing and excavation in that area.
- Stockpiles of Soil – Soil was stockpiled onsite from the Electrical Vault Work. The material appeared to be adequately protected from potential erosion (i.e., plastic sheeting coverage was adequate). PWPO indicated that a trucking firm was being identified to remove the material. Soil that was picked up as part of the sweeping of the asphalt cap, and filter cake (from stormwater treatment system), was stored on a liner under a covered building. It will be disposed of offsite.
- Trenches – The two main trenches built as part of the site remedy appeared in good condition, and all covers/grates were in good condition. EPA recommended that soil draining into the ditches be controlled to minimize the amount of material that must be processed in the treatment system.
- Onsite activities. The site was very active, with more product onsite than observed by EPA in previous years. The White Pole area is very muddy, and although PWPO appears to be actively cleaning the asphalt surface (as required by O&M Plan) in the Treatment Area, the mud/dirt/woody debris that is tracked on the asphalt could be minimized with an improved drainage system in the White Pole Area. PWPO has submitted a plan to the agencies for this work.
- Future submittals. PWPO agreed: 1) to send a CD to EPA with the final 2012 Environmental Audit Report on April 30th; 2) to send the final BMP Plan, revised to include a BMP regarding ‘woody debris’ accumulating on the asphalt surface, to EPA by May 3 (PWPO will send EPA an email with Mr. Thayer’s opinion on the woody debris and whether it could potentially adversely impact the impermeability and/or longevity of the asphalt cap); 3) to resolve the issue of the oil draining into the ditch from the peeler area and will send an email summarizing the issue resolution by May 3; 4) to send EPA an email summarizing the site visit by Jerry Thayer, who was scheduled to be onsite to fix the earlier asphalt repair near the Block Dissolving Building and to fix the two depressions noted on the south side of the asphalt; 5) to submit the Tank Integrity Result Report to EPA. The report is completed (integrity testing for all tanks, not just oil tanks) and PWPO will send the report, as well as a letter describing PWPO actions completed to date and planned future actions to address any concerns/recommendations set forth in that report.

- PWPO did not provide any comments on the draft FYR, which had been shared with them since their company was mentioned throughout the report.

Attachment A

Photographs

Stormwater
Treatment
System



Paint stripe and
yellow markers
showing
centerline of
slurry wall on
asphalt

Covered
stockpile of soils
from vault
excavation;
awaiting off-site
disposal



Poles near
retort, with new
kiln in center of
background

Retorts and poles



Patch repair in MatCon asphalt from installation of new power pole

Patch repair in MatCon asphalt from installation of new power pole



Treatment Area at PWPO facility

Asphalt patch
(applied by
Jerry Thayer) in
area of fork lift
puncture; will be
re-repaired on
May 1, 2012



Rail shed with
sump at
southern end to
pump
stormwater to
treatment
system

Dirt and debris
swept from
MatCon asphalt
cap, awaiting
off-site disposal



Filter cake from
stormwater
treatment
system,
awaiting off-site
disposal

White Pole
Storage Area;
vicinity of area
proposed for
Culvert Work



White Pole
Storage Area;
proposed
culvert work
should minimize
noticeable
drainage issues

One of two
depressions in
MatCon asphalt
cap (SW
quadrant); will be
repaired on May
1, 2012 by Jerry
Thayer (MatCon
rep)



Woody debris
accumulated on
MatCon asphalt
cap; PWPO will
discuss this issue
with the MatCon
rep and will
prepare a BMP
for this issue

Grating for one of two trench drains constructed as part of site remedy



Ditch along Rock Creek Road (east side of facility)

Southern terminus of ditch along Rock Creek Road (flows under Highway 18B)



Discharge point for NPDES-permitted discharge; EPA removal action conducted in this South Yamhill River Gully

Plantings on the
east side of
South Yamhill
River Gully,
South of
Highway 18B



Plantings on the
east side of
South Yamhill
River Gully

Area of Rock
Creek Gully that
was excavated
and planted



Area of Rock
Creek Gully that
was excavated
and planted



Observed discharge from the peeler area to the ditch along Highway 18B; PWPO sampled stained soil/grass for tannins/lignins and petroleum.

Attachment B

Site Inspection Checklist

Five-Year Review Site Inspection Checklist

(The template for this Site Inspection Checklist is provided in Appendix D of EPA's Comprehensive Five-Year Review Guidance, EPA 540-R-01-007, OSWER No. 9355.7-03B-P June 2001. "N/A" refers to "not applicable." "FYR" refers to Five-Year Review.)

INFORMATION CHECKED BELOW IS BASED ON THE SITE INSPECTION AND ON REVIEW OF DOCUMENTS PREVIOUSLY PROVIDED BY PWPO TO THE AGENCIES, PARTICULARLY THE 2011 ENVIRONMENTAL AUDIT REPORT.

I. SITE INFORMATION							
Site name: Taylor Lumber and Treating	Date of inspection: 4/27/2012						
Location and Region: EPA Region 10, Seattle, WA	EPA ID: ORD009042532						
Agency, office, or company leading the five-year review: EPA Region 10	Weather/temperature: Rain Showers						
<p>Remedy Includes: (Check all that apply)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Landfill Waste Area cover/containment (asphalt) <input checked="" type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input checked="" type="checkbox"/> Groundwater pump and treatment <input checked="" type="checkbox"/> Surface water collection and treatment Other _____ _____ </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Monitored natural attenuation <input checked="" type="checkbox"/> Groundwater containment <input checked="" type="checkbox"/> Vertical barrier walls </td> </tr> </table>		<input checked="" type="checkbox"/> Landfill Waste Area cover/containment (asphalt) <input checked="" type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input checked="" type="checkbox"/> Groundwater pump and treatment <input checked="" type="checkbox"/> Surface water collection and treatment Other _____ _____	<input type="checkbox"/> Monitored natural attenuation <input checked="" type="checkbox"/> Groundwater containment <input checked="" type="checkbox"/> Vertical barrier walls				
<input checked="" type="checkbox"/> Landfill Waste Area cover/containment (asphalt) <input checked="" type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input checked="" type="checkbox"/> Groundwater pump and treatment <input checked="" type="checkbox"/> Surface water collection and treatment Other _____ _____	<input type="checkbox"/> Monitored natural attenuation <input checked="" type="checkbox"/> Groundwater containment <input checked="" type="checkbox"/> Vertical barrier walls						
<p>Attachments: <input type="checkbox"/> Inspection team roster attached - See Memo <input type="checkbox"/> Site map attached – See FYR report</p>							
II. INTERVIEWS (Check all that apply)							
<p>1. O&M site manager Terry Petko, Director of Environmental Health and Safety, PWPO ; Roland Mueller, PWPO.</p> <p>Interviewed: <input checked="" type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____</p> <p>Problems, suggestions; <input type="checkbox"/> Report attached _____</p> <p>None. Discussed delivery of documents for next week: Final BMP Plan, Final 2012 Environmental Audit, and Tank Integrity Test Results and Plan. Soil pile will be disposed once trucking firm is selected. Upcoming work includes culvert work, visit by Jerry Thayer (MatCon rep) on next Monday.</p>							
<p>2. O&M staff <u> N/A </u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: center;">Name</td> <td style="width: 20%; text-align: center;">Title</td> <td style="width: 20%; text-align: center;">Date</td> </tr> <tr> <td colspan="3"> Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____ Problems, suggestions; <input type="checkbox"/> Report attached _____ _____ </td> </tr> </table>		Name	Title	Date	Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____ Problems, suggestions; <input type="checkbox"/> Report attached _____ _____		
Name	Title	Date					
Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____ Problems, suggestions; <input type="checkbox"/> Report attached _____ _____							
<p>3. Local regulatory authorities and response agencies (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.</p>							

Agency: Oregon DEQ
 Contact: Norm Read, Project Manager for O&M that is state-responsibility at this fund-lead site

Problems; suggestions; Report attached __Oregon DEQ completed 2012 groundwater sampling in early April 2012. GW Monitoring Report is under preparation. Oregon DEQ will ensure that Jerry Thayer (MatCon rep) does the required annual inspection in July or August 2012.

4. **Other interviews-N/A** (optional) Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**

x O&M manual	x Readily available	x Up to date <input type="checkbox"/> N/A
x As-built drawings	x Readily available	x Up to date <input type="checkbox"/> N/A
x Maintenance logs	x Readily available	x Up to date <input type="checkbox"/> N/A

Remarks _____

2. **Site-Specific Health and Safety Plan** xReadily available Up to date

Contingency plan/emergency response plan Readily available Up to date

Remarks__ Revised SPCC will be completed within the month. Note that SPCC is not Superfund oversight responsibility.

3. **O&M and OSHA Training Records-N/A** Readily available Up to date

Remarks_____

4. **Permits and Service Agreements**

X Air discharge permit	X Readily available	x Up to date <input type="checkbox"/> N/A
X Effluent discharge	X Readily available	x Up to date <input type="checkbox"/>
<input type="checkbox"/> Waste disposal, POTW	<input type="checkbox"/> Readily available	N/A <input type="checkbox"/> Up to date <input type="checkbox"/>
<input type="checkbox"/> Other permits _____	<input type="checkbox"/> Readily available	N/A <input type="checkbox"/> Up to date <input type="checkbox"/>

Remarks__ Permits are in 2012 Environmental Audit Report. _____

5. **Gas Generation Records-N/A** Readily available Up to date
 N/A

Remarks_____

6. **Settlement Monument Records-N/A** Readily available Up to date
 N/A
 Remarks _____

7. **Groundwater Monitoring Records** x Readily available Up to date
 Remarks _____

8. **Leachate Extraction Records** Readily available Up to date
 x N/A
 Remarks _____

9. **Discharge Compliance Records**
 Air Readily available Up to date
 N/A
 x Water (effluent) x Readily available Up to date
 N/A
 Remarks Air Permit not reviewed by EPA Superfund (unrelated to EPA remedy). Reviewed NPDES DMRS in 2012 Environmental Audit.

10. **Daily Access/Security Logs** Readily available Up to date
 x N/A
 Remarks _____

IV. O&M COSTS

1. **O&M Organization**
 State in-house Contractor for State
 PRP in-house Contractor for PRP
 Federal Facility in-house Contractor for Federal Facility
 x Other_N/A – Not an EPA issue for this fund lead site (O&M is paid for by PWPO and Oregon DEQ).

2. **O&M Cost Records**
 Readily available Up to date
 x Funding mechanism/agreement in place – State Superfund Contract; Amended Agreement and Covenant not to Sue (EPA/PWPO); and, Amended Prospective Purchaser Agreement (ODEQ/PWPO).
 Original O&M cost estimate _____ Breakdown attached
 Total annual cost by year for review period if available
 From _____ To _____ Total cost Breakdown attached
 Date Date
 From _____ To _____ Total cost Breakdown attached
 Date Date
 From _____ To _____ Total cost Breakdown attached
 Date Date
 From _____ To _____ Total cost Breakdown attached
 Date Date

Remarks_ Issue regarding 0.1 acre ODOT property will be discussed in FYR.			
D. General			
1.	Vandalism/trespassing	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident
Remarks _____ _____			
2.	Land use changes on site	Remarks_ No land use changes onsite. _____ _____	
3.	Land use changes off site	Remarks_ No land use changes off site. _____ _____	
VI. GENERAL SITE CONDITIONS			
A. Roads <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Roads damaged	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Roads adequate <input checked="" type="checkbox"/> N/A
Remarks _____ _____			
B. Other Site Conditions			
Remarks See Memo. White Pole area had very muddy road conditions.			
VII. LANDFILL COVERS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
A. Landfill Waste Area – Asphalt Surface			
1.	Settlement (Low spots)	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Settlement not evident
Areal extent _____ Depth _____			
Remarks_ Overall asphalt surface looked good. No soft spots observed.			
2.	Cracks	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Cracking not evident
Lengths _____ Widths _____ Depths _____			
Remarks _____ _____			
3.	Erosion-N/A	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
Areal extent _____ Depth _____			
Remarks _____ _____			
4.	Holes	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Holes not evident
Areal extent_ Two small depressions____ Depth_ 2 inches est. _____			
Remarks_ Two depressions noted (south side; see photo) plus one repair patch that needs to be fixed. Jerry Thayer (MatCon rep) will be at site to repair. Edge of asphalt had gravel going up to edge; edge of asphalt near main road/truck			

	Areal extent _____	Depth _____	Remarks _____ _____
2.	Material Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of degradation
	Material type _____	Areal extent _____	Remarks _____ _____
3.	Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of erosion
	Areal extent _____	Depth _____	Remarks _____ _____
4.	Undercutting	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of undercutting
	Areal extent _____	Depth _____	Remarks _____ _____
5.	Obstructions	Type _____	<input type="checkbox"/> No obstructions
	<input type="checkbox"/> Location shown on site map	Areal extent _____	Size _____
	Remarks _____ _____		
6.	Excessive Vegetative Growth	Type _____	
	<input type="checkbox"/> No evidence of excessive growth		
	<input type="checkbox"/> Vegetation in channels does not obstruct flow		
	<input type="checkbox"/> Location shown on site map	Areal extent _____	
	Remarks _____ _____		
D. Cover Penetrations <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Gas Vents	<input type="checkbox"/> Active <input type="checkbox"/> Passive	<input type="checkbox"/> Routinely sampled
	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Good condition
	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs Maintenance	
	<input type="checkbox"/> N/A		
	Remarks _____ _____		
2.	Gas Monitoring Probes	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning
	<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Routinely sampled
			<input type="checkbox"/> Good condition
			<input type="checkbox"/> Needs Maintenance
			<input type="checkbox"/> N/A
	Remarks _____ _____		
3.	Monitoring Wells (within surface area of landfill)	<input checked="" type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning
	<input checked="" type="checkbox"/> Routinely sampled		<input checked="" type="checkbox"/> Good condition
	<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs Maintenance
			<input type="checkbox"/> N/A
	Remarks _____ _____		

4.	Leachate Extraction Wells-N/A <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Evidence of leakage at penetration Remarks _____ _____	<input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A
5.	Settlement Monuments <input type="checkbox"/> Located Remarks _____ _____	<input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A
E. Gas Collection and Treatment <input type="checkbox"/> Applicable X N/A		
1.	Gas Treatment Facilities <input type="checkbox"/> Flaring <input type="checkbox"/> Thermal destruction <input type="checkbox"/> Collection for reuse <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____	
2.	Gas Collection Wells, Manifolds and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____	
3.	Gas Monitoring Facilities (<i>e.g.</i> , gas monitoring of adjacent homes or buildings) <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____	
F. Cover Drainage Layer <input type="checkbox"/> Applicable X N/A		
1.	Outlet Pipes Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____	
2.	Outlet Rock Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____	
G. Detention/Sedimentation Ponds <input type="checkbox"/> Applicable X N/A		
1.	Siltation Areal extent _____ Depth _____ <input type="checkbox"/> N/A <input type="checkbox"/> Siltation not evident Remarks _____ _____	
2.	Erosion Areal extent _____ Depth _____ <input type="checkbox"/> Erosion not evident Remarks _____ _____	
3.	Outlet Works <input type="checkbox"/> Functioning <input type="checkbox"/> N/A	

	Remarks _____ _____	
4.	Dam <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____	
H. Retaining Walls <input type="checkbox"/> Applicable X N/A		
1.	Deformations <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Deformation not evident Horizontal displacement _____ Vertical displacement _____ Rotational displacement _____ Remarks _____ _____	
2.	Degradation <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Degradation not evident Remarks _____ _____	
I. Perimeter Ditches/Off-Site Discharge X Applicable <input type="checkbox"/> N/A		
1.	Siltation <input type="checkbox"/> Location shown on site map X Siltation not evident Areal extent _____ Depth _____ Remarks _____ _____	
2.	Vegetative Growth <input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A X Vegetation does not impede flow Areal extent _____ Type _____ Remarks _____ _____	
3.	Erosion <input type="checkbox"/> Location shown on site map x Erosion not evident Areal extent _____ Depth _____ Remarks _____ _____	
4.	Discharge Structure X Functioning <input type="checkbox"/> N/A Remarks. Offsite flow, from peeler area, appeared to be running over the edge, under the fence, into the ditch that drains to the South Yamhill River. PWPO will investigate drainage here, and options for control, since all stormwater in this area should be flowing to the stormwater treatment system (even though material here is not treated wood, there was evidence of petroleum product (oil?) from onsite operations (equipment?) that was draining to ditch (see photo). PWPO will inform EPA of what was done to correct this problem.	
VIII. VERTICAL BARRIER WALLS x Applicable <input type="checkbox"/> N/A		
1.	Settlement <input type="checkbox"/> Location shown on site map x Settlement not evident Areal extent _____ Depth _____ Remarks _____ _____	
2.	Performance Monitoring Type of monitoring <u> Painting of white line on asphalt marking the slurry wall center line.</u> Line missing in places but PWPO has glued markers in place until weather is dry enough to permit painting. <input type="checkbox"/> Performance not monitored	

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

Discussed in FYR. _____

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Discussed in FYR. _____

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

None. _____

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

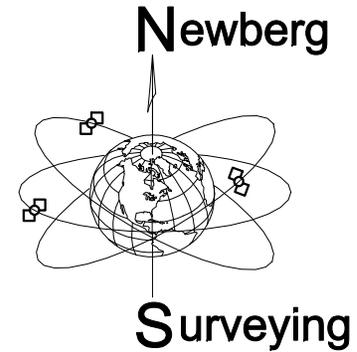
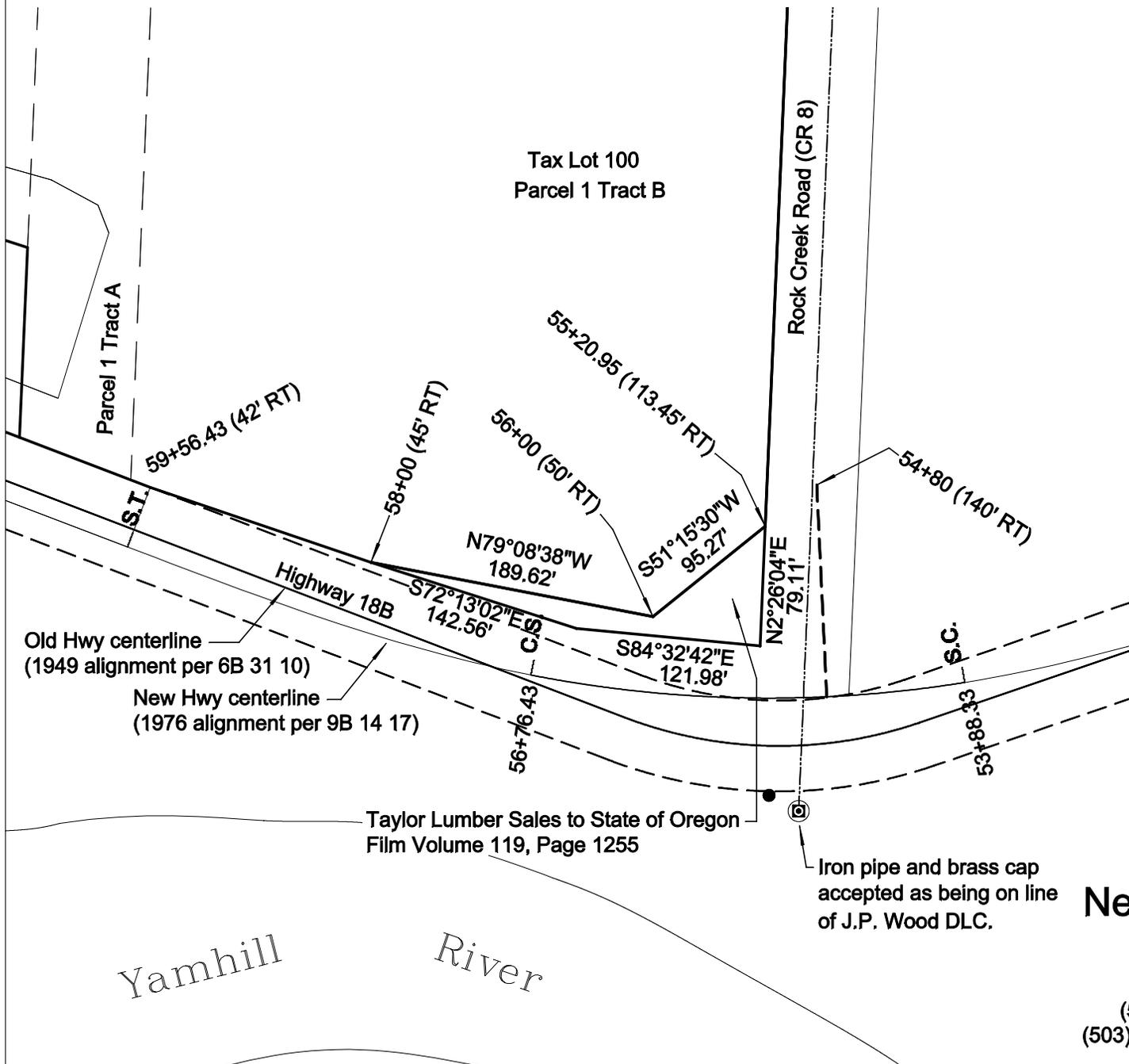
_None noted. _____

Attachment I

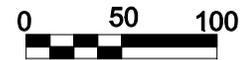
PWPO Potential Lease or Purchase of Oregon DOT Property

PACIFIC WOOD PRESERVING OF OREGON

NE 1/4 Section 33, T. 5 S., R. 6. W.
Willamette Meridian,
Yamhill County, Oregon



Scale: 1" = 100'



August 18, 2011

Basis of Bearing Grid North
as derived from CH2M Hill
survey provided by EPA

REGISTERED
PROFESSIONAL
LAND SURVEYOR

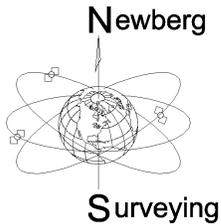
OREGON
June 30, 1997
JOHN G. NEWBERG
2838

Renewable 12-31-2012

Newberg Surveying, Inc.

1205 NE Evans
McMinnville, OR 97128

(503)-474-4742 (971)-237-1956 Cell
(503)-474-3752 Fax newberg@vclink.com



Newberg Surveying, Inc
1205 NE Evans
McMinnville, OR 97128
(503)-474-4742 • (503)-474-3752 FAX

August 19, 2011

Legal Description for Lease Area

A tract of land being a part of the John P. Wood Donation Land Claim No. 44 in Section 33, Township 5 South, Range 6 West, Willamette Meridian, Yamhill County, Oregon, said tract of land being a portion of that tract of land conveyed from John C. Taylor Lumber Sales, Inc. to the State of Oregon and recorded in Film Volume 119, Page 1255 Yamhill County Deed Records, said tract being more particularly described as follows:

Beginning at the intersection point of the West margin of Rock Creek Road (CR 8) and the north boundary of land described in said Film Volume 119, Page 1255, said intersection point being on a line between Station 54+80 (140 feet Right) and Station 56+00 (50 feet Right) from the centerline described in Parcel 1 of said Film Volume 119, Page 1255, said beginning intersection point also being approximately Station 55+20.95 (113.45 feet Right); thence continuing along the northerly boundary of land described in said Parcel 2 of Film Volume 119, Page 1255 South $51^{\circ} 15' 30''$ West 95.27 feet more or less, in a straight line to Station 56+00 (50 feet Right); thence North $79^{\circ} 08' 38''$ West 189.62 feet in a straight line to Station 58+00 (45 feet Right); thence South $72^{\circ} 13' 02''$ East 142.56 feet; thence South $84^{\circ} 32' 42''$ East 121.98 feet to a point on the extension of the west margin of Rock Creek Road; thence North $02^{\circ} 26' 04''$ East 79.11 feet to the point of beginning.



FW: Pacific Wood Preserving of Oregon - ODOT Property Description

Roland Mueller to: Karen Keeley

03/20/2012 08:31 AM

2 attachments



PacificWoodPreserving-odotleaseMap.pdf



1081LeaseAreaDescription.pdf

Per the surveyor the area described is 0.1 Acres or 5234.5 sq ft.

-----Original Message-----

From: Roland Mueller [mailto:roland.mueller@pacificwood.com]
Sent: Friday, August 19, 2011 9:38 AM
To: Rollie.D.HUSEN@odot.state.or.us
Cc: Newberg Surveying
Subject: FW: Pacific Wood Preserving of Oregon - ODOT Property Description

Hello Rollie,

Take a look at the attached files and let us know if this will work for you. Also, we are having irons set to identify the PWPO property lines and are wondering if we should also identify the lease area with irons - your thoughts?

Thanks,
Roland

-----Original Message-----

From: John Newberg [mailto:newberg@viclink.com]
Sent: Friday, August 19, 2011 9:29 AM
To: Roland Mueller
Subject: RE: Pacific Wood Preserving of Oregon - ODOT Property Description

Hi Roland:

Sorry for the delay in getting this to you. Here is a map and description of the area that would cover encroachment into the ODOT Right of Way. Let me know if this is what you were thinking. We should be able to start setting property corners next week, but not sure if irons should be set along this lease area.

Thanks,
John

At 09:59 AM 8/16/2011, you wrote:

>Hello Rollie,

>

>I have an email in to the surveyor to see what the status is. I'll let you know what I find out.

>Thanks,

>Roland

>

>From: HUSEN Rollie D [mailto:Rollie.D.HUSEN@odot.state.or.us]

>Sent: Tuesday, August 16, 2011 9:02 AM

>To: Roland Mueller

>Subject: RE: Pacific Wood Preserving of Oregon - ODOT Property Description

>

>Roland,

>How are we coming on this description?

>
>Rollie Husen,
>Acting Senior Property Agent
>ODOT Property Management Unit
>(503) 986-3633
>
>
>
>-----
>From: Roland Mueller [mailto:roland.mueller@pacificwood.com]
>Sent: Monday, August 08, 2011 7:59 AM
>To: Newberg Surveying
>Cc: JORDAN Donald L; HUSEN Rollie D
>Subject: Pacific Wood Preserving of Oregon - ODOT Property Description
>Hello John,
>
>On Friday I spoke with Rollie Husen (503-986-3633) from ODOT's Property
>Management staff and we need to provide him with a legal description of
>the portion of the ODOT property that we wish to lease.
>
>Can you help us with this? If so, how soon would you be able to put
>something together?
>
>Thanks,
>Roland
>
>

Newberg Surveying, Inc.
1205 NE Evans
McMinnville, OR 97128
503-474-4742
503-474-3752 FAX
971-237-1956 Cell

4/4/77

Highway Division
File 49412
RS-124(1)

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, That JOHN C. TAYLOR LUMBER SALES, INC., an Oregon corporation, Grantor, for the consideration of the sum of Five Thousand Seven Hundred and No/100 DOLLARS (\$5,700.00) received, does hereby convey unto the STATE OF OREGON, by and through its DEPARTMENT OF TRANSPORTATION, Highway Division, Grantee, the following described property, to wit:

PARCEL 1

A parcel of land lying in the John P. Wood D.L.C. No. 44, Township 5 South, Range 6 West, W.M., Yamhill County, Oregon and being a portion of that property described in that deed to John C. Taylor Lumber Sales, Inc., recorded in Film Volume 109, Page 694, Records of Yamhill County; the said parcel being that portion of said property included in a strip of land variable in width, lying on the Southerly side of the center line of the Williamson - Sheridan Highway as said highway has been relocated, which center line is described as follows:

Beginning at Engineer's center line Station 51+08.33, said station being 102.82 feet North and 351.61 feet East of the Initial Point of CENTRAL PARK, Yamhill County, Oregon; thence on a spiral curve right (the long chord of which bears South 72° 15' West) 280 feet; thence on a 318.51 foot radius curve right (the long chord of which bears South 88° 52' West) 288.10 feet; thence on a spiral curve right (the long chord of which bears North 74° 31' West) 280 feet; thence North 71° 15' West 279.67 feet; thence on a spiral curve left (the long chord of which bears North 75° 54' 51" West) 400 feet; thence on a 818.51 foot radius curve left (the long chord of which bears South 84° 01' 45" West) 306.31 feet; thence on a spiral curve left (the long chord of which bears South 69° 58' 21" West) 400 feet to Engineer's center line Station 73+42.41 Back equals 73+41.11 Ahead; thence South 59° 18' 30" West 908.89 feet to Engineer's center line Station 82+50.

The widths in feet of the strip of land above referred to are as follows:

Station	to Station	Width on Southerly Side of Center Line
		50
55+00	60+50	50 in a straight line to 60
60+50	61+00	60 in a straight line to 50
61+00	62+36.10	50 in a straight line to 60
62+36.10	65+00	60 in a straight line to 50
65+00	65+50	50 in a straight line to 100
65+50	69+42.41	

ALSO that portion of said property lying Northerly of said center line and Southerly of a line parallel with and 80 feet Northerly of said center line.

Bearings are based upon the Oregon Co-ordinate System, North Zone.

The parcel of land to which this description applies contains 1.48 acres, more or less, outside of the existing right of way.

PARCEL 2

A parcel of land lying in the John P. Wood D.L.C. No. 44, Township 5 South, Range 6 West, W.M., Yamhill County, Oregon and being a portion of that property described in those deeds to Sheridan Pressure Treated Lumber Inc., recorded in Film Volume 55, Page 596 and in Film Volume 67, Page 541, Records of Yamhill County; the said parcel being that portion of said property included in a strip of land variable in width, lying on the Northerly side of the center line of the Williamson - Sheridan Highway as said highway has been relocated, which center line is described in Parcel 1.

Pg. 2 - WD
4/11/77

Highway Division
File 49412
RS-124(1)

The widths in feet of the strip of land above referred to are as follows:

Station	to Station	Width on Northernly Side of Center Line
54+80	56+00	140 in a straight line to 50
56+00	58+00	50 in a straight line to 45
58+00	59+56.43	45 in a straight line to 42
59+56.43	61+00	42

ALSO that portion of said property lying Southernly of said center line.

The parcel of land to which this description applies contains 0.34 acre, more or less, outside of the existing right of way.

Also for the above stated consideration, there is hereby conveyed to Grantee, all existing, future or potential common law or statutory abutter's easements of access between the right of way of the existing and the relocated Williams-Sheridan Highway, including Parcels 1 and 2 hereinabove described, and all of Grantor's property described in those deeds recorded in Film Volume 109, Page 694; Film Volume 35, Page 596; Film Volume 67, Page 541; Film Volume 77, Page 1023; Film Volume 77, Page 744; Film Volume 77, Page 828 and Film Volume 111, Page 1987, Yamhill County records, remaining after the conveyance herein made, EXCEPT, however,

RESERVING for the service of Grantor's remaining property, access rights to and from said remaining property to the abutting highway right of way at the following places and for the following widths:

Hwy. Eng. Sta.	Width	Side of Hwy.	Purpose
55+40	35 feet	Southerly	Unrestricted
59+20	35 feet	Northerly and Southerly	Unrestricted
60+24	35 feet	Northerly	Unrestricted
63+23	35 feet	Northerly and Southerly	Unrestricted
63+74	35 feet	Northerly	Unrestricted
64+31	35 feet	Northerly	Unrestricted

If, after written notice to desist, Grantor, or any person holding under it, shall use any of the above places of access in a width greater than above stated, or shall permit or suffer any person to do so, the right of access therefor shall automatically be suspended and Grantee shall thereupon have the right to close said places of access. The suspension shall terminate when satisfactory assurance has been furnished Grantee that the places of access will be used in a width not greater than above stated.

And Grantor does hereby covenant to and with Grantee, its successors and assigns, that it is the owner in fee simple of said property which is free from all encumbrances and will warrant and defend the same from all lawful claims whatsoever.

Dated this 18 day of April, 1977.

JOHN C. TAYLOR LUMBER SALES, INC.,
an Oregon Corporation

By [Signature]
President

By [Signature]
Secretary