



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

INITIAL INVESTIGATION FIELD REPORT

ERTS: 635466

Parcel(s): 10132, 10134, 10137

County: Cowlitz

SITE INFORMATION

Site Name (e.g., Co. name over door): Puget Sound Freight Lines	Site Address (including City and Zip+4): 146 Industrial Way, Longview, WA 98632-1004	Site Phone: N/A
Site Contact and Title: Brett MacDonald, RG 3 Kings Environmental, Inc.	Site Contact Address (including City and Zip+4): 1311 Grace Avenue, Battle Ground, WA 98604-3526	Site Contact Phone: 360-666-8202
Site Owner: Wil-Hunt I LLC	Site Owner Address (including City and Zip+4): PO Box 3456, Spokane, WA, 99220-3456	Site Owner Phone: N/A
Site Owner Contact: Tom Lovejoy Puget Sound Freight Lines	Site Owner Contact Address (including City and Zip+4): PO Box 24526, Seattle, WA 98124-0526	Owner Contact Phone: 206-623-1600
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees): 46.116220

Longitude (Decimal Degrees): -122.923131

INSPECTION INFORMATION

Inspection Conducted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date/Time:	Entry Notice: Announced <input type="checkbox"/> Unannounced <input type="checkbox"/>
Photographs taken? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Samples collected? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	As part of 3 Kings Environmental, Inc. investigation / remediation	

RECOMMENDATION

No Further Action (Check appropriate box below):	LIST on Confirmed and Suspected Contaminated Sites List: <input checked="" type="checkbox"/>
Release or threatened release does not pose a threat <input type="checkbox"/>	
No release or threatened release <input type="checkbox"/>	
Refer to program/agency (Name: _____) <input type="checkbox"/>	
Independent Cleanup Action Completed (i.e., contamination removed) <input type="checkbox"/>	

COMPLAINT (Brief Summary of ERTS Complaint): A phase II environmental investigation in 2011 found petroleum hydrocarbon contamination in soil and groundwater at the Puget Sound Freight Lines yard in east Longview.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing):

Remedial work in 2012 included contaminated soil removal and push-probe characterization of groundwater. The work eliminated the soil source and majority of the pathway but diesel contamination in shallow groundwater was confirmed above MTCA CULs.

Investigator: Cris Matthews

Date Submitted: 1/17/2013

OBSERVATIONS

Description (please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

In December 2011, Adapt Engineering, Inc. was contracted by Puget Sound Freight Lines to conduct a Phase I environmental investigation of a freight yard property in Longview. Based on the results, a limited Phase II investigation was undertaken to follow on. This work consisted of soil and groundwater sampling by push probe in each of three areas on site identified as potential contamination sources:

- Above-ground fuel storage tank (AST)
- Former waste oil underground storage tank (UST)
- Dry well

The probe was advanced to approximately 12' bgs in each location. The latter two site borings – noted as SB-2 and SB-3 – found no visual or olfactory evidence of petroleum contamination. However, boring SB-1 adjacent to the AST encountered obvious soil contamination and 'moderate' sheen on the groundwater collected. Sample analyses found 4,200 mg/kg diesel range organics (DRO) in SB-1 soil collected from an interval 5 – 7' bgs, and DRO values of 530,000 and 2,400 µg/L in groundwater from SB-1 and SB-2, respectively (MTCA Method A CUL for groundwater = 500 µg/L).

Later, in January 2012, 3 Kings Environmental, Inc. (3 Kings) excavated 11 test pits to characterize the extent of contamination and define areas for remedial excavation. A total of 12 soil samples found DRO contamination exceeding MTCA Method A CULs for soil in only one location, TP-7 adjacent to the AST. The other pit samples detected DRO, but at values below CULs. Selective grab samples of water collecting in some of the pits found DRO values ranging as high as 15.4 mg/L in TP-9, approximately 30 times the CUL.

3 Kings then excavated an area including the former AST site where the previous sampling had indicated soil impact, removing 2,850 tons of soil – approximately 4000 ft² to a depth of 10' bgs – for disposal in the Weyerhaeuser HQ Road LF. Confirmation soil sampling following removal detected only minor amounts of DRO contaminant, all well below CULs. However, analysis of water accumulating in the excavation – assumed to be groundwater – was found to substantially exceed CULs:

- TP1H2O-020212 @ 8.35 mg/L TPH-Dx (approximately 16 times CUL)

In an attempt to characterize the apparent groundwater impact, 3 Kings returned to the site three times later in the year to obtain representative samples with push-probe equipment. Two borings to a depth of 10' bgs in the footprint of the excavation were completed in both June and July. The site was allowed to stabilize and followed in December 2012 with four borings – two in the excavation footprint and two additional in presumed up / down hydraulic gradient locations. Groundwater was encountered at approximately 4' bgs – presumably a local static groundwater level – in each boring in the latest sampling. Analysis included NWTPH-Dx and BTEX components.

Results for the June and July samplings were mixed. Three of the four samples obtained were below the CUL (one was essentially non-detect) for DRO, with only one exceedance:

- B4H2O-071012 @ 1.18 mg/L TPH-Dx. Ethylbenzene and xylenes were detected at values far below CULs

The December sampling had similar mixed results, with a single outright exceedance of CULs:

- DP-2-W @ 174 mg/L TPH Dx. Toluene and xylenes were detected at values far below the CULs

As a result of this additional characterization, 3 Kings recommends the installation of at least 4 permanent groundwater monitoring wells with a program of quarterly monitoring for the site. The wells would bracket the affected area to include a hydraulically up-gradient point, one placement within the excavation area, and 2 wells down gradient spaced along the southern edge of the main site.

Based on these findings and contractor recommendations, this site will be placed on Ecology's Confirmed & Suspected Contaminated Sites Report for future disposition.

(fill in contaminant matrix below with appropriate status choice from the key below the table)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents		B				Organic solvents, typically volatile or semi-volatile, not containing halogens, i.e., Chlorine, Iodine, Bromine or Fluorine. (Examples include acetone, benzene, toluene, ethylbenzene & xylenes [BTEX], methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropanol, formic acid, acetic acid, Stoddard solvent and naphtha)
	Polynuclear Aromatic Hydrocarbons (PAH)						Hydrocarbons composed of two or more benzene rings.
	Tributyltin						The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether						MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene						Benzene
	Other Non-Halogenated Organics						Other Non-Halogenated Organics (Example: Phthalates)
	Petroleum Diesel	RB	C				Petroleum Diesel
	Petroleum Gasoline						Petroleum Gasoline
	Petroleum Other						Crude oil and any fraction thereof. Petroleum products that are not specifically Gasoline or Diesel.
Halogenated Organics (see notes at bottom)	PBDE						Polybrominated di-phenyl ether
	Other Halogenated Organics						Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents						Solvents containing halogens (Halogen is typically chlorine, but can also be fluorine, bromine, iodine), and their breakdown products (Examples: Trichloroethylene; Tetrachloroethylene (aka Perchloroethylene); TCE; TCA; trans and cis 1,2 dichloroethylene; vinyl chloride)
	Polychlorinated Biphenyls (PCB)						Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)						A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270
Metals	Metals - Other						Metals other than arsenic, lead, or mercury. (Examples: cadmium, antimony, zinc, copper, silver)
	Lead						Lead
	Mercury						Mercury
	Arsenic						Arsenic
Pesticides	Non-halogenated pesticides						Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides						Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic						Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
	Conventional Contaminants, Inorganic						Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos						All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances						Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures						Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures						For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordnance						Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes						Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes						Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

Status choices for contaminants	
Contaminant Status	Definition
B - Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested)
S - Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C - Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example - above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA - Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example - capped area).
RB - Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example - complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivative. Referral to the HSDB is recommended you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

Dibenzodioxins and dibenzofurans are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in Ch. 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (<https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf>). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).

FOR ECOLOGY USE ONLY (For Listing Sites):

How did the Site come to be known: ☒ Site Discovery (received a report): 12/28/2012 (Date Report Received)
☒ ERTS Complaint
☐ Other (please explain): The original ERTS was logged 7/30/2012. Ecology received a supplementary cleanup report from 3 Kings Environmental, Inc. 12/28/2012

Does an Early Notice Letter need to be sent: ☒ Yes ☐ No
If No, please explain why: _____

NAICS Code (if known): _____
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):
Truck freight yard

Site Unit(s) to be created (Unit Type): ☒ Upland (includes VCP & LUST) ☐ Sediment
If multiple Units needed, please explain why: _____

Cleanup Process Type (for the Unit): ☒ No Process ☐ Independent Action
☐ Voluntary Cleanup Program ☐ Ecology-supervised or conducted
☐ Federal-supervised or conducted

Site Status: ☒ Awaiting Cleanup ☐ Construction Complete – Performance Monitoring
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring
☐ No Further Action Required

Site Manager (Default: Southwest Region): SWRO

Specific confirmed contaminants include: Facility/Site ID No. (if known): _____
_____ in Soil
TPH-Dx (diesel) in Groundwater
_____ in Other (specify matrix: _____)

COUNTY ASSESSOR INFO:

Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

