



# INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 648824  
 Parcel #(s): 390108326085  
 County: Whatcom  
 FSID #: 2919  
 CSID #: 950

## SITE INFORMATION

Site Name (e.g., Co. name over door): Treoil Industries	Site Address (including City and Zip+4): 4242 Aldergrove Road, Ferndale, WA, 98248	Site Phone: 604-589-6866
Site Contact and Title: Mr. J Gill	Site Contact Address (including City and Zip+4):	Site Contact Phone: 604-589-6866 604-700-5750
Site Owner: Campbell Land Corporation Attn: Herbert Davis	Site Owner Address (including City and Zip+4): 61-8355 Delsom Way, Delta, BC , Canada, V4E 0A9	Site Owner Phone:
Site Owner Contact: Mr. J Gill	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone: 604-589-6866 604-700-5750
Alternate Site Name(s):	Comments: Tax parcels:	
Previous Site Owner(s):	Comments:	

<b>Latitude (Decimal Degrees):</b> 48.878760
<b>Longitude (Decimal Degrees):</b> -122.711276

## INSPECTION INFORMATION

Inspection Conducted? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date/Time: 6/3/14 10:30 AM	Entry Notice: Announced <input checked="" type="checkbox"/> Unannounced <input type="checkbox"/>
Photographs taken? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Samples collected? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If Yes, be sure to include a figure/sketch showing sample locations.	

## RECOMMENDATION

<b>No Further Action</b> (Check appropriate box below):	<b>LIST on Confirmed and Suspected Contaminated Sites List:</b> <input 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: <u>WA Ecology WQ and HWTRP</u> ) <input checked="" type="checkbox"/>	
Independent Cleanup Action Completed (i.e., contamination removed) <input type="checkbox"/>	

COMPLAINT (Brief Summary of ERTS Complaint): The Treoil Bio-oil refinery property is for sale. Oily substance are covering the ground over a large portion of the site. Concern about soil, air, groundwater and surface water pollution from Tall Oil, Bio-diesel, and other refinery activities using pulp from paper factories, and other industrial wastes.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA): The site is listed and SHA Ranked at 2 under MTCA. Whatcom County Health Department recommends action by WA ECY to address immediate pollution concerns. Various types of bio-oil residues (Tall Oil, Bio-diesel, unknown), wastes and products are present on the ground, and in poor containment situations, and do obviously flow with surface water in storm water conveyance systems to a pit location outside of the fenced refinery area. Wastes may have been recently dumped into the storm water system. The site remains polluted by PAHs, lead, and Diesel in soil.

Investigator: Bill Angel and Jeff Hegedus of WCHD	Date Submitted: 6/12/14
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**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.):

Jeff Hegedus and I responded to ERTS 648824 at the Treoil Industries site, FSID# 2919, SHA Ranked 2, about oily substance covering the ground from poor industrial practice and potentially impacting surface water leaving the property.

Access was denied during the first site visit. Site inspection arrangements were made with the property manager. During the announced inspection on 6/3/14, we were accompanied by the property manager Mr. J Gill 604-589-6866, 604-700-5750.

The scene at this site was awful. Black oily residue was apparent under the fresh gravel that was recently placed on the entire length of the driveways on the property. Large quantities of (bio-oil) oily residue had obviously been released to the surface of the ground, outside of the secondary containment structures for the industrial refinery tankage farms, even since the placement of gravel. The previously released oil had apparently flowed to the west from the tank farm area toward storm water conveyances and the western fence line.

A large (10'x10'x4'd) pit located outside of the western property fence line was apparently heavily impacted by black oily chemicals. Apparently, per the attached GIS map, the storm water conveyance for the site preferentially flows to/through this pit, though no pipe was observed.

Oily substance was present in the secondary containment structures floating on at least a foot of water. The manager indicated that the oily water was due to be treated as part of the industrial process, though no treated water disposal method was identified.



Outside the fence line.

(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						Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB ( <a href="http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB">http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB</a> ) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). <i>Use this when TEX contaminants are present independently of gasoline.</i>
	Polynuclear Aromatic Hydrocarbons (PAH)	C					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	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					
Other Halogenated Organics							Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB ( <a href="http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB">http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB</a> ) 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)		S	S	S			A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). <i>Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatiles analysis 8270</i>
Metals	Metals - Other						Metals other than arsenic, lead, or mercury. (Examples: cadmium, antimony, zinc, copper, silver)
	Lead	C					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)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic	C	C	C			Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	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

**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

ERTS 648824 – Treoil Industries FSID 2919 – 4242 Aldergrove Road, Ferndale, WA

Parcel #390108326085



Location of black tar pit along the storm water conveyance system.

390108 326085  
4242 ALDERGROVE RD

390108 384026  
0 ALDERGROVE RD

390108 406302  
0 GRANDVIEW RD

390117 334462  
4205 ALDERGROVE RD

Point Whitehorn











