



INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 657071
Parcel #: 00804000000107
County: Snohomish
FSID #: 11757
CSID #: 13076

SITE INFORMATION

Site Name (e.g., Co. name over door): Lake Stevens Cleaners	Site Address (including City and Zip+4): 303 91 st AVE NE Suite C302 Lake Stevens, WA 98258	Site Phone: 425-397-0277
Site Contact and Title: Gary Galloway Galloway Environmental, Inc.	Site Contact Address (including City and Zip+4): 3102 220 PL SE Sammamish, WA 98075	Site Contact Phone: 425-688-8852
Site Owner: Lake Stevens Marketplace LLC	Site Owner Address (including City and Zip+4): 8525 120th Ave NE #100 A Kirkland, WA 98033	Site Owner Phone:
Site Owner Contact: Keith Therrien Powers & Therrien, PS	Site Owner Contact Address (including City and Zip+4): 3502 Tieton Dr Yakima, WA 98902	Owner Contact Phone: 509-453-8906
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees): 47.999488

Longitude (Decimal Degrees): -122.107111

INSPECTION INFORMATION

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

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): Ecology received a Remedial Investigation/Feasibility Study (RI/FS) dated 3/23/15 from Gary Galloway at Galloway Environmental Inc. The RI/FS was prepared as part of the owner's response to the recent discovery of dry cleaning solvent impacts to soil and groundwater at the property. (Contaminants are PCE and TCE). Owner "would like to" enter VCP with goal of receiving an NFA letter.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA): Perchloroethene (PCE) and trichloroethene (TCE) were detected in soil and ground water on the Site at concentrations exceeding Method A cleanup levels.

Investigator: Heather Vick

Date Submitted: March 25, 2016

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.):

The property corresponds to Snohomish County parcel number 00804000000107 which is 0.71 acres in size. The property is located approximately 0.4 mile west of Lake Stevens.

Lake Stevens Cleaners operated in the Lake Stevens Shopping Center beginning in 1993 and used PCE as a dry cleaning solvent. Two suspected PCE release areas are indicated including leaks from the dry cleaning equipment to soil below the concrete slab and spent solvent disposed into soil exposed in a landscaped area east of the facility.

Phase I Environmental Assessments (ESA) conducted on the property in 2000 and 2003 did not indicate the former dry cleaning facility as a potential recognized environmental condition (REC). The two Phase I ESAs further concluded that further investigation of the property was unwarranted. It is unclear what prompted the later investigative activities on the property, which are described below.

In 2013, four soil borings (B-1 through B-4) were advanced to 5 feet bgs within and just outside the former dry cleaning tenant space. A soil sample was collected in each boring at 4 feet bgs. PCE, TCE and cis-1,2-dichloroethene (cis-1,2-DCE) were detected at concentrations exceeding Method A cleanup levels. The borings were completed as 5-foot deep soil vapor wells. PCE was detected in two of the soil vapor wells at concentrations ranging from 3.8 to 30 ug/L exceeding the Method B screening level.

In 2014, a Focused Phase II ESA consisted of four direct push soil borings (P1 through P4) advanced on the property to depths of 10 to 20 feet bgs. One of the four soil samples collected contained only PCE and at a concentration less than the Method A cleanup level. Of the three water samples collected, P2 and P3 contained PCE at 40 and 31 micrograms per liter (ug/L) which are well above the Method A cleanup level of 5 ug/L.

In 2015 as part of the Remedial Investigation (RI), four soil borings were advanced and completed as monitoring wells MW-1 through MW-4. A soil sample collected from each boring at depths of 7 to 8 feet bgs contained PCE and cis-1,2-DCE at concentrations below Method A. A ground water sample collected from monitoring well MW-2 contained PCE at 450 ug/L exceeding the Method A cleanup level. The other wells contained cis-1,2-DCE at concentrations below Method A. The ground water flow direction was determined by Galloway Environmental Inc. to be to the northwest but is actually more to the north based on data presented in the RI/FS. MW-2 is located to the north of the facility.

The FS proposed excavation and off-site disposal of source area soils, bioremediation and chemical oxidation as the selected remedial alternative for the site.

In March 2015, chemical oxidation and freeze-dried microbial products were injected beneath the floor of the former dry cleaning facility at depths ranging from 3 to 7 feet.

In April 2015, soil impacted with PCE and related compounds was removed from the landscaped area outside the building (42.7 tons) and from inside the facility (20 tons).

Confirmation soil samples were collected to verify the removal of contaminated soil. A total of 13 samples were collected. In the landscaped area, 8 soil samples were collected, 6 at the sidewall limits and 2 bottom samples. All of the 8 samples contained PCE and two contained TCE but none of the concentrations exceeded Method A cleanup levels.

The excavated areas were both backfilled with Type-17 soils (pit run). Approximately 5 cubic yards of topsoil were placed over the fill in the landscaped area.

A total of 5 soil samples were collected from the excavated area inside the facility, four sidewall samples at five feet below the ground surface (bgs) and a bottom sample at 6 feet bgs. Three of these samples contained PCE including the bottom sample but none of the concentrations exceeded the Method A cleanup level. Two vapor probes were installed to 2 feet bgs. Sub-slab vapor samples from each of the probes contained non-detectable levels of PCE and TCE.

The four onsite ground water monitoring wells were sampled on April 29, 2015. PCE was detected at a concentration of 110 ug/L in MW-2 which exceeds the Method A cleanup level of 5 ug/L.

A ground water monitoring report dated January 29, 2016 provided by Galloway Environmental, Inc. indicates PCE detected only in MW-2 in quarterly sampling rounds of concentrations up to 370 ug/L. In the most recent event (January 2016), PCE in MW-2 was 100 ug/L, still well above Method A but a decrease most likely due to the remedial measures performed in 2015.

(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)
							Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, 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 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, isopropanol, formic acid, acetic acid, stoddard solvent, Naptha). <i>Use this when TEX contaminants are present independently of gasoline.</i>
	Non-Halogenated Solvents						
	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						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	C	C				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). <i>Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270</i>
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)

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						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).

FOR ECOLOGY II REVIEWER USE ONLY (For Listing Sites):

How did the Site come to be known: ☒ Site Discovery (received a report): 3/27/15 (Date Report Received)
☐ ERTS Complaint
☐ Other (please explain): _____

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.):

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: Donna Musa): Donna Musa

Specific confirmed contaminants include:

PCE, TCE in Soil

PCE, TCE in Groundwater

_____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):

11757

Cleanup Site ID No. (if known):

13076

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.