INITIAL INVESTIGATION FIELD REPORT

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ERTS Number: 644362
Parcel #(s): 7090000880 + 7090000881
COUNTY: Pierce

SITE INFORMATION

Site Name (e.g., Co. name over door): Hibbard Resdential Property	Site Address (including City and Zip+4): 3617 South Madison St Tacoma, WA 98409-2215	Site Phone: None
Site Contact and Title: Mike Slade, Public Works/Construction Manager	Site Contact Address (including City and Zip+4): City of Tacoma 747 Market Street, Rm 836, Tacoma, WA 98402	Site Contact Phone: 253-591-2004
Site Owner: Bradley J. Hibbard	Site Owner Address (including City and Zip+4): c/o Bradley D. Hibbard 1108 North E Street, Tacoma, WA 98403-2918	Site Owner Phone: 253-572-3697
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees):	47.22566
Longitude (Decimal Degrees):	-122.48915

INSPECTION INFORMATION

Inspection Conducted? Yes ☒ No ☐	Date/Time: 10/4/13, 2:15 pm	Entry Notice: Announced ☒	Unannounced ☐
Photographs taken?	Yes ☒	No ☐	
Samples collected?	Yes ☐	No ☒	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:** ☒
Release or threatened release does not pose a threat	☐	
No release or threatened release	☐	
Refer to program/agency (Name: _____)	☐	
Independent Cleanup Action Completed (i.e., contamination removed)	☐	

COMPLAINT (Brief Summary of ERTS Complaint):

During demolition of a dilapidated residence and shed, petroleum contaminated soil was discovered under the concrete slab of the shed.

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

Sampling revealed soil contaminated with gasoline and BTEX in concentrations exceeding MTCA cleanup levels. Site remediation has not occurred.

Investigator: J. Seger, TPCHD — Date Submitted: 11/15/13

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 subject site is located in the City of Tacoma, and within the South Tacoma Groundwater Protection District (STGPD). This is a residential property consisting of approximately 0.28 acres. A dilapidated residence and a shed were recently demolished as a result of Code Enforcement activity and a court order. A large metal-wall shop building remains in the southeast corner of the site. The property owner died in 2004 and the property is currently listed in tax foreclosure; the foreclosure auction is scheduled for 12/2/13.

On 10/2/13, The City of Tacoma, (the City) notified Sharon Bell, Tacoma-Pierce County Health Department (Health Department) that petroleum contaminated soil was encountered at this site. The information was forwarded to Ecology to generate an ERTS case. Green Earthworks Contractors (G.E.C. NW), a civil and environmental contractor had demolished the house and shed. They also cleared the overgrown lot of vegetation, garbage and trash. During removal of the concrete floor of the shed, subsurface petroleum contaminated soil and a concrete-walled vault were discovered. The shed was located at the east end of the property at the back fence, adjacent to the alley. Before leaving the site, the contractor backfilled the vault for safety utilizing the surrounding excavated soil.

On 10/4/13, I met on site with Chris Burke, City of Tacoma Sr. Environmental Specialist and Sean Hart, G.E.C. NW, for scheduled soil sampling. Mr. Hart showed us the two areas of concern. The first location, west vault, was described as a concrete vault having a top, sides and bottom and may have been the original septic tank. This vault was not uncovered for sampling; two photos taken earlier by the City are included in this report. The second area, east vault, was located beneath the concrete floor of the shed and was described as having only concrete sidewalls. Mr. Hart uncovered the east vault with a large excavator to expose soils for sampling.

Mr. Burke and a technician obtained discrete soil samples at five locations. Four sample locations were from the east vault. The fifth sample was obtained from a steel pipe that ran between the two vaults. The pipe was discovered by the contractor during demolition and set aside. The pipe was approximately ten feet long and two inches in diameter. The pipe was cut in half at the mid-point to observe any contents. The pipe was somewhat clogged with a mud-like substance which had a slight musty odor; a sample was obtained. The east vault was backfilled with the excavated material and covered with plastic sheeting pending analytical results.

The samples were analyzed at the City of Tacoma Environmental Services Laboratory. The analysis included: HCID, NWTPH-Dx, NWTPH-G, total solids, Volatile Organics (EPA 8260c), and PCBs (EPA 8270). The analytical results for diesel and heavy oil for all five sample locations were below MTCA Method A cleanup levels of 2,000 mg/kg and 2,000 mg/kg respectively; summarized in Table 1. Only two of the five samples (E.vault @ 19" and E.vault out of pipe) were analyzed for PCB's and volatile organic compounds. PCB's were detected in both samples at concentrations below the MTCA cleanup level of 1.0 mg/kg. The presence of PCB's however, does not appear to adequately delineate the extent of the contamination and additional screening for PCB's is warranted. The same two previous sample locations were also analyzed for Gasoline and BTEX; which were detected at levels above MTCA cleanup levels. The results are shown in Table 2 which lists those contaminants exceeding MTCA (Table 740-1) cleanup levels.

Table 1.

Sample ID:	Diesel / Heavy Oil (mg/kg)
E. Vault @ 8"	16 / 74
E. Vault @ 19"	22 / 220
E. Vault Ret Wall	15 / 110
E. Vault @ 32"	15 / 57
E. Vault -- pipe	140 / 1700

(MTCA cleanup levels: 2,000 mg/kg each for diesel and oil).

Table 2. VOA

Contaminants above MTCA cleanup levels: (MTCA cleanup levels, mg/kg)	E. Vault @ 19"	E. Vault out of pipe
Gasoline (30.0)	6,100 mg/kg	
Benzene (0.03)		9.2 mg/kg
Ethylbenzene (6.0)	17.0 mg/kg	9.0 mg/kg
Naphthalene (5.0)	50.0 mg/kg	
Toluene (7.0)	5.3 mg/kg	77.0 mg/kg
Xylenes (9.0)	460.0 mg/kg	28.1 mg/kg

Lab notes: above results are estimated concentrations

On 10/24/13, Sharon Bell and I met with Mike Slade and Chris Burke, from the City to discuss the issues associated with the subject property. It was noted that the City is not obligated to perform a cleanup. Both the City and the Health Department would attempt to notify the property owner (or estate representative) of the confirmed site contamination. If cleanup was not initiated, the Health Department would recommend placing the site on Ecology's Contaminated and Suspected Contaminated Sites List.

On 10/28/13, I spoke with the deceased owner's son by phone. He indicated that his grandfather owned the property when the house was built in the 1920's and more recently it was owned by his father. He recalled that a studio attached to the shed was used as a commercial art studio. He also stated that a car had been parked in the shed for the past twenty years and he recalls that the shed had a grease pit. The son stated that they are unable to retain the property (site is still in the father's name).

On 10/29/13, I contacted Sandy Moore, Foreclosure Dept Coordinator, Pierce County Assessor's Office. She stated that bank liens go away at tax foreclosure sales. Therefore banks are notified prior, providing them the opportunity to retain the property/s. In this case, Bank of America/Seafirst does not have record of the property, and has not acted on the notice. Pierce County's annual tax foreclosure sale will take place on 12/2/13.

The City consulted with their attorney and Chris Burke was asked to notify Marv Coleman, Ecology regarding this matter. On 11/1/13, Mr. Burke spoke to Marv Coleman and Cris Matthews, Ecology. As this property would not likely undergo remediation soon, it was suggested that a domed clay-soil cap be placed over the contaminated areas to help shed water. The City stated they would add the cap when they return to the site to finish the grass seeding and straw cover.

Within a two mile radius of the subject site:

- Two aquifers lay beneath the subject site: EPA Sole Source aquifer and Clover/ Chambers Creek aquifer.
- Approximate # wells: 15-Group A and 15-Individual.
- Approximately 15 wetlands.
- Approximately four lakes & streams: Snake Lake, Leach Creek, Flett Creek and South Tacoma Swamp.
- Soils within Tacoma are generally composed of Alderwood -Everett associated soils. (Ref: City of Tacoma: Draft Planned Action Environmental Impact Statement (DEIS) MLK Subarea Plan, 12/3/2012; Sec 4.2).

Note: Two sets of laboratory analytical results are included with this report. The City of Tacoma Environmental Services Laboratory initial report dated 10/18/13 and a revised report dated 11/4/13. The later specified that the report corrected an omission of three compounds from the Volatile Organics analysis of sample T310052-07; no other analyses were affected. The revised laboratory report did not necessitate a change to the MTCA contaminants discussed in this report.

The confirmation of volatile organic compounds above MTCA cleanup levels located at the subject site present a threat for potential groundwater contamination. Due to the potential threat to human health and the environment, the Health Department recommends including this site on Ecology's Confirmed and Suspected Contaminated Sites List.

(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	C	S		S		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, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). *Use this when TEX contaminants are present independently of gasoline.*
	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	C	S		S		Benzene
	Other Non-Halogenated Organics						Other Non-Halogenated Organics (Example: Phthalates)
	Petroleum Diesel						Petroleum Diesel
	Petroleum Gasoline	C	S		S		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)	S		S	S		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

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
	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)
	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 Ordinance						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 derivitive. 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.

FOR ECOLOGY USE ONLY (For Listing Sites):

How did the Site come to be known:
- ☐ **Site Discovery (received a report):** _____ (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
- ☐ Voluntary Cleanup Program
- ☐ Federal-supervised or conducted
- ☐ Independent Action
- ☐ Ecology-supervised or conducted

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

Site Manager (Default: Southwest Region): _____

Specific confirmed contaminants include:
- ✓ in Soil GASOLINE/BTEX
- _____ in Groundwater
- _____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):
_____

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.

ERTS# 644362 3617 S. Madison St, Tacoma APN: 7090000880

Hibbard Residential Property (House & Shed demolished) Contaminated soil discovered under concrete floor of shed

Map Legend

- Highlighted Tax Parcels
- Tax Parcels
- Base Parcel
- Condominium
- Other
- Roads
- Interstate
- Limited Access State Routes
- Other State Routes
- Ramps
- Major Arterial
- Collector
- Local Access
- County - 2011 - Ortho

Scale 1:287

0 12 24 ft.

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