WASHINGTON STATE DEPARTMENT OF F.C.O.L.O.G.Y

INITIAL INVESTIGATION FIELD REPORT

Check this box if you have attached any documents to this form (using the paperclip icon on the left).

ERTS #(s):
Parcel #(s):
County:
FSID #:
CSID #:
UST #:

94351	
P34734	
Skagit	
32795	
15181	
520467	

SITE INFORMATION

Site Name (Name over door):	Site Address (including City, State and Zip):	Phone (360) 757-0786
WD Foods	9029 Chuckanut Dr Bow, WA 98232	<u>Email</u>
Site Contact, Title, Business: Kim Ninnemann Stratum Group	Site Contact Address (including City, State and Zip): PO Box 2546 Bellingham, WA 98227	Phone (360) 714-9409 Email Kim@stratumgroup.net
Site Owner, Title, Business: Doug Armstrong	Site Owner Address (including City, State and Zip): 17090 Sam Bell Rd Bow, WA 98232	Phone (425) 766-1869 Email wdfoods.doug@gmail.com
Site Owner Contact, Title, Business:	Site Owner Contact Address (including City, State and Zip):	Phone Email
Previous Site Owner(s):	Additional Info (for any Site Information Item):	
Alternate Site Name(s):		

Latitude (Decimal Degrees):	48.5152	
Longitude (Decimal Degrees):	122.3767	

INSPECTION INFORMATION

Please check this box if there is relevant inspection information, such as data or \square photos, in an existing site report for this site.

Inspection Conducted? Date/Time: 11/19/19; 9:00am Entry Notice: Announced ☐ Unannounced ☑

Photographs taken? Yes ☒ No ☐ Note: Attach photographs or upload to PIMS

Samples collected? Yes No Note: Attach record with media, location, depth, etc.

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	Contaminated Sites List.
No release or threatened release	
Refer to program/agency (Name:)	
Independent Cleanup Action Completed (contamination removed)	

COMPLAINT (Brief Summary of ERTS Complaint):

Three Underground Storage Tanks (USTs) were removed on 11/11/19. The tank sizes were 1,000, 700, and 400 gallons. A gasoline release was confirmed from soil samples taken around the tanks and under the pump island. It is suspected that the overfill and structural failure of the tanks contributed to the contamination. A 30-day notice was submitted for the tank removal.

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

Three tanks and 180 tons of contaminated soil were removed. The highest concentrations were at the pump island - 16,000 mg/kg at 4 feet below ground surface (bgs) and at the bottom of the excavation - 1,800 mg/kg at 10.5 feet bgs). The highest groundwater sample was 9,600 mg/L gasoline taken in July 2019. Recommend listing on Confirmed & Suspected Contaminated Sites (CSCS) List due to TPH-G in soil and groundwater above MTCA Method A cleanup levels.

Investigator: Annette Ademasu Date Submitted: 3/2/2020

OBSERVATIONS Please check this box if you included information on the Supplemental Page at end of report.
Description (If site visit made, 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.):
Field Investigation: Kim Ninnemann with Stratum Group is conducting the site assessment and clean-up. Spoke with Kim on the phone while I was on-site. AEC is the contractor that conducted the tank removal and will be digging out the contaminated soil. Upon arrival on site, the area where the tanks were removed (west of the store) was fenced. PSE (or utility contractor) dug a few trenches a few feet deep at the north side of the property along the road. Trenched soil had tight clay and no odors or visual observations of contamination (photos). I asked one of the workers if they noticed any petroleum or gasoline odors in the soil, while digging along the road, they responded no odors noticed. Gave utility worker my card in case they found any gasoline odor in soil, to give me a call. Store is open (espresso stand is closed). The espresso stand is adjacent to stockpiled soil that is covered with visqueen. I discussed a cleanup within 90 days of site discovery with Doug the owner and gave him my card.
Phone update from Stratum Group: they removed contaminated soil until the owner's money ran out, confirmation samples were above Method A.
Feb. 10, 2020 Report Review: Three tanks removed and 180 tons of contaminated soil removed. Tanks were in use until 1960s. No GW samples taken at this time. Bottom sample of TPH-G 1,800 mg/kg at 10.5 feet bgs. Pump island did not have soil removed, sample of TPH-G 16,000 mg/kg at 4 feet bgs.
Appendix included an Environmental Phase II Site Assessment dated July 19, 2019: Highest boring is B4 with 1,100 mg/kg TPH-G in soil and 9,600 mg/L gasoline, 2,900 mg/L diesel, 140 mg/L Benzene, and 110 mg/L MTBE in groundwater.
Documents reviewed:
Underground Storage Tank & Contaminated Soil Removal, Stratum Group, Bellingham, WA. February 10, 2020.
Environmental Site Assessment: Phase II Sampling Investigation. Stratum Group, Bellingham, WA. July 19, 2019. (Included in Appendix of UST report above.)

CONTAMINANT GROUP	CONTAMINANT	TIOS	GROUNDWATER	SURFACE WATER	AIR	SEDIMENT	DESCRIPTION	
	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)	
	Non-Halogenated Solvents Polynuclear Aromatic						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 CI, 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.	
Non-	Hydrocarbons (PAH)						rings.	
Halogenated Organics	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		С				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	С	С				Benzene	
	Other Non-Halogenated Organics	С					TEX	
	Petroleum Diesel		С				Petroleum Diesel	
	Petroleum Gasoline	С	С				Petroleum Gasoline	
	Petroleum Other						Oil-range organics	
	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 CI, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)	
Halogenated	Halogenated solvents						PCE, chloroform, EDB, EDC, MTBE	
Organics (see notes at bottom)	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						Cr, Se, Ag, Ba, Cd	
	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	SEDIMENT	DESCRIPTION
	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)
Other Contaminants	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)

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

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 if 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 WAC 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 II REVIEWER USE ONLY (For Listing Sites):								
How did the Site come to be known:	☐ Site Discovery (received a rep☐ ERTS Complaint☐ Other (please explain):	ort): 11/13/2019 (Date	e Report Received)					
Does an Early Notice Letter need to build No., please explain why:	oe sent: ⊠ Yes □ No							
NAICS Code (if known): Otherwise, briefly explain how prope	erty is/was used (i.e., gas station, o	dry cleaner, pai	nt shop, vacant land, etc.):					
Site Unit(s) to be created (Unit Type): If multiple Units needed, please explain		Sediment						
Cleanup Process Type (for the Unit):	Cleanup Process Type (for the Unit): No Process Voluntary Cleanup Program Ecology-supervised or conducted Federal-supervised or conducted							
Site Status:	☐ Construction Complete – Performa		Model Remedy Used?					
☑ Cleanup Started ☐ No Further Action Req	☐ Cleanup Complete – Active O&M/N juired	<u> </u>	If yes, was this a transformer spill?					
Site Manager (Default:): _								
Specific confirmed contaminants include: Facility/Site ID No. (if known):								
G, BTEX in Soil		Cleanup Site ID	No. (if known):					
G, B, D, MTBD in Groundwater								
in Other (specify r	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.



REPORT: UST & Contaminated Soil Removal

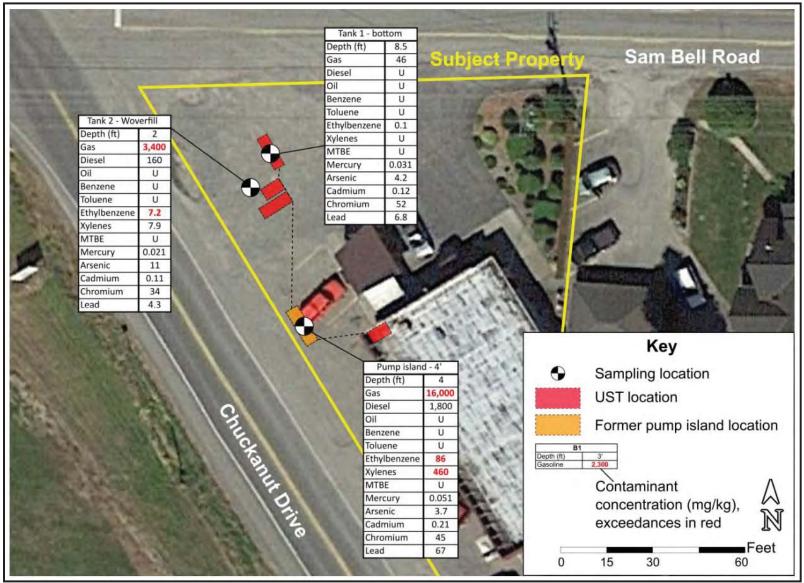


Figure 5. Site map with initial sampling results