INITIAL INVESTIGATION FIELD REPORT

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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

ERTS #(s):	719215
Parcel #(s):	Unknown
County:	King
FSID #:	99999008
CSID #:	16765
UST #:	

SITE INFORMATION

Site Name (Name over door):	Site Address (including City, State and Zip):	Phone / Email
Dallas Ave S PCE	Dallas Ave S & S Thistle St Seattle, WA 98108	
Site Contact, Title, Business: Unknown	Site Contact Address (including City, State and Zip):	Phone / Email
Site Owner, Title, Business: Unknown	Site Owner Address (including City, State and Zip):	Phone / Email
Site Owner Contact, Title, Business:	Site Owner Contact Address (including City, State and Zip):	Phone / Email
Previous Site Owner(s): Alternate Site Name(s):	Additional Info (for any Site Information Item): The PCE plume occurs in the vicinity of the intersection of Dallas Ave S and S Thistle St (east of 14th Ave S). Multiple upgradient properties have historically been used for dry cleaning and are potential sources of the plume.	

Latitude (Decimal Degrees):	47.52724
Longitude (Decimal Degrees):	-122.31438

INSPECTION INFORMATION

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

Inspection Conducted? Yes ☐ No ☒	Date/Time:	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	☐	
No release or threatened release	☐	
Refer to program/agency (Name: _____)	☐	
Independent Cleanup Action Completed (contamination removed)	☐	

COMPLAINT (Brief Summary of ERTS Complaint):

Ecology received information regarding a release not previously known. The maximum concentration of PCE in groundwater is 3,300 ug/L at MW-20 in the Dallas Ave S right of way, upgradient of South Park Marina.

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

The source of the release is unknown, though there are multiple candidate parcels upgradient of the detected PCE that historically were used for dry cleaning. An attempt was made to contact the owner of the parcel immediately upgradient, but there was no reply.

Investigator: Priscilla Tomlinson Date Submitted: 1/5/2023

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.):

During sampling for the remedial investigation at the South Park Marina site (SPM, CSID 2858), tetrachloroethene (PCE) was detected in groundwater and soil gas at the southwest corner of the site near the intersection of Dallas Ave S and S Thistle Street, which is just east of 14th Ave S.

Concentrations of PCE in groundwater within the parcel boundaries for SPM range from 12 ug/L at MW-09 to 2,900 ug/L at MW-13. The concentration of PCE in groundwater in MW-20, in the Dallas Ave S right-of-way upgradient of the SPM parcel, is 3,300 ug/L. The source of the PCE in groundwater appears to be upgradient of the SPM parcel and therefore not related to SPM operations.

The Method A groundwater cleanup level for PCE is 5 ug/L. The groundwater CUL to protect surface water in the Lower Duwamish Waterway is 2.9 ug/L. The groundwater screening levels to protect against vapor intrusion are 25 and 120 ug/L for unrestricted (residential) and commercial land use, respectively. The groundwater results indicate potential threats to the Lower Duwamish Waterway and to indoor air in buildings overlying the groundwater plume.

Concentrations of PCE is soil gas within the parcel boundaries for SPM range from 10,000 ug/m3 at SG-02 to 43,000 ug/m3 at SG-01. Both results exceeded the calibration range of the analytical instrument and should be considered estimated. Both samples were collected below a tire store located at the southwest corner of the SPM property. No soil gas samples were collected in the Dallas Ave S right-of-way.

The PCE soil gas screening levels to protect against vapor intrusion for unrestricted (residential) and commercial land use are 320 and 1,500 ug/m3, respectively. The soil gas results indicate potential for vapor intrusion into buildings at concentrations exceeding MTCA air cleanup levels.

Documents reviewed:

Draft map of PCE results in groundwater for South Park Marina. Aspect Consulting. December 2022.

Draft table of soil gas results for South Park Marina. Aspect Consulting. December 2022.

Historical South Park Neighborhood Inventory, Sites with Potential Recognized Environmental Conditions. King County, Department of Natural Resources and Park, Solid Waste Division. Undated.

Summary of Findings Related to Historic Dry Cleaner Site, 8500 to 8510 14th Ave S. TIG Environmental. March 8, 2023.

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	SEDIMENT	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 (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						Benzene
	Other Non-Halogenated Organics						TEX
	Petroleum Diesel						Petroleum Diesel
	Petroleum Gasoline						Petroleum Gasoline
	Petroleum Other						Oil-range organics
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	S	C		S		PCE, chloroform, EDB, EDC, MTBE
	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
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)

(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 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 ☐ 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

Model Remedy Used? ☐
If yes, was this a transformer spill? ☐

Site Manager (Default: _____): _____

Specific confirmed contaminants include:

_____ in Soil

PCE in Groundwater

_____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):
99999008
Cleanup Site ID No. (if known):
16765

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.

Analyte	Screening Level (ug/L)	Source
Tetrachloroethylene (PCE)	***2.90***	***GW-2***

Note: The GW-2 screening level is Ecology's Lower Duwamish Waterway Preliminary Cleanup Level based on protection of surface water.

- Analyte detected at a concentration 1000 times greater than the screening level
- Analyte detected at a concentration 100 times greater than the screening level
- Analyte detected at a concentration 10 times greater than the screening level
- Analyte detected at a concentration greater than the screening level
- Analyte not detected or detected at a concentration less than the screening level
- Monitoring Well
- Subslab Soil Gas Sample Location

Site Features

- Site Boundary
- Pervious Surface (gravel)
- Historical Site Feature
- Sheet Pile Wall
- King County Tax Parcel

MW-12 — *Exploration ID*

N — True North — Project North

Notes:
- ug/L = micrograms per liter
- Site features are approximate.

0 60 Feet

S THISTLE AVE

DALLAS AVE S

Duwamish Waterway

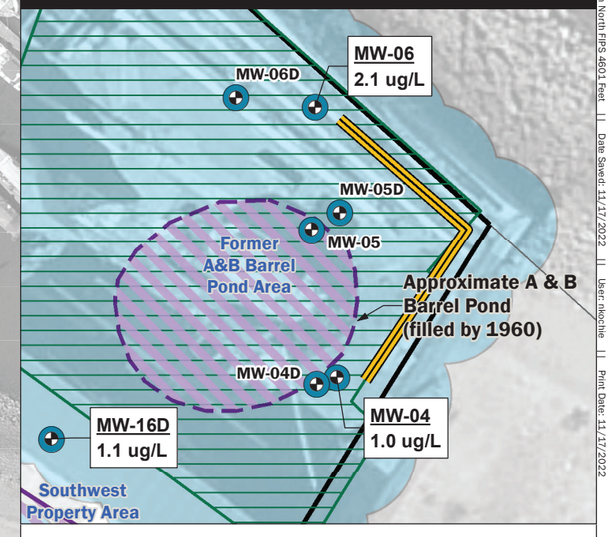
MW-11D
MW-11
MW-10
MW-12
MW-09
12 ug/L
MW-09D
420 ug/L
MW-22
65 ug/L
SG-01
SG-02
MW-13D
450 ug/L
MW-13
2900 ug/L
MW-20
3300 ug/L
MW-19
MW-19D
57 ug/L
MW-14
MW-15
1.2 ug/L
MW-17
MW-08
MW-08D
MW-07
MW-18D

Auto Repair and Gasoline Station (removed by 1972)
Former Service Station Area
Boat Maintenance Area
Radiator repair Shop (removed by 1972)
Historical Boat Manufacturing Building
Boat Wash and Historical Boat Manufacturing Area
A & B Barrel Building (1940s - 1960)
Southwest Property Area
Former Dry Cleaner (removed prior to 2012)

INSET MAP

PRELIMINARY - UNVALIDATED DRAFT DATA

INSET MAP



PCE Results in Groundwater

RIWP Addendum
South Park Marina
8604 Dallas Avenue South
Seattle, WA

DRAFT

Aspect Consulting	NOV-2022	BY: AY / TDR	FIGURE NO. X
	PROJECT NO. 190293	REVISED BY: NLK	

GIS Path: T:\projects_8\Seattle\Old_Jet\SouthParkMarina_190293\Delivered\PPPLY PCE Results in Groundwater.mxd | | Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet | | Date Saved: 11/17/2022 | | User: nlochte | | Print Date: 11/17/2022