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):	688323
Parcel #(s):	N/A
County:	King
FSID #:	90042
CSID #:	15064
UST #:	

SITE INFORMATION

Site Name (Name over door):	Site Address (including City, State and Zip):	Phone / Email
WA DOT Foreman	SR 509 & 12th Ave S SeaTac, WA 98148	
Site Contact, Title, Business: Patrick Svoboda WSDOT	Site Contact Address (including City, State and Zip):	Phone (360) 570-6696 Email
Site Owner, Title, Business: Washington State Department of Transportation	Site Owner Address (including City, State and Zip):	Phone Email
Site Owner Contact, Title, Business: Ben Wilkinson, HQ ESO Haz Mat & SW WSDOT	Site Owner Contact Address (including City, State and Zip): PO Box 47331 Olympia, WA 98504-7331	Phone Email
Previous Site Owner(s):	Additional Info (for any Site Information Item):	
Alternate Site Name(s):	The street address of 18451 12th Ave S, Des Moines given by WSDOT does not correspond with existing King County tax information or US Postal records.	

Latitude (Decimal Degrees):	
Longitude (Decimal Degrees):	

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):

On 2/26/2019, WSDOT Patrick Svoboda emailed Ecology Donna Musa with Notification and cleanup of Foreman Property for Ecology's review and comment. Ecology replied that an Initial Investigation would be conducted.

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

Additional characterization and/or cleanup is needed to ensure the site is in compliance with MTCA. Recommendation: Add to Confirmed & Suspected Contaminated Sites (CSCS) List.

Investigator: Dale Myers Date Submitted: 9/17/2019

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.):

Area B: The analytical results of soil sample SS-2 showed an arsenic concentration of 35 mg/kg; the CUL for arsenic is 20 milligrams per kilograms. Groundwater depth varied across the Site; although, it was encountered as shallow as three-ft. below ground surface (bgs) in select locations, a groundwater sample would be required. Additional information is needed:
• What are the dimensions of Area B
• At what depth was sample SS-2 taken
• Was a groundwater sample taken

Area C: Analytical results of soil sample SS-3 showed a lube range petroleum hydrocarbons of 31,000 milligrams per kilograms (mg/kg). Method A cleanup level (CUL) for lube oil is 2,000 mg/kg. “WSDOT considered this asphalt.” Groundwater depth varied across the Site; although, it was encountered as shallow as three-ft. below ground surface (bgs) in select locations, at a concentration of 31,000 mg/kg, a groundwater sample would be required. Additional information needed:
• What are the dimensions of Area B
• At what depth was sample SS-2 taken
• Was a groundwater sample taken

In January 2018 A-1 Towing, the lessee, graded and displaced Site soils. Some soils were contaminated. The soils were displaced from previously sampled areas A and B. There also was a new stockpile located just north of area D. Additional information is needed:
• Map accurately depicting how much of this grading encroached into Area B
• Did the soil contaminated with arsenic above the CUL get mixed/diluted with uncontaminated soil?
• Did the new stockpile of soil north of area D come from what was previously Area B?

On March 15, 2018, WSDOT Headquarters (HQ) HazMat Program collected four soil samples (SS1a, SS2a, SS3a, and SS4a) on the Site in areas previously defined as A, B, and in a new location. Additional information is needed:
• Detailed map depicting locations for these samples
• At what depth were these samples taken
• Was a sample of the new stockpile taken

On September 20 and 21, 2018, Marine Vacuum Incorporated (Marine Vac.) conducted excavation activities to address lube oil concentrations exceeding MTCA Method A CULs. Additionally, Marine Vac. excavated an area to remediate suspected contaminated materials (See Appendix 1 areas C and D). Additional information is needed:
• What are the dimensions of these two excavations?
• Were any confirmation samples taken at the limits of excavation and depth of excavation?
• An accurate map depicting these two excavations is necessary

The FCl-1 confirmation sample was collected at the bottom from the center of where the crushed asphalt was removed. Additional information is needed:
• At what depth was this sample taken?
• Was a confirmation groundwater sample taken?

The depth of the excavation trench for the 2nd confirmation sample could not safely be accessed. Therefore, the FCl-2 confirmation sample was collected from soil excavated with a backhoe bucket taken from the center of the bottom of the excavation. Additional information is needed:
• At what depth was this sample taken?
• Was a confirmation groundwater sample taken?

Figures: Map depicting sample locations on the Vicinity Map with sample Points does not match the sample locations of the Background Area figure. Additional figure necessary.
• A small inset with conflicting sample locations is unacceptable
• Accurate sample locations for SS-1, SS-2, SS-3, and SS-4 is required
• Accurate sample locations for SS1a, SS2a, SS3a, and SS4a is required
• Accurate depiction of grading and excavations is required.

Documents reviewed:

Phase II Environmental Site Assessment, Soil Sampling Report, State Route (SR) 509, Foreman Property 18451 12th Avenue South. Prepared by Headquarters Hazardous Materials and Solid Waste Program Environmental Services Office, Olympia, Washington. January 24, 2019.

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)	B					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	C	S				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						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	B					Cr, Se, Ag, Ba, Cd
	Lead						Lead
	Mercury						Mercury
	Arsenic	C	S				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):** 2/26/2019 (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:

lube oil, arsenic in Soil

_____ in Groundwater

_____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):
90042
Cleanup Site ID No. (if known):
15064

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.