

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

ERTS #(s):	738093
Parcel # (s):	ROW
County:	Pierce
FSID #:	100004534
CSID #:	17300
UST #:	N/A

SITE INFORMATION

Site Name (Name over door):	Site Address (including City, State, and Zip):	<u>Phone</u>	Click to enter text.			
WSDOT SR-509 Median	Center Median ROW, SR-509 and 4 th St. E,	Email Click	to enter text.			
ROW Area 1	Tacoma, WA 98421					
Site Contact, Title, Business:	Site Contact Address (including City, State, and Zip):	<u>Phone</u>	360.972.5366			
Tom Slimak, P.E., Project	Click to enter text	<u>Email</u>				
Engineer, WSDOT	Click to effici text.	thomas.s	limak@wsdot.wa.gov			
Site Owner, Title Business:	Site Owner Address (including City, State, and Zip):	<u>Phone</u>	Click to enter text.			
WSDOT	PO BOX 47331, Olympia, WA 98504-7331	Email Click	to enter text.			
Site Owner Contact, Title,	Site Owner Contact Address (Including City, State,	Phone	Click to enter text.			
Business:	and Zip):		0.1011 10 0.1101 10,111			
Click to enter text.	Click to enter text.	Email Click	to enter text.			
Previous Site Owner(s):	Additional Info (for any Site Information Item):					
	CC: Jeet Changari, Asst. Project Engineer, WSDOT,					
Alternate Site Name(s):	abhijeeth.changari@wsdot.wa.gov					
Click to enter text.						

	Lati	tude (Decima	47.2	5324				
	Lon	gitude (Decim	-122.30	6350				
INSPECTION INFORMATION	ON			neck this box if the n an existing site r			on information, such as data o	r
Inspection Conducted? Yes ☐ No ⊠	Date/Time: Click to ent	Date/Time: Click to enter text.		ice: An	nounced		Unannounced	
Photographs taken?	Yes 🗌	No 🛚	Note: Attach photog			r upload to	PIMS	
Samples Collected?	Yes 🗌	No ⊠ Note: Attach record			l with me	edia, locatio	n, depth, etc.	
RECOMMENDATION								
No Further Action (Check appropriate box below):						n Contamii	nated Sites List:	
Release or threatened release does not pose a threat								
No release or threatened release								
Refer to program/agency (Name: Click to enter text.)						LIST on NF	FA Sites List: 🔀	
Independent Cleanup Ad								

COMPLAINT (Brief Summary of ERTS Complaint):

Arsenic contamination was discovered during road construction project.

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

Soil remediated below MTCA Method A Cleanup Levels for arsenic. Recommend NFA list.

Investigator: Amanda Pole Date Submitted: 7/14/2025

OBSERVATIONS	Please check this box if you included information on the Supplemental Page at end of
eport.	

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):

The following is a summary of information provided in documents, email, and ecology mapping apps.

Construction personnel visually identified potential arsenic contaminated soil (based on dark soil discoloration) in 2 distinct areas during activities related to the SR-167/I-5 to SR-509 expressway project. Dark soil layers were identified twice in area 1 (in September and October 2024); area 2 was identified some time later with soil testing and remediation commencing in March 2025. Construction activities in both areas were halted and sites secured until soil testing and remediation was completed in consultation with DH Environmental (DH). This report focuses on area 1; a separate report has been prepared for area 2.

Excavated soils were stockpiled on, and covered with, Visqueen until waste characterization was completed for proper disposal. Based on the results of a fish bioassay test, the waste was designated as non-hazardous; the Tacoma Health Department approved the Waste Disposal Authorization application (refer to attachment 3 of DH's cleanup report).

Soil samples were analyzed for metals by Onsite Environmental Inc. using EPA methods 6010D and 7471B. Arsenic was the only metal to exceed MTCA Method A Cleanup Levels (CULs); all other metals tested for were either below their CULs or below the laboratory's practical quantitation limit (PQL).

Both areas are within the Tacoma Smelter Plume (TSP), with a predicted arsenic level under 20 ppm. Soil contamination from the former smelter is unlikely in this area. Additionally, the pockets of contamination identified during investigation are not indicative of TSP deposition patterns, and likely from another source.

Both areas are expected to be paved over as part of the WSDOT expressway construction project.

Area 1 was in the center median of SR-509 near 4th St. E in Tacoma. The above coordinates are approximation of area 1 based on Figure 1 in the cleanup report.

09/23/24 – DH began site investigation after the first report of suspect soil in area 1. They visually identified areas of concern (i.e. slag and debris) and used a portable X-ray fluorescent spectrometer (XRF) to measure heavy metal concentrations in the field (EPA Method 6200). Although the XRF screening did not identify As concentrations >20 mg/kg, five (5) soil samples were collected of the discolored soil for lab analysis. An additional five (5) soil samples were also collected from the stockpile of graded soil in temporary storage.

These samples were tested for RCRA 8 Metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver) as well as copper, nickel, and zinc. Arsenic was not detected above the lab's PQL of 11 mg/kg.

10/30/24 – DH returned to area 1 after the second discovery of suspect soil was identified. Thirty-three (33) test pits were advanced three (3) feet deep to address concern that the suspect material was widespread within the project area's anticipated excavation depth. DH visually inspected and collected multiple XRF readings in each test pit and collected soil samples where the screening indicated potential arsenic contamination above 20 mg/kg. Six (6) soil samples were collected for lab analysis.

Samples from test pits 8 and 12 were tested for RCRA 8 Metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver) as well as copper, nickel, and zinc. Samples from test pits 13, 18, 19, and 32 were solely tested for arsenic. Arsenic was detected above the lab's PQL in 4 samples (from test pits 8, 13, 18 and 19); the sample from test pit 18 detected arsenic at 24 mg/kg, exceeding the CUL of 20 mg/kg.

12/03/24 – KLB construction removed the contaminated soil around test pit 18 with DH's oversight. The excavation area was approx. 25 feet x 40 feet (according to the area defined in Figure 3 of the cleanup

report) with a sloped base ranging between 3 feet deep to a shallow surface scraping, resulting in no side walls. Clean soil limits were identified using XRF screening and four (4) confirmation soil samples were collected from the excavation base. Arsenic was not detected in these samples above the lab's PQL. Refer to Figure 4 in DH's cleanup report for excavation area boundaries and sample collection locations.

A summary of the arsenic lab results for the above referenced samples from area 1 can be found in Table 1 of DH's cleanup report.

04/04/25 – The ERTS report for the discovery of arsenic contaminated soil was submitted to Ecology by DH.

05/08/25 – Contaminated soils from areas 1 and 2 (140.65 tons combined) were transported to LRI Landfill in Eatonville, WA for disposal. Waste characterization was based on a fish bioassay and the waste disposal authorization was approved by the Tacoma Pierce County Health Department. Refer to the cleanup report for additional details and supporting documentation.

Documents reviewed:

Changari, Abhijeet (abhijeeth.changari@wsdot.wa.gov), "RE: ERTS 738093 WSDOT SR509 Arsenic Contamination at Construction Site", E-mail message, July 10, 2025.

Department of Ecology, "ERTS Incident #738093: Primary Initial Report", April 4, 2025, accessed on April 7, 2025.

Hill, David and Moxley, Nathan, "SR509 Area, Arsenic Cleanup Report, SR 167/I-5 to SR 509 Project, Tacoma, Washington", Letter, DH Environmental, INC, Tacoma, WA, July 3, 2025.

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	SEDIMENT	DESCRIPTION
	Phenolic Compounds	Select	Select	Select		Select	Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents	Select	Select	Select	Select	Select	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.
Non-Halogenated	Polynuclear Aromatic Hydrocarbons (PAH)	Select	Select	Select	Select	Select	Hydrocarbons composed of two or more benzene rings.
Organics	Tributyltin	Select	Select	Select		Select	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	Select	Select	Select	Select	Select	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	Select	Select	Select	Select	Select	Benzene
	Other Non-Halogenated Organics	Select	Select	Select	Select	Select	TEX
	Petroleum Diesel	Select	Select	Select		Select	Petroleum Diesel
	Petroleum Gasoline	Select	Select	Select	Select	Select	Petroleum Gasoline
	Petroleum Other	Select	Select	Select		Select	Oil-range organics
	PBDE	Select	Select	Select	Select	Select	Polybrominated di-phenyl ether
	Other Halogenated Organics	Select	Select	Select	Select	Select	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	Halogenated solvents	Select	Select	Select	Select	Select	PCE, chloroform, EDB, EDC, MTBE
Organics (see notes at bottom)	Polychlorinated Biphenyls (PCB)	Select	Select	Select	Select	Select	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)	Select	Select	Select	Select	Select	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 – Other	В	Select	Select		Select	Cr, Se, Ag, Ba, Cd
Motolo	Lead	В	Select	Select		Select	Lead
Metals	Mercury	Select	Select	Select	Select	Select	Mercury
	Arsenic	RB	Select	Select		Select	Arsenic
Pesticides	Non-halogenated pesticides	Select	Select	Select	Select	Select	Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
I CSIIGIUCS	Halogenated pesticides	Select	Select	Select	Select	Select	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	Select	Select	Select	Select	Select	Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic	Select	Select	Select		Select	Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic	Select	Select	Select	Select	Select	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	Select	Select	Select	Select	Select	All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances	Select	Select	Select		Select	Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures	Select	Select	Select		Select	Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures	Select	Select	Select		Select	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.
	Unexploded Ordinance	Select	Select	Select	Select	Select	Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes	Select	Select	Select	Select	Select	Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
Reactive Wastes	Corrosive Wastes	Select	Select	Select	Select	Select	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 O	NLY (For Listing Sites):						
How did the Site come to be known	☐ Site Discovery (received☑ ERTS Complaint☐ Other (please explain):	· ,	4/4/2025 (Date Report Received)				
Does an Early Notice Letter need to If No, please explain why:	be sent: ☐ Yes ☒ N NFA list	0					
NAICS Code (if known): Otherwise, briefly explain how prop Highway, Street, and Bridge Con	• • • • • • • • • • • • • • • • • • • •	station, dry cleaner, pa	int shop, vacant land, etc.):				
Site Unit(s) to be created (Unit Type If multiple Unites needed, please ex	· `	•					
Cleanup Process Type (for the Unit):	No ProcessVoluntary Cleanup ProgrFederal-supervised or co	- · ·	nt Action pervised or conducted				
Site Status: Awaiting Cleanup Cleanup Started No Further Action R		Model Remedy Used?					
Site Manager (Default Click to enter text.) Click to enter text.							
Specific confirmed contaminants in	clude:	Facility/Site ID No. (if known):					
<u>Arsenic</u> in So	pil	Click to enter text.					
		Cleanup Site ID No. (if	known):				
Click to enter text. in G	roundwater	Click to enter text.					
Click to enter text. in O	ther (specify matrix: <u>Choose a</u>	n item.					

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.

Additional or Supplemental Information for Observations Page Please use this box for any text that requires special formatting

Click to enter text.	