



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 #:

716254
Douglas
99999705
16816
none

SITE INFORMATION

Site Name (Name over door): RD 9.5 NE Used Oil Spill	Site Address (including City, State and Zip): 249 RD 9.5 NE, Mansfield, WA 98830 (nearest street address)	Phone Email
Site Contact, Title, Business: Jennifer Lange, Assistant County Engineers, Douglas County	Site Contact Address (including City, State and Zip): 140 19th St. NW, Suite A, East Wenatchee, WA 98802	Phone (509) 884-7173 Email jllange@co.douglas.wa.us
Site Owner, Title, Business: Douglas County road	Site Owner Address (including City, State and Zip):	Phone Email
Site Owner Contact, Title, Business: Douglas County	Site Owner Contact Address (including City, State and Zip):	Phone Email
Previous Site Owner(s):	Additional Info (for any Site Information Item): Dan Matthiesen is the owner of the residence directly to the north of Road 9.5 NE in the vicinity of the spill. Douglas County issued a cease and desist letter to him regarding dumping of oil onto the road.	
Alternate Site Name(s): Engle Road		

Latitude (Decimal Degrees): 47°45'0.48"N

Longitude (Decimal Degrees): 119°41'44.57"W

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: 8/10/2022 and 10/25/2022	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):

The complaint is that the owner of the residence to the north of the impacted area of the road dumped used oil onto the roadway, possibly for dust control.

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

This is a gravel road that is maintained by Douglas County.

Investigator: John Mefford

Date Submitted: 3/27/2023

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.):

On June 6, 2022, Jennifer Lange, an engineer with Douglas County, called to report a release caused by oil dumped onto a county maintained gravel road. The estimated volume is 30-35 gallons of used oil.

On August 10, 2022, I collected soil samples from three stained areas in the road and adjacent right-of-way. The analyses included NWTPH-Dx, EPA Method 8270D, EPA Method 8260, EPA Method 8082 and EPA 6000 series methods for metals. The samples obtained for volatile organics analysis by EPA Method 8260 were collected using EPA Method 5035. All of the samples were collected from 0-3 inches below ground surface (bgs). The sampling equipment was decontaminated after each use using an Alconox mixture and rinsed with regular tap water and finally with a deionized water rinse. Sampling locations were determined by field indications such as degree of staining as well as an evaluation using the sheen test. For more details, refer to the narrative & photo memorandum dated 8/10/2022.

The results of the initial sampling showed concentrations of diesel range and oil range organics that exceeded the Model Toxics Control Act (MTCA) Method A soil cleanup level (CUL). The Total Toxicity Equivalent Soil Concentration for carcinogenic PAHs (cPAHs) was also exceeded as was the CUL for benzo(a)pyrene. Other analytes were either non-detect or were below their respective Method A soil CULs.

Douglas County performed excavation of the impacted soils on October 17 and 18, 2022. Prior approval was received from the Greater Wenatchee Landfill for disposal after submittal of the initial sampling results. The total tonnage of the excavated materials is 277.88 tons. The weight tickets (9) are attached.

On October 20, 2022, I returned to the release area and collected five confirmation soil samples from four locations, coinciding closely with the previously sampled areas. Each sample was collected from 3-6 inches bgs, according to the location of the sample in relation to the excavation area. Prior to sample collection, soil was deposited into a pan and water was added to observe any sheen, if any. After each sample was collected, the tools were cleaned with an Alconox mixture, rinsed with tap water, then final rinsed with deionized water. The soil pan was also cleaned after each use. These samples were analyzed using NWTPH-Dx and EPA Method 8270D. These two methods were the only applicable methods since the other analyses screened out due to non-detection or to detection at levels below the MTCA Method A soil CULs.

Documents reviewed:

ERTS Incident #716254 report

Douglas County letter to Dan Matheisen. file attachment: 22_0628 R01376 Rd 9.5 Matheisen Ltr.pdf

Analytical results, Eurofins Cascade Analytical

file attachment: WCHH0390_1 LabAnalysis_Cascade 09 09 2022 1525.pdf, file attachment: WCJ0548_1 LabAnalysis_Cascade 11 08 2022 0758.pdf

Weight tickets. file attachment: 2022-10-19 101754.pdf

Diagram of estimated excavation extent and sampling locations. file attachment: Excavation_Sampling.Location.JPG

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, isopropanol, formic acid, acetic acid, stoddard solvent, Naptha). <i>Use this when TEX contaminants are present independently of gasoline.</i>
	Polynuclear Aromatic Hydrocarbons (PAH)	RB					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	B					Benzene
	Other Non-Halogenated Organics	B					TEX
	Petroleum Diesel	RB					Petroleum Diesel
	Petroleum Gasoline						Petroleum Gasoline
	Petroleum Other	RB					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)	B					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). <i>Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270</i>
Metals	Metals - Other	B					Cr, Se, Ag, Ba, Cd
	Lead	B					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 Ordnance						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 **Model Remedy Used?** ☐
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring **If yes, was this a** ☐
☒ No Further Action Required **transformer spill?**

Site Manager (Default: ____): John Mefford

Specific confirmed contaminants include:

petroleum, PAH in Soil

____ in Groundwater

____ in Other (specify matrix: ____)

Facility/Site ID No. (if known):

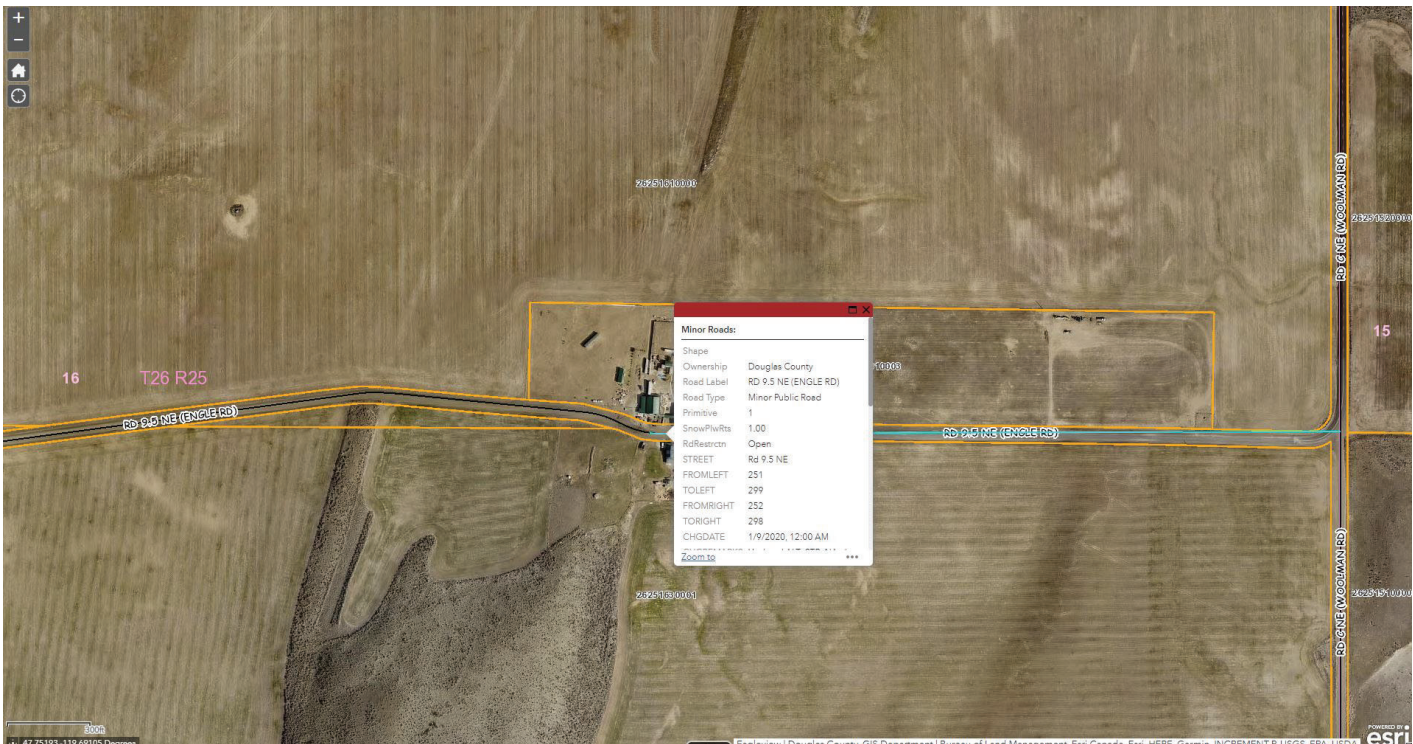
99999705

Cleanup Site ID No. (if known):

16816

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.

There is no designated parcel information for this portion of the road. This is a public road that is maintained by Douglas County.



The results of the post-excavation sampling confirm at the cleanup levels have been met for the cPAHs, both individual and TTEQ soil concentrations, as well as for diesel range and oil range organics. See file: Excavation_Sampling.Locations.JPG for estimated extent of excavation and sampling locations.

For additional context, the USDA SCS web soil survey shows that the soil in this area is mapped as the Touhey complex which consists primarily of fine-grained matrix. The first 12 inches of the native soil consist of ashy fine sandy loam. The surficial geology consists of Pleistocene continental glacial drift that overlies Tertiary volcanic rocks of the Columbia River Basalt Group. Review of nearest water supply well logs show shallow basalt bedrock is encountered as shallow as 6-12 feet bgs. Aerial imagery also shows bedrock outcrops. The water supply wells in the vicinity extend into the bedrock to depths of greater than 100 feet bgs.

CONCLUSION

Further action is not required. The cleanup action was sufficient to mitigate potential impact to human health and the environment.