State of Oregon
Department of Environmental Quality Memorandum

Date: 5/21/25

To: FILE

Through: Brad Shultz (Cleanup Program Manager) and Don Hanson (Lead Worker, Hydrogeologist)

From: Tina Elayer (Cleanup Project Manager)
Western Region

Subject: Jerry's Clutch and Transmission Service, ECSI # 6573; Staff Memorandum in support of a Conditional No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended Conditional No Further Action (CNFA) determination for the Jerry's Clutch and Transmission Service Site (Site), in Grants Pass. As discussed in this report, contaminant concentrations in soil, groundwater, and soil gas are below acceptable risk levels as long as certain conditions are met.

The proposed CNFA determination meets the requirements of Oregon Administrative Rules Chapter 340 Division 122, Sections 010 to 0140; and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A copy of the administrative record index is presented at the end of this report.

1. BACKGROUND

Site location.
The site's location can be described as follows:
- Address: 209 Macnew Lane, Grants Pass, Josephine County, Oregon.
- Latitude 42.3988º North, longitude -123.3092º West
- Tax lots 4409 and 4410, Township 36 South, Range 5 West, Section 32A

Site setting.
The Site consists of two adjacent parcels listed in Josephine County Assessor's records as tax lots 4409 and 4410. Tax Lot 4409 is approximately .52 acres and was used for vehicle and boat parking on the eastern portion, and automotive parts and equipment on the western portion. Tax Lot 4410 is approximately .53 acres and has a 3,600 square-foot one-story building that is divided into an office, three service bays, a driveline shop, and several storage areas. There is a covered porch with a concrete slab floor along the south side of the building and a covered and fenced enclosure with a concrete slab floor on the east side of the building. There was a 500-gallon above ground storage tank (AST) located at the northeast corner of the building. The AST

was in a concrete containment structure with a drain in the floor at the south end of the building. The AST is no longer on Site.

Adjacent properties are all residential and the zoning is Rural Residential – 5 acres minimum (RR 5).

Physical setting.
Site elevation is approximately 1150 feet above mean sea level (AMSL). Site topography is level, with a slight regional downgradient slope to the north towards the Rogue River. Depth to groundwater was measured in the onsite well that was drilled to a depth of 90 feet below ground surface (bgs). During drilling, water was first encountered in a bedrock unit at a depth of 50 feet bgs and rose to a static level of 8 feet bgs, indicating that the aquifer is at least partially confined.

The soil unit underlying the Site is identified in the Soil Survey of Josephine County, Oregon, published by the US Department of Agriculture, Soil Conservation Service as Unit 67b – Ruch gravelly silt loam, 2 to 7 percent slopes. This unit is described as deep, well-drained soil on foot slopes and alluvial fans. It formed in alluvium derived dominantly from altered sedimentary and extrusive igneous rock. The surface layer is very dark grayish brown gravely silt loam about 5 inches thick. The next layer is brown gravelly loam, about 8 inches thick. The subsoil is brown gravelly loam and dark yellowish brown and brown gravelly clay loam about 35 inches thick. The substratum to a depth of 60 inches or more is brown gravelly loam. The permeability of this Ruch soil is moderately slow. Runoff is medium, and the hazard of water erosion is moderate. Soil encountered during excavation activities was red-brown clay loam.

Site history.
In 1968 Tax Lot 4410 was developed as an autobody shop. Tax Lot 4409 was used for vehicle and boat parking The current owner, William Albert Moss Sr. purchased the Site in 1972 and operated an automotive repair service as "Jerry's Clutch and Transmission Service" and "Jerry's Drive-line" until 2019. Primary activities included repairing and rebuilding transmissions, drive-lines, and rear axle assemblies.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.
The Site is zoned as Rural Residential (RR 5), and the surrounding properties are all residential. This zoning allows commercial use. The Site was most recently used as an automotive repair facility. The William Albert Jerry Moss Trust (Trust) is working with U.S. Bank with plans to sell the Site. Based on the findings from assessment an easement & equitable servitude (EES) will be required restricting residential use at the Site. The building will still be able to be used for commercial purposes.

Groundwater use.
Oregon Water Resources Department (WRD) records for Section 32 identify 209 domestic wells within 1 mile of the Site. There is one onsite water well (JOSE#16053) that has been temporarily

capped and isn't being currently used, reportedly due to poor yield. The well report indicates the well was drilled to a depth of 90 feet in May 1992. Water was first encountered in a bedrock unit at a depth of 50 feet and rose to a static level of 8 feet. Drinking water for the two tax lots is currently provided by a water well on Tax Lot 4403, located on the north side of Macnew Lane. Based on the findings from assessment the onsite water well JOSE 16053 will have a restriction for residential water supply consumption without a treatment system in place. This well can be used for commercial purposes, however.

Surface water use.
There are no surface water bodies at the Site. The closest surface water body is Fruitdale Creek, located approximately 425 feet west of the Site. The creek discharges into the Rogue River approximately 1.7 miles north of the Site. The Rogue River is the primary receiving body for the area, discharging into the Pacific Ocean approximately 100 miles downstream at Gold Beach.

According to FEMA data, the Site is located within an undetermined flood zone. Storm water discharge across the site appears to flow multi-directionally. The storm water runoff appears to discharge to storm ditches that likely eventually discharge to the Rogue River.

3. INVESTIGATION AND CLEANUP WORK

EMC Engineers/Scientists (EMC) conducted a Phase I Environmental Site Assessment (ESA) in 2020. The ESA identified a recognized environmental condition (REC) with indications of petroleum contamination that was likely caused by incidental spills and releases at the Site. The ESA recommended that areas observed and/or suspected to have been impacted by should be excavated to ascertain their horizontal and vertical extents, to remove and dispose of contaminated soils, and assess their extents with respect to groundwater and exposure to potential receptors from media (soil, groundwater, and soil gas).

EMC conducted a site inspection on November 15, 2020, with a contractor who was hired by the Trust to dispose of and recycle remnant transmissions and parts. EMC and contractor decided on and implemented a cleanup plan that included storing, draining, and disposing of transmissions, multiple containers, collected oil, transmission fluid, and radiator coolant.

Several areas of concern (AOC) were identified by EMC, where fluids, oil, soil staining, and petroleum odors were present (Site map at end of staff memo). These areas were mainly concentrated on Tax Lot 4410, however several of these areas were located on Tax Lot 4409. There was significant staining visible in the drum storage areas south of the building, the covered areas between cargo containers where transmissions were stored, and around the cargo containers and outbuildings located south of the building. The wood and steel buildings on Tax Lot 4410 were demolished, and that exposed more stained soil in their proximity.

EMC identified 22 cleanup areas (Area 1 – Area 22) to simplify excavation and sampling activities. In September and October 2022 approximately 284 tons of petroleum contaminated soil (PCS) was excavated and transported to the Dry Creek Landfill in White City, Oregon for disposal under Special Waste Disposal Permits #2022-52 and #DC-23-85. The vertical extent of

the PCS was established by test holes excavated by the contractor in coordination with EMC. Visible staining was only evident in the uppermost foot of the native soil, which consists of red clay loam. In some areas the staining was only evident within four (4) inches of the surface.

The contractor scraped the surface gravel and uppermost native soil in cleanup Area 8 through Area 11 into a small pile. EMC collected a 5-part composite sample from the pile designated JT-062322-Pile on June 23, 2022, to characterize the soil for disposal. The sample was submitted to Neilson Research Corp. in Medford, Oregon (NRC). The sample was analyzed for diesel and oil range petroleum (TPH-Dx) and the volatile organic compounds (VOCs): benzene, ethylbenzene, toluene, and total xylenes (BTEX). Oil range petroleum (TPH-Ox) was reported at 20,600 milligrams per kilogram (mg/Kg). No other contaminants were reported above their respective Minimum Reporting Levels (MRL).

Areas 1 and 2 had a shallow 4-inch drainpipe along a concrete slab and staining was observed when the pipe was removed.

Areas 4, 5, and 6 had a subsurface trench drain, consisting of a 4-inch perforated pipe that ran along another concrete slab. The drain was connected to a buried 55-gallon polyethylene drum that had been perforated to allow drainage. Stained soils were observed under the pipe and drum, both were removed. Area 6 was then divided into Area 17 (drum) and Area 18 (pipe) with Area 17 being excavated to approximately 4.5 feet below ground surface (bgs). Area 18 was excavated to approximately eight (8) inches.

On June 6, 2023, an additional excavation was conducted in Areas 5, 7, 9-13, 15, and 16. Approximately eight (8) inches of exposed soil was removed in each area. Area 9 excavation was extended to approximately 2.5 feet bgs at one location due to a petroleum odor. Area 11 was also extended to approximately 2.0 feet bgs due to petroleum odor.

On July 10, 2023, another excavation was conducted in Area 11 and the former transmission staging area (Area 19). Both of these areas had approximately 2.5 feet below grade of additional PCS removed. Area 20 also had approximately four (4) inches of soil and automotive parts consisting of rubber hose, broken aluminum casing, electronic components, and copper tubing excavated in a 16-foot by 25-foot area.

The last excavation occurred on January 8, 2024. There were gaps observed by EMC around a fiberglass box embedded in the floor of the AST containment structure after tank was removed. Approximately two (2) feet of soil was excavated under the containment structure. The excavation was extended east approximately six (6) feet due to gray-brown staining of the soil underlying the containment structure. The depth of the excavation was increased to five (5) feet in the northeast corner due to visible staining. The final excavation was approximately 12 feet by 12 feet and ranged from 2 to 5 feet deep. The excavation was backfilled with clean fill.

Confirmation soil samples were collected after each phase of excavation. All confirmation samples were below the Level 2 Soil Matrix cleanup limit of 500mg/Kg for oil-range total petroleum. The highest remaining TPH-Dx concentration is 436 mg/Kg in Area 20. Arsenic was

reported at concentrations ranging from 1.38 mg/Kg to 2.35 mg/Kg. The regional default background concentration (RDBC) for arsenic in the Klamath Mountain Region is 12 mg/Kg. Barium was reported at concentrations ranging from 45.0 mg/Kg to 64.0 mg/Kg. The RDBC for barium in the Klamath Mountain Region is 630 mg/Kg. Cadmium was reported at concentrations ranging from 1.54 mg/Kg to 2.16 mg/Kg. The risk-based concentration for soil ingestion, dermal contact, and inhalation (RBCss) for residential receptors is 78 mg/Kg. Chromium was reported at concentrations ranging from 37.1 mg/Kg to 57.3 mg/Kg. The RDBC for chromium in the Klamath Mountain Region is 890 mg/Kg. Lead was reported at concentrations ranging from 5.19 mg/Kg to 8.77 mg/Kg. The RDBC for lead in the Klamath Mountain Region is 36 mg/Kg. Mercury was reported at concentrations ranging from 0.0160 mg/Kg to 0.0254 mg/Kg. The RDBC for mercury in the Klamath Mountain Region is 0.17 mg/Kg.

The Trust entered the Voluntary Cleanup Pathway (VCP) program on October 4, 2023, and ECSI # 6573 was assigned. DEQ reviewed the report entitled, Cleanup Report for Jerry's Clutch and Transmission Service (Former), 209 Macnew Lane, Grants Pass, Oregon, dated September 29, 2023, that documented excavation and sampling activities. DEQ then requested additional evaluation of groundwater and vapor intrusion impacts based on historic use of solvents at the site.

EMC prepared a Sampling and Analysis Plan for Supplemental Investigation (SAP) dated March 15, 2024. The SAP proposed collection of groundwater samples from the onsite well and the domestic well at 208 Macnew Lane. The SAP also proposed collection of sub-slab vapor samples near the former locations of a parts washer and an aboveground storage tank for used oil. DEQ provided recommendations for sub-slab sampling procedures in emails.

On July 9, 2024, groundwater samples were collected from the onsite well (JT-070924-Well 1) and the domestic well at 208 Macnew Lane (JT-070924-Well 3). Groundwater sample locations map is provided at end of staff memo. A field duplicate water sample (JT-070924-Well 2) was collected during the sampling of well JT-070924-Well 1. Groundwater samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and gasoline range hydrocarbons by Northwest Method TPH-Gx. The two wells were also analyzed for polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270 SIM and diesel and lube oil range hydrocarbons by Northwest Method TPH-Dx.

Groundwater samples were compared to risk-based concentrations (RBCs) for residential receptors. Heavy oil hydrocarbons, toluene, and bromoform were reported in the onsite well. The concentrations of toluene and bromoform were below the residential RBC for ingestion & inhalation from tapwater (RBCtw). However, the heavy oil hydrocarbons exceeded the RBC_{tw}. The relevant RBC in this case is 100 µg/L (diesel). No contaminants were detected in the residential well at 208 Macnew Lane.

The following groundwater results are provided in Table 1 below.

Table 1: Groundwater Sample Results

Contaminant	**JT-070924-Well 1** (209 Macnew Ln)	**JT-070924-Well 2** (Field Duplicate)	**JT-070924-Well 3** (208 Macnew Ln)	Residential RBCtw
Gasoline range Hydrocarbons	<37.0	<37.0	<37.0	110
Diesel range Hydrocarbons	<33.7	NA	<33.0	100
Lube oil range Hydrocarbons	158	NA	<31.6	100
Bromoform	0.690	<0.382	<0.382	3.3
Benzene	<0.0527	<0.0527	<0.0527	0.46
Ethylbenzene	<0.220	<0.220	<0.220	1.5
Naphthalene	<0.0985	<0.830	<0.0995	0.17
Toluene	9.63	9.77	<0.260	1,100
Total Xylenes	<0.340	<0.340	<0.340	190
Polynuclear Aromatic Hydrocarbons	All <0.469	NA	All <0.474	Various

All values in micrograms per liter
RBCtw Risk-based concentration for *Ingestion and Inhalation from Tapwater*
< Contaminant was not detected at the Report Limit specified.
NA Not Analyzed

Sub-slab vapor sampling points were also installed during assessment with samples collected into a certified 1-liter stainless steel cannister (sub-slab sample locations map at end of staff memo). A sub-slab vapor sample designated JT-072224-SSG1 was collected near the former location of the parts washer. The location was moved to the west side of the temporary wall to avoid a crack in the concrete slab. A background sample designated JT-072224-Back was collected under the plastic sheet. A sub-slab vapor sample designated JT-072224-SSG2 was collected near the former location of the used oil storage tank.

Several volatile organic compounds were reported in one or more sub-slab vapor samples at concentrations below occupational worker and residential RBCs for inhalation (RBCsv). 1,3-Butadiene was reported in SSG1 slightly above the residential RBC for inhalation (RBCsv) and not detected in SSG2. The highest concentration is below occupational worker RBCsv. The average concentration is below the residential RBCsv. Method detection limits (MDLs) for 1,3-Butadiene, Hexachlorobutadiene, and 1,1,2,2- Tetrachloroethane were higher than RBCsv for residential receptors and may be present at the Site. The MDLs were below RBCsv for occupational workers.

The following Table 2 shows the results of the sub-slab vapor sampling event.

Table 2: Sub-slab Vapor Sample Results

Contaminant	JT-072224-SSG1 (Parts Washer)	JT-072224-SSG2 (Used Oil Tank)	JT-072224-Back (Background)	Residential RBCsv	Occupational Worker RBCsv
4-Methyl-2-pentanone	49	<2.2	<1100	NL	NL
Acetone	1400	810	2,100 (J)	NITI	NITI
Benzene	12	3.9 (J)	**<79**	12	52
Bromodichloromethane	**<4.4**	**<3.0**	**<180**	2.5	11
Butadiene, 1,3-	**5.4**	<1.8	**<79**	3.1	14
Butanone, 2- (Methyl Ethyl Ketone)	170	47	<450	NITI	NITI
Carbon Disulfide	24 (J)	<3.4	<340	24,000	100,000
Chlorobenzene	<2.0	<1.4	190 (J)	1,700	7,300
Cyclohexane	<2.6	2.6 (J)	<180	210,000	880,000
Dibromoethane, 1,2- (EDB)	**<5.2**	**<3.6**	**<330**	0.16	0.68
Ethanol	200	38	<920	NITI	NITI
Ethylbenzene	8.3 (J)	3.8 (J)	**<140**	37	160
Ethyltoluene, 4-	19	6.5 (J)	<150	NL	NL
Heptane	13	10	<180	14,000	58,000
Hexachlorobutadiene	**<25**	**<17**	**<7,000**	4.3	19
Hexane	9.5	8.2	<150	24,000	100,000
Methylene Chloride	11 (J)	12 (J)	<560	3,400	41,000
Propanol, 2-	89	96	700,000	NL	NL
Propylbenzene	3.9 (J)	<1.6	<270	35,000	150,000
Styrene	3.2 (J)	<1.1	<170	35,000	150,000
Tetrachloroethane, 1,1,2,2-	**<4.9**	**<3.4**	**<190**	1.6	7.1
Tetrachloroethene (Tetrachloroethylene)	44	25	<250	360	1,600
Toluene	27	21	<130	170,000	730,000
Trichloroethane, 1,1,1-	3.4 (J)	2.0 (J)	<190	170,000	730,000
Trimethylbenzene, 1,2,4-	37	11	<150	2,100	8,800
Trimethylbenzene, 1,3,5-	15	4.2 (J)	<200	2,100	8,800
Trimethylpentane, 2,2,4-	<3.8	3.4 (J)	<130	NL	NL
Xylene, m,p-	30	15	<150	3,500	15,000
Xylene,o-	15	4.9 (J)	<200	3,500	15,000

All values in micrograms per liter
RBCsv Risk-based concentration for *Inhalation* from Soil Gas
< Contaminant was not detected at the Report Limit specified.
(J) Value is estimated; above the Method Detection Level but below the Report Limit
NITI No inhalation toxicity information
Bold values exceed Residential and/or Occupational Worker RBCsv

Nature and extent of contamination.
Residual hydrocarbons remaining in soil following cleanup were below soil matrix level 2 criteria, but in some areas TPH-Dx concentrations exceeded the leaching to groundwater RBC for diesel.

The contaminants of interest in the onsite groundwater well on Tax Lot 4410 include petroleum hydrocarbons, toluene, 1,3-Butadiene, and 1,1,2,2, -tetrachloroethane. The concentrations of

heavy oil hydrocarbons (when compared with the diesel RBC) exceed applicable risk-based concentrations for residential use.

The contaminants of interest in the onsite sub-slab vapor samples include 1,3-butadiene, 1,1,2,2-tetrachloroethane and benzene. The reporting limits for 1,2-dibromoethane (EDB), hexachlorobutadiene and bromodichloromethane were elevated above the RBCs, so it is unknown if they are also present. 1,3-butadiene was detected at 5.4 $\mu g/m^3$ in the vapor sample from the parts washer area, and this is above the EPA residential vapor intrusion screening level (VISL) calculated value of 3.1 $\mu g/m^3$. The concentration is below the VISL for commercial use. The 1,1,2,2-tetrachloroethane reporting limit is elevated slightly above the VISL calculated target sub-slab and near source soil gas concentration for 1E-6 cancer and hazard quotient of 1. Since this contaminant is relatively uncommon, it is likely not to be present at levels above RBCs.

Indoor air was not tested in the building. Because there have been impacts to soil beneath the building, it is likely that contamination may also exist in the flooring inside the building. Contaminated building materials such as concrete can also contribute to indoor air contamination.

4. RISK EVALUATION

Conceptual site model.
A conceptual site model identifies:

- Sources of contamination,
- Pathways by which this contamination could reach human and ecological receptors, and
- The human and ecological receptors currently and reasonably likely affected, and the degree of their exposure.

To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air. Table 3 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

Table 3. Identification of applicable RBCs, based on pertinent pathways and receptors

	Pathway	Receptor	Is pathway complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact, and Inhalation	Residential and/or Urban Residential	Yes	No	See note 1.
		Occupational	Yes	No	
		Construction Worker	Yes	No	

		Excavation Worker	Yes	No	
	Volatilization to Outdoor Air	Residential and/or Urban residential	Yes	No	
		Occupational	Yes	No	
	Leaching to Groundwater	Residential and/or Urban residential	Yes	Yes	See note 1.
		Occupational	Yes	Yes	
Groundwater	Ingestion & Inhalation from Tap Water	Residential and/or Urban residential	Yes	Yes	See note 2.
		Occupational	Yes	No	
	Vapor Intrusion into Buildings	Residential	No	No	
		Commercial	No	No	
	Groundwater in Excavation	Occupational	No	No	
Soil Vapor	Vapor Intrusion into Buildings	Residential	Yes	Yes	See note 3.
		Commercial	Yes	No	
Ecological		Terrestrial & Surface Water	No	No	

Notes:

1. Final confirmation samples were below Level 2 Soil Matrix cleanup limit of 500 mg/Kg for oil-range total petroleum. Highest remaining TPH-Dx concentration is 436 mg/Kg in Area 20. The residential leaching to groundwater RBC is 100 mg/Kg for TPH-Dx. The occupational leaching to groundwater RBC is 430 mg/Kg.
2. The onsite well appears to have been contaminated by past Site uses as an automotive repair facility as evidenced by the presence of petroleum hydrocarbons, toluene, 1,3-Butadiene, and 1,1,2,2, -tetrachloroethane. The concentrations of heavy oil hydrocarbons (when compared with the diesel RBC) exceed applicable risk-based concentrations for residential use. Using this well for residential domestic uses may lead to exposures to people above DEQ's cleanup standards.
3. Based on the concentrations of 1,3-butadiene, 1,1,2,2-tetrachloroethane and benzene in soil gas, residential use at the Site could result in unacceptable exposures to people from vapor intrusion. Use of the existing building for residential use may not be safe, however further (seasonal/quarterly) soil vapor monitoring and/or indoor air sampling could demonstrate that the vapor intrusion (VI) risk is acceptable for residential use.

Contaminant concentrations.

Soil

All the confirmation soil samples were below the Level 2 Soil Matrix cleanup limit of 500 mg/Kg. The highest remaining TPH-Dx concentration is 436 mg/Kg in Area 20 after four (4) inches of contaminated soil was removed.

Groundwater
Bromoform was detected in the JT-070924- Well 1 (Tax Lot 4410) groundwater sample at levels below DEQ's residential and commercial tap water RBC, which is 3.3 micrograms per liter (µg/L). DEQ assumes this contaminant might be from 'well shocking' where the well is treated with chlorine. Bromoform is a trihalomethane or THM and EPA's MCL for total THMs, or TTHMs, is 0.08 mg/L, or 80 µg/L. The detection of 0.69 µg/L is well below the TTHM value.

Heavy oil hydrocarbons were detected and exceeded the diesel RBC for tap water. The relevant RBC in this case is 100 µg/L (diesel) for residential receptors. The detection of 158 µg/L exceeds the residential RBC.

There is not currently a well on Tax Lot 4409, so it is not known if groundwater beneath this tax lot has also been affected by contamination from Tax Lot 4410. However, DEQ feels that the likelihood of contamination from the former Jerry's Clutch & Transmission operation is lower than at Tax Lot 4410, where contamination was confirmed in its well water.

Soil Gas
Benzene was detected in the JT-072224-SSG1 sample at 12 µg/m^3 which is right at the residential soil vapor RBC of 12 µg/m^3 near the parts washer; however, it was below the occupational RBC.

1,3-butadiene was detected at 5.4 µg/m^3 in the sample from the parts washer, and this is above the residential vapor intrusion screening level (VISL) calculated value of 3.1 µg/m^3. The concentration is below the VISL for commercial use.

1,1,2,2-tetrachloroethane reporting limit (<4.9 µg/m^3) is elevated slightly above the VISL (1.6 µg/m^3) calculated target sub-slab and near source soil gas concentration for 1E-6 cancer and hazard quotient of 1. Since this contaminant is relatively uncommon, it is likely not to be present at levels above RBCs.

Human health risk.
The onsite well on Tax Lot 4410 appears to have been contaminated by past Site uses as an automotive repair facility as evidenced by the presence of petroleum hydrocarbons, toluene, 1,3-Butadiene, and 1,1,2,2, -tetrachloroethane. The concentrations of heavy oil hydrocarbons (when compared with the diesel RBC) exceed applicable risk-based concentrations for residential use. Using this well for residential domestic uses may lead to exposures to people above DEQ's cleanup standards.

DEQ recommends using a carbon filter that could likely remove the petroleum contamination as well as the low levels of toluene in the water, if the well water is used as a drinking water source. Use of the well for commercial uses may be safe. Before using the well, the owner should have an understanding about the presence of typical well contaminants, including fecal coliform, e-coli, nitrates, lead and arsenic. The neighbor's well (208 Macnew Ln Well – JT-070924-Well 3) appears to be safe for residential use of the property and can be an option for continued use for water supply at the Tax Lot 4410.

The groundwater beneath Tax Lot 4409 was not tested. Because of its proximity to the former Jerry's facility, it is possible that groundwater may also have been affected at Tax Lot 4409.

Based on the concentrations of 1,3-butadiene, 1,1,2,2-tetrachloroethane and benzene in soil gas, residential use at the Site could result in unacceptable exposures to people from vapor intrusion. Use of the existing building for residential use may not be safe, however further (seasonal/quarterly) soil vapor monitoring and/or indoor air sampling could demonstrate that the vapor intrusion (VI) risk is acceptable for residential use. Continued use of the Site for commercial use would be acceptable if the building is not also used for residential purposes. One option would be to deed restrict residential uses. Another option would be to require vapor resistant construction for any new residential buildings on the Site, or further VI assessment and DEQ approval prior to the redevelopment.

Ecological risk.
There is no aquatic or terrestrial habitat at the Site currently or expected to be in the future. Tax Lot 4410 currently has a commercial building and Tax Lot 4409 is a bare lot that was used to store vehicles and boats.

5. RECOMMENDATION

Based on these findings DEQ feels that use of the onsite well at Tax Lot 4410 for commercial uses should be acceptable if standard well testing parameters are also within acceptable limits (arsenic, fecal coliform, nitrates, etc.). If the well on Tax Lot 4410 were to be used for residential purposes, it should not be used for the water supply without water treatment to remove petroleum (TPH - heavy oil). Treatment would also likely remove other VOCs detected. Continued use of the domestic well at 208 Macnew Lane (the current source of water to Tax Lot 4410) should be protective for both residential and commercial use at the Site.

At Tax Lot 4409, groundwater was not assessed. Groundwater beneath this tax lot may also have been affected to some extent by contamination from the former Jerry's operations, although it is less likely because of its location and distance from the former operations. DEQ recommends water testing of any new well drilled on Tax Lot 4409. Testing should include standard required parameters as well as TPH-Dx by method NWTPH-Dx, and VOCs by EPA Method 8260 or EPA Method 524.2.

Use of the existing onsite building for residential would likely result in unacceptable risk. The building can still be used for commercial purposes, if nobody resides at the Site. Because of possible contamination inside the building itself, the current building should not be repurposed for residential uses. If residential use were to be desired at the Site, it should be done in new construction. Engineered vapor mitigation methods should be employed during construction to prevent unacceptable vapor intrusion exposures to residents. This could include an engineered vapor barrier designed to block organic vapors (not just a standard moisture barrier), or a depressurization vapor mitigation system (sub slab or sub-membrane) similar to those used for radon gas removal. This option would need an easement & equitable servitude (EES) recorded

with the county before a conditional no further action (NFA) determination could be issued. Alternatively, construction for residential could be allowed if additional vapor assessment shows that soil vapor concentrations are acceptable over the seasons.

Following removal of contamination and based on sample results for soil, groundwater and soil gas, acceptable risk levels are not exceeded, and a conditional NFA determination is recommended for this Site, with an EES. The conditional NFA determination should be recorded in DEQ's ECSI database (ECSI # 6573) and in Your DEQ Online (YDO).

A 30-day public comment period is required, for adjacent property owners to review this staff memo and reports supporting this recommendation. Publication in the Oregon Bulletin and local newspaper/media is also required.

6. ADMINISTRATIVE RECORD

Phase I Environmental Site Assessment for William Albert Jerry Moss Sr. Site: 209 Macnew Ln, Grants Pass, OR 97527. EMC Engineers/Scientists, LLC. August 3, 2020.

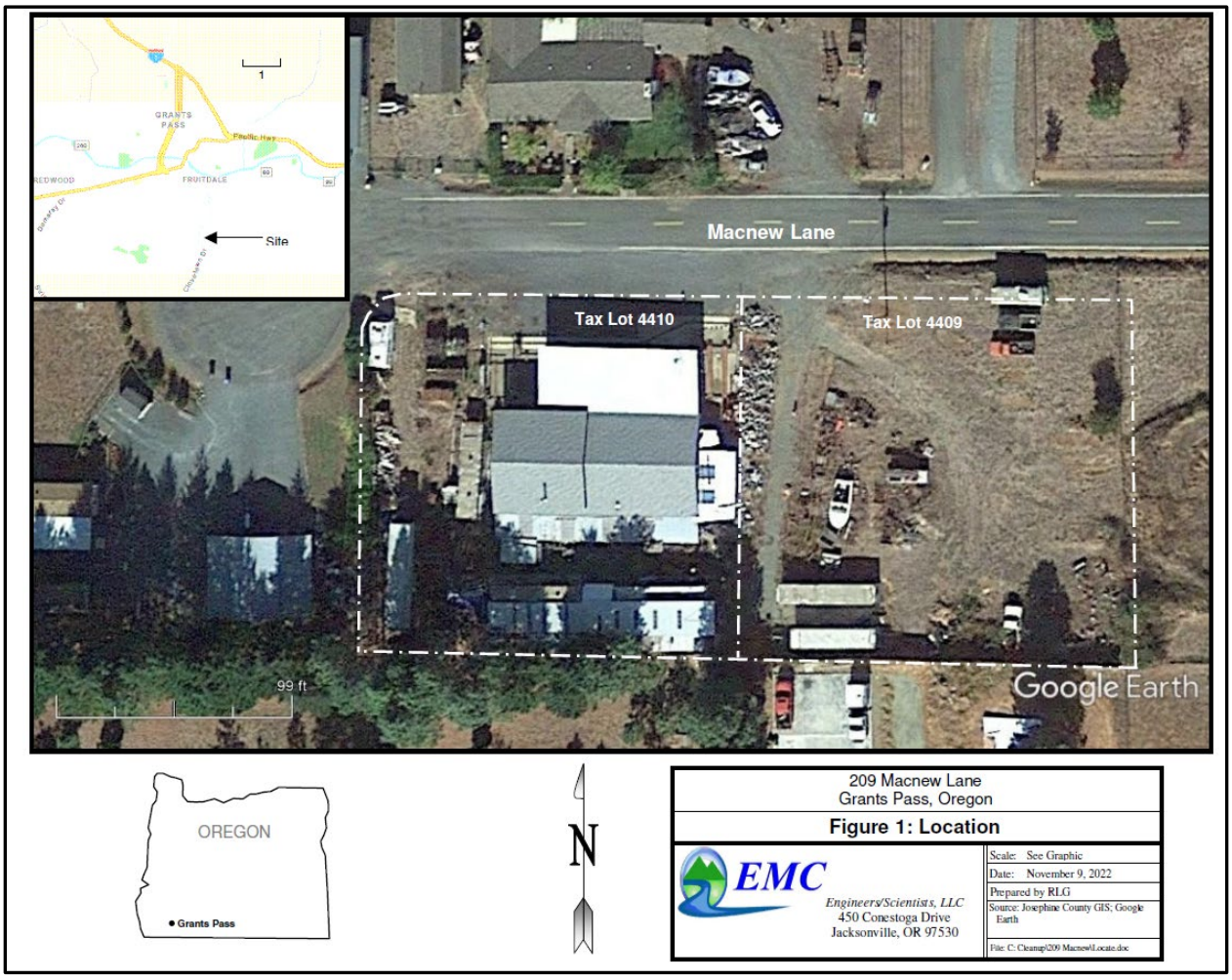
Cleanup Report for Jerry's Clutch and Transmission Service (Former): 209 Macnew Ln, Grants Pass, Oregon, ECSI#6573. EMC Engineers/Scientists, LLC. January 16, 2024.

Supplemental Investigation of Jerry's Clutch and Transmission Service (Former) ECSI#6573, 209 Macnew Ln, Grants Pass, Oregon, EMC Engineers/Scientists, LLC. November 22, 2024.

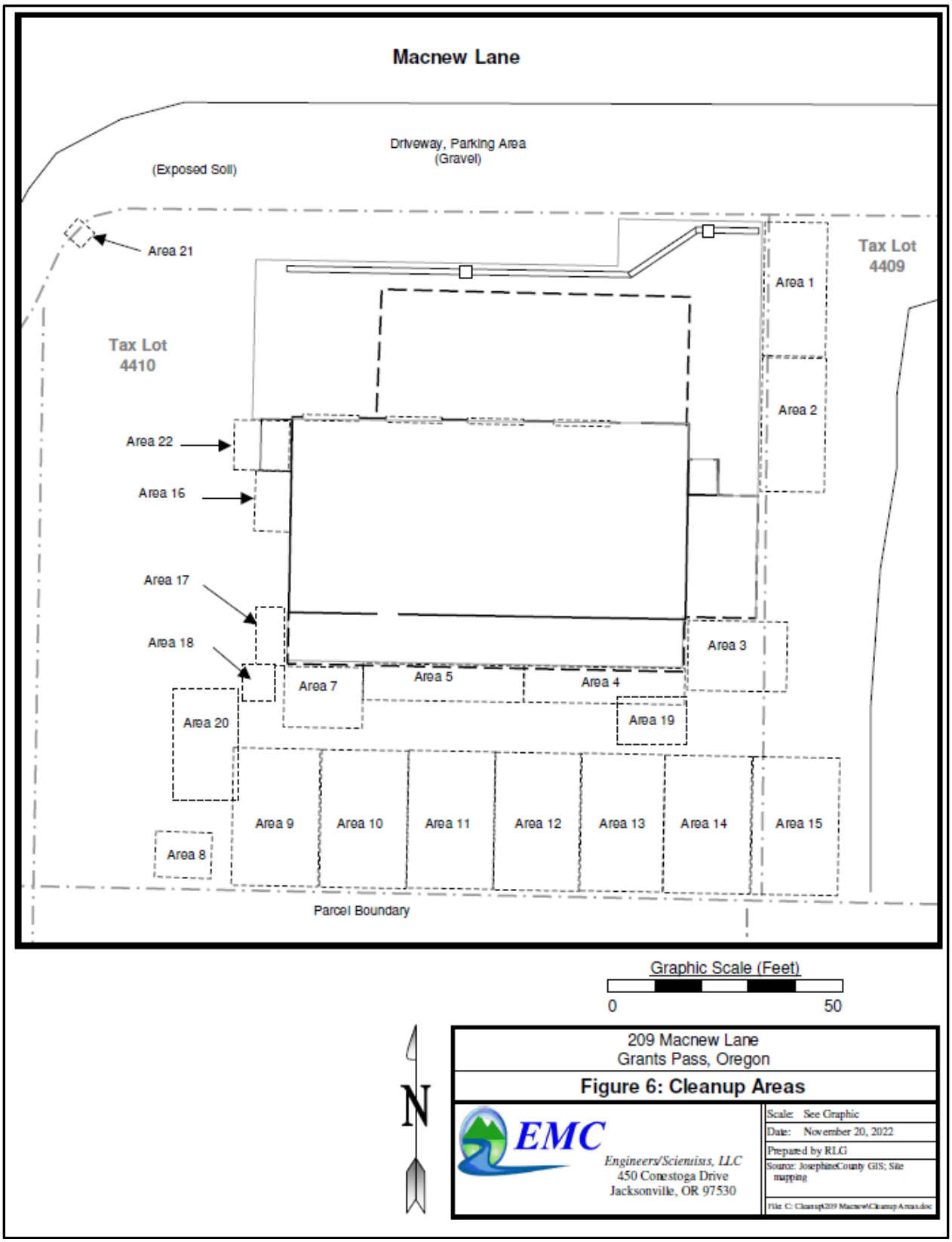
Supplemental Investigation Comments Summarized. ECSI#6573. DEQ. January 29, 2025.

7. ATTACHMENTS

1. Location map
2. Site map showing areas of concern
3. Groundwater sample location map
4. Sub-slab sample location map

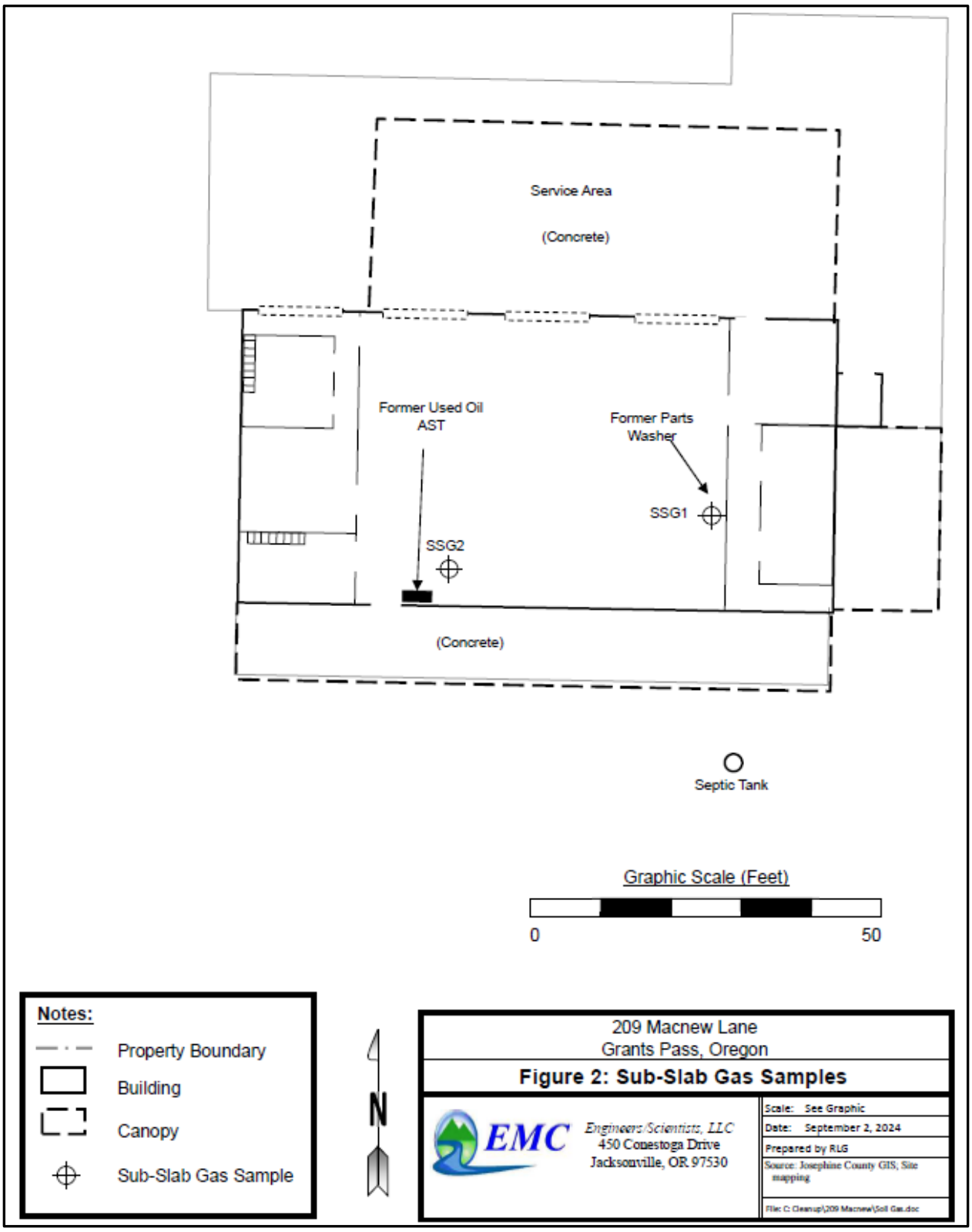


Location map (Retrieved from EMC Cleanup Report January 16, 2024).



Site Map (Retrieved from EMC Cleanup Report January 16, 2024).

Groundwater sample locations map (Retrieved from EMC Supplemental Investigation Report November 22, 2024).



Sub-Slab sample locations map (Retrieved from EMC Supplemental Investigation Report November 22, 2024).