

Date: September 12, 2023

To: FILE

Through: Brad Shultz (Manager), Don Hanson (Lead Worker)

From: Tina Elayer (Project Manager)
Western Region

Subject: Pacific Flats, ECSI # 6552; Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended No Further Action (NFA) determination for the Pacific Flats Site (Site), near Medford (Phoenix). As discussed in this report, contaminant concentrations in soil are below acceptable risk levels. The proposed NFA 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.

Address: 4003 and 4019 S. Pacific Highway, Medford (Phoenix), Jackson, Oregon. Latitude 42.2829° North, longitude -122.8247° West. Tax Map and Lots – 381W09A 1200 (4003); 381W09A 1100 (4019), Township 38 South, Range 1 West, Section 09A.

Site setting.

Property is approximately 3.57 acres and located within Jackson County, adjacent to the city limits of Phoenix, Oregon. All structures on the Site were demolished, and underground utilities removed in the summer of 2018 by M&M Services in preparation for future development activities. Adjacent properties include mobile home parks bordering the northern and eastern sides of the Site. The southern property border is next to S. Pacific Highway, western property boundary is adjacent to Jantzer Automotive Services. The land use zoning is GC, General Commercial. All adjoining properties are zoned GC or UR, Urban Residential.

Physical setting.

Site is located approximately 1480 feet above mean sea level (amsl). Topography of the regional area has a downgradient slope from south to northeast, towards Bear Creek to the east. Depth to groundwater is greater than 12' feet below ground surface (bgs). Site is in the broad Rogue River Valley, with surface waters draining northeast towards Bear Creek. Surface soils

are classified as Ruch Silt Loam (157B). Ruch silt loam is a very deep, well-drained soil located on alluvial fans. At the Site, shallow soils consist of several feet of loam over dark gray clay.

Site history.

Based on aerial photographs, in 1940, the eastern portion of the property was covered with an orchard. In 1951 the orchard was removed, and multiple buildings were constructed on the southern half of property. One structure was in the northern middle part of property, and smaller structures were in the NE corner. From 1962-1978 multiple automobiles, two single-wide mobile homes, a concrete block vehicle repair building, and a shop building were located on the property. From 1991-2002 there were three residences, a shop building, vehicle repair building, and a single-wide mobile home on middle part of property. There were also over twenty automobiles parked in several locations on the property, majority located on the southern portion of the property. Vehicles appear to be removed by 2017. Past Site use includes residential rentals, ceramic shop, auto sales with painting and repair services (Phoenix Auto Mart), and a shop utilized by a long-haul trucker.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.

Currently the property is vacant and has no remaining structures. Commonwealth Companies is working on purchasing the property planning a low-income residential development in response to the 2020 Alameda Fire that destroyed over 3,500 residential units in the Rogue Valley. The likely future land use is therefore residential.

Groundwater use.

Drinking water for the Site is supplied by Medford Water Commission. Groundwater was not encountered in excavations and borings completed to 12 feet bgs, and thus was not sampled. A beneficial water use survey was not conducted for the Site.

Surface water use.

Nearest surface water is Coleman Creek, approximately 300 feet east of the Site, with Bear Creek approximately 1000 feet northeast of the Site. An engineered stormwater management system will be developed for the Site per County/City code.

3. INVESTIGATION AND CLEANUP WORK

The following recognized environmental conditions (RECs) were identified from the Coleman Creek Consulting, Inc. (CCC) phase one environmental site assessment (ESA):

- Former fuel dispenser and underground fuel storage tank (UST) reportedly removed 25-30 years ago.
- Air compressor and associated stained soil behind the shop building.
- Former above ground used oil tank and used oil dust suppression on the gravel road areas.
- Hydraulic lift and presumed tank located beneath the shop building slab floor.

- Uses associated with auto sales and repair on the property from the 1950's to the 2000's, including vehicle repair activities in the shop building, and used vehicle storage on the north end of the property.
- Large burn pile in the NW part of the property.
- Possible impacts from orchard use prior to 1940 until prior to 1951.

CCC was then retained by Wes Meyers, Trustee, to prepare a Phase II Site Investigation dated January 19, 2018. Shop building area findings- Three boreholes were advanced to a depth of 11 feet (bgs) in the vicinity of the shop building vehicle lift and wall control. Three soil samples were collected from the advanced boreholes, and all three reported non-detect for Diesel and Lube Oil. The near surface soil adjacent to the north and south sides of the shop building were also investigated by scraping with a 3-foot smooth backhoe bucket to a depth of approximately 8". Two representative soil samples were collected north and south of the shop building from soil noted with discoloration. Diesel (482 and 505 mg/Kg), Lube Oil (2,400 and 4,430 mg/Kg) and total Lead (2,460 and 143 mg/Kg) concentrations were reported in the two soil samples.

Two representative soil pits were excavated to a depth of one foot bgs on the driveway north and south of the shop building. Two representative soil samples were collected from the soil pits and were reported non-detect for Diesel and Lube Oil, except one soil sample reported 91 mg/Kg Lube Oil. The stained soil area north of the air compressor near the NW corner of the shop building was investigated by excavating soil to a depth of 3 feet bgs. Two soil samples were collected from the pit at depths of 10" and 28" bgs. Both samples were reported non-detect for Diesel and Lube Oil.

The reported location of the former fuel UST near the SW corner of the shop building was investigated by excavating with a backhoe. Sewer lines and drain lines were exposed, and decomposed granite fill material was noted in contrast to the dark clay native soil. A concrete tank cap with imprint of the tank was encountered in two pieces. The fill material was removed to a depth of 7 feet bgs. No discolored soil or hydrocarbon odors were noted during excavation. A confirmation soil sample was collected from native clay soil at the bottom of the excavation and was reported non-detect for Diesel and Lube Oil. An 8-inch pipe identified as a former well casing was discovered with the confirmation soil sample at the bottom of the UST excavation.

The area of historically parked used cars on the south end of the Site was investigated by using a backhoe front end loader to remove grass and disturb near surface soil. An area approximately 20 feet by 80 feet was investigated, with no soil discoloration noted. The debris burn pile soil was investigated by removing the debris and scraping near surface soil with the backhoe front end loader. No visible soil staining was observed, and a sample of near surface soil was collected. The sample was reported non-detect for Diesel and 67 mg/Kg Lube Oil, with low concentrations of total Cadmium, Chromium and Lead.

The area of historically parked used cars on the north end of the Site was investigated by using a backhoe frontend loader to remove grass and disturb near surface soil. An area approximately 20 feet by 100 feet was investigated, with no soil discoloration noted. A representative soil sample

was collected from near surface soil, and reported non-detect for Diesel and Lube Oil, with low concentrations of total Cadmium, Chromium and Lead.

Three soil pits were excavated to a depth of 3 feet bgs to investigate historical orchard use. A representative soil sample was collected from each pit at depths of 12-16" bgs and reported with concentrations of total Arsenic (2.00 to 2.66 mg/Kg) and total Lead (4.3 to 7.99 mg/Kg).

The former used oil AST area was investigated by removing grass and scraping near surface soils with a backhoe front end loader. An area of 8 feet by 12 feet was investigated, and a representative near surface soil sample was collected. The soil sample was reported non-detect for Diesel and Lube Oil and detected poly aromatic hydrocarbons (PAHs) were all below residential direct contact cleanup concentrations. Recommendations from the Phase II Site Investigation included removal of petroleum contaminated soil (PCS) from the north and south area of shop building roll-up doors, removal of shop building floor lift and investigation for PCS, and proper decommissioning of the abandoned water well.

CCC was retained by OW&L, LLC to conduct a Phase III Cleanup and Soil Sampling Investigation in June 2018. After demolition of the shop building, the concrete floor slab was removed, along with the hydraulic vehicle lift. The air actuated lift was noted with attached airline, and no hydraulic tank. No petroleum odors or soil staining were noted during excavation activities. The lift cylinder was noted sealed, and approximately 35 gallons of hydraulic fluid was drained and properly disposed. A confirmation soil sample was collected from the bottom of the excavation at 9' bgs and was non-detect for Diesel and Lube Oil.

The PCS was removed from near surface soils on the north and south sides of the shop building roll-up doors where diesel and heavy oil range hydrocarbons had been detected. Approximately 27 tons of PCS was disposed at Dry Creek Landfill. Two confirmation soil samples were collected from the north side excavation at a depth of 12" bgs, with both samples reported non-detect for Diesel, and 145 and 39 mg/Kg Lube Oil. The soil sample collected from the south side excavation at a depth of 6" bgs was reported non-detect for both Diesel and Lube Oil.

The abandoned water well near the SW corner of the shop building was decommissioned according to abandonment procedures specified by the Oregon Water Resources Department by Gribble Well Drilling May 17, 2018.

Nature and extent of contamination.

Contaminants of interest include TPH-Diesel, poly aromatic hydrocarbons (PAHs), total metals (Arsenic, Cadmium, Chromium, and Lead), and volatile organic compounds (VOCs). The affected media is soil. Arsenic, Cadmium, Chromium, and Lead are in near surface soils.

4. RISK EVALUATION

Conceptual site model.

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 1 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

Table 1. Identification of applicable RBCs, based on pertinent pathways and receptors.

RISK BASED CONCLUSIONS
 Pacific Flats - ECSI 6552 - Site Investigation
 Phoenix, Oregon

	Pathway	Receptor	Is Pathway Complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact and Inhalation	Residential	Yes	No	Lead concentrations reported in near surface soils. Residential risk based concentration is 400mg/kg. Highest lead concentration is 89 mg/kg in confirmation samples.
		Urban Residential	Yes	No	
		Occupational	Yes	No	
		Construction Work	Yes	No	
	Volatilization to Outdoor Air	Excavation Worker	Yes	No	N/A
		Residential	Yes	No	
		Urban Residential	Yes	No	
	Vapor Intrusion Into Buildings	Occupational	Yes	No	Remaining concentrations below 500 mg/Kg and should not present a vapor intrusion concern.
		Residential	Yes	No	
		Urban Residential	Yes	No	
Leaching to Groundwater	Occupational	Yes	Yes	No groundwater encountered at 12' bgs. Local groundwater is not currently used for drinking water and is not likely to be used for this purpose in the future.	
	Urban Residential	Yes	Yes		
	Residential	Yes	Yes		
Groundwater	Ingestion & Inhalation From Tap Water	Occupational	Yes	No	City water is provided. Local groundwater is not currently used for drinking water and is not likely to be used for this purpose in the future.
		Urban Residential	Yes	No	
		Residential	Yes	No	
	Volatilization to Outdoor Air	Occupational	Yes	No	N/A
		Urban Residential	Yes	No	
		Residential	Yes	No	
	Vapor Intrusion Into Buildings	Occupational	Yes	No	N/A
		Urban Residential	Yes	No	
		Residential	Yes	No	
	Groundwater in Excavation	Occupational	Yes	No	Groundwater is greater than 12' bgs.
Soil Gas to VI	Occupational	Yes	N/A	N/A	
	Urban Residential	Yes	N/A		
	Residential	Yes	N/A		
Air	Occupational	Yes	No	N/A	
	Urban Residential	Yes	No		
	Residential	Yes	No		
Ecological	Terrestrial & Surface Water	No		Concentrations of contaminants remaining on the Site are below Eco Risk RBCs. The Site is going to be developed into residential housing and there will be a lack of suitable habitat for species of concern.	
Notes: bgs - below ground surface RBCs- risk based concentrations.					

Contaminant concentrations.

Lead, Arsenic, poly-aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and total petroleum hydrocarbons (Diesel and heavy range hydrocarbons) are the contaminants of concern (COCs) on the Site. Soil confirmation samples collected after PCS excavation reported

Lead, Diesel, Lube Oil, PAH, and VOC concentrations were all reported below applicable risk-based concentrations. Total Arsenic concentrations in soil were reported ranging from 2 to 2.66 mg/Kg. More discussion on this concentration is described in the Human health risk section.

Human health risk.

Four (4) near surface soil samples were reported with total Lead concentrations ranging from 34 to 89 mg/Kg at depths ranging from 6” to 12” bgs. Nine soil samples collected at various locations on the Site at depths up to 28” bgs were reported with total Lead concentrations below 30 mg/Kg. Dry soil was encountered to a depth of 9 feet bgs during vehicle lift excavation. Based on the above information, it is highly unlikely the near surface Lead concentration will impact groundwater. In addition, the highest Lead concentration (2,460 mg/Kg) was the soil excavated and disposed at Dry Creek Landfill. The highest remaining Lead soil concentration is 89 mg/Kg. Residential RBC for Lead is 400 mg/Kg.

Three (3) soil samples were collected in the area of the Site that formerly was an orchard prior to 1951. In Southern Oregon, the most common pesticide in use prior to 1950 was Lead Arsenate, and the soil samples were analyzed for both Lead and Arsenic. Total Lead concentrations in soil were reported ranging from 4.3 to 7.99 mg/Kg. Total Arsenic concentrations in soil were reported ranging from 2 to 2.66 mg/Kg. The generic ODEQ cleanup concentration for Arsenic in soil based on a residential receptor and direct soil contact exposure pathway is 0.29 mg/Kg. However, DEQ’s background concentration for arsenic for the Klamath Mountain province is 12 mg/Kg. The remaining arsenic concentrations are well below the regional background concentration.

The remaining TPH concentrations are below 500 mg/Kg and should not present a vapor intrusion concern at this Site.

Ecological risk.

Concentrations of contaminants remaining on the Site are below Eco Risk RBCs. The Site is going to be developed into residential housing and there will be a lack of suitable habitat for any species of concern.

5. RECOMMENDATION

Following removal of contamination and based on sample results for soil, acceptable risk levels are not exceeded, and a No Further Action determination is recommended for this site. The No Further Action determination should be recorded in DEQ’s ECSI database (ECSI # 6552).

6. ADMINISTRATIVE RECORD

Phase One Environmental Site Assessment, Property Described as T38S R1W S09A TAX LOTS 110 AND 1200 Jackson County, Oregon., prepared by Coleman Creek Consulting, Inc. (CCC), dated October 20, 2017.

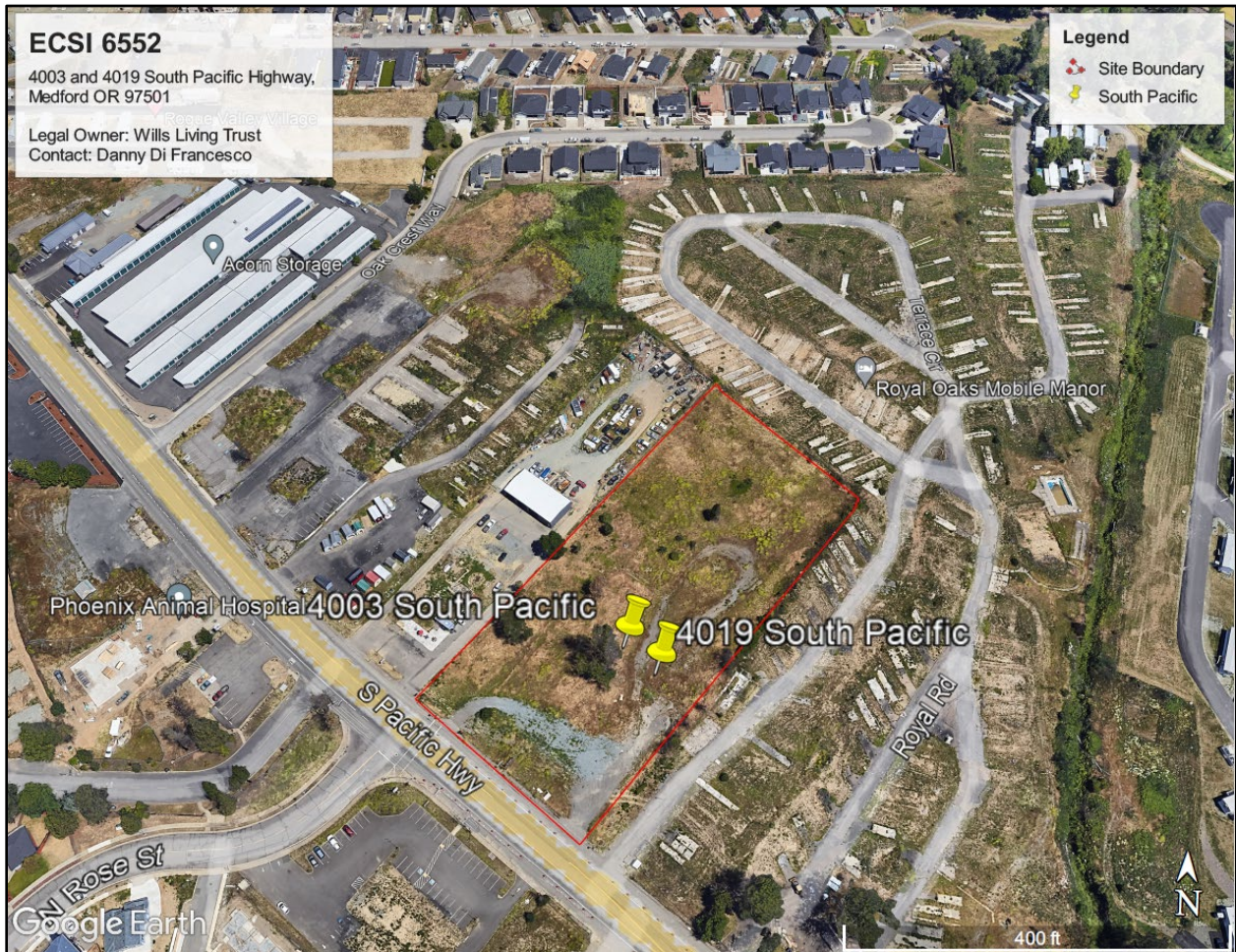
Pacific Flats, ECSI# 6552
Staff Memorandum
9/12/2023
Page 7 of 10

Phase II Site Investigation, Myers Property, 4019 S. Pacific Hwy., Medford, Oregon, prepared by Coleman Creek Consulting, Inc. (CCC), dated January 19, 2018.

Phase III Cleanup and Soil Sampling Investigation, OW&L, LLC Property, prepared by Coleman Creek Consulting, Inc. (CCC), dated June 12, 2018.

7. ATTACHMENTS

1. Vicinity map
2. Sample Location and Analytical Results Diagrams



Site Vicinity Map.



Phase II Sample Location and Analytical Results Diagram.



Phase III Sample Location and Analytical Results Diagram