

State of Oregon
Department of Environmental Quality

Memorandum

Date: March 2022

To: FILE

Through: Michael Kucinski, Manager Western Region Cleanup Manager
Donald Hanson, RG, Lead Worker/Hydrogeologist

From: Geoff Brown, RG
Western Region

Subject: Sunshine Road Apartments, ECSI # 6471 and 4695
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 Sunshine Road Apartments site, in Roseburg. This site is part of a larger ECSI site (4695), for which DEQ issued an NFA in 2007. Land use changed from industrial to urban residential on the portion of the larger site to which the Sunshine Road apartment NFA applies, requiring an evaluation of site conditions based on residential risk-based standards. As discussed in this report, contaminant concentrations 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.

The site's location can be described as follows:

- Address: 152 Sunshine Road, Roseburg, Douglas County, Oregon, **See Figure 1**
- Latitude 43.220479527997504° North, Longitude -123.27994404894311° West
- Map and Taxlot 2705W15C TL 200

Site Developments

Plans for the site include complete development (see Figure 2). Currently five large apartment buildings are under various stages of construction. The development is slated to conclude in December of 2022. As part of this project, the entire footprint of the site has been cleared and will be covered by new buildings, parking areas, landscaping, or drainage features.

Site setting.

The 9.09-acre Sunshine Road Apartments site is located in a mixed use neighborhood on the eastern edge of Roseburg. Property to the north and west of the site includes a mix of vacant former wood product industry sites, a quarry, and current industrial facilities conducting junkyard and metal recycling activities. The property across sunshine road from the site is Sunshine Park, a large sports complex of athletic fields. Properties to the south of North Umpqua Highway are mostly residential.

Physical setting.

The site slopes gently to the south, toward Deer Creek, which is just south of North Umpqua Highway. Deer Creek flows west, toward the South Umpqua river. A small unnamed tributary of Deer creek crosses the Sunshine property from north to south, flowing south.

Soil and groundwater borings at the site encountered shallow groundwater between two and 18 feet below ground surface. Local shallow groundwater flow is likely to the south, toward Deer Creek.

Site history.

The subject property was undeveloped until sometime after 1974, after which mill operations from the adjacent property to the west expended onto the property. An aerial photo from 1982 shows log decks and lumber storage covering a large portion of the site and a former truck shop and wigwam burner on the south portion of the property. No lumber milling occurred on the subject property and all structures, logs, and lumber were removed from the subject property by 2001.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.

The site has been developed as a multi-family apartment complex and is likely to remain this way for the foreseeable future. It is zoned Mixed Use.

Groundwater use.

Roseburg Water Services provides water for the site. Since the property is a large multi family residential development, future use of the underlying aquifer for drinking water at the property is not reasonably likely. In addition, residential properties to the south of the site also get their water from Roseburg Water Supply. Future development of the shallow aquifer for domestic water supply is not reasonably likely.

A postcard and door to door survey of 4865, 4809, 4769, and 4753 North Umpqua Highway and follow-up interview with Roseburg Water Services indicates confirms that the closest down-gradient residences are all on city water. A well log survey identified no downgradient nearby wells.

Surface water use.

A small unnamed tributary to Deer Creek crosses the site from north to south. This creek drains to Deer Creek, about 200 feet south of the site. Deer Creek flows from the site vicinity to the South Umpqua River entirely through the City of Roseburg, where a municipal water supply is readily available. It is not reasonably likely that there is current or future domestic use of water from the creek, although irrigation use is possible. There is no indication of any site related surface water impact.

3. INVESTIGATION AND CLEANUP WORK

The Sunshine Road Apartments property is the southeast portion of a larger former shingle and lumber mill that operated in this area from the early 1940s until 2001. Some wood treatment was conducted using a non-hazardous material (not documented) from 1999-2001. No milling or wood treatment operations were conducted on the subject property, only log and lumber storage, a truck repair shop, and a wigwam burner.

Environmental Investigations 2000-2006

A series of environmental investigations were conducted from 2000-2005. The site came into the Voluntary Cleanup Program in 2006 as the Schiller Property, ECSI #4695. DEQ worked with EGR & Associates to develop to review the historical data and identify data gaps. A sampling strategy was developed that targeted the saw mill, the planer mill, the wigwam burner, the diesel fueling area, the oil house and tank, debarker, and truck repair shop. Of these areas, only the wigwam burner and truck repair shop are within the current footprint of the future Sunshine Apartments property.

Chromium and Dioxins were detected in wigwam burner samples. Elevated concentrations of hydraulic and lube oil range hydrocarbons were detected in samples collected around the truck shop. A combined 65 cubic yards of contaminated soil was removed from the site. Follow up sampling showed that the wigwam burner area did not contain levels of chromium or dioxin above DEQ acceptable risk levels. Confirmation samples from the truck shop area did not contain petroleum. DEQ concluded that no risk based concentrations were exceeded for the site and issued a letter of No Further Action in February of 2007. Documents related to the cleanup of the Schiller Property can be found in ECSI File #4695.

Phase I (and II) Environmental Site Assessment, The Galli Group and Alpine Environmental Consultants May 2021

Alpine Environmental Consultants conducted a Phase II ESA on the subject property in May of 2021 to evaluate potential residual contamination on the property. The phase II consisted of collecting twenty two soil samples, seven groundwater samples and twelve soil gas samples (for methane). Sample locations are shown in Figure 3. Analytical data is presented in Attachment 1. Analytes included:

- Gasoline, Diesel, and Oil Range Hydrocarbons
- Polycyclic Aromatic Hydrocarbons

- Volatile Organic Compounds
- PCBs
- Dioxin and furans
- Total and dissolved arsenic, barium, cadmium, chromium, lead mercury, selenium, and silver
- TCLP arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver
- Asbestos
- Helium, methane, VOCs, and gasoline (in soil gas)

Nature and extent of contamination.

Soil contamination

Soil contamination exceeding generic risk-based concentrations was detected at three locations, which are shown on Figure 4:

- TP-1, 509 PPM Gasoline, near former truck repair shop, 2.5-3.5 feet below ground surface, exceeds vapor intrusion into buildings and leaching to groundwater RBCs
- TP-6D, 235 PPM Gasoline, in northeast corner of property, no obvious source, 2.6-5 feet below ground surface, exceeds vapor intrusion into buildings and leaching to groundwater RBC
- TW-5, 33.4 PPM Gasoline, center of west property line, 1.5 feet below ground surface, no obvious source, exceeds leaching to groundwater RBC

These locations are isolated from one another represent small pockets of soil contamination.

Groundwater contamination

Gasoline, diesel and oil exceeded generic risk based concentrations for ingestion of groundwater at several locations including:

- TW-2 GW, Oil, Truck Repair Shop area
- TW-4 GW, Diesel, West property line
- TW-5 GW, Diesel, Oil, West property line
- TW-6 GW, Diesel, West property line
- TP-6 GW, Diesel, Gasoline, northeast corner of property

Groundwater concentrations were generally low and can be found in the attached Tables. Groundwater conditions will be discussed in the Risk Evaluation section of this report.

Other chemicals

No other analytes were detected in excess of any risk based concentration, except Arsenic which was detected at concentrations exceeding RBCs but below regional background values for naturally occurring metals.

Soil gas sampling suggests Methane is not a concern at the apartment building locations, despite prevalent buried wood waste and sawdust.

4. RISK EVALUATION

Conceptual site model.

Evaluating 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.

[CONCEPTUAL SITE MODEL TABLE – ONE EXAMPLE]

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

Pathway	Receptor	Applicable RBC?	Basis for selection/exclusion
SOIL			
Ingestion, dermal contact, and inhalation	Residential	No	See Note 1.
	Urban residential	Yes	
	Occupational	Yes	
	Construction worker	Yes	
	Excavation worker	Yes	
Volatilization to outdoor air	Residential	No	See Note 1.
	Urban residential	Yes	
	Occupational	Yes	
Vapor intrusion into buildings	Residential	No	See Note 2.
	Urban residential	No	
	Occupational	No	
Leaching to groundwater	Residential	No	See Note 3.
	Urban residential	No	
	Occupational	No	
GROUNDWATER			
Ingestion and inhalation from tap water	Residential	No	See Note 3.
	Urban residential	No	
	Occupational	No	
Volatilization to outdoor air	Residential	No	See Note 1.
	Urban residential	Yes	
	Occupational	Yes	
Vapor intrusion into buildings	Residential	No	See Note 1.
	Urban residential	Yes	
	Occupational	Yes	
Groundwater in excavation	Construction and excavation worker	Yes	

1. The site is a large multifamily residential facility so urban residential applies, but not Residential.
2. No contaminated soil is located beneath or nearby buildings for human occupancy. Pockets of contamination are small and vapor resistant techniques were used during construction.
3. City water is provided at the site and nearby sites. Local groundwater is not currently used for drinking water and is not likely to be used for this purpose in the future.

Contaminant concentrations.

Soil Direct Contact Pathways. No chemical detected in any soil sample exceeded direct contact pathways for Urban Residential Receptors, Occupational Receptors, Construction Workers or Excavation Workers.

Soil Volatilization Pathways

Gasoline in TP-1 and TP-6D soil samples exceeded vapor intrusion into indoor air RBCs for Urban Residential Receptors. These samples are not located near buildings or planned building locations for the fully developed site. Additionally, the soil samples were followed up on by soil vapor samples, which detected no gasoline soil vapors in the vicinities. This pathway is incomplete and does not apply at the site.

No chemical was detected in excess of volatilization to outdoor air pathways for any receptor type.

Leaching to Groundwater

Gasoline concentrations in soil samples from TP-1, TW-5, and TP-6D are above leaching to groundwater Risk Based Concentrations. However, this pathway is incomplete based on the following:

- No wells are located on the subject property or adjoining properties
- The apartments at the site are served by the municipal water supply
- Nearby downgradient properties are all on city water based on a door to door survey and verification with the local water utility
- Based on the ready availability of city water, it is not reasonably likely the underlying shallow aquifer will be used for domestic purposes at the site or in the neighborhood.

Ingestion and Inhalation from Tap Water

This pathway is incomplete for reasons described above.

Groundwater Volatilization Pathways

While these pathways are complete, no chemical exceeded the RBCs for this pathway in any sample.

Groundwater in Excavation

No chemical detected in groundwater exceeded this these RBCs.

Human health risk.

Based on a comparison of soil and groundwater concentrations to applicable Risk Based Concentrations, there is no unacceptable human health risk at the site.

Ecological risk.

This site is an impacted industrial property that has been in use since the 1940s. There is no high value habitat on the site, and site development plans include development of the entire footprint of the site. There is a small seasonal tributary of Deer Creek that crosses the site, but there is no data suggesting impact to the creek. The 2007 DEQ NFA for the site concluded that site conditions do not impact ecological habitat and the site poses no ecological risk. Current environmental conditions are consistent with conditions in 2007 and there is no unacceptable risk to ecological receptors.

5. RECOMMENDATION

Based on sample results for soil, groundwater and soil gas, 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 # 6471 and 4695).

No public involvement is required at the site because there is no excess human health risk and no remedy is required for the site.

6. ADMINISTRATIVE RECORD

Phase I Environmental Site Assessment, 152 Sunshine Road, Roseburg, Oregon; Galli Group; May 3, 2021

Phase II Environmental Site Assessment, 152 Sunshine Road, Roseburg, Oregon 97470; Alpine Environmental Consultants, LLC; May 3, 2021

Documentation Supporting No Further Action Determination, Independent Cleanup Pathway; Oregon Department of Environmental Quality; December 14, 2006 *and supporting documents found in DEQ file ECSI 4695*

7. ATTACHMENTS

FIGURES

- Figure 1 - Site Vicinity Map
- Figure 2 - Site Map
- Figure 3 - Sample Location Map
- Figure 4 - Beneficial Use Survey Map

ATTACHMENT 1

Tables