Reserve Silica Reclamation

SHARP Report — Part 1 of 2

Go to site contamination history

• SHARP first SHARP	v2024.04.29	Ecology Info	
• SHARP rating	High	ERTS	SHARP it
• SHARP date	02/25/2025	CSID	4728
• EJFlagged?	⃠ - No Override	FSID	2041
• LD confidence level	low	VCP	none
• Cleanup milestone	remedial investigation	UST ID	none
• SHARPster	Tim O'Connor/Alan Noell	LUST ID	none

This section is blank if this is the first SHARP

SHARP Media	Scores	Confidence	Additional Factors	
Indoor air	D4	high	multiple chemical types	✔
Groundwater	C1	high	risk to off-site people	✔
Surface water	D4	high	climate change impacts	✔
Sediment	**A4**	high	plant/animal tissue data	⃠
Soil	**A2**	high		

Location and land use info

26000 Black Diamond Ravensdale Rd, Ravensdale, King County, 98051

Primary parcel	012106-9011 (Lot 5)
Land use	other
Responsible unit	Solid Waste

Sources reviewed

WSP, 2025, Remedial Investigation Report, Public Review Draft

Primary census tract	Associated census tracts
316	SHARP it

Local demographics comments

no comments

Source/source area description

The Lower Disposal Area (LDA) is the source of contamination. The LDA is a sandstone surface mining pit that was filled with approximately 175,000 tons of cement kiln dust (CKD) and with mine spoils between June 1979 and October 1982. Caustic groundwater is generated when CKD interacts with water. Groundwater/leachate fills the low-permeability sandstone like a bathtub and seeps through an approximately 25-foot tall berm constructed beneath haul road on the northwest side of the LDA. The caustic groundwater (with pH greater than 13 standards units) has mobilized antimony, arsenic, lead, and vanadium metals from within the CKD and soil beyond the LDA.

Soil comments

Soil contamination is limited to the seepage face, an emphemeral surface water body that is seasonally dry and has no observed surface water discharge, a former drainage area, and saturated low-permeable till soil.

Groundwater comments

Groundwater contamination is primarily encountered in low-permeability till soil near the source area. Contaminated seepage is collected in a trench, conveyed by pipe to the treatment system, treated by carbon dioxide sparging and iron filings, and discharged through a pipe to the Infiltration Ponds. The treated leachate infiltrates into the recessional outwash, within the 5-year capture zone of the Kent Springs wellheads near Lake Sawyer. The entire site is within the City of Kent Wellhead Protection Area. Groundwater complies with cleanup levels when treated before discharge to Infiltration Ponds. Ecology anticipates finalizing the State Waste

Surface water comments

Surface water contamination exists in the South Pond and the Infiltration Ponds. The South Pond is ephemeral, dry several months a year, and surface water discharges have not been observed. The Infiltration Pond receives treated leachate and discharges only to groundwater within the Vashon recessional outwash. Even in the absence of treatment, the caustic leachate is neutralized by groundwater within the recessional outwash and elevated concentrations of antimony, arsenic, and lead attenuate to below the cleanup levels near the Infiltration Ponds when neutralized.

Sediment comments

Sediment contamination is limited to the South Pond and Infiltration Ponds. The sediment cleanup levels are established by arsenic and lead, which are adjusted upward to the site-specific natural background concentrations in soil. The South Pond and Infiltration Ponds are surrounded by chain link fencing and they do not discharge to surface water.

Indoor air comments

There are no volatile contaminants at the Site.

Additional factors comments

no comments

Reserve Silica Reclamation

4728 Reserve Silica Reclamation 20250225
First SHARP
SHARP rating — High

SHARP Report — Part 2 of 2

Conceptual site model
02/25/2025

SHARP