

# **Reserve Silica Reclamation Site**

#### Site address

26000 Black Diamond Ravensdale Rd, Ravensdale, WA 98051

#### Comments accepted

May 1 – May 30, 2025

#### **Submit comments**

#### Online at:

go.ecology.wa.gov/ReserveSilica ReclamationRIComments

#### By mail or email:

Alan Noell, Site Manager PO Box 330316 Shoreline, WA 98133-9716 Phone: 425-213-4803 Email: alan.noell@ecy.wa.gov

#### **Document review locations**

Maple Valley Library 21844 SE 248<sup>th</sup> St Maple Valley, WA 98038

Ecology – NW Region Office 15700 Dayton Ave. N, Shoreline, WA 98133 By appointment, call: 206-594-0016 Email: nwro\_public\_request@ecy.wa.gov

#### **View Documents Online:**

go.ecology.wa.gov/ReserveSilica ReclamationRI

#### **Ecology Site ID's**

Facility Site ID: 2041 Site Cleanup ID: 4728



#### **Public Comment Period**

In December 2019, Reserve Silica Corporation and Holcim (US) Inc. entered into an Agreed Order under the state's cleanup law, the Model Toxics Control Act (MTCA).

MTCA provides requirements for contaminated site cleanup and sets standards that protect human health and the environment. Ecology implements MTCA and oversees cleanups. MTCA provides public participation requirements for formal agreements that allow the public to comment during the cleanup process.

The Agreed Order requires the companies to complete a Remedial Investigation (RI), Feasibility Study (FS), and Preliminary Draft Cleanup Action Plan (CAP).

Ecology hosted a public comment period for the Agreed Order in November 2018 and held a public meeting on November 16, 2018. Ecology provided a Responsiveness Summary Report and updated the Public Participation Plan in January 2020.

**Ecology requests your input on the Draft Remedial Investigation Report.** 

### Online Public Meeting

Ecology will hold an online public meeting May 7, 2025 to discuss the Draft Remedial Investigation Report.

 $\textbf{Register}: \ go.ecology.wa.gov/Reserve Silica Reclamation on line meeting$ 

**Zoom Presentation**: 6:00 – 7:00 pm **Questions and answers**: 7:00 – 8:00 pm

We will provide accommodations and interpreters for this public meeting upon request. To request assistance, please contact Nancy Lui at 425-393-5679 or email nlui461@ecy.wa.gov and reference Reserve Silica Reclamation Site.



### Site location and background

The Reserve Silica Reclamation site (Site) is located between Ravensdale and Black Diamond, Washington. Underground and surface coal mining were performed in the Site vicinity between the early 1900s and approximately 1950. Two surface mining pits – the Lower Disposal Area (LDA) and Dale Strip Pit (DSP) – were reclaimed with cement kiln dust (CKD) and mining spoils under the permitting authorities of two King County agencies, currently known as King County Department of Local Services and Public Health – Seattle & King County (Public Health). The LDA was filled with CKD and mine spoils between June 1979 and October 1982. The DSP was filled with CKD and mine spoils between November 1982 and May 1988.

CKD is a waste product from cement processing. CKD reacts with water to form calcium hydroxide, which can increase the pH to greater than 12 standard units creating caustic water. Caustic water has seeped from the LDA since the 1980s. The cleanup site is associated with the release of contamination from the CKD.

Since 1981, caustic seepage has been directed towards a borrow pit or the Infiltration Ponds, where the seepage was neutralized in groundwater. In 2002, Reserve Silica executed an Agreement to allow Holcim to conduct monitoring and cleanup activities for the CKD landfills. Since 2002, Holcim has completed independent cleanup actions at the Site. These actions include

Dale No.7 Seam Disposal Area Tan Sand Pit North Pit Upper Pit Lower Pit Middle Pit **Historical Coal Mining Features** Dale Pit No.4 Seam Historical Mining Areas **Property Boundary** Imagery: 0.1 Miles HxGN Content

groundwater and surface water monitoring, capping and monitoring of the LDA and DSP, management and treatment of seepage from the LDA, and installation of fencing to mitigate exposure.

The responsible parties have managed the caustic seepage under the permitting authorities of Public Health and Ecology's Water Quality Program. In September 2017 and March 2018, Ecology determined that Reserve Silica Corporation (Reserve Silica), Holcim (US), Inc. (Holcim), and BNSF Railway (BNSF) were potentially liable persons for the release of hazardous substances. Reserve Silica Corporation and Ravensdale 6 LLC (wholly-owned subsidiaries of Reserve Industries Corporation) own the parcels that contain the LDA and DSP. A predecessor company to Reserve Silica, Industrial Mineral Products, Inc., hauled CKD generated by Ideal Basic Industries, Inc., a predecessor company to Holcim, for disposal on BNSF property.

### Remedial investigation findings

Electromagnetic (EM) geophysical surveys indicate that high pH groundwater is released from the northwest side of the LDA and extends in low permeability soil beyond the seepage collection ditch and Lower Haul Road to the South Pond. The EM surveys also depict residual high pH groundwater near the Infiltration Ponds after the startup of the treatment system. The EM surveys do not indicate any lateral migration of high pH groundwater from the DSP.

There has been no confirmed release of contamination from the DSP after more than 20 years of monitoring groundwater in the bedrock monitoring wells and water that discharges from the mine portal. Mine water that discharges through the portal complies with the cleanup standards for the Site. The DSP is not subject to the MTCA regulations and thus not retained as a part of the MTCA Site.

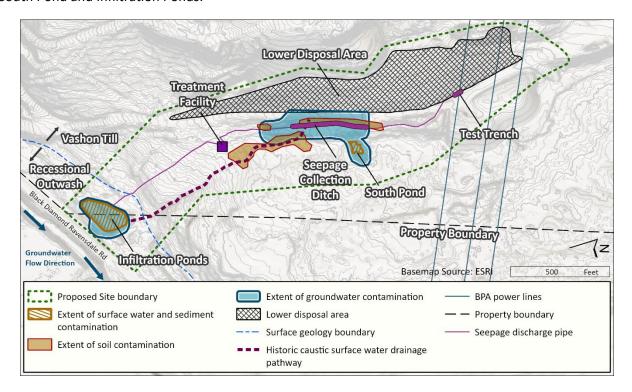
CKD fill in the LDA extends further southeast than the previously demarcated boundary. The low-permeability soil cover does not extend beyond the haul road and parcel boundary.



The low-permeability bedrock causes water to fill the former surface mine like a bathtub and discharge laterally through a berm on the northwest side of the LDA. The seepage collection ditch intercepts and discharges the caustic water through a pipe to the seepage treatment facility and then to the Infiltration Ponds. The seepage collection ditch has operated since 2013 and the seepage treatment system has operated continuously since 2019. Surface water in the Infiltration Ponds has been neutralized since treatment was initiated.

The RI delineates the extent of contamination defined as the areas where the concentrations of the contaminants of concern (COCs) exceed the preliminary cleanup standards. Antimony, arsenic, lead, vanadium, and pH were identified as COCs because their concentrations exceeded the preliminary cleanup levels (PCULs) developed in the RI Work Plan. Vanadium exceedances are limited to the areas with the highest pH and the concentrations of all the COCs decrease below the PCULs at neutral pH.

- Groundwater contamination extends from the active seepage area within the low permeability Vashon till formation
  and is encountered in the high permeability recessional outwash when high pH water discharges to the Infiltration
  Ponds.
- Surface water contamination is limited to the seepage collection ditch, the South Pond, and the Infiltration Ponds.
   The ponds discharge only to groundwater. Chain link fencing is placed around the seepage area and surface water bodies to restrict access.
- Soil contamination exists in the seepage area and historical drainage areas, while sediment contamination exists in the South Pond and Infiltration Ponds.



### What happens next?

Ecology will finalize the Draft Remedial Investigation Report after the public comment period ends. Ecology will review and consider all comments received and respond accordingly. Ecology will make appropriate revisions (if any) in the Final Remedial Investigation Report.

The potentially liable persons will prepare a Draft Feasibility Study Report and Preliminary Draft Cleanup Action Plan based on the conclusions and recommendations in the Remedial Investigation Report. Ecology will host a public comment period and a public meeting for the Draft Feasibility Study Report and Draft Cleanup Action Plan before finalizing the documents.



Solid Waste Management Alan Noell, Site Manager P.O. Box 330316 Shoreline, WA 98133-9716

Reserve Silica Reclamation Site
Draft Remedial Investigation Report
Public Comment Period: May 1-30, 2025
Zoom online public meeting: May 7, 2025
6:00-8:00 p.m.

## Sitio de Limpieza: Reserve Silica Reclamation Site

CSID 4728
26000 Black Diamond Ravensdale
RD, Ravensdale WA 98051

Kent

Maple Valley
Ravensdale

Site Location

Black Diamond

Ecología invita a comentarios sobre el Borrador de Investigación Remedial para este sitio, ubicado en 26000 Black Diamond Ravensdale Road, Ravensdale, WA 98051.

Periodo de comentarios públicos: 1º al 30 de mayo, 2025. Reunión pública virtual: 7 de mayo de 2025 – 6-8 p.m. Contacte a Nancy Lui para traducciones o interpretación para la reunión pública: nlui461@ecy.wa.gov | 425-393-5679

To request an ADA accommodation, contact Ecology by phone at 425-393-5679 or email nlui461@ecy.wa.gov, or visit ecology.wa.gov/Accessibility. For Relay Service or TTY call 711 or 877-833-6341.