

A fence closes off a portion of the lower Rocky Top trails on Friday, Feb. 3, 2023, after DTG Recycle closed public access to part of their portion of the Rocky Top trail system in Yakima, Wash.

Magnus Fulton of West Valley High School / Unleashed

Yakima Health District and DTG will start monitoring the company's landfill west of Yakima for forever chemicals.

In late 2003, as part of the U.S. Army's installation restoration program, just over 1,000 tons of soil contaminated by gasoline and oil from the Yakima Training Center were disposed of at the Anderson landfill in Yakima. DTG purchased the site in 2019.

The Army's installation restoration program addresses contamination on Army land and provides a groundwork for decontamination efforts to make the land usable. For years, the Army used shallow, unlined fire training pits in firefighting exercises. The pits were doused in flammable materials such as old gasoline and ignited. Firefighters would then use a PFAS-rich firefighting foam to put it out.

Per-and polyfluoroalkyl substances, or PFAS, are a family of chemicals. Some chemicals within the group are toxic to humans in minute quantities and have the ability to persist in human bodies, and the environment, for years.

In the early 2000s, the Army found groundwater at the Yakima Training Center was contaminated with petroleum-related compounds, and cleanup efforts began. After determining the fire training pits were too contaminated for on-site decontamination, the Army opted to dig up the pits and dispose of 743 cubic yards of soil at the Anderson landfill.

In January 2023, the Washington State Department of Ecology sent a letter to the Yakima Health District after learning about the contamination risk the soil posed. It suggested the health district start monitoring the area in the former Anderson landfill where the soil was disposed for PFAS.

New guidance

When the soil was moved to the landfill in 2003, the effects of PFAS were not fully understood by the Army and Ecology, which oversaw the disposal of the soil. The contents of the fire pits were dumped in a part of the landfill designed for treating and containing petroleum-contaminated soils. This site is unlined with no barrier between the contents and the ground beneath it.

More information has come out in recent years about the forever chemicals and the best way to address them.

According to the Environmental Protection Agency's 2020 interim guidance on the destruction and disposal of PFAS, unlined landfills cannot properly prevent PFAS from entering groundwater, as the chemicals can mix with water passing down through the landfill and into the ground.

The EPA said modern lined landfills can mitigate PFAS contamination but that hazardous waste landfills with more extensive protections like double liner systems with leachate and leak detection are best equipped to contain the chemicals.

In 2021, the EPA began taking steps to regulate the disposal of PFAS under the Resource Conservation and Recovery Act. Regulations are expected to be put in place within the next year and will allow for nationwide disposal standards.

In its interim disposal guidance, the EPA noted that since PFAS are still not regulated under the RCRA, "existing unlined landfills could contain PFAS that are easily emitted into the environment. Depending on their mobility, PFAS compounds could impact groundwater if disposed of in an unlined landfill."

At DTG

Ecology recommended the health district amend its sampling and analysis plan of the landfill to include PFAS within the next year. It also recommended soil grid sampling and the installation of monitoring wells near the petroleum-contaminated soils site at DTG.

DTG's petroleum-contaminated soils site has not received approval from the health district to accept new soils or remove soils off-site. The health district has given DTG until July 24 to decide whether to finish remediating all soil currently at the site and shut it down, or keep the site open and install more robust stormwater control.

"Regardless of the decision to continue operating or not, DTG will have to implement monitoring wells and sampling procedures for both petroleum and PFAS contaminants," Stephanie Badillo-Sanchez, a spokesperson for the health district, said in an email. "Specifications to these requirements have not been submitted or approved as their deadline has not passed."

Emily Tasaka, a spokesperson for Ecology, said the agency is investigating the landfill under an agreement with DTG. Ecology has heard concerns from multiple residents in the area about odors and vapor plumes. Sampling data from Ecology has found unsafe levels of chemicals like

benzene and volatile organic compounds responsible for the plumes, Tasaka said in an email to the Yakima Herald-Republic.

John Martin, chief innovation officer at DTG, said in an email to the Yakima Herald-Republic that DTG revised the site's sampling and analysis plan for groundwater in May to include PFAS in accordance with guidance from the health district and Ecology. The site already tests for total petroleum hydrocarbons in groundwater.

He said DTG is working with the health district to determine the future of its petroleumcontaminated soils site. Martin confirmed the site is not accepting petroleum-contaminated soils.

Under the state's Model Toxics Control Act, the health district has regulatory authority to enforce the monitoring efforts suggested by Ecology.

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