Fort Ord Cleanup Fact Sheet: Operable Unit 2 (OU2): Groundwater Cleanup

History:

The Army operated a landfill (located south of the corner of Imjin Parkway and Abrams Road) during the years Fort Ord served as a training base. The landfill (Operable Unit 2 or OU2) was a waste disposal area for Fort Ord's housing, offices, and support facilities, such as machine shops and motor pools. The landfill stopped accepting waste in 1987. It consisted of 6 areas (A through E) covering about 150 acres (see photo at right). In the late 1990s, contents of area A (about 33 acres) were excavated and placed into other areas. Like many municipal landfills from this era, Fort Ord's landfills were found to be leaching contaminants into groundwater below.

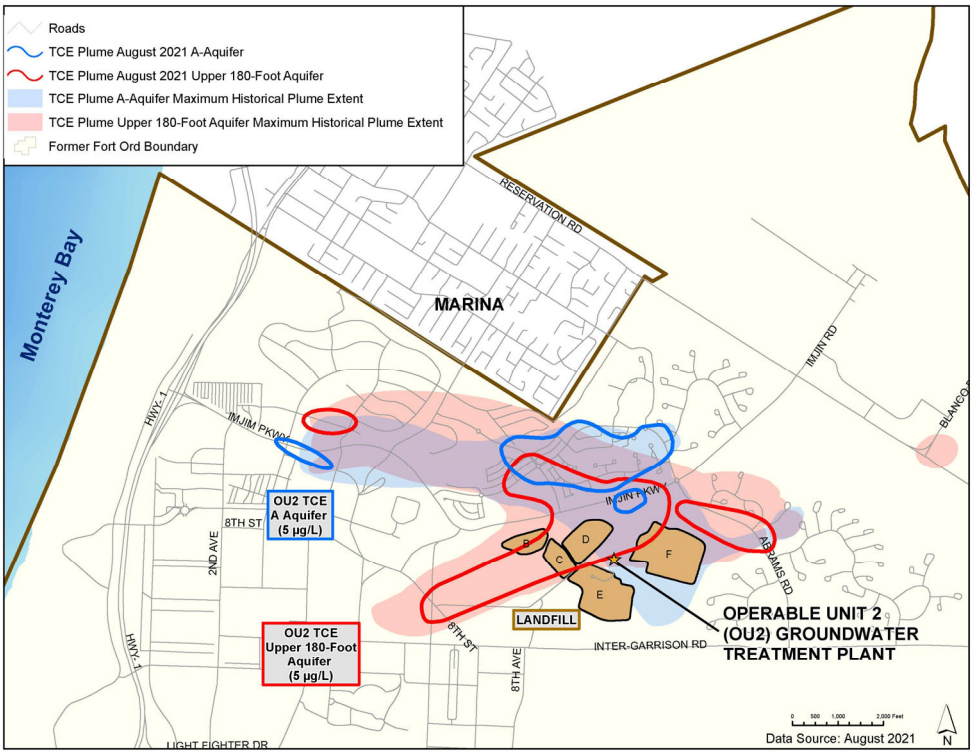
As part of the Superfund cleanup, the Army has installed a groundwater extraction and treatment facility, which has been operating since 1995. To prevent further migration of contaminants into the groundwater, an engineered cover system has been installed over areas B through E in three phases (1997-2013).

What chemicals have been found in groundwater related to OU2?

Eleven chemicals of concern (COCs) were identified during the groundwater investigation: benzene, carbon tetrachloride (CT), chloroform, 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), cis-1,2-dichloroethene (DCE), cis-1,2-dichloropropane (cis-1,3-DCP), dichloromethane, tetrachloroethene (PCE), vinyl chloride, and trichloroethene (TCE). COCs are chemicals present in groundwater at concentrations that could detrimentally affect human health or the environment. TCE is the primary COC at OU2. The groundwater must be cleaned up to meet the Aquifer Cleanup Levels (ACLs) for all eleven COCs, which are based on drinking water standards.

How far does groundwater contamination extend?

Initially, only the A-Aquifer (uppermost aquifer) was thought to be contaminated. However, subsequent investigations found contamination in monitoring wells in the Upper 180-Foot Aquifer (located just below the A -Aquifer). The map at right outlines the current footprint (based on August 2021 sampling results) for OU2 TCE contamination areas: blue lines show the current extent of TCE in the A-Aquifer and the blue shaded areas show the maximum historical extent of contamination. The red lines represent current TCE in the Upper 180-foot Aquifer and the shaded pink shows the maximum historical extent of TCE in this aquifer.



What is the Army doing to clean the water?

As part of the Fort Ord Superfund cleanup, the Army, with oversight by regulatory agencies (listed at the end of this fact sheet), is implementing a program to clean up contaminated groundwater. This program includes (1) placing an impermeable cover over the landfill to prevent precipitation (such as rain) from moving downward through the waste and (2) construction and operation of a groundwater extraction and treatment system.

Above is a photo of the new OU2 treatment plant that was completed in 2018. The six tanks are filled with granular activated carbon and used as part of the OU2 treatment system to clean up contaminated groundwater.

Contaminated groundwater is pumped from extraction wells and treated at the treatment plant (see right photo), which removes contaminants using granular activated carbon filtration. The treated water is then reinjected into the Upper 180-Foot Aquifer.

A new treatment plant has been constructed in an area near the landfill and is now operational. This groundwater treatment system will continue to operate until the concentrations of all eleven COCs meet the ACLs. This process will likely continue about 30 years based on current data. The treatment system is inspected each week to confirm proper operation. The Army conducts quarterly sampling at groundwater monitoring wells to assess groundwater quality in the aquifers and uses the data to determine if further changes to system operations are needed to maximize groundwater cleanup efficiency.

Your drinking water is safe.

Data indicate very low concentrations of TCE have been found in some drinking water supply wells on former Fort Ord. Concentrations of TCE in drinking water supply wells are significantly below federal and state Safe Drinking Water Act maximum contaminant levels. Drinking water supplied by Marina Coast Water District meets all federal, state and local regulatory standards. Drinking water quality is regularly tested by Marina Coast Water District and the results are reported in annual Consumer Confidence Reports, which can be viewed at www.mcwd.org/gsa_ccr.html. For more information, see Groundwater Cleanup Overview fact sheet on www.fortordcleanup.com.

What happens next?

The Army will continue to operate the OU2 groundwater treatment system and monitor groundwater quality until the cleanup goals are met.

To learn more about Fort Ord Groundwater Cleanup:

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