

# Fort Ord Cleanup Fact Sheet: Sites 2 and 12 Groundwater Cleanup

## History:

The groundwater contamination at Sites 2 and 12 was associated with improper disposal of solvents from former automotive and other repair facilities. The contamination is limited to the Upper 180-Foot Aquifer.

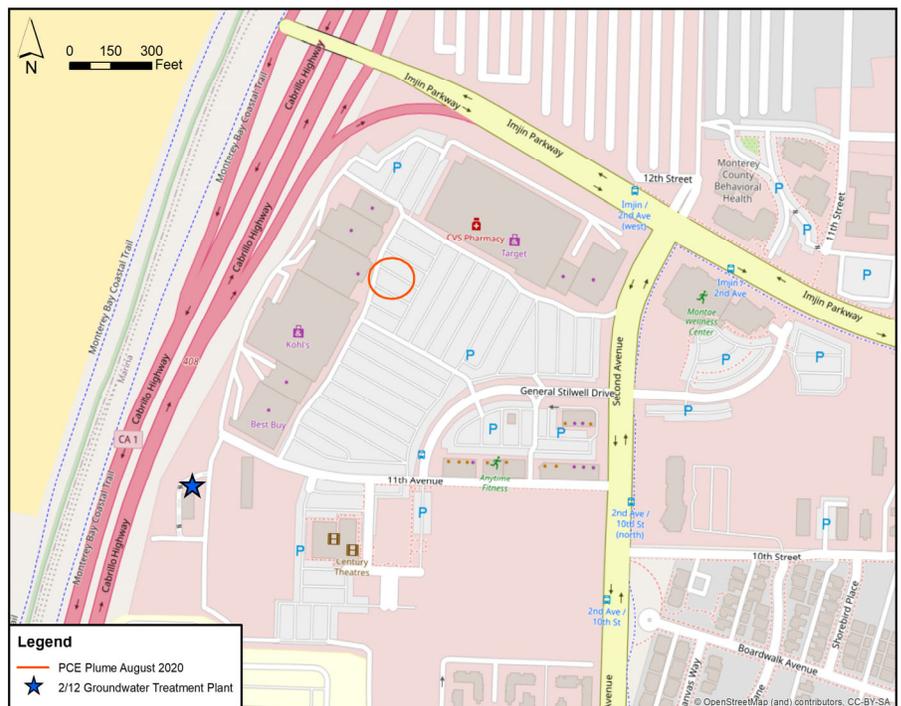
As part of the Fort Ord Superfund cleanup, the Army, with oversight by regulatory agencies (listed at the end of this fact sheet), has been implementing a program to clean up contaminated groundwater and to stop further aquifer



contamination. This program includes removal of contaminated soil from Site 12 (completed in the 1990s), operation of the groundwater treatment facility (housed in the building in photo above) that extracts and cleans contaminated groundwater and then returns treated groundwater to the aquifer, and operation of a soil vapor treatment facility (shown at the far right in the photo above) that extracts and cleans contaminated soil gas so contaminants do not enter groundwater.

## What chemicals have been found in groundwater related to Sites 2 and 12?

Eight chemicals of concern (COCs) were identified during the Army's investigation of groundwater: chloroform, 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,3-dichloropropene (total), tetrachloroethene (PCE), vinyl chloride, and trichloroethene (TCE). COCs are chemicals present in soil or groundwater at concentrations that could detrimentally affect human health or the environment. The groundwater treatment system began operating in 1999. The Army also conducted a soil gas investigation at Sites 2 and 12. Soil gas, also known as soil vapor, has been evaluated in accordance with state and federal guidelines. After operating the soil gas treatment system for several years (2015-2018), recent monitoring results indicate that the presence of COCs in soil gas is not contributing to the groundwater contamination. As part of an ongoing study, the soil gas treatment system is currently off-line. The cleanup goal is to meet the Aquifer Cleanup Level (ACL) for all COCs. Of the eight COCs, the only remaining COC requiring cleanup is PCE. The groundwater cleanup is ongoing and will continue until the ACL is achieved.



## How far does groundwater contamination extend?

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The map on the previous page outlines the current footprint of PCE (orange solid line) contamination at Sites 2 and 12 based on August 2020 sampling results. The groundwater treatment system for Sites 2 and 12 has been operating since 1999. As of December 31, 2023, the system has pumped and treated over 2.354 billion gallons of groundwater and removed over 498 pounds of contaminants.

## What has the Army been doing to clean groundwater?

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Contaminated groundwater is pumped from extraction wells and treated at the treatment plant (shown in the photo on page 1), which removes contamination using granular activated carbon filtration and air stripping. The treated water from this treatment plant is combined with the treated groundwater from OU2 and reinjected back into the aquifer. In 2015, the treatment system was modified to include the soil vapor extraction and treatment system to enhance and optimize groundwater cleanup efforts. The soil vapor treatment system performed as intended. Additional soil gas monitoring will occur before this system can be removed.

The groundwater extraction and treatment system will continue to operate for a few more years until impacted groundwater meets the ACL for all COCs. The treatment system is inspected weekly to ensure proper operation and is also periodically adjusted to maximize efficiency of the groundwater cleanup. Groundwater and soil gas monitoring wells are sampled quarterly to assess groundwater quality and to determine if further changes to system operations are needed.

## Your drinking water is safe.

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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](http://www.mcwd.org/gsa_ccr.html). For more information, see Groundwater Cleanup Overview fact sheet on [www.fortordcleanup.com](http://www.fortordcleanup.com).

## What happens next?

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The Army will continue to monitor Sites 2 and 12 groundwater quality quarterly. The groundwater extraction and treatment system will be operated until the COC aquifer cleanup goals are met.

## To learn more about the Fort Ord Groundwater Cleanup:

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