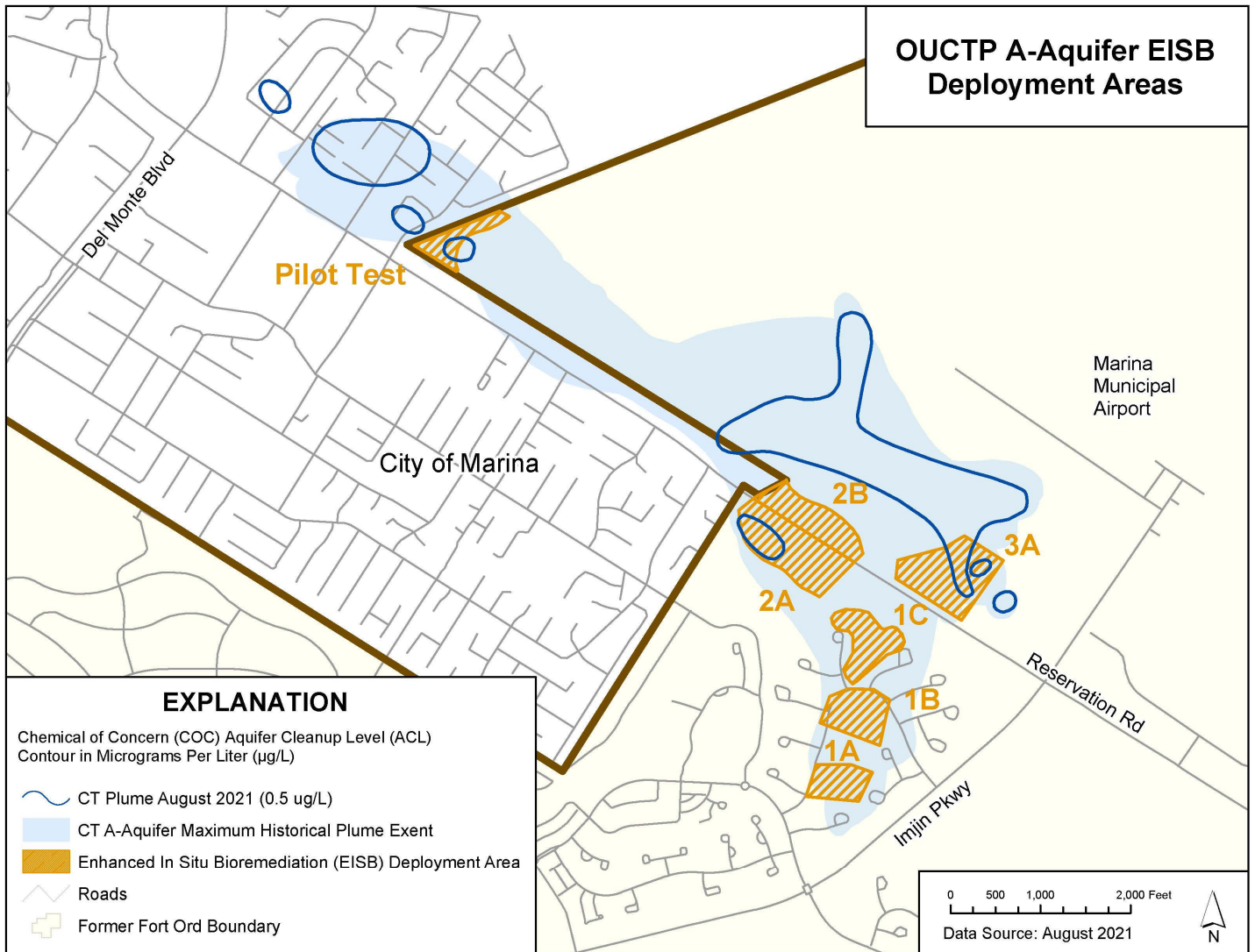


Fact Sheet: Operable Unit Carbon Tetrachloride Plume(OUCTP): Groundwater Cleanup

History:

Between 1940 and 1950, the Army used carbon tetrachloride (a solvent) to clean communication equipment such as radios at a location near the Preston Park, Lexington Court area. Some was spilled on the ground (source area), moved down through soil, and contaminated the groundwater. Groundwater contamination affects three aquifers: A-Aquifer, Upper 180-Foot Aquifer, and Lower 180-Foot Aquifer. The A-Aquifer map below shows the area of maximum historical extent of groundwater contamination (blue shaded area) and the current (as of August 2021) extent of groundwater contamination (outlined as a solid blue line).



Carbon tetrachloride is the primary COC for all three aquifers because it was detected at the highest concentrations above its cleanup goal across the greatest extent of impacted groundwater. The cleanup goal (also known as Aquifer Cleanup Level or ACL) for carbon tetrachloride is 0.5 micrograms per liter (0.5 $\mu\text{g/L}$).

What chemicals have been found in groundwater related to Operable Unit Carbon Tetrachloride Plume (OUCTP)?

In the A-Aquifer (uppermost aquifer), the chemicals of concern (COCs) are carbon tetrachloride, tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (DCE), chloroform, 1,2-dichloroethene (1,2-DCE), dichloromethane, and vinyl chloride. In the Upper 180-Foot Aquifer, the COC is carbon tetrachloride. In the Lower 180-Foot Aquifer, COCs are carbon tetrachloride and 1,2-dichloroethane.

What has the Army been 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 in each of the aquifers. Soil cleanup (now complete) included treatment of contaminated soil gas near the source area. Each of the three affected aquifers has a specific cleanup regime as noted below.

Treatment in the A-Aquifer consists of enhanced *in situ* bioremediation, or EISB. This bioremediation “feeds” microbes that naturally live in groundwater and stimulates growth of certain microbes that use COCs as an additional source of food and energy. The microbes break down COCs into less toxic or non-toxic substances. Groundwater in the A-Aquifer is monitored to ensure continued success of the *in situ* bioremediation. The EISB treatment areas are shown on the map on the reverse side as orange hatched lines.

Treatment in the Upper 180-Foot Aquifer is on-going. Groundwater is extracted and sent to the Operable Unit 2 (OU2) groundwater treatment system. The treated groundwater is returned to the Upper 180-Foot Aquifer using injection wells and infiltration galleries.

Natural Attenuation in the Lower 180-Foot Aquifer is being monitored. Natural attenuation reduces and breaks down COCs over time through natural processes without additional treatment.

Your drinking water is safe.

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 quarterly monitoring of the three aquifers related to OUCTP groundwater contamination. In addition, operation of the OU2 groundwater treatment system will continue until the aquifer cleanup goals for both OUCTP and OU2 are met. See the groundwater overview fact sheet for the current extent of all groundwater plumes.

To learn more about the Fort Ord Groundwater Cleanup:

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