Camp Lejeune – Chapter D Report

Occurrence of Selected Contaminants in Groundwater at Above-Ground and Underground Storage Tanks at Camp Lejeune

Background

U.S. Marine Corps Base Camp Lejeune, North Carolina was established in 1942. In 1982, the Marine Corps discovered specific volatile organic compounds (VOCs) in the drinking water provided by two on base water treatment plants. The Agency for Toxic Substances and Disease Registry has several projects underway to help Marines, civilians, health officials, and other interested parties understand more about the drinking water contamination and whether it affected the health of persons living or working on the base during that time.

Using Research to Understand Health Effects

ATSDR is conducting water modeling to estimate when and where areas at Marine Corps Base Camp Lejeune received contaminated drinking water in the past. Water modeling is a tool that will help ATSDR estimate contaminant concentrations in drinking water. Water modeling will help identify where and when certain areas at Camp Lejeune received VOC-contaminated drinking water. This will help in understanding who was exposed to contaminants and at what level they were exposed.

Chapter D is another building block in the water modeling process. This report is one part of ATSDR's compilation of data needed for our water modeling work. This report includes data collected under the Resource Conservation and Recovery Act on the groundwater contaminants that came from above ground and underground storage tanks.

This report is a companion to previously published reports on geohydrologic data (Chapter B) and selected groundwater contaminants at Installation Restoration Program sites (Chapter C).

Information in this Report

Compiling these data offers a better understanding of contamination from refined petroleum products at the site.

Significant contamination occurred in the area of the former Hadnot Point Fuel Farm and Building 1115. Maximum benzene concentrations in samples taken from monitor wells at those locations reached 43,000 micrograms per liter. In comparison, concentrations in other water supply wells ranged from below detection limits to 720 micrograms per liter.

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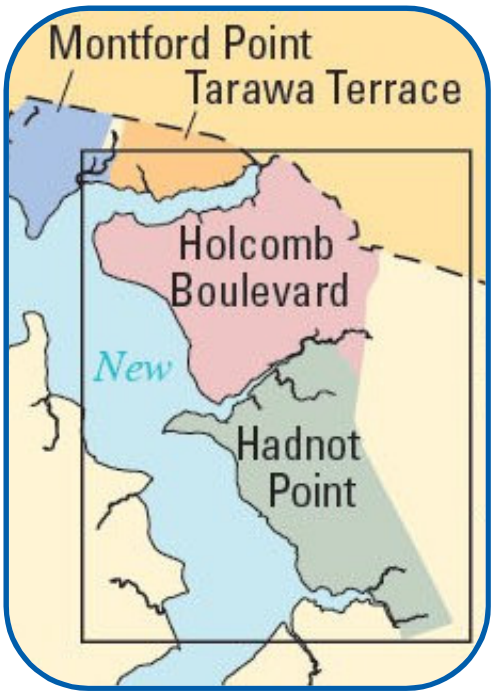
Fuel contamination near Building 1115 is a likely source of benzene determined in samples from nearby water supply well HP-602 during 1984. HP-602 was one well in the network of 73 wells that provided water to the Hadnot Point water treatment plant. Water from many wells was mixed to provide drinking water to residents and workers.



Next Steps

Information and data in this report will help scientists create a computer water model to estimate when the contaminants first reached the water supply wells. The water models will also provide estimates of monthly levels of contaminants in groundwater and in drinking water. This information will help ATSDR finish its ongoing Camp Lejeune health studies.