



# FACT SHEET



## Fort George G. Meade, Maryland Groundwater Cleanup Remedies at Operable Unit 4 and Lower Patapsco Aquifer April 2014

### Overview

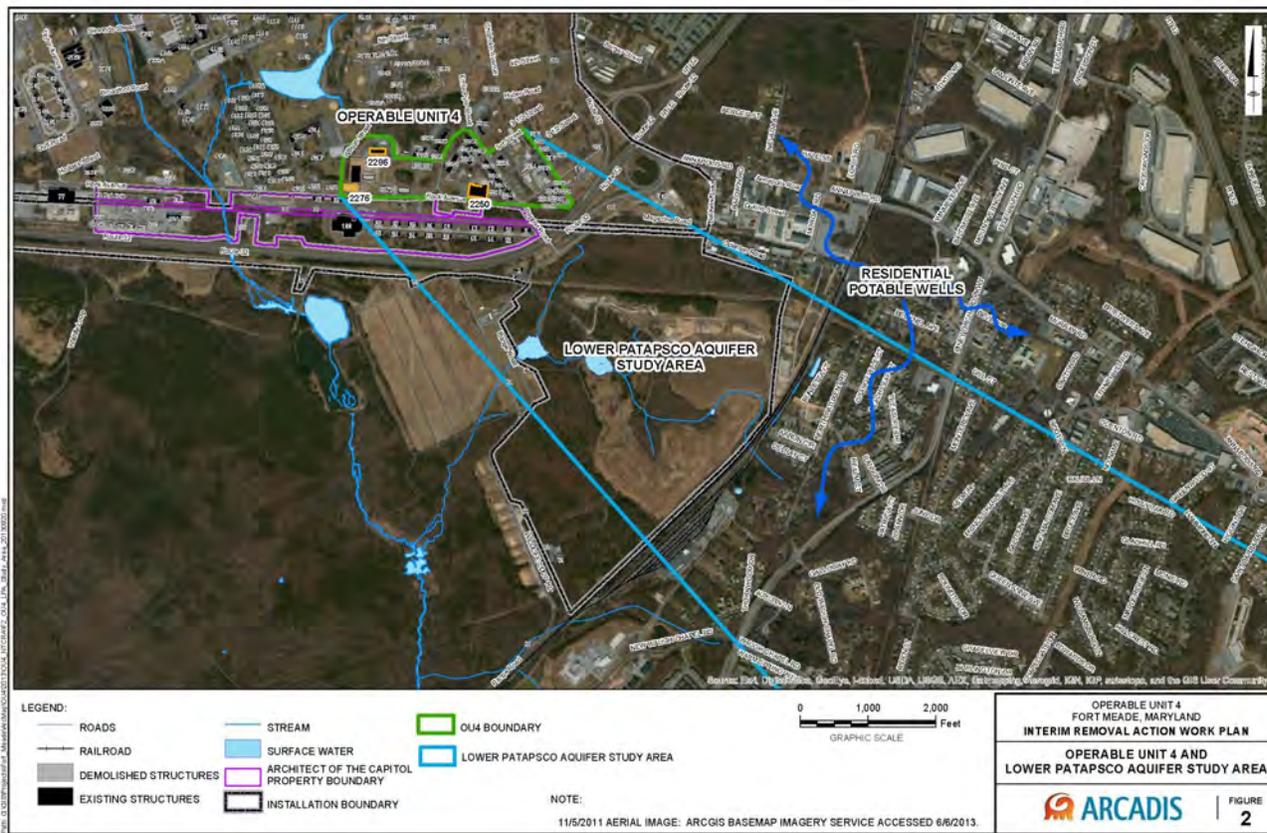
The U.S. Army at Fort George G. Meade recently began installing several groundwater cleanup remedies at a part of the installation designated as Operable Unit 4 and in the Lower Patapsco Aquifer. This fact sheet provides background information on the groundwater investigations in this area and the actions being taken.

### Background on Operable Unit 4 Groundwater

The Army, in cooperation with the U.S. Environmental Protection Agency, Maryland Department of the Environment, and Anne Arundel County Department of Health, has been conducting an investigation of groundwater in the southeastern portion of Fort Meade (see map below), an area referred to as Operable Unit 4 or OU4. OU4 is bordered by Chisholm Avenue, Rock Avenue, Wilson Street, and Huber Road.

An area of groundwater in an underground formation, the Lower Patapsco Aquifer, has been impacted by historic activities at Fort Meade. This groundwater migrates several thousand feet beyond Fort Meade toward the town of Odenton, MD. Trichloroethene (TCE), tetrachloroethene (PCE), and carbon tetrachloride (CCl<sub>4</sub>) have been detected in this groundwater. These chemicals are industrial solvents used for cleaning and degreasing metals, to dry clean fabrics, and as an ingredient in paint removers, spot removers and pesticides.

Some private off-post wells have been impacted, and the residents notified. While the levels of solvents detected in these wells do not exceed the standard set by EPA, the Army is providing bottled water while investigations continue to residents who use their wells as their drinking water source. Drinking water on Fort Meade is not impacted. **Homes and businesses on public water are not affected by the solvents.**



## Army Taking Interim Actions While Comprehensive Studies Continue

In the fall of 2013, the Army released for public comment an Engineering Evaluation/Cost Analysis which proposed taking interim actions at three areas while the comprehensive environmental studies continue. A detailed work plan was then developed and approved which outlined how the actions will be constructed and implemented. Taking action now will address areas considered to be sources of the solvents and help mitigate the contamination in the aquifer. In January 2014, the Army began implementing the actions at the following three areas:

**Area 1: Groundwater Near Building 2286 and Former Building 2276.** At Area 1, the Army will be injecting an oxidant into the groundwater through a series of injection wells. The oxidant will break down the solvents into less toxic compounds and eventually into water and carbon dioxide. Workers will be wearing protective equipment, such as face masks, when they prepare the oxidant.

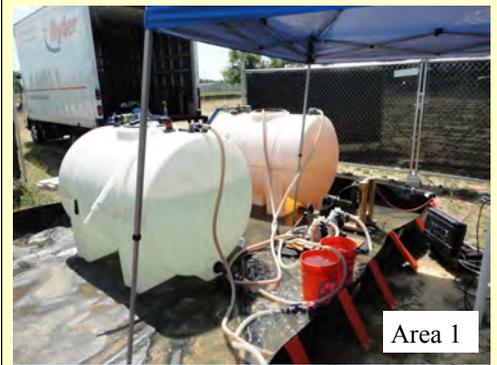
**Area 2: Groundwater Near Building 2250.** Building 2250 was the location of a former large industrial dry cleaning operation which resulted in high concentrations of PCE in the groundwater. The Army has constructed and is operating an air-sparge and soil vapor extraction system which will remove the solvents.

**Area 3: Lower Patapsco Aquifer.** The Army has installed and is operating a hydraulic containment system which will address the groundwater heading off Fort Meade in a southeasterly direction. The groundwater will be captured, treated, and re-injected as clean water back into the aquifer at 150 feet or deeper.

The Army will be sampling and monitoring the groundwater to ensure the remedies are working effectively.

### Final Record of Decision Planned for 2015

Once the Army has completed all the investigations of the Operable Unit 4 area, it will summarize those investigations and any additional actions needed in a Proposed Plan. The Army will hold a 30-day public comment period on the Proposed Plan. The Army and the US Environmental Protection Agency will then sign a Record of Decision documenting the final plan for the site. In addition to ongoing maintenance and inspections, all Records of Decisions



*Photos of the treatment systems*

### Additional Information Available

Fact sheets for TCE, PCE, and  $\text{CCl}_4$  are available from the Agency for Toxic Substances and Disease Registry at [www.atsdr.cdc.gov/toxfaqs/index.asp](http://www.atsdr.cdc.gov/toxfaqs/index.asp). The Anne Arundel County Department of Health can also assist with health questions at 410-222-7398.

Additional project information is available on Fort Meade's Environmental Management System web site at [www.ftmeade.army.mil/environment](http://www.ftmeade.army.mil/environment) (click on the link for Clean-Up Program and then "Program Sites"). Fort Meade has established an information repository which contains various documents available for the public's review at Anne Arundel County Library, West County Branch, or Fort Meade's Environmental Division (please call 301-677-9559 to make arrangements to review the documents at the Environmental Division office).

This project and other environmental projects are discussed at meetings of Fort Meade's Restoration Advisory Board. These meetings are held approximately every other month, typically the third Thursday at 7 p.m.. Meetings are announced in local papers and on the Fort Meade web site ([www.ftmeade.army.mil/environment](http://www.ftmeade.army.mil/environment); click on the link for RAB). Interested community members are always welcome at the meeting and to consider applying to be a Board member.

### Contact Information

- **Fort Meade Public Affairs Office:** 301-677-1361
- **US Environmental Protection Agency:** John Burchette, Project Manager, 215-814-3378
- **Maryland Department of the Environment:** Lis Green, Project Manager, 410-537-3346 or Public Affairs, 410-537-3003