



US Army Corps  
of Engineers ®  
Baltimore District

# The Corps' pondent

A newsletter by the U.S. Army Corps of Engineers for Spring Valley Project area residents

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<http://www.nab.usace.army.mil/projects/WashingtonDC/springvalley.htm>

The Corps' mission in Spring Valley is to identify, investigate and remove or remediate threats to human health, safety or the environment resulting from past Department of Defense activities in the area.

## Spring Valley munitions disposal alternatives

The U.S. Army Corps of Engineers, Baltimore District has completed an evaluation of alternatives for the disposal of discarded military munitions recovered during investigations at the Spring Valley Formerly Used Defense Site. The results of the study are presented in a document called the Engineering Evaluation/Cost Analysis (EE/CA), which is available for public review at the Palisades Public Library, 4901 V St, NW, Washington, DC 20007, and the Spring Valley website:

<http://www.nab.usace.army.mil/projects/WashingtonDC/springvalley.htm>.

The area consists of approximately 661 acres in the Northwest section of Washington, D.C. During the World War I era, the site was known as the American University Experiment Station, and was used by the U.S. Government for research and testing of chemical agents, equipment and munitions. Today, the Spring Valley neighborhood encompasses about 1,200 private homes, including

several embassies, as well as the American University and Wesley Seminary. USACE is in the process of investigating and cleaning up contamination resulting from operations during the World War I era. As a result of recent investigation efforts, a number of munitions were discovered. These include recovered chemical warfare materiel as well as conventional munitions that contain explosives. These munitions are safely stored on federal property at SVFUDS. This EE/CA provides an analysis of alternatives for disposition of the recovered munitions.

SVFUDS is part of the Department of Defense Environmental Restoration Program. DERP FUDS is administered in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act and the National Contingency Plan, which includes requirements for community involvement in the cleanup process. The 30-day public comment period commenced on Nov. 30 and ends on Dec. 30, 2009. If mailed, must be postmarked by Dec. 30, 2009.

## Glenbrook Road and University update

by Joyce Conant  
Public Affairs Specialist

The U.S. Army Corps of Engineers Spring Valley project team has made significant progress on some long-lasting portions of the ongoing Spring Valley clean-up project.

While USACE was able to achieve completion of major elements of work on these efforts, the property at 4825 Glenbrook Road continues to challenge them.

Things were quiet on Glenbrook Road during the months of September and October. This was because the work crews were preparing the site for high probability digging operations. This included constructing new structures on the grounds and ensuring all safety measures were in place.

In early August, small amounts of Mustard and Lewisite were found in two areas on the property. "The levels of these two chemical warfare agents were so low that unsafe exposures to site workers did not occur," said Dan Noble, USACE project

manager. "They did require that the team build protective structures over the areas and return to work with expanded safety measures in place."

Noble stressed that at no time was the public at risk. On Nov. 17, digging resumed and the team believes that one area of contamination has already been cleared.

Once clearance is confirmed the team will move to the second area and work diligently to clear that area as well. Once the chemical warfare agent areas are clear, the team will continue with the tasks it was working on previous to the discoveries (digging test pits on a grid pattern to ensure no further hazardous materials are on the property), and will hopefully complete the work by spring of 2010.

At the American University Public Safety Building, the USACE team has finished gathering up and sorting through tons of debris deposited in a surface disposal area in the rear of the building.

Wet weather, a shallow groundwater table, and at times uncontainerized hazardous waste presented challenges as the field crew completed this work.

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# Glenbrook Road and University update

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The main portion of the disposal area is now gone, and according to Noble the effort was worth it.

Approximately 60 items that were military in nature were recovered by the team. These items, referred to as "munitions debris," are inert items that did not present explosive hazards, but it takes an ordnance expert to make this determination.

"If any other work crew had found any of these items, there is a good chance it could have resulted in 911 emergency calls due to the misperception that the item might be dangerous," said Noble.

The team also recovered a munition item that had a small amount of explosive material still present in it. "This is definitely the kind of item that only an expert should handle," said Noble.

The USACE contractor is now finishing up some final tasks, digging up and containerizing small amounts of soil contaminated with low levels of heavy metals, and coordinating with the university on obtaining soil samples from underneath the building.

Noble said the work has to be done slowly and carefully, and that the work crews continue to safely deal with unknowns as the project proceeds.

"By the winter holiday, the AU community and nearby residents should notice a much smaller footprint to our operations behind the Public Safety Building," said Noble.

"We appreciate your patience and understanding during this work."

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## Dalecarlia geophysical investigations

*by Lan Reeser and Joyce Conant  
U.S. Army Corps of Engineers*

Field work began on the geophysical investigation of the Dalecarlia Woods area on July 13. The U.S. Army Corps of Engineers geophysical survey contractor, Earth Resources Technology, Inc. (ERT) has completed initial site preparations on the vast majority of the 62-acre area targeted for investigation.

Site preparations included land surveying to lay-out the grids to be investigated, surface metal clearance, and brush removal. No munitions-related items were found during the initial site preparation activities. Following site preparations, the digital geophysical mapping (DGM) began within the Federal prop-

erty on August 10, and through the end of November, slightly over one third of the total area has been mapped for subsurface anomalies.

Site preparation and DGM activities are planned along Dalecarlia Parkway in February and March 2010, and the entire field mapping effort should be complete by May 2010.

Two instruments are used for the field mapping: A Geometrics G-858 gradiometer, which is used to detect ferrous metals, and a Geonics EM-61, which is an all-metals detector.

"The instruments, while traveling over a survey area, emit an electromagnetic pulse," said Ryan Coolbaugh of ERT. He said that any possible metals in or on the ground receive the pulse and, depending on size, composition, density, etc., give off their own "signature," which is then received and logged by the device.

Anomaly digs from several initial test grids on Federal property could begin as early as this month. However, the intrusive anomaly resolution for the bulk of the acreage isn't expected to start until late spring 2010.

"Site conditions have proved to be a challenge, with deadfall trees and other obstructions, creeks, and steep hills," said Coolbaugh. "But, I am pleased with our pace."

*Shown left: ERT Geophysicists Lynelle Brode and Ryan Coolbaugh conduct field investigations at Dalecarlia Woods. Brode is operating the EM61 while Coolbaugh logs field notes. (photo by Joyce Conant)*



# Groundwater study continues in Spring Valley

by Joyce Conant  
Public Affairs Specialist

The U.S. Army Corps of Engineers continued its groundwater study in Spring Valley this fall, which included the installation of four new groundwater monitoring wells and the sampling of existing monitoring wells, as well as, surface water locations.

The study includes collection of water quality samples and groundwater elevation data. Water quality samples are analyzed in a laboratory to determine if any contaminants are present in the water. Groundwater elevation data is collected by measuring the water level in the well and is used to determine groundwater flow patterns in the project area.

Of the four newly installed wells, three were placed on the American University property to help better understand the source of the perchlorate detections in the area, and to characterize the nature and extent of the perchlorate groundwater plume.

The additional new well was placed on 52<sup>nd</sup> Court – the vicinity of the original munitions disposal pit that was discovered in 1993. Previously installed wells down gradient of this area indicate that the regional groundwater was not impacted by the disposal pit. Todd Beckwith, USACE project manager, said this

new well will help determine if there is localized groundwater contamination in the direct vicinity of the 52<sup>nd</sup> Court disposal pit.

USACE and its partners – the U.S. Environmental Protection Agency and the D.C. Department of the Environment will examine the results of this latest sampling effort and determine what additional steps are necessary to complete the characterization of the shallow groundwater at Spring Valley.

“Evaluation of the deeper groundwater flow patterns is also planned,” said Beckwith. One deep monitoring well will be installed in early 2010 to evaluate bedrock groundwater flow patterns and to help determine if a portion of the perchlorate plume has migrated into the deeper bedrock aquifer.

“The hydraulic properties of the well will be tested using two different methodologies. The partners will evaluate the results to determine the best methodology for testing three additional deep wells that are planned to be installed later in 2010,” said Beckwith.

Updates on the groundwater study will be available on the Spring Valley web site at <http://www.nab.usace.army.mil/projects/WashingtonDC/>



[springvalley.htm](http://springvalley.htm).

*Pictured above is Tim Fox with URS Corporation as he prepares to take water samples. (photo by Carrie Johnston)*

## The Corps'pondent

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Spring Valley Formerly Used Defense Site

# Project Lifecycle Schedule

The macro schedule is a working document that is adjusted periodically in response to the evolving needs and priorities of the Spring Valley investigation and cleanup. The tasks within this schedule have been estimated in order to facilitate planning and prioritization discussions among our regulatory partners and other stakeholders. This schedule is flexible, as unforeseen fieldwork may arise and each task may end up taking more or less time than what is currently allocated in the schedule (as of Nov. 2009).

	FY 10 (\$11M)	FY 11 (\$3M)	FY 12 (\$0.5M)
<b>MMRP</b>  <b>Military Munitions Response Program</b>	<ul style="list-style-type: none"> <li>• 4825 Glenbrook Test Pits</li> <li>• AU Public Safety Building</li> <li>• Residential/AOI Geophysics</li> <li>• Residential/AOI Anomaly Removal</li> <li>• Dalecarlia Woods Area Geophysics</li> <li>• Dalecarlia Woods Area Anomaly Removal</li> <li>• Munitions Disposal</li> <li>• AU Soccer Field Investigation</li> <li>• RI/FS Report</li> </ul>	<ul style="list-style-type: none"> <li>• Residential/AOI Anomaly Removal</li> <li>• Dalecarlia Woods Area Anomaly Removal</li> <li>• Munitions Disposal (if necessary)</li> <li>• RI/FS Report</li> </ul>	<ul style="list-style-type: none"> <li>• RI/FS Report **, Proposed Plan and Decision Document</li> <li>• Initiate long term management as determined in Decision Document</li> </ul>
<b>HTW</b>  <b>Hazardous and Toxic Waste Program</b>	<ul style="list-style-type: none"> <li>• Arsenic Soil Removals</li> <li>• Groundwater Investigation</li> <li>• AOI Sampling</li> <li>• RI/FS Report</li> </ul>	<ul style="list-style-type: none"> <li>• Groundwater Investigation</li> <li>• RI/FS Report</li> </ul>	<ul style="list-style-type: none"> <li>• RI/FS Report **, Proposed Plan and Decision Document</li> <li>• Initiate long term management as determined in Decision Document</li> </ul>

\*\* The Remedial Investigation/ Feasibility Study (RI/FS) Report process will include an evaluation of human and ecological risk resulting from any residual contamination remaining. If the risk assessment indicates the need for further cleanup, the necessary remedial action will be included in the schedule at that time.

Please call Carrie Johnston at 410-962-0157, if you have any questions regarding this schedule.