



AMERICAN UNIVERSITY  
WASHINGTON, DC

CORNELIUS KERWIN  
PRESIDENT

September 27, 2007

**TO:** Campus Community  
**FROM:** Neil Kerwin, President  
**SUBJECT:** Army Corps of Engineers Work Along Glenbrook Road

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As much of the campus is probably aware, for almost 15 years the U.S. Army Corps of Engineers has been conducting clean-up operations to remove World War I materiel discovered at various locations on or near the American University main campus and throughout the Spring Valley neighborhood. The presence of these materials dates back to 1917-18, when parts of the AU campus and the surrounding area were used by the U.S. government and the U.S. Army as a site to develop and test chemical weapons.

On October 29, the Corps is scheduled to resume the excavation and removal of items in a burial pit located at 4825 Glenbrook Road, a residential property owned by AU in the neighborhood adjacent to campus. The digging operations will be between 8 a.m. and 4 p.m., Monday through Friday, for an estimated 14 weeks; they will not work on weekends or holidays. This work entails the removal of a known cache of World War I era munitions that was previously discovered; tests conducted on munitions removed from this site indicate the possible presence of chemical agents including mustard and arsine gas. Given the nature of these materials, the Corps is implementing a number of safety precautions, including a containment structure and filtration unit around the burial pit to prevent the release of harmful chemicals into the environment in case of an accident, and monitors to detect any unusual airborne agent.

Even though the potential for a chemical release is highly unlikely, we want to ensure that everyone is prepared to take appropriate action in case of an emergency. For those campus areas closest to the work site (map is at the end of this memo), we will conduct a series of "shelter-in-place" briefings to outline what to do in an emergency. We will contact the affected units directly to provide that information and will post the schedule for those briefings on the AU website. A siren notification and an automated telephone tree also will kick into motion in case of an accident or chemical detection.

Although the Corps clean-up activities have lasted for years on the AU campus and in neighboring Spring Valley, we will maintain a vigilant focus to ensure the safety and well-being of the AU community for the duration of these operations. We will inform students, faculty and staff regarding the schedule of work, the potential risk, the safety precautions the Corps will have during the excavation, and the emergency response procedures to be implemented by the university, Army Corps, and District of Columbia safety officials. Toward that end we address a number of issues in the attached question and answer document. We also will continue to post relevant information on

the AU website dedicated to this project. (To access that site, go the AU homepage, click on Offices and Services, then AU Offices Directory, then [Army Corps project](#)).

Some may consider the precautions we are taking as excessive and possibly causing alarm; I will accept that criticism, however, to ensure the maximum level of safety for AU's faculty, students, staff and visitors. I will communicate with the community again as the work prepares to begin, and will continue to update you regarding relevant information we receive from the Army Corps

If you have questions or concerns about the Army Corps work about to commence, please call 202-885-2020.

## **Q & A – Regarding the Army Corps Operations at 4825 Glenbrook Road**

### **When is the operation scheduled to begin and how long will it last?**

The Army Corps target date to begin the excavation at 4825 Glenbrook Road is October 29. The work is schedule to take place Monday through Friday from 8 a.m. until 4 p.m., with no work planned on weekends or holidays. The estimated duration of the operation will be approximately 14 weeks from start to finish.

### **What are the hazards associated with the excavation?**

The primary hazard to the general public is the accidental release of chemical warfare agents into the environment in sufficient quantities to cause harm to nearby individuals. The chemical agents that the Army suspects are present can cause both short-term and long-term harmful physical effects for individuals who come in contact with the agents.

### **What preparations is the Army Corps taking to ensure the safety of campus and community?**

The Army's work plan includes extensive safety measures, which have been reviewed by several agencies within the Department of Defense as well as the Environmental Protection Agency and the District of Columbia Department of the Environment. All digging and retrieval of suspected munitions will be done within a containment structure. The structure is designed to contain both explosions and chemical releases. All air exiting the containment structure goes through a three-tier filtration system, designed to prevent a chemical release into the atmosphere. In the unlikely event that a structure wall is punctured, the negative air pressure maintained within the structure will keep the gas inside the structure. In addition, a vapor containment cover is draped over the outside of the entire unit. All work done in close proximity to buried munitions will be done by hand, to prevent a potential release. Sensors inside the containment structure and in the filtration system are designed to detect a chemical release before it reaches the atmosphere. Auxiliary power and backup systems will be in place in case the primary systems fail. Personnel within the containment structure and in an outside post will monitor the work and the sensors.

### **What is arsine gas?**

Arsine is a colorless, flammable gas which is highly toxic in certain concentrations. Although it has garlic-like or fishy odor, odor is not an adequate indicator of arsine's presence. Because arsine is nonirritating and produces no immediate symptoms, persons exposed to hazardous levels may be unaware of its presence.

### **Why does the Army Corps believe that arsine gas is contained in the burial pit?**

During an excavation almost six years ago, the Corps removed some shells from this burial pit at 4825 Glenbrook Road. Subsequent tests conducted on those shells indicated the possibility that some contained arsine gas. The Corps is making an assumption that some of the shells remaining in the burial pit may also contain arsine gas.

### **What is the possibility of a chemical release?**

Because of the containment structure around the burial pit, the Corps strongly believes there is zero risk of a chemical release into the atmosphere. During the University's independent review of the Army's work plans, we insisted on additional measures to safeguard the campus population including a thicker containment structure than was originally planned; additional air monitoring;

information education, training and a “shelter-in-place” program for anyone in the campus buildings closest to the work site

**What is “shelter-in-place” and how does it protect us from exposure to a toxic chemical?**

Shelter-in-place means that you go inside a building and stay there for the duration of the alarm. The windows are closed and the heating/cooling systems are shut off to prevent possible intake of contaminated air. In the unlikely event of a chemical release, the agent will be dispersed through the atmosphere over time until there is no longer a possibility of exposure to harmful concentrations.

**How will faculty and students know if there is a chemical release into the environment?**

There are air quality monitors inside the containment unit and inside the filtration system. Should a chemical agent reach the filtration system, Army personnel will sound a siren. In addition, there will be a telephone and e-mail notification system in place to alert university officials and occupants of nearby buildings.

**What are we supposed to do if we hear the siren?**

Occupants of Watkins, Kreeger, Child Development Center, Hamilton and Financial Aid and users of Jacobs Field will receive detailed instructions specific to their locations. Sessions to educate and explain the procedures will be scheduled in October. If the siren sounds and you are not in these locations, you should stay away from this area and await further instructions from university officials. Faculty who will be teaching in the newly renovated Watkins building will soon receive a special set of communications, to ensure they and their enrolled students are aware of the work on the Glenbrook properties.



**Affected Area**

**American University - Main Campus**  
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