

**DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS**

**STATEMENT OF**

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**BEFORE THE**

**COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM  
SUBCOMMITTEE ON FEDERAL WORKFORCE, POSTAL SERVICE  
AND THE DISTRICT OF COLUMBIA**

**ON**

**THE ENVIRONMENTAL RESTORATION PROGRAM  
AT THE  
SPRING VALLEY FORMERLY USED DEFENSE SITE**

**JUNE 10, 2009**

Chairman Lynch and members of the Subcommittee, thank you for inviting me to address you today about the Spring Valley Formerly Used Defense Site (FUDS), located in Washington, D.C. My name is Colonel Peter Mueller, Commander and District Engineer of the U.S. Army Corps of Engineers, Baltimore District. The Corps executes the Spring Valley clean-up activities for the Army and is responsible for managing and overseeing a successful clean up of this site.

The Spring Valley FUDS area consists of 661 acres in northwest Washington, D.C., and includes approximately 1,300 residential homes, 22 Embassy properties, American University (AU), Horace Mann Elementary School, Wesley Seminary, several churches, and a variety of small businesses. The Army used this site from 1917 to 1920 to conduct chemical warfare research. Since the Spring Valley investigation began in 1993, munitions and explosives of concern, including conventional and chemical munitions, as well as some laboratory vials containing chemical agent have been recovered within this area. The Army refers to chemical munitions and chemical agent in containers as chemical warfare material or CWM.

The technical and stakeholder involvement challenges inherent to the munitions response investigation within this residential community require active planning and communication between the Corps, the U.S. Environmental Protection Agency - Region III, and the Washington D.C. Department of Health. To meet these challenges, the three agencies established a multi-tiered partnering process based on the following principles:

- Active inclusion of agency leadership
- Redundant communication and notification
- Clear documentation of decision-making and information-sharing.

The Spring Valley Master Partnering Communication Plan addresses:

- Partnering structure and corresponding agency representatives;
- Using the tiered process to guide the Spring Valley work; and
- Spring Valley-specific communication pathways and mechanisms necessary to maintain proactive and transparent communication.

Our shared mission at Spring Valley is to identify, investigate and safely remove or remediate potential threats to human health and the environment resulting from past Department of Defense (DoD) activities in this area. As the agency responsible for accomplishing this clean up, the Army's end-state goal is to achieve agreement between the Spring Valley Partners and the community. Our priorities are to maintain the safety of our workers and the public, address community issues, achieve agreement among partners on all major cleanup decisions, and to implement a deliberate, risk-based approach to cleanup decision making.

The Spring Valley Partnership remains a vibrant and active collaboration between the federal government and the city. We share the common goal of protecting the residents of the Spring Valley community from the potential hazards associated with DoD' past activities at this site. Together, we use a deliberate cleanup decision-making approach that sets important milestones and prioritizes tasks that lead to decisions that best serve the interest of the residents of Spring Valley. The process includes public stakeholder involvement on a variety of levels, and I believe

this commitment to openness and transparency will allow the Partnership and the community to complete this project in the years ahead.

Today, I will summarize the key aspects of achieving a successful clean up and completing our mission at the site, which include a comprehensive historical analysis, implementation of effective communications, and the four ongoing tasks at the site.

A crucial element to accomplishing this clean up has been to learn and understand its history. Spring Valley is one of the most comprehensively researched sites in the history of the FUDS program. This includes interviews with those most familiar with past DoD activities and a 1993 review of AU Experimentation Station records, some of which are now housed at Fort Leonard Wood, Missouri. Some of the notable interviews include the former commander of the Naval Bomb disposal school and all members of a risk assessment team hired by AU in 1986 to conduct research prior to the construction of new facilities on campus. The historical report was published in 1994 and although new information has emerged since then, none has yielded new conclusions nor changed the direction of the investigation. We continue to review new documentation as it comes to light.

Another critical component of this clean up includes the array of tools and methods used by the partnership to communicate effectively with the community. The Department executes FUDS under the Defense Environmental Restoration Program, established by Congress in 1986 in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This process requires public input from the regulatory community, stakeholders and community members at each critical decision point, from the preliminary assessment to the completion of a Remedial Investigation and Feasibility Study, Record of Decision and Remedial Action. The two-way communication process includes news releases, monthly newsletters, public hearings and meetings, public comment periods, establishment of an information repository, fact sheets, tours, notification to key officials, and most importantly, the establishment of the Restoration Advisory Board (RAB) in early 2001. The RAB is a forum for representatives of DoD, local community, and city and EPA regulators to discuss and exchange crucial information about the project. It provides stakeholders an opportunity to make their views known, review progress and participate via dialogue with decision makers.

The Baltimore District has been meeting monthly with stakeholders through the RAB, which was established in spring 2001. We maintain a dedicated Community Relations team committed to providing accessible, consistent and transparent communications within the Spring Valley community. It is overseen by a public affairs team with more than ten years of experience in community relations at FUDS, Superfund and other environmental clean-up sites. In the last two years, we have held 30 RAB meetings and 34 Partnership meetings. We have held five community meetings and mailed nine issues of our project newsletter to the entire community. We also prepare a monthly project update that is posted to the project website and is individually emailed to approximately 150 community members, all of whom requested inclusion on an email distribution list. We provided numerous email updates on our Pit 3 site investigation effort to a distribution list of approximately 115 community members. We staff a community hotline, and between phone calls and emails have fielded and responded to more than 750 requests for information and assistance on such topics as project updates, property sale inquiries, and right of entry requests.

We also maintain a physical presence in the community. We are out in the neighborhood, visiting homes and talking to residents on a weekly basis. We have conducted seven targeted canvassing efforts during which we went door to door to discuss such topics as the Pit 3 investigation, the on-site destruction of munitions, and other aspects of the project with a potential to impact residents. In addition to canvassing, we have scheduled more than 170 individual, face-to-face meetings with residents and elected officials on a range of topics, from arsenic soil removal to geophysical survey to groundwater sampling and have attended and spoken at Metropolitan Police Department 2<sup>nd</sup> District roll calls to ensure that the police who keep the community safe are aware of what we are doing as well.

The Corps has made a concerted effort to conduct this clean up in a transparent manner, operating openly, collaboratively, and in an inclusive manner with Partners and stakeholders. There is thoughtful discussion and exchange of ideas and information among all Partners and stakeholders. At certain points in this process we capture partner decisions in writing. An example is the signing of Memoranda for the Record detailing partnership conclusions on Areas of Interest, and the signing by all Partners of Anomaly Review Board memoranda. Partner review and acceptance of final work plans and reports is another clear and concrete example of outside agency approval on Army cleanup decisions and strategies in our approach to the Spring Valley project. By listening to differing viewpoints, I believe we collectively have been able to improve the cleanup decision making process as the partnership has set clean up goals and endpoints for the project.

With that, today I would like to update you on four major ongoing activities and accomplishments, and give an overview of future tasks.

First, we continue to test for and remove arsenic contaminated soil from properties at the site. To date, we have addressed a total of 106 properties and removed more than 24,000 tons of contaminated soil. Currently, we are working with 32 property owners with the goal of receiving permission to either test or remove contaminated soil. We expect to finish the residential soil removal effort by the end of this calendar year. More than 98% of approximately 1,500 property owners have agreed to the testing and removal program. As part of this effort, we conducted an innovative pilot project, which we concluded last year that used phytoremediation to accomplish some of our goals at 19 properties. Phytoremediation uses plants to mitigate potential environmental concerns without the need to excavate contaminant material and dispose of it elsewhere.

Second, the Baltimore District continues to manage a very active program to investigate for and recover military munitions. I am pleased to report that in March 2009, we completed our investigation of Pit 3 and the excavation of any munitions and explosives of concern, including CWM, and related debris found at the Glenbrook Road area. Pit 3 was in an area known to have burials of CWM and related debris and completion of our investigation is an important accomplishment. This project, which began in October 2007, was conducted in four phases. We faced many technical challenges and completed the work without a single incident threatening the safety of our workers or the community. Constant monitoring of the worksite documented that while the team encountered and recovered CWM, there were no releases of chemical agent inside the protective structure. The protective structure, which has now been dismantled, provided overlapping safety and engineering controls to effectively contain a release,

if one were to occur). The success of this portion of the clean up depended on the cooperation of the entire Spring Valley community. We are now investigating other areas where we do not expect to encounter munitions and explosives of concern, including CWM, for other material resulting from DoD's efforts at the AU Experiment Station. All planned work at this property should conclude later this summer.

Over the course of the project, the Partners identified 104 properties for geophysical survey. We have conducted 86 geophysical surveys and proceeded with follow-on intrusive investigations on 63 of these properties. The geophysical survey results generally identified 50 to 100 anomalies per property for investigation. By far, the most common items found as a result of our investigation are items that could be found in any suburban yard. These items included miscellaneous debris such as construction materials, nails, horseshoes, and bits of metal unrelated to Army activities. Occasionally, we did find munitions debris that was related to DoD's activities at this site. Munitions debris is essentially equivalent to scrap metal. When this occurs, the material is evaluated, examined to verify that it is inert, certified in writing that it is inert, packaged and sent to a smelter. We will determine the need for anomaly investigation on the remaining properties in the next 18 months.

The team is currently working at a property on Quebec Street where we found some munitions debris last month. We are evaluating this debris to determine whether we need to adjust our procedures. We will stay in close contact with our Partners and the property owner to bring the ongoing effort to a successful conclusion. We are continuing examination of the large piece of federal property within project boundaries, commonly referred to as the Dalecarlia Woods. We will thoroughly and systematically search 62 acres of this wooded property for military munitions. This investigation is an important step in assembling a complete picture of DoD activities at AU Experiment Station.

Third, we continue to collaborate and actively investigate groundwater in two areas where perchlorate levels exceed EPA guidelines. Two phases of the investigation have been completed and a third phase is being planned. So far, results have indicated the Dalecarlia Reservoir is not at risk. In Phase 3, we will install an additional eight groundwater monitoring wells to join the 43 wells already in the network. Of note are the installations of four deep monitoring wells and a shallow well immediately down-gradient of the former location of the 52<sup>nd</sup> Court Disposal Pit. The partnership will attempt to use specialized testing to evaluate the perchlorate to determine the nature of the source. Perchlorate can have both natural and manmade origin and we would like to know which it is in the Spring Valley area.

Fourth, during the Pit 3 investigation, we recovered chemical munitions. Our plan is to destroy these munitions on site recovered later in 2009 using a mobile treatment system, known as an Explosive Destruction System, or EDS. This is the same technology used on site in 2003 to destroy chemical munitions recovered during earlier clean up efforts at this FUDS. Designed by the Army, this system provides on-site treatment of chemical munitions in a safe and environmentally sound manner. The Army used the EDS, which has been approved for use in the field by the Army and DoD, at locations across the country to safely destroy more than 1,500 recovered chemical munitions. The EDS has a dedicated crew of trained professionals with an exceptional safety record. No release of chemical agent has occurred outside of engineering controls during any past operation.

One question raised numerous times is; “Can we transport munitions to another facility for destruction?” The simple answer to this question is no. Federal Public Laws 103-337 and 91-121, as well as DOD and Army policy, provide the authority to transport, store and dispose of CWM. Federal hazardous waste laws limit the transportation and disposal of chemical munitions to facilities that are permitted to receive, store or dispose of this hazardous waste.

Currently, facilities permitted to store and dispose of chemical munitions are not permitted to receive *recovered* chemical munitions for storage or treatment. In addition, states where these facilities are located have generally refused to grant the required permits. Only Maryland has permitted Aberdeen Proving Grounds to receive a few items for research purposes only.

Finally, as we looked into the transport question as related to recoveries at Spring Valley, our hazard analysis indicates the potential hazards and public exposures associated with the transport of chemical munitions to another site by air or vehicle poses greater potential hazards to the public than on-site destruction using the EDS owned and operated by the US Army Chemical Materials Agency.

As with all of our efforts at Spring Valley, the destruction planning has been closely coordinated with our project Partners at EPA and D.C. Department of Environment as well as the community, D.C. Homeland Security and Emergency Management Agency, local police and firefighters, and Sibley Hospital. We want to ensure that everyone understands the process and is able to provide input prior to the Corps proceeding with our plans. We also have extensive coordination requirements within the DoD. Prior to the start of operations, we are required to obtain approval from Army’s Chemical Materials Agency, the U.S. Army Technical Center for Explosives Safety, and DoD’s Explosive Safety Board. The Office of the Assistant Secretary of the Army for Environment, Safety, and Occupational Health must also approve the destruction plan for us to go forward.

As part of our ongoing community outreach program, we also made significant efforts to ensure that the community was informed of the planned destruction operation and had an opportunity to provide their input. In addition to our normal outreach efforts, such as the RAB, updates and project mailings, we held a Community-Wide meeting in March specifically to discuss the planned chemical munitions destruction. We also conducted door to door canvassing of approximately 40 residences near Dalecarlia Parkway to ensure that those closest to the destruction operation were fully informed of the planned operation. Additionally, before commencing operations, we will hold a Media Day and allow for tours of the system by elected officials and the Restoration Advisory Board.

When we finish our fieldwork, we will complete the remedial investigation report and feasibility study. These documents analyze all data and findings collected from our fieldwork and involve consultation with the regulatory community, and the public, including Spring Valley stakeholders; we will allow the facts and the data to guide future work. The Partners are committed to a transparent process that actively seeks input as we go forward, and the Army is committed to a process that calls for formal input from all interested stakeholders before work can conclude. The DoD is legally and financially responsible for conducting any follow-up investigation or remediation deemed necessary to protect human health and environment.

The DoD, the Army and the Corps recognize the issues and challenges faced by Spring Valley residents, students, and businesses are real. We will continue to remain open, transparent and accessible so all can be confident that their government is working truthfully, diligently and with

maximum effort to ensure their safety and security. We remain committed to our purpose – for as long as it takes – to get the job done. I am highly confident in our ability to achieve our mission for the Army and, most importantly, the community of Spring Valley.

I thank the committee for the opportunity to speak, and I am prepared to answer any questions.