

WRITTEN TESTIMONY

**COUNCIL OF THE DISTRICT OF COLUMBIA
ROUNDTABLE DISCUSSION**

**The Committee on Public Works and the Environment
Carol Schwartz, Chair**

APRIL 12, 2006

**COLONEL ROBERT J. DAVIS
COMMANDER
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS**

Good morning, Councilwoman Schwartz and other distinguished Council members. I am Colonel Robert J. Davis, Commander of the Baltimore District US Army Corps of Engineers. Thank you for your invitation to participate in this roundtable and before this committee, regarding groundwater and other progress at the Spring Valley Formerly Used Defense Site (FUDS).

The bottom line upfront is that the Spring Valley Partnership, consisting of the U.S. Army Corps of Engineers, Environmental Protection Agency and the D.C. Department of Health, is making significant progress in both our Hazardous and Toxic Waste and Military Munitions Response programs. Furthermore, I am extremely confident that the Spring Valley investigation is technically sound and that the Partnership is well prepared to both manage the known tasks that lie before us, and address any

discoveries or hurdles that could present themselves in the future. We continue to work very hard to include public stakeholders on a variety of levels and I believe this commitment to openness and transparency will allow the Partnership and the community to successfully complete this project in the years ahead.

Through the Spring Valley Partnership, we are executing three broad project components concurrently. These three components, in order of priority, are: A) remediation and mitigation of known risks, B) field investigation to evaluate potential risks and C) review of historical records and project data to determine what other field investigations may be needed. In discussing each of these three concurrent components, I will focus on progress made since the last time I addressed the Council.

Within our field efforts to mitigate known risks, we are conducting soil removals to address areas of elevated arsenic and removing known pits and debris areas that contain wastes from WW-I-era American University Experiment Station activities. Since November 2004, we have successfully completed soil removals on 19 residential properties, bringing the total number of properties remediated to 47. Because the Partnership has addressed the properties with the highest arsenic levels first, we have now remediated over 62% of the total grids identified for remediation. To

illustrate our progress, please note that the first property we remediated had an average arsenic concentration of over 350 parts per million, and the average arsenic concentration for the most recently completed property is less than 27 parts per million (ppm).

We expect to conduct soil removals at approximately 93 additional residential properties between now and 2009. As we address these upcoming properties, we will make every effort to meet property owner needs through our extensive community outreach program, and expedite properties when possible through our phytoremediation efforts. Regarding phytoremediation, our third season of planting ferns to reduce soil arsenic will begin next month. We are working closely with EPA and the Restoration Advisory Board's technical advisor on refining our sampling approach to better show the effectiveness of phytoremediation, and plan to formally present this technology for public comment this fall.

With regard to our pit and debris removal, I am pleased to inform you that the Lot 18 high-probability intrusive investigation is complete. This was finished ahead of schedule and budget. Since June 2004, we removed approximately 5,400 cubic yards of debris and soil, recovered two bottles with agent or agent breakdown products (as well as, one previous bottle containing Lewisite which was recovered in 2003), three bottles containing

explosives or explosive breakdown products and three containers with perchlorate. Next month we will conduct additional soil removal from the excavated Lot 18 area to address some residual elevated metals, which will allow us to backfill and re-grade the site. Our next major project for removing known risks will be the excavation of the partial pit that remains at 4825 Glenbrook. We are currently drafting work plans, and we plan to begin this pit removal in the next fiscal year.

A recent find I should mention here is the discovery of an ordnance item during arsenic soil removal at a Quebec Street property. Upon discovery, our soil removal contractor notified the Site Operations Officer who initiated our emergency response procedure for an unplanned ordnance recovery. Specifically, MAJ Andy Off notified the DC Police using 311. The DC Bomb Squad arrived on site, conducted their initial assessment of the item and called the US Army's 767th Explosive Ordnance Company at Fort McNair. For safety reasons, we evacuated four homes prior to the 767th handling the recovered munitions.

Chemical agent tests conducted on the item were negative, and x-rays taken indicated that no burster was present and no liquid line was visible. The Army's 767th determined it was safe for transport and took the

round to Quantico for open detonation. Post-detonation inspection determined that the round was either empty or partially filled with sand.

Safety is our number one priority during such an event and we are pleased with how the situation unfolded. If any individual resident were to uncover a possible ordnance item in the future, this is the process that should be followed. In the instructions provided to the entire neighborhood on several occasions, we direct anyone who suspects that they have unearthed a potential munition item to call 911.

The second major prong of the Partnership's efforts is field investigation to assess possible risks to the public and the environment. There are several fronts for which I can provide an update to you today. The effort of greatest current public interest is our groundwater investigation. Since my last meeting with you, the Partnership reached consensus on the work plan for the first phase of the investigation; we installed 29 monitoring wells, collected groundwater elevation data, and conducted chemical analysis on each of these 29 wells. While we were pleased not to have found a large spectrum of contaminants at high concentrations, we did detect a few chemicals that do require follow-up. The most noteworthy detections were two areas where perchlorate in groundwater exceeds the 24 parts per billion (ppb) DOD level of concern

(the EPA Drinking Water Equivalent Level is 24.5ppb) and one well location where arsenic exceeds the maximum contaminant level of 10 ppb.

Last month, the Partnership met to begin developing our data quality objectives for Phase-2 of our groundwater investigation. The Corps project team subsequently developed a groundwater planning survey to get more detailed feedback. We are now drafting a work plan based on that meeting and survey and will circulate the plan for comment very soon.

In this planning process, we are collaborating not only with our partners, but also with the RAB, the RAB's technical advisor, a local elected official and other public stakeholders. We are doing this to ensure that everyone understands what we are considering, and so that we have diverse input from our stakeholders before reaching consensus with our partners on this year's work plan. In this spirit, I should note here that if any comments or concerns expressed this afternoon can contribute to our planning for 2006 and beyond, the Partnership will certainly take them back for consideration.

I can say at this time, based on the Spring Valley Phase-1 data and the ongoing monitoring conducted by Mr. Tom Jacobus at the Washington Aqueduct, the limited groundwater contamination within Spring Valley a) does not pose a current threat to the reservoir and b) the drinking water

supply remains safe to drink. As discussed at the Spring Valley RAB meeting last night, our groundwater elevation data does suggest that some limited groundwater is likely seeping into the reservoir at specific locations. However, we expect this volume of groundwater to be minute compared to the Potomac River water entering the reservoir everyday, and we have had no significant detections in the groundwater wells closest to the reservoir.

Our phase-2 investigation later this year and next year will provide much more information as to whether any Spring Valley groundwater contamination detected up-gradient of the reservoir could pose a future risk. If the Partnership identifies a significant future risk, we will determine, through consensus, what action should be taken to mitigate that future risk before it becomes a problem.

On the munitions side of the project, we are completing a low-probability, open-air intrusive investigation of several subsurface anomaly clusters, as well as 74 single point anomalies, on American University. This is being done in the vicinity of the Lot 18 debris field to make sure that other potential risks are not buried there. To date, we are finding a variety of metal scrap, and some broken lab glassware, but nothing found thus far would cause us to reconsider this open-air approach.

This summer we plan to intrusively investigate an additional 84 single point anomalies on several residential properties adjacent to Lot 18, following which we should be close to done with work on the 4600 block of Rockwood Parkway. We know this block has had to deal with extensive investigation and disruption over the years, and I am happy that we are starting to see the light at the end of the tunnel for them.

As to whether chemicals in soil other than arsenic might pose a risk to the community, it is well known that we have sampled for chemical warfare materials, agent breakdown products, explosives, explosive breakdown products and other compounds - both on the surface and below the surface - at approximately 20% of the Spring Valley lots and residential properties. To date, our soil sampling has not revealed any other chemicals of concern at the site. However, there is some follow-up work planned on this issue in the months ahead. For example, we will be conducting some background sampling this summer. Collecting this data will help us better evaluate both past and future surface soil sampling results for other constituents, as recommended by the Agency for Toxic Substances and Disease Registry (ATSDR) in its September 2005 Spring Valley Health Consultation.

Another field investigation planned for this summer or fall is the collection of soil gas data from the Glenbrook Road pit. As recommended by ATSDR, this sampling will be conducted prior to removal of the pit to determine whether air could be a pathway of concern near major burial areas.

As for our residential geophysical investigation, we have completed our efforts on 32 of the top 50 residential properties and American University Lots prioritized by the project partners in fiscal year 2002. An additional seven properties have already been surveyed and are currently undergoing or awaiting intrusive investigation. As for specific progress since November 2004, we performed geophysical surveys on 10 properties, one being from the FY02 prioritization and nine being added by the partners for various project reasons. Of these 10 surveyed properties, five were intrusively investigated and resolved, three are awaiting intrusive investigation in 2007, and two were determined to not require intrusive investigation.

Our third component of the Partnership's project efforts is our review of historical records, project data, and even anecdotal information as we try to identify and fill any remaining data gaps in our comprehensive investigation. For example, the Area of Interest Task Force, which includes

Mr. Richard Albright from DC Health, Mr. Terry Slonecker from EPA, Mr. Mark Baker from the Corps and the RAB's technical advisor, Dr. Peter deFur, continue to meet on a regular basis to develop and finalize reports on areas of interest or AOIs. They report their recommendations to the Tier 1 Partnering group, which reviews their work and decides through consensus what additional field investigation should be conducted for an AOI, if any.

Another example is the recreation of the original range fan used by the AUES, which depicts the trajectories of the ballistically fired ordnance and includes likely target areas. This range fan encompasses 104 residential properties. We notified the 104 property owners about the range fan evaluation in May 2005. Our ongoing residential geophysical work and arsenic removals have already addressed 11 properties within the range fan, with no intact ordnance being found to date. Looking ahead, our review of available historical records has identified several additional range fan properties for geophysical survey and they have been inserted into our lifecycle schedule for fiscal year 07.

Another example is our ongoing assessment of historical records, which shows the value of public stakeholder participation. With input from Mr. Kent Slowinski and others, the Partnership developed a strategy, by

consensus, to verify the thoroughness of previous historical records assessments and address any data gaps identified. This spring and summer, representatives from the partnering agencies will conduct follow-up site visits to as many as six locations to see if additional historical records can be found regarding former AUES activities that can assist us in our ongoing investigations. Currently, we are developing a plan to visit Fort Leonard Wood, where many historical records pertaining to AUES activities are housed. This draft plan will be provided to the RAB and Mr. Slowinski for comment prior to finalizing the approach and scheduling the visit.

One other example of our recurring data review is our recent shift of the project boundary in the northeast portion of the FUDS. In follow-up to requests from two property owners, we conducted additional analysis of the historical aerial photos and parcel maps for that area. Based on that review, we determined the boundary should be shifted slightly to be most protective of the community. In turn, we notified 28 additional property owners that we would like to sample their properties for arsenic. This sampling has already begun and early data indicates that at least two properties will require follow-on sampling.

Our working relationship with our project partners has never been better. We are working together in an open and professional manner,

meeting monthly, setting annual goals collectively and making project decisions together. Involvement of leadership from each of our agencies is strong, noting Tier 2 and Tier 3 representatives meet three times per year and Tier 4 representatives meet annually to ensure our strong relationship continues.

We have made an equal effort to keep the DC Council and other elected officials more informed, noting my ongoing commitment to brief the members of this body personally, and to continue the e-mail distribution of our monthly project updates that began in November 2003. These updates are also posted on our project web site. Furthermore, with the transparency we have established and our interest in making this a collaborative project, rest assured that any comments or suggestions identified today that may enhance our project will be taken back to the Tier 1 Partnership for further consideration.

We have worked very hard during the past 18 months to better define the extent of DOD contamination. The Partnership continues to seek full and open communication with the community and we remain absolutely committed to aggressively responding to identified risks associated with former DOD activities at the Spring Valley site.

I would like to thank this committee for the opportunity to speak and I am prepared to answer any questions regarding the Corps' efforts at this site.