USACE SPRING VALLEY FUDS PROJECT **AGENDA**

Inter-Agency Partners Meeting

Tuesday, August 20th, 2013				**[**Upcoming Meetings: October?**]**
TIME	**TOPIC**	**DISCUSSION LEADER**	**PREPARATION**	**OBJECTIVE**
9:15 - 9:30	Check-in / Review Ground Rules	J. Sweeney		Introductions of new attendees/ Personal check-in / Post Meeting Lunch plans/ Review Ground Rules
9:30 - 10:15	Groundwater	T. Beckwith		Sampling results discussion
10:15 – 10:30	2014 Budget Preview	L. Reeser		
10:30 - 10:45	BREAK			[Lunch $ collection]
10:45 – 11:20	Site-wide RI/FS Update	L. Reeser/ T. Bachovchin		Follow-on Risk Screening of more recent sample data / Arsenic sampling
11:20 – 11:30	Watermark/PRP Investigation	D. Noble		Worker interview transcript
11:30 – 11:40	Johns Hopkins 2013 Health Study	J. Sweeney		Discussion
[11:40 – 12:35]	WORKING LUNCH			
11:40 – 11:50	Open Issues and New Data	J. Sweeney		
11:50 - 12:00	Document Tracking Matrix for MMRP/HTW	L. Reeser/ Parsons	Partners Review	Review pending documents
12:00 – 12:10	Partners' Parking Lot	J. Sweeney	Partners Review	
12:10 - 12:20	Agenda Building	J. Sweeney		** Future Meeting Discussion
12:20 – 12:35	4825 Glenbrook Road*	B. Barber/Parsons		High probability site preparation. Schedule review
12:35	Adjourn	J. Sweeney		* Partners Site Tour

Spring Valley Partnering Meeting
August 20, 2013
Spring Valley Trailer Conference Room

Name	**Organization/Address**	**X**
Sherri Anderson-Hudgins	CEHNC	**X**
Thomas Bachovchin	ERT	**X**
Brenda Barber	CENAB	**X**
Todd Beckwith	CENAB	**X**
Bethany Bridgham	American University	**X (by telephone)**
Janelle Boncal	Parsons	**X**
Jessica Bruland	ERT	**X**
Sean Buckley	Parsons	
Paul Chrostowski	CPF Associates, AU Consultant	
Tom Colozza	CENAB	
Jennifer Conklin	DDOE	
Kathy Davies	US EPA Region 3	
Dr. Peter deFur	Environmental Stewardship Concepts/RAB TAPP Consultant	
Diane Douglas	DDOE	
Bill Eaton	URS	
Brandon Fleming	USGS	
Clem Gaines	CENAB, Public Affairs	**X**
Alma Gates	RAB Member - Horace Mann Rep.	
Steve Hirsh	US EPA Region 3	**X**
Leigh Isaac	Environmental Stewardship Concepts	
David King	CENAB	
Carrie Johnston	RCAI - Community Outreach Team	**X**

Dan Noble	CENAB	**X**
John Owens	CENAB	
Randall Patrick	Parsons	**X**
Lan Reeser	CENAB	**X**
Mike Rehmert	CENAB	
Paul Rich	Parsons	
Amy Rosenstein	Risk Assessor (Independent Consultant)	
Allen Shapiro	USGS	
Don Silbacher	Parsons	
Jim Sweeney	DDOE	**X**
Andrea Takash	CENAB, Public Affairs	**X**
Tenkasi Viswanathan	CENAB-WA	**X**
Ethan Weikel	CENAB	
Nan Wells	ANC3D Commissioner	**X**
Cheryl Webster	CENAB	
Laura Williams	Environmental Stewardship Concepts	**X**
Bruce Whisenant	CEHNC	**X**
Rebecca Yahiel	ERT - Community Outreach Team	**X**
Doug Yeskis	USGS	

Summary of August 20 Spring Valley Partnering Meeting

Consensus Decisions

- No consensus decisions were made.

August 20, 2013 Action Items

- DDOE will speak with the DC Office of Planning's public space division to obtain feedback on the current permitting process to access DC public space (specifically, whether the public space permit is covered under the new monitoring well permit exemption).
- USACE will seek approval from EPA and DDOE hydrogeologists for discontinuing sampling at selected wells with a specific rationale.

- ERT will provide an electronic copy of the follow-on screening addendum handout (outlining the procedure for identifying and addressing outlier locations) to EPA for review by D. Ioven, as requested.
- USACE will provide another copy of the Final 4825 Glenbrook Road Chemical Safety Submission (CSS) electronically to EPA and DDOE, as requested, if they are unable to locate the document.
- USACE will conduct a study to ensure the 4825 Glenbrook Road CAFS volume satisfies the DC evening noise requirements, so that the equipment can be run continuously.
- AU will follow up on 4825 Glenbrook Road high-probability preparations with the university administration, as requested (preferred siren installation locations on campus, phone contact information for AU President Kerwin and his wife, and specific topics they would like included in the site tour).

Tuesday, August 20, 2013

Check-in

The Partners conducted their normal check-in procedure.

Laura Williams of Environmental Stewardship Concepts represented Dr. Peter deFur, RAB TAPP Consultant, at the meeting.

A. Spring Valley Project Budget Review

USACE-Baltimore provided an update on the Spring Valley FUDS project budget outlook.

Funding Summary: As of August 2013, a total of almost $230 million ($229.545 million) was spent on the project to date, beginning in the original fiscal year (FY) 1993 through the current FY2013. This amount includes $3.2 million from Congressional assistance and also includes all costs projected through September 2013.

Beyond FY2013, the remaining cost to complete (CTC) represents the amount of funding required to complete planned efforts during upcoming fiscal years, and is projected to be $11.327 million. Upon completion of all planned efforts, the total project is currently projected to be almost $241 million ($240.872 million). As noted at previous Partnering and RAB meetings, the remaining funding estimates can be adjusted based on the status of currently planned project activities. Active investigations are ongoing and the projected budgets may change.

FY2013 Summary: FY2013 officially began on October 1, 2012.

Approximately $8.73 million were spent on Military Munitions Response Program (MMRP) and Hazardous and Toxic Waste (HTW) project activities, along with the Potentially Responsible Party (PRP) effort, during FY2013. (This total budget includes the baseline funding of $5.25 million and the plus-up funding of $3.48 million.) Of this total budget, $8.15 million were spent on MMRP activities, $0.56 million were spent on HTRW activities, and $0.02 million were spent on the PRP project.

These activities included further preparations for completing the Site-Wide RI/FS report, which will resemble the documents produced for the 4825 Glenbrook Road site but will address the entire Spring Valley FUDS. Associated MMRP efforts included the Site-Wide MEC HA and completion of three site-specific reports: 4835 Glenbrook Road Investigation Report, AU Public Safety Building (PSB) Investigation Report, and the AU PSB HHRA. Associated HTRW efforts included supplemental sampling in selected Areas of Interest (AOIs), completion of the Pre-2005 HHRA Review, and completion of the Recent Sampling Follow-on Screening.

Under the MMRP program, 4825 Glenbrook Road house demolition and the remedial design have already been completed, followed by the initial low-probability portion and preparations for the high-probability portion of the remedial action (a major milestone for the Spring Valley project). Additional MMRP activities at the 4825 Glenbrook Road site included continued stakeholder outreach, site security activities, and landscape reimbursement.

Under the HTRW program, which focuses on environmental concerns, groundwater investigation activities continued. The isotopic analysis of perchlorate was completed, and the Partners reached consensus on two new deep monitoring wells and upcoming path forward for groundwater monitoring. Periodic sampling was also conducted.

Under the Potentially Responsible Party effort, the PRP investigation is currently being conducted.

FY2014 Projected Summary: The baseline projected budget for FY2014 project activities is $3.97 million. Of this total budget, $2.82 million are allocated to MMRP activities, $1.09 million are allocated to HTRW activities, and $0.06 million (the equivalent of $60 thousand) are allocated to the PRP effort during FY2014.

Preparation of the Site-Wide RI/FS and Proposed Plan will continue. Associated HTRW efforts will include conducting Exposure Unit (EU) HHRAs and preparation of RI/FS reports specific to each EU.

Under the MMRP program, the last planned residential anomaly investigation (Fordham Road property) will tentatively be completed, along with landscape reimbursement. Additional MMRP activities at the 4825 Glenbrook Road site will include ongoing remedial actions (a major milestone for the Spring Valley project), and stakeholder outreach and site security activities will continue.

Under the HTRW program, activities will include the last planned arsenic delineation sampling and soil removal (1 residential property) and landscape reimbursement. Additional HTW activities as part of the groundwater investigation will include two new well installations, periodic sampling efforts, and preparation of the Site-Wide Groundwater RI report.

Under the Potentially Responsible Party effort, the PRP investigation will be completed.

FY2015 Projected Summary: The baseline projected budget for FY2015 project activities is $2.825 million.

Completion of the Site-Wide RI/FS and Proposed Plan will be followed by preparation of the Decision Document.

Anticipated MMRP activities at the 4825 Glenbrook Road site will include completion of remedial actions at 4825 Glenbrook Road site (a major milestone for the Spring Valley project). Completion of the remedial action closeout report for the 4825 Glenbrook Road site will be another major project milestone, and stakeholder outreach and site security activities will continue.

Anticipated HTRW efforts will include periodic sampling as part of the groundwater investigation.

Anticipated Major Reporting Milestones: Finalization of each site-wide document (similar to the site-specific documents for the 4825 Glenbrook Road site) will be a major milestone for the Spring Valley project. The time frames for these planned milestones include:

- **Site-Wide Remedial Investigation (RI) report** – November 2014
- **Site-Wide Feasibility Study (FS)** – January 2015
- **Site-Wide Proposed Plan (PP)** – July 2015
- **Site-Wide Decision Document (DD)** – December 2015

The determinations made in the Site-Wide DD will significantly impact future actions taken and future FY budgets, depending on whether additional site-wide remedial activities are required or whether the site

cleanup is officially closed and completed. If additional actions are required at the site, they will be implemented immediately following final approval and signature of the DD.

B. Groundwater Study Efforts

The goal of this segment of the meeting was to provide an update on ongoing and upcoming groundwater study efforts.

USACE provided a brief update on the status of upcoming groundwater study efforts.

Semi-Annual Sampling: Selected existing groundwater monitoring wells and surface water monitoring locations will be sampled twice annually for the next few years. These locations include a total of 20 shallow and deep wells and 10 surface water locations. The first semi-annual sampling event began in late April 2013, as part of the extended 2013 groundwater monitoring program, and all sampling was completed by mid-May 2013. [Details of the sampling effort were provided at the May 2013 Partnering meetings.]

Sampling results were generally consistent with previous sampling rounds, and are summarized below. Hard copies of the updated groundwater sampling map and the validated analytical data table were provided to the Partners. These validated analytical results will be shared with the RAB as early as November 2013.

- **Sibley** – Perchlorate concentrations ranged from 18 ppb at the Sibley Sump (consistent with previous results) to 4.5 ppb at MW-21 (slightly lower than previous results).
- **AU Campus** – Three sampled wells represent five different depth intervals in front of Kreeger Hall. Perchlorate concentrations included 5.6 ppb at PZ-4S (lower than previous results) and 40 ppb at MW-44 (consistent with previous results). At MW-45S/D, which has been sampled twice to date, perchlorate concentrations were significantly higher (30 ppb and 54 ppb, respectively) compared with the previous initial sampling round (3 and 6 ppb, respectively).
- **Glenbrook Road** – Perchlorate concentrations ranged from non-detect at MW-24 to around 3 ppb at MW-25, and MP-2 perchlorate levels were slightly higher at deeper sampling intervals compared with shallow intervals. MP-2 arsenic levels exceeded the MCL of 10 ppb arsenic in five intervals, including the deepest interval (160 feet), and were generally consistent with previous sampling rounds.

The second semi-annual sampling event is scheduled to begin in late October 2013, and all sampling will tentatively completed by November 2013.

Quarterly Sampling: Two existing groundwater monitoring wells and surface water monitoring locations were selected for more frequent quarterly sampling in addition to the semi-annual sampling events, based on historically high perchlorate detections. PZ-4S/D and the Sibley Sump were both sampled in July 2013. These results will be shared with the Partners pending receipt of the validated sampling results, as early as September 2013.

Additional Deep Wells: Two additional wells are planned to provide additional vertical delineation of groundwater. Proposed locations include the area between MP-3 and MP-4 (in the vicinity of Indian Lane or further down Rockwood Parkway) and close to Sibley Hospital. Approval was obtained for using prior year funds to fund the existing task order and for using the previous well installation contractor (URS), as described during the April 2013 Partnering conference call. Modification of the existing contract is underway and will tentatively be in place by the end of September 2013. Planning for the new wells will be completed in calendar year 2013, followed by the well installations, tentatively in late 2013 or in early 2014. Work plan development and contents will closely resemble those completed for previous deep well installations.

Discussion – Semi-Annual Sampling Results

USACE mentioned that the 5.6 ppb perchlorate concentration at PZ-4S is much lower than the highest perchlorate detection observed in Spring Valley to date (146 ppb perchlorate, which was historically detected at the same well).

EPA asked why the laboratory detection limits and quantitation limits differ depending on the particular sample. USACE explained that these differences are due to the laboratory method used to analyze each sample. If the sample contains significant Total Suspended Solids (TSS), then the sample must be diluted prior to analysis, thus increasing the detection limit of the contaminant of interest.

In response to EPA's inquiry, USACE confirmed that the analytical results presented today were all derived from the same semi-annual sampling event, sent to the same laboratory, and analyzed using the same method. The different detection and quantitation limits are simply resulted from the dilution of various samples that contained excessive suspended solids.

USACE clarified that the reason for the apparent increase in perchlorate concentrations at MW-45S/D is unknown. It is possible that the initial sampling results (low perchlorate concentrations) were obtained too soon after the well was drilled, in which case the recent sampling results (significantly higher perchlorate concentrations) may be truly representative of the groundwater at that location.

EPA inquired about this possible cause of the variability of perchlorate at MW-45S/D. USACE confirmed that the initial sampling event at this well was conducted at least two weeks after drilling, but the use of drilling mud during this process could have locally influenced the short-term groundwater chemistry.

In response to DDOE's inquiry, USACE confirmed that MW-44 and MW-45S/D are downstream of PZ-4S/D, but all three wells are situated within 20 or 30 feet of each other. DDOE mentioned the possibility that the historical elevated groundwater perchlorate contamination migrated slightly further downstream.

EPA asked whether the groundwater elevations are currently higher (shallower) compared to previous sampling events, and noted that 2013 has been a very wet and record-breaking year. USACE agreed to provide the groundwater elevations electronically to the Partners, along with the field data (pH and Eh) that were requested by AU during the January 31, 2013 Groundwater Conference Call.

In response to EPA's inquiries, USACE clarified that MP-2 is the deep well situated on Glenbrook Road across from the Glenbrook Road disposal pit vicinity. USACE confirmed that arsenic was non-detect at MP-3, where initial arsenic samples collected about three years ago had been contaminated by arsenic leaching from the FLUTe liner.

USACE briefly summarized the overall conclusion that the first semi-annual sampling results (from April/May 2013) are consistent with previous sampling results. The same set of wells will be sampled again in October/November 2013.

EPA asked whether any recent surface water sampling results were of interest. DDOE replied that the perchlorate concentration of 23.8 ppb at SW-25 was unexpected. USACE explained that this represents the highest perchlorate detection to date at this location. Possible sources include up gradient swimming pools, but it does not appear to be associated with AU campus perchlorate plume.

USACE and DDOE added that at SW-24, which is situated at a stream within Glover Archbold Park and is inaccessible for sampling, perchlorate concentrations have historically varied between low and exceeding the screening level.

Discussion – Deep Well Installations

USACE commented that the EPA and DDOE hydrogeologists will likely want to review the deep well installation work plan even though the details will closely resemble previously approved plans. DDOE agreed, and EPA added that these reviews will likely be completed quickly.

The Partners briefly discussed feedback regarding implementation of DDOE's new policy with respect to monitoring well permitting requirements. DDOE added that draft monitoring well regulations were introduced a few weeks ago. These regulations defined a monitoring well as putting a shovel into the ground, which delayed anomaly investigations until this issue was resolved and the necessary permits were approved. A new task force will be formed to review and modify these regulations. DDOE confirmed that the work plan should be submitted for review, but a permit application and associated fee are not required.

USACE noted that MP-5 is proposed for installation on DC property. The planned location is on a triangle-shaped grassy area owned by DC, and the deep well would be drilled using a rig situated entirely on DC property, as described previously. DDOE agreed to check whether a public space permit will be required to access DC public space, because the public space permit may not be covered under the monitoring well permit exemption.

The Partners briefly discussed the vicinity of the proposed deep well near Sibley Hospital. The deep well will tentatively be installed between the parking lot sump and the new hospital facility. USACE confirmed that the new hospital will be built in the large excavated area, potentially with underground parking. EPA commented that deep excavation will necessitate additional sumps and additional draining and dumping of groundwater.

USACE confirmed that the next focused groundwater meeting will be scheduled after the new wells are drilled, for the purpose of discussing the MP-5 FLUTe sampling port design.

Discussion – Groundwater Monitoring and Exposure Pathways

USACE asked whether the Partners feel there is any value in continuing to monitor MP-3 and MP-4 during future semi-annual sampling events. Both deep wells have been sampled several times to date, and both wells have consistently been either non-detect, or contained very low levels of perchlorate and arsenic. USACE proposed discontinuing monitoring at both locations due to significant time and expense required to sample multiple FLUTe intervals (8 ports and 9 ports, respectively).

EPA requested an additional sampling event at MP-3 and MP-4, as they prefer a midpoint between semi-annual and discontinued sampling. Both wells could potentially be sampled once every two years. USACE responded that they are prepared to sample both deep wells during the next semi-annual sampling event in October/November 2013. The Partners previously noted that these two wells (MP-3 and MP-4) and the new deep well (MP-5) should be sampled during the same general time frame. This would show whether the new well intervals represent similar fracture zones to those observed in the surrounding wells MP-3 and MP-4.

EPA suggested that USACE e-mail EPA's hydrogeologist to seek approval for discontinuing sampling at selected wells with a specific rationale. Their agency is open to discussing sampling frequency for monitoring wells in Spring Valley. This site typically makes these decisions on a yearly basis, while most project sites have established a long-term groundwater monitoring report and plan. USACE emphasized that this is because the Spring Valley project is still in the Remedial Investigation (RI) phase.

In response to EPA's inquiry, USACE explained that site-wide groundwater will be included in the Site-Wide Decision Document (DD), and is currently represented by a placeholder ("operation and maintenance") in the site-wide document schedule.

USACE acknowledged the possibility that the groundwater investigation may be addressed via a separate track with an extended groundwater study schedule. The new deep wells may introduce a different direction for the study, provide additional information for consideration, or require additional data collection beyond what is currently anticipated. USACE hopes that the groundwater investigation will be completed during the planned time frame and incorporated into the Site-Wide DD.

USACE confirmed that URS is under contract to produce the Site-Wide Groundwater RI report. Portions of the report have been drafted, to be completed pending remaining well installations and additional data

collection. URS also prepared a draft conceptual work plan for completing the groundwater risk assessment, and this plan will be shared with the Partners in Fall 2013 pending USACE internal review.

EPA noted that the Partners should reach consensus on groundwater exposure pathways early during the risk assessment process, and USACE agreed.

Next Steps

DDOE will speak with the DC Office of Planning's public space division to obtain feedback on the current permitting process to access DC public space (specifically, whether the public space permit is covered under the new monitoring well permit exemption).

USACE will seek approval from EPA and DDOE hydrogeologists for discontinuing sampling at selected wells with a specific rationale.

C. Potentially Responsible Party (PRP) Investigation

USACE-Baltimore provided a brief update on the Potentially Responsible Party (PRP) investigation currently being conducted by contractor Watermark, Inc. This investigation focuses on the post-AUES development of two Glenbrook Road residential properties (4825 and 4835) along with the AU Campus Public Safety Building.

D. Follow-on Spring Valley Health Study

The goal of this segment of the meeting was to provide a progress update on the follow-on Spring Valley health study.

DDOE provided a brief update on the status of the follow-on Spring Valley health study.

(As described at previous Partnering meetings, a contract was awarded to Johns Hopkins University for completing the Follow-on Spring Valley Health Study. Johns Hopkins completed the original Spring Valley Public Health Scoping Study in 2007. Previous Partnering and RAB meetings included a summary of the original 2007 scoping study, details of the follow-on health study, and subsequent status updates).

Status: The follow-on Spring Valley health study was recently completed in accordance with the Statement of Work (SOW) and met expectations based on limited funding of $250 thousand. The final follow-on health study report was released to the public in July 2013.

Results: Johns Hopkins presented the results of the follow-on Spring Valley health study during two separate briefings in July and August 2013. The first briefing was scheduled for DDOE, the DC Department of Health (DOH), and a representative from Councilmember Mary Cheh's office. The second briefing was held at the AU campus to share the results with the public.

Discussion – Community Response to Follow-on Spring Valley Health Study Results

DDOE mentioned that the follow-on health study results met their expectations based on the planned study components. Health of the Spring Valley neighborhood is generally very good. Several people expressed concerns about different diseases, particularly rare diseases and deaths of young individuals, during the public briefing. These specific issues were not the point of the follow-on health study, which served as a general community health survey. DDOE expressed the opinion that Johns Hopkins conducted the study very well and accomplished what they were asked to do.

DDOE added that Johns Hopkins received a total of 862 survey responses from the zip codes of interest. Johns Hopkins was satisfied and felt that this response was very good from a statistical standpoint. Many public questions remain with respect to the usefulness of the follow-on study. Only 862 survey responses were received out of approximately 41 thousand residents in Spring Valley and Chevy Chase.

DDOE noted that they have not received any criticism with respect to the public briefing date. The briefing schedule was previously discussed in response to community concerns, as many residents are not available to attend briefings in July and August, but Johns Hopkins wanted to release the report to the public upon report finalization.

N. Wells confirmed that some residents expressed criticism because the public briefing was held during the popular vacation time frame (July and August). She clarified that Johns Hopkins has also received criticism regarding the lack of direct mailings to residents. Residents feel that direct mailings would have reached more people and would have been modestly priced. Most concerns focused on the requirement to identify themselves as residents of these zip codes in order to participate in the community health survey, instead of receiving information directly. EPA added that a Massachusetts Avenue resident recently complained that they were not notified or included in the survey.

DDOE responded that the best way to disseminate information to the community is unclear. The survey was advertised via a long list of websites, list serves, and media sources including the Northwest Current. USACE added that information was handed out at election polling locations. N. Wells replied that direct mailings should have been conducted, and the ANC could have provided voter lists for both zip codes.

DDOE added that toward the end of the survey time frame, the Johns Hopkins team conducting the study had asked whether door-to-door efforts in the neighborhood were are a good idea (as suggested by RAB Member Tom Smith). DDOE felt this would be too time-consuming and labor-intensive to pursue so late in the survey process, as the Johns Hopkins team was trying to collect the final data for the study.

DDOE noted that Johns Hopkins was willing to conduct another public briefing if warranted due to sufficient comments and complaints regarding the July 2013 public briefing date. N. Wells agreed to provide copies of these criticisms to DDOE for reference.

N. Wells emphasized that there is considerable disparity in the community regarding the follow-on health study results. Positive feedback was provided by RAB Member Malcolm Pritzker, who stated the study shows that health of Spring Valley residents is generally good, noted that these results were expected due to the study's limitations, and asked why residents are still complaining. Criticism was provided by many residents, with whom the Partners are likely familiar.

DDOE mentioned that Johns Hopkins felt the study was statistically valid, and they may have obtained the same results even with many more survey responses. It sounds like residents would prefer door-to-door contact for medical monitoring purposes, which is under the purview of DOH (not Johns Hopkins or DDOE). Although DDOE will speak with their agency regarding this topic, no agencies or potential contractors have pursued a detailed medical study. It is unclear when and how these concerns will be addressed in the future.

In response to USACE's inquiry, EPA replied that the follow-on health study results were not surprising and accomplished exactly what EPA expected.

N. Wells asked whether EPA feels that the follow-on health study excluded the possibility of health effects. EPA replied that they feel this is not the case, as the study was designed as a community health survey instead of focusing on particular individuals or groups of residents.

DDOE added that the contract was worded so JHU retains possession of the intellectual property and are permitted to use it as they wish. This allows them to adapt the follow-on study (produced for DDOE under contract) into a peer review product (for discussion with the RAB and the community).

DDOE confirmed that this is the second Spring Valley health study conducted by Johns Hopkins. The original scoping study was completed in 2007.

USACE commented that this follow-up study seems to mimic the original 2007 scoping study. DDOE clarified the differences between the two efforts. The original study focused specifically on the Spring Valley neighborhood, while the follow-on study expanded the scope to include a larger area. Comparisons

were made between the Spring Valley neighborhood, the entire 20016 zip code (which encompasses Spring Valley and surrounding neighborhoods), and the 20015 zip code (the comparable neighborhood of Chevy Chase, MD). The follow-on effort represented a slightly more general health study compared to the original study.

Discussion – Follow-on Spring Valley Health Study Report Recommendations and Comments

USACE mentioned that the follow-on study report included two recommendations and comments pertaining to the ongoing Site-Wide RI activities.

First, Johns Hopkins felt uncertain why the groundwater investigation monitoring wells were placed in their current locations (as opposed to elsewhere in Spring Valley). DDOE shared their surprise that Johns Hopkins mentioned this topic, because the groundwater investigation is still in the RI phase. Monitoring wells have been placed where the Partners feel they were most needed, and knowledgeable hydrogeologists provide input and feedback into these decisions. USACE agreed and replied that the rationale for monitoring well locations will be explained in the RI report.

Second, Johns Hopkins felt that a landscaper exposure scenario was not considered in the human health risk assessments (HHRAs) to date. USACE clarified that this exposure pathway was included and fully addressed in many Spring Valley risk assessments to date, and was excluded from other risk assessments as appropriate. Johns Hopkins likely reviewed a couple of risk assessments in which this exposure pathway was not addressed.

Discussion – Community Awareness of Spring Valley FUDS Contamination

N. Wells expressed her surprise that many landscapers and utility workers in the Spring Valley neighborhood are unaware of the potential for finding AUES-related items and contamination and the associated risks. This is an ongoing concern with respect to community safety. For example, her landscaper had no knowledge of this topic, and gas utility repairs were at one point temporarily shut down because a “strange” item was found in a residential backyard. The current system for disseminating information (including contact information and guidance for reporting unusual or unidentified finds) to the community does not appear to be working, which seems strange considering that the Spring Valley project has been going on for years. Many people spending time in the neighborhood, such as landscaping companies, are still unaware of this information and must apparently notify themselves. Realtors are likely pleased about this.

USACE explained that businesses that move soil for any purpose must have their own level of due diligence and exhibit caution with respect to potential risks in the soil. It is unlikely that every company is aware of the presence of a FUDS site where they are working, but it is not difficult to locate this information if they are concerned about safety. A proactive system does not exist anywhere for the purpose of notifying and sharing information with landscapers, developers, and utility workers.

EPA added that this type of information is disseminated via land use controls (LUCs), GIS data and maps, and dig permits. For example, LUCs would probably be established at an active military installation.

EPA noted that the utility personnel who will be digging and replacing streets are aware of the risks and plan to conduct sampling during their activities. USACE added that they communicate with the gas company management, who are aware of the risks, but USACE cannot accept responsibility for directly sharing this information with the gas company’s individual employees. N. Wells commented that this information was apparently not shared with the workers of the gas company.

EPA commented that this is an issue for their agency because it is more difficult to share relevant information with workers at private properties. Active military installations typically establish checks and balances to ensure that digging is not conducted in areas containing particular hazards. USACE clarified that this is true only for some installations and NPL sites. The status of LUCs and the system of checks and balances depends on the site’s age and history. During site establishment, the planned design and the actual construction do not always match, and early data may be unavailable or fail to match current data.

Community Outreach mentioned that the probability of finding AUES-related items or contamination at Spring Valley residential properties is much more remote now, compared to earlier during the project. This is a direct result of the extensive arsenic sampling, soil removal, geophysical surveys, and anomaly removals conducted at these properties.

N. Wells agreed and clarified that she is not blaming USACE for the lack of communication. Her intention was to emphasize that potentially important information is not reaching field workers under the current communication system. N. Wells mentioned that homeowners typically assume their property is clear and safe if their property was already screened and cleared for arsenic. DDOE replied that this is a good assumption. EPA added that the majority of these properties can be considered clean.

N. Wells expressed concern regarding a residential property that was previously cleared for arsenic, followed by discovery of an unidentified item on the property, which prompted the homeowner or workers to contact emergency personnel. USACE responded that it is prudent for a homeowner to contact emergency personnel if they find anything of potential concern, particularly because even a small item like a chain link fence cap can resemble a grenade after remaining in soil for a while.

E. Site-Wide RI/FS Update (Pre-2005 HHRA Review)

USACE-Baltimore and ERT provided an update on the current status of the Revised Draft Final Pre-2005 HHRA Review Document.

[This document addresses one of the key issues – **review of pre-2005 human health risk assessments (HHRAs) –** in the site-wide evaluation document, *Evaluation of Remaining Sampling Requirements*, which was finalized in July 2012. Details of the finalized site-wide evaluation document were described at previous Partnering meetings.]

Document Overview: [This information was not presented during the follow-on meeting, and is summarized for reference purposes. Details of the structure, contents, and associated maps of the revised draft final pre-2005 HHRA review document were described at the July 2013 On Board Document Review meeting, the May 2013 Partnering meeting, and previous Partnering meetings.] A total of 5 previously-completed HHRAs and subsequent AUES parameter sampling results were re-evaluated to determine whether the associated conclusions remain protective of human health, based on updated screening criteria. These HHRAs were completed by USACE and/or USEPA between 1993 and 2000, followed by AUES parameter sampling. The pre-2005 data and conclusions were re-evaluated using an elaborate step-by-step screening assessment process. The resulting numerous tables and explanatory text summarize all of the pertinent information from each of the pre-2005 HHRAs. The report also incorporates miscellaneous grab samples (associated with anomaly investigations) that were collected more recently and not yet rolled into a site-specific HHRA, as well as recent supplemental soil sampling completed by ERT in 2012. The report also identifies areas new Exposure Units (EUs) that may require additional risk screening (e.g., actions such as supplemental soil sampling) and possible risk assessment. Depending on the results of follow-on risk screening and evaluation, one or more EUs may require full separate HHRAs, which will be included in the site-wide Remedial Investigation (RI) report.

Document Status: A follow-on meeting (On-Board Document Review) was held on July 9, 2013 to resolve concerns with respect to the Revised Draft Final Pre-2005 HHRA Review document. The Partners reached several agreements during the follow-on meeting (including several not associated with the written EPA comments) to be incorporated into the document. Preparation of final comments/responses and revision of the document text are in progress, with the goal of obtaining final Partner concurrence. The revised document will then be finalized and submitted to the Partners.

Presentation Background: One of USEPA's comments on the revised draft final pre-2005 HHRA review document (dated June 20, 2013) focused on the appropriate selection of EUs based on specific criteria, including the compatibility between EU size and the exposure scenario being evaluated. As noted by

USEPA toxicologist Dawn Ioven during the On-Board Document Review, this compatibility is one of the criteria that should be used for establishing EUs at the Spring Valley FUDS. Inconsistencies with regard to compatibility may lead to scenarios where elevated contamination levels would be diluted during screening of the overall EU, which can significantly alter the exposure point concentration calculations and thus the presence of remaining risks within the EU. Outliers, also referred to as hot spots, are defined as areas of higher contaminant concentrations within an EU. These outliers may be encompassed within a larger EU or designated as a small individual EU. There is no formal process for evaluating outliers whose concentrations may be diluted. During the On-Board Document Review, toxicologists identified the need to evaluate the presence of any locations that could indicate areas of higher concentrations, in order to ensure that the identified EUs do not dilute higher concentrations over a larger area.

Presentation Objectives: The compatibility between EU size and the exposure scenario being evaluated was discussed, with the goal of determining how the Partners would like to address outlier locations. This process is considered a follow-on screen to determine which EUs truly require further risk assessment. The follow-on screen will be presented as an addendum to the finalized pre-2005 HHRA review document.

Presentation Summary: A handout was provided containing the proposed screening process to identify outliers within the proposed EUs, along with two options for addressing the outlier locations. The purpose of this approach is to confirm that the proposed EUs are appropriately sized with respect to the detected concentrations, and that the EUs do not dilute higher hotspot concentrations over too large of an area. This approach is fairly straightforward, and feedback from EPA and DDOE was requested to ensure there are no concerns or issues with this approach.

Procedure for Identifying Outliers: Outliers will be identified using the proposed procedure outlined below (an order of magnitude iterative approach). This procedure is designed for an EU that consists of multiple individual properties. Within the elaborate step-by-step screening process that was previously briefed, this procedure is a subsection of Step 2 and primarily applies to metals.

AOI 9 Example: AOI 9 is one of the largest EUs identified for further evaluation and a possible HHRA. This EU contains a total of 60 samples that were color-coded by category on the figure: pre-2005 HHRA samples, miscellaneous grab samples, and recent supplemental samples.

1. Metals whose maximum concentration exceeded the RSL or background value are identified as provisional COPCs for that EU.
    - **Aluminum was identified as a provisional COPC for the AOI 9 EU.**
2. Each COPC's maximum concentration is compared against the average concentration of all other sample points in the EU.
    - **AOI-9 contains a total of 60 samples. The maximum aluminum concentration was compared to the average of the other 59 aluminum data points.**
        a) If the maximum is less than 10 times the average (i.e., the average increased by one order of magnitude) then it is not considered an outlier, thus it is not a hotspot. Further evaluation of the COPC proceeds to the next screening assessment step.
        b) If the maximum exceeds 10 times the average, then aluminum at this sample location is an outlier. This procedure is repeated for the next highest aluminum concentration, and so forth, using an iterative process to identify outliers.
            - **The maximum aluminum concentration exceeded 10 times the average.**
3. The COPC's maximum concentration (which was identified as an outlier) is removed from the dataset and called Location A (defined by that single sample). The provisional COPCs continue to be screened with only the remaining 59 samples.

- **The maximum aluminum concentration outlier location is now called Location A.**

4. If another COPC is identified as an outlier, this maximum concentration is removed from the data set and called Location B (defined by that single sample). The provisional COPCs continue to be screened with only the remaining 58 samples, and so forth.

    - **The maximum barium concentration outlier location is now called Location B.**

5. Upon completion of this screening step, COPCs have been identified for the EU and for the additional separate locations of the outliers. A formal HHRA will be conducted for the original EU, minus the outlier locations.

    - **A formal HHRA will be conducted for the AOI-9 EU, minus the outliers for the COPCS (in this example, aluminum and barium).**

Path Forward: The follow-on screen will be presented as an addendum to the finalized pre-2005 HHRA review document, followed by preparation of work plans and completion of formal HHRAs for each EU. Two options for addressing outliers will be presented in the AOI-9 EU HHRA work plan (and any other EUs for which outliers were identified), as follows:

- **Option 1 –** Weight of evidence arguments can be made for why the single-sample outlier locations do not need to be assessed as separate EUs. Depending on the specific outlier, supporting contextual information could potentially include the outlier location's accessibility, the likelihood that a resident would always come into contact with soil at that outlier location, the target organ analysis using a conservative 10x order of magnitude approach, and the presence of low-level COPC samples surrounding the outlier location.
- **Option 2 –** The single-sample outlier locations can be included in the formal HHRA. Risks would be calculated for two types of CTE and RME scenarios. If no risks are associated with the outlier, then it is dropped from the HHRA (pending reviewer concurrence). If one or more risks are associated with the outlier, or if the "no risk" conclusion is rejected by reviewers, then a separate EU can be created for the outlier or the risks would be discussed in the uncertainty section of the HHRA.

Discussion – Next Steps

USACE asked whether the resolution is to move forward with this process using Option 1 (in which technical weight of evidence arguments will be made for why the identified single sample outlier locations do not present risks that would be diluted and thus do not need to be addressed as separate EUs). USACE also asked whether D. Ioven will be aware of this selected path forward.

ERT clarified that the preferred option has not been selected at this stage in the follow-on screening assessment process. The revised draft final pre-2005 HHRA review document will simply screen and identify specific outliers that need to be addressed in the associated EU HHRA work plan.

For example, the text will state that outliers for a total of two COPCs (aluminum and barium) were identified in the AOI 9 EU. Assuming that AOI 9 is recommended for an HHRA, then both options for addressing the outliers will be presented in the AOI 9 HHRA work plan. During work plan review, if reviewers do not concur with Option 1, then the work plan process would move to Option 2 (evaluate the outlier locations within the AOI 9 HHRA).

Discussion – Addressing Outliers During Baseline Risk Assessment Process

ERT mentioned that all samples collected after the pre-2005 HHRAs, including key exposure areas and all orphan samples, have been included within reason.

ERT reiterated that they have begun using this outlier identification approach to achieve two goals: one, to ensure progress is made toward identifying EUs that require a formal HHRA, and two, to address D.

Ioven's concerns with respect to EUs that are potentially too large and would diluting COPC concentrations and risks.

ERT briefly described an alternative statistical approach for determining outliers was also mentioned. This approach relies on detailed parametric statistics based on deviations from normal data distributions, using ProUCL supplemented by graphical data plots, and provides much greater detail than is necessary for this effort. Most of the EUs have been screened to date, and outliers were identified for only one EU so far. The iterative approach is a straightforward way of identifying these outliers, without creating a highly detailed statistical process to address an issue that occurs infrequently at the Spring Valley FUDS.

ERT noted that individual residential properties constitute their own EU because it is impractical to subdivide a property into multiple EUs. When 4801 Glenbrook Road was initially subdivided into multiple EUs for the front and back yards, there were some difficulties with respect to explaining the conclusions.

ERT mentioned that four individual residential properties were screened and identified as possible EUs. These include a 4900 block of Quebec Street property (discussed above), a 4200 block of Warren Street property, and two 52nd Street properties (3900 block and 4000 block).

ERT clarified that a Woodway Lane property was designated as a separate major EU in addition to the four small individual residential properties.

EPA asked whether it is common to make this argument at this stage of the baseline risk assessment process. EPA further clarified that it may be too early to make risk management decisions, such as excluding outlier contaminant locations. Risk calculations are often followed by risk identification and subsequent risk management.

ERT acknowledged that this screening procedure deviates from the typical risk assessment process, but not by too much. No pertinent information will be hidden or ignored. The only true difference between Options 1 and 2 is the timing for eliminating COPCs that do not present risks. For example, it is evident that mercury will not be a major risk issue and will be dropped during the formal HHRA process based on the target organ analysis. **Option 1** would present the rationale for dropping mercury earlier during the process, at the work plan stage, to simplify the overall structure of the formal HHRA effort and focus on the actual risk issues. If preferred by agency toxicologists, **Option 2** would require calculation of mercury risks for the 4900 Quebec Street property EU. The formal HHRA would be conducted, only to find that mercury drops out and the HHRA effort for this EU was unnecessary.

ERT agreed to send an electronic copy of the handout (outlining the proposed procedure for identifying outliers and the proposed options for addressing outliers) to EPA for review by D. Ioven, along with any clarifying discussion that ERT wishes to share, as requested. A quick review time frame is anticipated. EPA noted that Dawn is familiar with the typical risk assessment process and the implications of deviating from this process. EPA added that they concur with this approach as long as D. Ioven provides concurrence.

EPA commented that remedial actions are always possible outcomes after an outlier risk is calculated and identified. ERT agreed that further remediation and removal at outlier locations are certainly possible.

Next Steps

ERT will provide an electronic copy of the handout (outlining the procedure for identifying and addressing outlier locations) to EPA for review by D. Ioven, as requested.

F. Open Issues and New Data

The goal of this segment of the meeting was to share issues not on the agenda for possible placement on a future agenda and to share new data that became available since the last Partnering meeting.

Three open issues were brought forward for discussion.

Discussion – Planned Efforts at the 3700 block of Fordham Road Property

[Details of the tentative schedule for soil sampling, soil removal, and anomaly removals at the 3700 block of Fordham Road property were provided at the January 2013 Partnering meeting, followed by brief discussion of property issues at the March/April/May 2013 Partnering meetings. Details of the signed Anomaly Review Board (ARB) memo for this property were provided at the December 2012 Partnering meeting.]

USACE described recent incremental progress toward obtaining right-of-entry for arsenic soil removal at the 3700 block of Fordham Road property. Permission was granted by the property owner to evaluate the site topography and determine the best way to move an excavator into the backyard, and USACE has visited the property a couple of times during the past week.

The property owner revised and submitted the right-of-entry for completing arsenic delineation. USACE's legal counsel were unable to sign the revised version because they are uncomfortable with guaranteeing blanket coverage and approving generalized statements of assurance that the property owner will be fully reimbursed for all property damages. A landscape appraisal will be scheduled for the purpose of documenting the itemized landscape value. This will hopefully reassure the property owner that USACE understands the value of any damaged landscaping, and encourage the property owner to sign more standardized right-of-entry language that is acceptable to USACE legal counsel.

USACE hopes to resolve this in a timely fashion. As described at the May 2013 Partnering meeting, progress with obtaining right-of-entry is necessary in order to prepare for field efforts in the fall. A signed right-of-entry is needed in order to collect delineation soil samples and determine the extent of soil removal to be completed in the fall.

EPA asked whether the arsenic soil extent planned for removal at the 3700 block of Fordham Road property needs to be minimized further. USACE explained that all of the arsenic soil is contained in partial grids, and potential landscape impacts of soil removal have already been minimized. Some of these partial grids are small grid corners that overlap with the property, and removal of the entire partial grids is planned. Delineation sampling must be completed before the full extent of soil removal is determined.

EPA inquired about plans to contact the neighboring homeowners regarding arsenic sampling along property boundaries adjacent to the 3700 block of Fordham Road property. USACE replied that soil samples will be collected along the property lines during arsenic grid removal, and any arsenic exceedances will be shared with the adjacent property owner. Further actions will be at the discretion of the property owner, who may be satisfied with their existing arsenic screening letter, or who may provide right-of-entry for soil sampling along their property boundary to ensure that no arsenic soil remains.

Discussion – Planned Efforts at a Woodway Lane Property

USACE summarized and provided an update on an outstanding issue at a Woodway Lane property where anomaly investigations were previously conducted. During this effort, one hardscape anomaly situated close to the sidewalk was set aside for re-evaluation pending investigation of the selected accessible anomalies. All 37 anomalies selected for investigation were identified as cultural debris, and the Partners concurred that subsequent investigation of the hardscape anomaly was not warranted.

The sidewalk at this property was recently lifted by roots of an adjacent mature tree, and, according to the homeowner, DC plans to remove the tree and repair the sidewalk. Based on the suggestion that the hardscape anomaly may now be accessible for investigation without damaging the sidewalk, USACE re-acquired the anomaly using a Schondstat and classified it as a B1 anomaly. The exact location appears to be adjacent to the sidewalk, rather than directly underneath as indicated by the map layers. USACE plans to return to the property to briefly investigate this B1 anomaly.

In response to N. Wells' inquiry, USACE briefly described the anomaly ranking system used to select

anomalies for investigation. Each anomaly is assigned a letter category (A, B, C, or D) based on the strength of the geophysical signal detection, where the strongest signal (A) is likely a metallic item as large as a 75 mm projectile, and where the weakest signal (D) is likely small cultural scrap metal such as a bottle cap. Each anomaly is also assigned a designation of 1 (inside a historical ground scar, POI, or AOI) or 2 (outside of historical ground scars, POIs, and AOIs). USACE added that based on this categorization, a B1 anomaly is ranked fairly highly.

Discussion – Planned Efforts at a 4700 block of 50th Street Property

USACE mentioned that they were in the process of obtaining right-of-entry for arsenic soil screening at one of approximately ten Spring Valley residential properties that had not previously granted right-of-entry. The homeowner recently put this property up for sale and it sold quickly. The new buyer signed the disclosure statement acknowledging that the property is situated within the Spring Valley FUDS, and they waived soil testing to ensure that the sampling effort did not interfere with the closing process.

USACE hopes to contact the new property owner regarding right-of-entry for arsenic soil screening.

G. Partner's Parking Lot

The goal of this segment of the meeting was to review and update the Parking Lot list.

The "Partners Parking Lot" is an informal list designed to assist the Partners in tracking ideas, collaborations, research and tasks. The list is not a formal document specifying actions that must be taken.

The Parking Lot list was reviewed.

Discussion – Parking Lot Items

USACE mentioned that some progress has been made on AOI closeout documents since the associated spreadsheet was last updated. USACE noted that they will send the updated AOI status spreadsheet to the Partners as a read-ahead for the next Partnering meeting. [This action item is addressed in an existing parking lot tasker.]

EPA asked whether the parking lot item associated with the Dalecarlia Woods investigation has been closed out. USACE confirmed that the anomaly investigation was completed, but the consensus memos for AOI 2 and AOI 6 (situated within the Dalecarlia Woods) are still outstanding and are in preparation. Partner signatures for the final consensus memos are pending completion of these memos.

USACE clarified that surface water exposure risks will be addressed in the ecological risk assessment within the Site-Wide RA.

EPA asked whether a surface water perchlorate concentration of 30 ppb needs to be examined or considered further, as similar surface water perchlorate concentrations were not observed during risk assessment efforts to date. DDOE and ERT clarified that previous elevated surface water perchlorate concentrations included 20 ppb at SW-24. The Partners confirmed that these elevated surface water perchlorate concentrations will be addressed.

In response to EPA's inquiry, USACE clarified that preparation of a brief technical memorandum, summarizing the results and conclusions of the perchlorate source area investigation and the co-located geophysical investigation, has not been completed to date. As previously requested by EPA, this memo is designed to document the Partners' agreement that the perchlorate source area investigation did not identify a discrete perchlorate source. This information will be summarized in the Site-Wide RI report. EPA commented that this topic does not need to be a 'parking lot' item if it will be addressed via discussion in the RI. USACE replied that EPA's concurrence on the accuracy of this conclusion, as part of a technical memo, would be appreciated if it is worthwhile. EPA acknowledged that it would be a good idea to lay out this argument based on Kreeger Hall area geophysical investigations and monitoring well data. DDOE added that the status of the perchlorate source area investigation is frequently voiced during

RAB meetings. USACE agreed to prepare the technical memo as described. [This action item is addressed in an existing parking lot tasker.]

USACE mentioned that one outstanding issue must be resolved prior to finalizing the Data Gap ARB Memo. USACE asked whether DDOE plans to pursue access to the limited areas where residential properties have encroached onto the DC right-of-way along the Dalecarlia Parkway. USACE confirmed that all investigation activities in the Dalecarlia Woods are completed. DC replied that they would only pursue access if it is necessary for Spring Valley project activities. USACE acknowledged this and stated that they will finalize the memo for signatures at the next Partnering meeting. [This action item is addressed in an existing parking lot tasker.]

USACE mentioned that 4825 Glenbrook Road high-probability excavations are planned to begin on the start date of September 23, 2013. DDOE added that procurement of funding and signatures for DC Police presence at the site is underway, with the Memorandum of Understanding (MOU) in preparation.

USACE Public Affairs and EPA confirmed that the Corps'pondent mailing list now includes EPA's newest office address for physical mail correspondence, as requested.

USACE mentioned that assistance from DDOE's legal counsel no longer seems necessary to assist with obtaining access to the 3700 block of Fordham Road property. In response to N. Wells' inquiry, USACE confirmed that this item has been closed out because USACE seems to be making progress toward obtaining access and completing efforts at this property.

USACE confirmed that the Final 4825 Glenbrook Road Chemical Safety Submission (CSS) was submitted electronically to the Partners several months ago. If EPA and DDOE are unable to locate their copies, USACE agreed to provide the Final 4825 Glenbrook Road CSS electronically to EPA and DDOE, as requested.

USACE mentioned that they will confirm Dr. P. deFur received the Area B confirmation sampling results for the 4825 Glenbrook Road site. He likely already received the results electronically because the Partners subsequently provided concurrence for backfilling the Area B excavation.

USACE mentioned that in addition to seeking input from the university administration on whether they would like soldier piles to be left in place during 4825 Glenbrook Road site restoration, USACE also requested input on the final site topography restoration.

In response to N. Wells' inquiry, USACE replied that the purpose of structural monitoring is to ensure that cracks and other types of damage do not impact AU President Kerwin's house (4835 Glenbrook Road) during remedial action activities at the adjacent 4825 Glenbrook Road site.

DDOE commented that the Parking Lot items should be reviewed more frequently as a refresher on the purpose and status of each tasker. This agenda item has been skipped during recent meetings.

Next Steps

USACE will provide another copy of the Final 4825 Glenbrook Road Chemical Safety Submission (CSS) electronically to EPA and DDOE, as requested, if they are unable to locate the document.

H. Document Tracking Matrix for Hazardous Toxic Waste (HTW) and Military Munitions Response Program (MMRP)

The goal of this segment of the meeting was to review the comment due dates on HTW and MMRP draft reports and the status of the documents.

There were no documents that required a status review.

I. Agenda Building

The next meeting is tentatively scheduled for Tuesday, October 22, 2013.

Discussion – Upcoming Meetings

In response to EPA's inquiry, USACE replied that two on-site tour dates are currently planned prior to starting 4825 Glenbrook Road high-probability excavations.

In response to N. Wells' inquiry, USACE replied that the planned start date for 4825 Glenbrook Road high-probability excavations is September 23, 2013.

USACE clarified that a media site tour is not planned. The public affairs office felt that they could potentially schedule a media day if multiple inquiries are received, but the interest expressed by the Northwest Current is not sufficient to justify an entire media day event.

J. 4825 Glenbrook Road Remedial Action Update

The goal of this segment of the meeting was to discuss the decision-making process and the ongoing remedial action for the 4825 Glenbrook Road site.

USACE-Baltimore and Parsons provided an update on the upcoming high-probability remedial activities planned at the 4825 Glenbrook Road site.

Overview of Completed Efforts to Date:

- Details of previously-completed efforts, including house demolition and low-probability site preparations, were presented at the December 2012 and January 2013 Partnering meetings.
- Details of initial low-probability efforts, during which no AUES-related items were found, were provided at the March/April 2013 Partnering meetings.
- Details of high-probability site preparations were provided at the March/April/May 2013 Partnering meetings. Details of recent AUES-related debris findings were presented at the May 2013 Partnering meeting.

Upcoming Activities: The remaining low-probability efforts include completion of final site preparations for high-probability efforts, including installation of small sirens that will alert the surrounding neighborhood in the event of an emergency at the site. Personnel training, tabletop activities, and pre-operational surveys are underway by USACE-Huntsville and will then be inspected and reviewed by the Department of the Army (DA). High-probability excavation will begin once all of these preparations have been completed.

Tentative Remedial Action Schedule: Three phases of remedial action are planned: demolition (completed), initial low-probability efforts including the remaining low-probability test pits in the back yard including the utility trench (completed), and all planned high-probability and low-probability soil removal areas. Site preparations for high-probability efforts are approaching completion. High-probability soil removal will tentatively begin in early fall (September 23) 2013, with completion anticipated approximately one year later in early fall (September) 2014. The remaining low-probability soil removal actions (the remainder of excavation area A, along with excavation area B) will be conducted as early as fall/winter 2014, followed by site restoration. The remediated property will be returned to AU, the property owner, as early as December 2014.

Discussion – Shelter-in-Place (SIP) Preparations

USACE mentioned that they are currently installing the siren system, which will alert residents within the Shelter-in-Place (SIP) zone in the event of a site emergency. They asked AU whether they received confirmation of where the university administration would prefer installation of two sirens within the SIP

zone (a small portion of the athletic fields and the Watkins Hall area). AU replied that they met with the university risk management personnel but have not received feedback on this topic. AU agreed to follow up on this inquiry.

In response to USACE's inquiry, AU replied that they have provided approximately 90 percent of the list of campus community individuals to call in the event of a site emergency. AU will follow up with AU President Kerwin to obtain phone contact information for himself and his wife, at which point the call list should be complete.

USACE mentioned that the first SIP siren test is scheduled for September 4, 2013 at 4:05 PM, and will send AU a reminder e-mail with this information. They suggested that AU communicate with their contact list to ensure they understand the system will be tested at that time, with no need to activate SIP procedures.

EPA inquired about the use of sirens during high-probability excavations, and noted that sirens were previously excluded from the public protection plan details. USACE explained that the large siren was excluded due to the size and volume, but small sirens are more suitable for the site. One neighboring family requested a small siren in their home, and Community Outreach came up with a solution. A total of four small sirens will be installed, with one siren posted at each property corner. After the sirens stop, a visual strobe light will continue until the site is designated "all clear" and personnel are permitted back onto the site.

USACE confirmed that the volume can be controlled to ensure the entire SIP zone is notified without unnecessarily disturbing communities across the Maryland and Virginia state boundaries, like the large siren does. N. Wells replied that she is happy to hear that sirens will be used, as this provides a quick way to alert the neighborhood during an emergency.

Discussion – Noise Levels Anticipated During 4825 Glenbrook Road High-Probability Effort

USACE mentioned that the Chemical Air Filtration System (CAFS) is very quiet and may be running 24 hours per day for maintenance purposes. USACE-Huntsville confirmed that they can authorize a study to ensure the CAFS volume meets DC evening noise requirements.

Discussion – AU Campus Community

N. Wells asked AU when the campus community will be informed of the 4825 Glenbrook Road high-probability excavations and safety protocols. AU replied that the details will be shared with the campus community approximately two weeks before the high-probability start date. This time frame is designed to target the faculty and students who will be on campus, as well as all sports teams who may be present on the athletic field. Training sessions for specific buildings (and other areas of campus as necessary) will be conducted by Paul Chrostowski (AU consultant) and will be attended by risk management and facilities personnel, as well as B. Bridgham.

In response to N. Wells' inquiry, AU clarified that safety protocols for the campus community are generally incorporated into campus notices and announcements rather than putting information on the AU website.

AU confirmed that it would be helpful if USACE provides a flyer containing point of contact (POC) information, in case students wish to communicate with USACE and ask questions regarding the high-probability remedial activities.

Discussion – Site Security Logistics

The Partners briefly discussed the logistics of security patrols at the 4825 Glenbrook Road site. During the previous high-probability effort, a guard was stationed at the parking area entrance during non-work hours, and frequent influx and out flux of student vehicles made it difficult for the site crew to maintain parking security while focusing on the site activities. Another option is to place barriers across the road, which is less effective because students and other community members move them out of the way.

USACE-Baltimore asked the Partners whether they would prefer a guard (armed or unarmed) to be stationed at the parking area entrance, for the purpose of limiting access and minimizing distractions. If so, then a creative solution is required because the guard will not be covered under the existing contract. USACE-Huntsville responded that a guard at the parking area entrance is unnecessary at this time, and this security measure can be instituted if needed during high-probability excavations.

In response to N. Wells' inquiries, USACE confirmed that the site is secured, similar to previous cleanup efforts at the site. The guards will perform roving patrols multiple times during their shift, in lieu of security monitors or perimeter alarms.

USACE mentioned that daily safety briefings will be held for the field crews and the guards, who will monitor the site and question unfamiliar people who approach the site. AU campus safety personnel and the DC Police will also watch for unauthorized site access.

N. Wells mentioned that a single security guard provided the only visible site security in the past. USACE clarified that a DC Police car is typically parked near the site during work hours, followed by the security guard's roving patrols during non-work hours. USACE confirmed that they feel these security measures will provide adequate site protection.

In response to N. Wells' inquiry, USACE explained that the site security details are classified as "For Official Use Only" (FOUO) and cannot be released to the public based on their agency's operational security orders. The USACE Baltimore Colonel takes these strict security regulations very seriously. Site security is their top priority to ensure the site is not left unsecured and exposed to theft or safety hazards. USACE has shared as much information as they are permitted to provide openly with the community. They have fulfilled their due diligence by providing armed security guards and planning to increase the level of site security as needed.

N. Wells commented that students have previously wandered through this site as a shortcut and the associated security personnel were not on top of this issue at that time. USACE clarified that all military operations establish security from day one; likewise, 4825 Glenbrook Road security has always been in place. This applies to both active efforts and maintenance mode at the site, as AU and USACE continue to work together to ensure the site is secured. For example, when the house was still present, AU installed a security system to provide additional protection.

USACE emphasized that the site is fully secured at this time. Although they cannot guarantee that unauthorized site access will not occur, USACE is taking every precaution to prevent this from occurring.

N. Wells explained that her primary concern is for the safety of the surrounding neighborhood. She highlighted the importance of considering all alternatives, possibilities, and precautions for the site. USACE replied that their operational security orders are very clear and well-defined.

Next Steps

USACE will conduct a study to ensure the 4825 Glenbrook Road CAFS volume satisfies the DC evening noise requirements, so that the equipment can be run continuously.

AU will follow up on 4825 Glenbrook Road high-probability preparations with the university administration, as requested (preferred siren installation locations on campus, phone contact information for AU President Kerwin and his wife, and specific topics they would like included in the site tour).

K. Adjourn

The meeting was adjourned at 12:24 PM.