USACE SPRING VALLEY FUDS PROJECT **AGENDA**

Inter-Agency Partners Meeting

TIME	TOPIC	DISCUSSION LEADER	PREPARATION	OBJECTIVE
Wednesday, September 5, 2012				**[**Upcoming Meetings: ?]**
9:15 – 9:30	Check-in / Review Ground Rules/Lunch Plans	D. Noble		Introductions of new attendees/ Personal check-in / Review Ground Rules
9:30-9:40	NTCRA/Arsenic Removal	L. Reeser		Review status of effort
9:40-9:55	Additional AOI Sampling	L. Reeser/ T. Bachovchin		Discuss possible sampling/ Phase 2
9:55-10:10	Groundwater	T. Beckwith		Discuss completed and upcoming groundwater efforts - Purging and re-sampling MP-2 - Installation of deep well on the AU campus
10:10-10:20	Document Tracking Matrix for MMRP/HTW	L. Reeser/ Parsons	Partners Review	Review pending documents
10:20 – 10:30	BREAK			[Give Lunch $ to Carrie or Maya]
10:30-10:40	Site-wide Evaluation Document	L. Reeser/T. Bachovchin		Review document progress
10:40- 10:50	JHU – DOE Health Study	M. Fox		
10:50-12:50	4825 Glenbrook Road	B. Barber/Parsons		Discuss Draft-Final Remedial Design and Remedial Action Work Plan - MCE, Engineering Controls
12:50-1:10	ARB			Issuance of USACE assurance letters
1:10-1:25	Open Issues and New Data	D. Noble		Tentative October Community Meeting
1:25-1:35	Partners' Parking Lot	D. Noble	Partners Review	
1:35-1:45	Agenda Building	D. Noble		** Discuss having upcoming meetings every 2 months
1:45	Adjourn	D. Noble		

Spring Valley Partnering Meeting
September 5, 2012
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**
Frank Bochnowicz	CENAB	
Bethany Bridgham	American University	
Jessica Bruland	ERT	**X**
Sean Buckley	Parsons	**X**
Jack Choynowski	Shaw	
Paul Chrostowski	CPF Associates, AU Consultant	**X**
Tom Colozza	CENAB	
Jennifer Conklin	DDOE	
Kathy Davies	US EPA Region 3	
Dr. Peter deFur	Environmental Stewardship Concepts/RAB TAPP Consultant	**X**
Diane Douglas	DDOE	
Bill Eaton	URS	
Brandon Fleming	USGS	
Clem Gaines	CENAB, Public Affairs	
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**

Neil Jones	ERT	
Brian Junck	Weston	
Dan Noble	CENAB	**X**
John Owens	CENAB	
Randall Patrick	Parsons	**X**
Lan Reeser	CENAB	**X**
Mike Rehmert	CENAB	
Paul Rich	Parsons	
Allen Shapiro	USGS	
Don Silbacher	Parsons	**X**
Jim Sweeney	DDOE	**X**
Andrea Takash	CENAB, Public Affairs	
Fan Wang-Cahill	Parsons	
Ethan Weikel	CENAB	
Nan Wells	ANC3D Commissioner	
Cheryl Webster	CENAB	
Maya Werner	ERT - Community Outreach Team	**X**
Laura Williams	Environmental Stewardship Concepts	
Bruce Whisenant	CEHNC	**X**
Doug Yeskis	USGS	

Summary of September 5 Spring Valley Partnering Meeting

Consensus Decisions

- No consensus decisions were made.

September 5, 2012 Action Items

- USACE-Baltimore will provide electronic copies of the USACE legal counsel concurrence for moving forward with the planned demolition time frame (based on the knowledge that all requirements have been met and regardless of final permit approval) to EPA and DDOE for their reference.

- Parsons will adjust the planned 4825 Glenbrook Road temporary fence location as needed to avoid the landscaped tree in DC public space and to ensure that the materials to support the 4801 Glenbrook Road right-of-entry request reflects the most current work plan details.
- USACE-Baltimore will inform the project team as soon as the necessary backfill procurement quantity is verified from the agreed-upon source or if there is a need for a second source to provide sufficient backfill for the 4825 Glenbrook Road site.
- Parsons will evaluate whether the first ECS tent layout can be established earlier than currently planned, concurrently with initial low-probability activities and in preparation for high-probability excavation, as suggested by USACE.
- The Partners will obtain RAB feedback and concurrence on the combined format of the October 9, 2012 RAB and informational community meeting.

Wednesday, September 5, 2012

Check-in

The Partners conducted their normal check-in procedure.

AU expressed appreciation for the ongoing contact between Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health and AU President Kerwin. This communication is very helpful and effectively integrates President Kerwin into the project.

A. Arsenic Sampling and Soil Removal

USACE briefly reviewed the status of follow-on arsenic soil removal efforts.

Arsenic Exceedances Associated with Soil Borings: All arsenic sampling results from the Spring Valley arsenic sampling and removal program were recently reviewed to assess whether any arsenic exceedances at depth (associated with soil borings) were inadvertently not addressed. A total of two soil samples with levels slightly above the Spring Valley cleanup level of 20 parts per million (ppm) at depth were identified as not previously addressed. Both samples were below the EPA's national action level of 43 ppm. The review process, findings, and associated Partner feedback are documented in the revised arsenic soil boring revised memorandum for record (MFR). Details were provided at the January, April, and July 2012 Partnering meetings.

- AU concurrence for No Further Action (NFA) was obtained for the remaining arsenic exceedance at the AU campus. Details were provided at the July 2012 Partnering meeting.
- Soil removal was requested by the property owner at a 5100 block of Tilden Street property, where 22.8 ppm arsenic was detected at 5 feet below ground surface (bgs) in the front yard. Details of soil delineation were provided at the July 2012 Partnering meeting. All delineation samples were below the 20 ppm cleanup level for arsenic, and further soil delineation was not required. Excavation is planned for a small area measuring 4 feet square and 6 feet deep. A total of 3.5 cubic yards of soil will be removed using a mini-excavator and stored in a drum at the Federal Property for future disposal, followed by clean backfill and restoration (including topsoil and seeding). Soil removal is scheduled to begin tomorrow and requires an approximate timeframe of 2 days. USACE expects to complete this soil removal effort this week (early September 2012).

Discussion – Arsenic Soil Removal (5100 block of Tilden Street)

Community Outreach confirmed that they recently canvassed the neighboring properties to ensure that all residents' concerns were addressed. Two residents requested new copies of their arsenic sampling and removal comfort letters. No other concerns were voiced.

EPA asked whether any additional soil removals are planned in Spring Valley, aside from the upcoming 4825 Glenbrook Road remedial effort. USACE replied that all planned soil removal efforts in Spring Valley have been completed, with the exception of the inaccessible Fordham Road property.

In response to EPA's inquiries, USACE replied that arsenic soil removal was conducted at approximately 147 residential properties. Phytoremediation efforts raise the total number to around 170 residential properties that received some form of arsenic remediation. EPA added that the phytoremediation properties should be included when describing the total number of remediated properties.

USACE mentioned that a total of approximately 10 residential properties denied property access for arsenic soil sampling out of the more than 1600 properties within the project area.

Community Outreach mentioned that arsenic sampling at these inaccessible residential properties may be requested if the property is inherited or is in the process of going on the real estate market. .

USACE added that although all unsuccessful attempts to gain property access were documented and reported to USACE Headquarters, the USACE is willing to complete the remaining residential soil sampling if requested by the homeowners during the next 3 years while the project is still active.

B. Site-Wide Evaluation Document (Supplemental Soil Sampling)

USACE provided an update on the Site-Wide Evaluation Document and follow-on soil sampling.

Site-Wide Evaluation Document: The site-wide evaluation document, *Evaluation of Remaining Sampling Requirements*, was finalized in July 2012. Key issues in this document include **work plan details** for proposed follow-on sampling in areas known to require supplemental sampling, as described at previous Partnering meetings.

Supplemental Soil Sampling: Supplemental soil sampling is proposed for a total of 5 discrete AOIs. The objective of supplemental sampling is to ensure enough data exists to make human health and ecological risk determinations about these AOIs. Details of this sampling effort were provided at the April 2012 Partnering meeting.

Supplemental sampling is planned at a total of 17 residential properties and at the AU campus. Following the supplemental sampling, the analytical results for each area will undergo risk screening. A discrete HHRA may be completed for any AOI that presents potential health risks based on the risk screening.

The Community Outreach Team is currently coordinating with residential property owners to obtain rights-of-entry (ROEs) for the supplemental soil sampling. To date, ROEs have been received for most residential properties and the AU campus. The remaining property owners have sent their ROEs or have responded positively and are likely to grant access.

As described at the July 2012 Partnering meeting, one alternate residential property was selected in lieu of sampling the residential property on the corner of Sedgwick Street and Fordham Road, based on the homeowner's concerns about temporary property disturbances.

Tentative Schedule: Supplemental soil sampling is planned for late September 2012, pending receipt of remaining ROEs.

Discussion – Supplemental Soil Sampling Locations

Community Outreach mentioned that the supplemental soil sampling effort includes a 4700 block of Woodway Lane property (adjacent to the AU campus and a 4800 block of Glenbrook Road property) where AUES-related bunkers were historically documented and where extensive cleanup was completed to date. Supplemental soil sampling is also planned for nearby Glenbrook Road and Woodway Lane properties that are part of POI 24/ AU/53.

Discussion – Supplemental Soil Sampling Parameters

USACE explained that additional key issues in the evaluation document include **review of pre-2005 human health risk assessments (HHRAs)**. The associated draft document was completed by ERT and is currently under internal review by USACE. Based on the results of this pre-2005 HHRA review, additional contaminants of potential concern (COPCs) may be identified, and additional samples for these parameters may be required to fill associated data gaps. These parameters may be added to the planned supplemental soil sampling effort, which would minimize disruption to property owners, or these parameters may be addressed during a second (Phase II) supplemental sampling effort. The Partners will be informed if additional COPCs are identified, and the status of this effort will tentatively be briefed at the October 30, 2012 Partnering meeting.

AU emphasized their request for sampling additional metals concurrently with the planned supplemental soil sampling effort. This formal request was made during the evaluation document review process. USACE confirmed that this request is under consideration.

Peter deFur, RAB TAPP Consultant, inquired about the impacts of this pending decision on the planned supplemental soil sampling schedule. The supplemental sampling effort may be delayed if everything proceeds in sequence (starting with a final decision about sampling for additional parameters, and followed by receipt of rights-of-entry, collecting samples, and preliminary laboratory analysis and review). Another option is to store the collected samples until a final decision is made, at which time the samples can be extracted and analyzed for additional metals.

USACE and ERT confirmed that sample storage and extraction is under consideration. Jars containing soil samples can remain undisturbed for lengthy time frames and subsequently sampled, as long as the parameters of interest are restricted to metals (which are more stable than some other potential COPCs). AU noted that based on their review of all existing data, they believe that any additional COPCs will be limited to metals. USACE agreed that most potential additional COPCs under consideration are metals, and expressed their preference for collecting supplemental soil samples without much delay, to be followed by additional COPC analysis decisions as needed.

The Partners briefly discussed their potential approach in the event that a second (Phase II) supplemental sampling effort is necessary. During recent internal discussion of this topic, Community Outreach recommended that the Partners obtain property owner permission to use soil samples previously collected at their properties. Permission is necessary because analysis of additional sample parameters from the previously-collected soil samples was not an assumption that was made as part of the associated ROE, and this solution would minimize future disruption to the community.

EPA, AU, and P. deFur agreed that previously-collected samples would provide the necessary metals data (except for mercury) as long as the laboratory analyzed these samples using Inductively Coupled Plasma (ICP) analysis. This technique analyzes the full range of metals and provides detection of trace metals that may be present in each sample. Data for many potential COPCs may be available even if they were not originally provided due to laboratory quality reporting procedures. For instance, EPA noted that they previously obtained additional laboratory data (for parameters such as arsenic) that were associated with lead soil samples. ERT added that the laboratory data may include many parameters whose data points were not requested by the Partners because the sampling effort focused only on specific metals of interest.

EPA suggested that additional identified COPCs that are likely to be valuable should be included in the planned supplemental soil sampling effort, to streamline the process and minimize the number of sampling rounds with specific sample holding times that may or may not be met. USACE replied that this effort will most likely consist of a single round of sampling.

C. Groundwater Study Efforts

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

USACE-Baltimore provided an update on the status of ongoing and upcoming groundwater study efforts. (Details of these groundwater study efforts were provided at the May 31, 2012 Groundwater-Partnering meeting. Updated information was provided at the July 2012 Partnering meeting.)

MW-45: Installation of this additional screened well near Kreeger Hall on the AU campus was completed in early August 2012. This well was drilled close to MW-44 to assess bedrock and groundwater flow conditions between 100 feet and 200 feet bgs, with a final well depth of 175 feet. This depth range lies between the maximum depth of MW-44 and the maximum depth of the existing deep wells, respectively. The well construction was originally planned as either a multi-port deep well (MP-1) or a small number of conventional screened well intervals, to be determined by the Partners following analysis of downhole geophysical tests using a blank FLUTe liner.

This well was drilled to a final depth of 175 feet bgs, because the deep bedrock broke the drill rig drive before it reached the intended depth of 200 feet bgs. A large fracture with significant groundwater flow was encountered during blank FLUTe liner installation and the borehole went off-center, preventing completion of the liner installation. Some, but not all, geophysical test equipment was able to descend down the well. Based on these difficulties, MW-45 was developed as a conventional screened well with a casing that extended to 102 feet bgs.

Two groundwater-bearing fractures were identified at two depth intervals (approximately 120 feet and 150 feet bgs) and were isolated using two conventional well screens (shallow and deep, respectively). The seal between the well screens was tested by USACE to prevent cross-contamination of groundwater in these intervals, and laboratory results confirmed that a good seal was achieved.

This sampling effort is planned for early September 2012. Groundwater chemistry data from MW-45, along with isotopic perchlorate analysis results, will be discussed at the next Groundwater meeting, which is tentatively planned for October 2012 (depending on participant availability).

MP-2: This deep well is located on the 4800 block of Glenbrook Road. Follow-up purging and resampling of all intervals at MP-2 were completed in late July 2012, followed by receipt and review of analytical groundwater chemistry results in August 2012. The purging results were provided electronically to the Partners. Details of this effort were described at the July 2012 Partnering meeting.

Based on follow-up purging observations, the sampling intervals appear to be discrete with minimal connectivity, except for a small amount of connectivity between FLUTe liner ports 5 and 6. This suggests that similar groundwater chemistry among intervals was not influenced by FLUTe sampling interval placement and not a result of cross-contamination associated with well construction.

Based on resampling results, the similarity of arsenic concentrations across all MP-2 sampling intervals appears to be truly representative of the groundwater chemistry at MP-2. Perchlorate and arsenic detections at MP-2 almost exactly matched the March 2012 sampling results at MP-2.

Isotopic Perchlorate: USACE noted that analytical laboratory results for both isotopic perchlorate samples are still pending. Based on a recent update from the University of Chicago laboratory, analytical results are anticipated in mid-September 2012. Data analysis is complete for all oxygen isotopes and one chlorine isotope. Data analysis for the remaining chlorine isotope is pending.

Discussion – Completed Efforts

In response to P. deFur's inquiry, USACE confirmed that MW-45 was the only well recently evaluated for the accuracy of the seal between conventional well screens.

P. deFur inquired about receipt of quality assurance and quality control (QA/QC) for isotopic perchlorate analyses. USACE replied that the QA/QC information will be documented and ready to distribute with the results. USACE can check with URS to determine what type of QA/QC was performed by or for the laboratory. EPA and P. deFur confirmed that the University of Chicago will perform QA/QC procedures.

Discussion – Future Groundwater and Surface Water Monitoring

The Partners briefly discussed whether additional sampling data or additional monitoring wells will be necessary to adequately delineate the nature and extent of arsenic contamination at depth. USACE noted that the recent MP-2 sampling results, and good sampling coverage in the vicinity of MP-2, may adequately define the location of arsenic in deep groundwater for the purpose of assessing groundwater risks. The maximum depth of arsenic in groundwater (e.g., 150 feet or 220 feet) may not be important information to pursue. DDOE noted that agency hydrogeologists may express a different opinion. EPA added that additional monitoring wells will probably be necessary for risk management purposes due to recent perchlorate exceedances. This topic will be discussed in detail at the next Groundwater meeting.

P. deFur emphasized the importance of clearly defining groundwater discussion topics (beyond the analytical results) prior to the upcoming groundwater meeting. Potential topics include whether additional monitoring wells are needed to further determine the vertical and horizontal distribution of contamination. USACE agreed and added that this topic includes whether the two down-gradient deep wells provide sufficient data to make conclusions about the perchlorate plume boundary, and EPA noted that the sufficiency of the well depths will be the primary issue of concern for the regulatory hydrogeologists.

EPA mentioned that the list of discussion topics should include the significance (or insignificance) of the isotopic perchlorate analytical results.

USACE asked whether the Partners had the opportunity to review the list of groundwater monitoring wells and surface water locations proposed for semi-annual sampling. [This list was provided at the May 31, 2012 Groundwater-Partnering meeting and details were provided via a follow-up e-mail to the Partners.] DDOE noted that their hydrogeologist briefly mentioned potential issues with specific proposed wells. USACE replied that the list can be discussed and finalized at the upcoming Groundwater meeting.

The Partners briefly discussed whether semi-annual sampling should be conducted during specific months of the year. EPA, AU, and USACE agreed that based on existing annual data collected since 2005 and the recently-completed quarterly sampling effort, there does not appear to be a best month or season for sampling groundwater and surface water.

USACE mentioned that the first semi-annual sampling event will not be scheduled until the list of proposed sampling locations is finalized. USACE is expecting finalization at the October 2012 Groundwater meeting. EPA added that if a 6-month interval is not selected, then the sampling event schedule may vary over time.

AU asked whether the ambitious schedule for the Groundwater RI/FS will be delayed. USACE confirmed that the current schedule will be adjusted if additional monitoring wells are needed. This scenario is likely, based on recent arsenic and perchlorate detections at depth in MP-2.

USACE mentioned that the next scheduled Partnering meeting (October 31, 2012) would be an ideal time to hold a combined Groundwater-Partnering meeting. A separate Groundwater meeting date can be scheduled if necessary to accommodate agency and contractor schedules.

D. Anomaly Review Board (ARB) Issue

The goal of this segment of the meeting was to briefly present an issue relevant to the Anomaly Review Board.

Purpose: The purpose of this segment of the meeting was to inform the Partners of this issue and obtain feedback, if any on formal language used in assurance letters provided to residents upon completion of anomaly investigations at their properties. Examples of assurance letters were provided along with summary of the investigation status at selected residential properties.

Background: Each residential property underwent a two-year process involving geophysical surveys and anomaly investigations to determine whether AUES-related munition items were present. This process included obtaining rights-of-entry from the homeowner along with technical aspects: digital geophysical

mapping (DGM) and analysis, selection of anomalies for investigation, ARB discussion and consensus, work plan development and finalization, anomaly investigations, and property restoration (including hardscape as applicable). The anomaly selection process was developed and refined during this time frame. The geophysical survey and anomaly investigation results were documented and shared with the homeowner.

Status of Assurance Letters: All completed anomaly investigation property files were recently reviewed. Anomaly investigations were completed for a total of 100 residential properties. Of these properties, 88 received assurance letters. The remaining 12 anomaly removal properties have not received an assurance letter to date. These homeowners have not contacted USACE to obtain a letter for their property, even though several are adjacent to properties that did receive an assurance letter.

Properties Without Assurance Letters: Anomaly investigations at these 12 properties were completed prior to the ARB's revised anomaly categorization and prioritization process established in 2008.

Originally, ARB recommendations were based on anomalies located within anomalous areas. The goal was to identify potential pits and trenches (PPTs) at each residential property. Anomalies outside of PPTs were not selected for investigation. This ARB recommendation process was used until Summer 2003.

In November 2004, ARB recommendations began focusing on single-point anomalies. At some properties with AUES-related MEC or MD findings, no additional anomalies were selected for investigation. At other properties, the ARB selected additional anomalies for investigation. This methodology was not consistently followed. (At one property with 53 anomalies, only 3 were selected by the ARB and a total of 27 were investigated according to the report. Findings included 6 MEC items. It is possible that the initial 3 anomalies were identified as MEC or MD, leading to additional anomaly investigations.)

The prioritization process established in 2008 prioritized anomalies based on geophysical evidence of their size and depth (A/B/C/D) and whether they were within an AOI, POI, ground scar, or the range fan (1/2).

Discussion – Assurance Language

Early during the anomaly investigations program, assurance letters were provided to homeowners upon completion of anomaly investigations and restoration at their properties. These letters were issued by USACE to provide homeowners with documentation of the completed property investigation and the conclusion that no further investigation was believed necessary.

Letters dated prior to 2007 were prepared by Greg Nielson (formerly of USACE and currently with the U.S. Army Chemical Materials Agency) and signed by the USACE-Baltimore District Commander. During the 2007 time frame, D. Noble joined the project team and accepted responsibility for signing assurance letters, but did not see a reason to question the inherited assurance language. When T. Beckwith was asked to sign these letters, he questioned the finality of the assurance language, particularly for properties where anomaly investigations were conducted prior to 2008.

Assurance Statement: These letters include the following assurance statement: "Based on the history of the site, the results of the Corps' tests and investigations, and the restoration activities performed to date on your property, the Corps believes that all appropriate and necessary requirements to protect public health and safety and the environment with respect to threats from OE, recovered CWM, or other contamination associated with prior DoD activities, have been met at your property."

USACE expressed concern that this statement implies that additional geophysical survey and anomaly investigations will not be warranted at a given residential property in the future.

USACE asked the Partners for feedback on whether identical assurance letters should be prepared for the remaining 12 properties, considering the information presented above. USACE does not feel comfortable with issuing the existing assurance letter to these 12 properties, due to the strength of the assurance language and the use of pre-2008 anomaly selection criteria at these properties.

The Partners briefly discussed the implications of the next paragraph in the assurance letters: "Nonetheless, in the unlikely event of future discoveries on your property of OE, recovered CWM, or other contamination associated with prior DoD activities, the Corps retains responsibility for any response actions that may be warranted consistent with CERCLA, the NCP, and the DERP." USACE confirmed that future property clearance will certainly be conducted if AUES-related items of concern are found.

USACE noted that the original assurance language appears to present the message that clearance on the property is considered complete, which is a premature statement because remedial actions for the Spring Valley FUDS will not be defined until completion of the site-wide RI/FS and Decision Document. The assurance letters should focus on sharing the property-specific findings with the homeowner and providing assurance of completed investigation efforts.

Discussion – Completed Anomaly Investigations

The Partners briefly discussed the anomaly selection process, which originally focused on PPTs and was refined to include single-point anomalies within the range fan or the associated range fan buffer that were potentially live-fired. Properties such as the inaccessible Sedgwick Street property were investigated to assess the possible presence of a burial pit, similar to that of the 52nd Court burial pit.

USACE emphasized that the anomaly selection process evolved over time, and the first properties were investigated differently than the most recent properties. USACE noted that the existing assurance letter language is more appropriate for residential properties investigated within the past five years (since 2008). At these properties, the ARB selected anomalies using the most current and most satisfactory anomaly classification process. Additional anomalies not originally selected for investigation were subsequently removed as necessary to ensure that properties were thoroughly investigated. Many "D" anomalies were excluded from the dig list if the property had no AUES-related findings of concern. Although these investigations cannot be considered clearance, they extended well beyond the typical definition of investigation. Any future property disturbances would be destructive to previously-completed restoration efforts. The Partners are unlikely to recommend additional DGM data collection and anomaly investigations at these properties.

USACE mentioned that it appears that sufficient data were collected to support USACE's future site-wide conclusions. EPA clarified that this conclusion is not conveyed by the inaccurate assurance language. The phrase "recovered CWM or other contamination" implies that finding additional AUES-related contamination is unlikely at these properties. USACE and EPA agreed that this key paragraph in the assurance letter is more accurate for full property clearance or soil cleanup efforts.

Discussion – Future Assurance Letters

USACE expressed discomfort with signing the existing assurance letter language for residential properties whose geophysical surveys and anomaly investigations were completed prior to 2008. USACE agreed that any future assurance letters should present the investigation findings and state that the findings will be used to prepare site-wide documents. The ultimate goals are to assess these findings within the RI/FS report, identify whether anomaly distributions are associated with the range fan or individual residential properties, and to produce the site-wide Decision Document. Specifically, all property findings will be assessed to determine whether sufficient anomaly investigations were conducted to characterize the range fan and specific target areas.

USACE added that upon request of an assurance letter for one of these 12 properties, a modified letter can be produced.

USACE emphasized that this issue will require Partner discussion during development of site-wide documents including the munitions and explosives of concern hazard assessment (MEC HA). Decisions must be made regarding the need and approach for follow-on anomaly investigations at additional properties as well as potentially at previously-investigated properties. Based on previous findings, future

intrusive investigations are unlikely to be conducted at properties where there is minimal chance of recovering another AUES-related item.

E. 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.

The Partners briefly reviewed the status of several documents.

Discussion – Contract Closure

USACE emphasized the importance of finalizing specific documents, as the associated contract will expire on December 31, 2012.

USACE noted that no further work is anticipated under Sevenson's soil removal contract, which has expired. Finalization of the remaining two Sevenson reports is pending receipt of Partner comments. These comments will be addressed and incorporated into the final reports by USACE. An electronic copy of the 4900 block of Quebec Street property report will be sent to DDOE, as requested.

Discussion – Data Coverage Analysis Memorandum for Dalecarlia Woods Geophysical Survey Area

EPA and P. deFur provided verbal concurrence for finalizing the Data Coverage Analysis Memorandum for the Dalecarlia Woods Geophysical Survey Area. Details of this ARB memo were provided at the April and July 2012 Partnering meetings. USACE mentioned that the associated ERT task order is completed.

Discussion – Site-Specific Work Plan for Remedial Design/Action at 4825 Glenbrook Road

The Partners briefly discussed receipt of the site-specific work plan for 4825 Glenbrook Road. AU [Paul Chrostowski] noted that B. Bridgham is currently unavailable and may have received the mailed hard copy. A hard copy with electronic appendices was provided to AU during the meeting, as requested.

F. Site-Wide MEC Hazard Assessment (MEC HA)

The goal of this segment of the meeting was to provide a preliminary overview of the site-wide MEC HA contents and approach.

USACE-Baltimore and ERT provided a brief preliminary overview of the site-wide MEC HA contents and approach. Additional details of this topic will be shared at upcoming Partnering meetings, pending further internal discussion and development.

Overview: Three primary overview issues were identified for scoring the site-wide MEC HA. These include disposal areas, static fire areas, and ballistic fire areas (to be discussed at upcoming Partnering meetings). Preliminary color-coded maps were developed to assess the distribution of AUES-related MEC and MD items and the most probable source of each item (disposal, static-fire, or ballistic-fire).

Static fire areas: A total of four static fire areas have been identified to date. Static fire areas are characterized by controlled testing of AUES-related items such as 75 mm projectiles (in contrast to ballistic fired items which present potential UXO hazards throughout the range fan). These include:

- POIs 39/10/11 (Static Test Fire Area and smaller areas encompassed within POI 39)
- 52nd Court trenches
- Sedgwick trenches
- POI 9 (Possible Firing or Observation Stalls).

At least one static fire area (52nd Court trenches) is associated with a known disposal area (the original 1993 burial pit containing MEC/MD). This provides a 150-foot walking radius which may apply to potential disposals conducted for other static fire areas, such as the high anomaly concentration at the 3700 block of Fordham Road property.

MEC/MD findings in the vicinity of these areas are under evaluation to identify whether they are associated with potential static firing kick-out areas instead of the overall range fan. Most residential properties within the 150-foot radius around static fire areas have been geophysically investigated. The remaining properties may be recommended for further geophysical data collection and investigation.

Disposal areas: A total of three disposal areas have been identified to date. These include:

- 4800 block of Glenbrook Road (Burial Pits 1/2/3)
- A small portion of the AU campus (Lot 18 and the Public Safety Building)
- 52nd Court trenches (the original 1993 burial pit)

Other potential small disposal areas were tentatively identified for internal discussion and may be associated with one or more MEC/MD sources such as static test fire areas and range fan ballistic firing activities. Potential disposal areas include:

- 5000 block of Sedgwick Street property, where numerous items were recovered near POIs 5/6.
- 3700 block of Fordham Road property, where geophysical data revealed anomalies potentially associated with trenches (similar to the 52nd Court burial pit near the circular trenches). Right-of-entry was not granted for anomaly investigations and the property is currently inaccessible.
- 4900 block of Quebec Street property, where a box of fuzes associated with POI 18 was recovered. This is also potentially a static test fire area.
- AOI 13 (Quebec/Woodway 13), where findings included a pipe with explosives and miscellaneous MD items.

Site-Wide MEC HA Output: The MEC HA scoring worksheet provides specific output categories (ranging from 1 to 4) based on hazard input factors and values. This tool can be used in different ways, such as identifying additional residential properties where further geophysical investigation is warranted.

Tentative Schedule: The site-wide MEC/HA is in development with expertise from Paul Greene (former USACE-Baltimore explosives safety manager and team leader and currently ERT's military munitions program manager).

Discussion – Static Fire and Disposal Areas

EPA inquired about the potential radius around 4825 and 4801 Glenbrook Road. USACE clarified that the radius would not apply to these disposal areas. ERT added that details of disposal areas are still pending internal discussion and evaluation.

Discussion – Site-Wide MEC HA Output

ERT clarified that the MEC HA development is a work in progress. The potential walking distance for conducting disposals may be larger than the hazard fragmentation distance for the same area. It is also unclear how the MEC HA worksheet will address suspected but unconfirmed disposal areas such as a 5000 block of Sedgwick Street, where AUES-related findings included a Stokes mortar and numerous MD items. USACE mentioned that these items were recovered from a small munitions pit, but it is uncertain whether the property developer found scattered items on the property and reburied them in a single location. USACE added that gathering and burying these items in a pit or trench would make sense based on the locations of the two small hilltops used as targets.

P. deFur asked whether each type of munition testing activities would have their own unique characteristics (such as a distance from the center point or not) during the MEC HA evaluation. ERT confirmed that the MEC HA is a formal model that requires worksheet inputs via drop boxes and specific choices. Different site-specific scenarios must be evaluated and scored. Currently these scenarios include disposal areas, static fire areas, and ballistic fire areas, but more detailed scores may be calculated for specific locations such as a particular disposal area.

USACE noted that the purpose of the preliminary presentation was to share the top-level approach with the Partners, which evaluates three types of munitions response sites (disposal, static test fire, and ballistic test fire areas).

P. deFur commented that a few findings were recovered just north of the outer Sedgwick trench circle and very close to (within a couple of degrees of) the lower range fan edge. ERT clarified that these 75 mm MD and miscellaneous MD finds are not classified as ballistically fired range fan items. USACE added that most AUES-related findings have been 75 mm MEC and MD. Very few items were identified as Liven's projectiles and Stokes mortars.

ERT explained that the accuracy of the identification of a few MD items may be questionable. These map items are color-coded based on descriptions obtained from Parsons' and Shaw's databases, and USACE is currently compiling these items into a master database. Based on input from USACE field personnel and Paul Greene, many of these items were likely correctly identified as 75 mm MD. USACE added that this includes those items that were nearly intact or identified as projectile bases.

USACE noted that the accuracy of the conceptual site model (CSM) for the range fan boundary must be judged by the locations of Liven's and Stokes findings. This is difficult for two reasons. One, very few Liven's projectiles and Stokes mortars were recovered, providing very little confirmation of the range fan boundary. Two, a limited number of properties were geophysically investigated outside of the range fan, providing insufficient data to conclude that Liven's and Stokes are not present beyond the range fan boundary. P. deFur agreed that positive and negative controls are important for addressing this question.

USACE noted that AUES testing activities were carefully observed, and any intact filled items would have been retrieved. Most AUES-related findings outside of the range fan boundary were identified as MD, with very few recovered intact filled items.

G. 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.

Dr. Mary Fox provided an update on the follow-on Spring Valley health study. Dr. Fox, a principal researcher of the follow-up health study, is an Assistant Professor within the Health Policy Management Department of the Johns Hopkins Bloomberg School of Public Health.

Background: As described at previous Partnering meetings, a contract was recently 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.

(A detailed overview of the follow-on health study was provided by M. Fox at the August 2011 Partnering meeting and the September 2011 RAB meeting, followed by a status update at the February 2012 RAB meeting and the April 2012 Partnering meeting. A summary of the original 2007 scoping study was provided by M. Fox at the September 2011 RAB meeting.)

Status: Data collection for the follow-up health study will tentatively be completed in late 2012, followed by report preparation. This extended time frame was approved by the contracting agency (DDOE). Pending data includes the community survey results and the last health registry dataset from DC Department of Health.

Community Health Assessment (Community Survey): The community survey is currently being finalized to gather input from Spring Valley residents to further understand any ongoing site-related health concerns. Necessary approvals were obtained in Spring 2012 by the internal Johns Hopkins University Institutional Review Board (IRB) and the DC Department of Health IRB.

Pilot testing of the draft survey was conducted during Summer 2012. The final survey preparations and launch were postponed until early Fall 2012 to ensure that vacations and other summer commitments did not interfere with community member participation. The project team plans to announce the final survey launch date at the upcoming September 2012 RAB meeting.

Discussion – Community Survey

M. Fox inquired about the Spring Valley project's Information Repository at the Tenley-Friendship Library. Community Outreach confirmed that M. Fox and her project team can provide the survey in hard copy format for the benefit of residents who cannot complete the survey online. The Information Repository is located in the reference library on the second floor and the contents are not monitored by library staff. Hard copies of the survey can be placed in the Plexiglas box that currently holds project fact sheets, and coordination with the reference librarian is not required.

In response to Community Outreach's inquiries, M. Fox clarified that the survey is still being finalized based on the last set of pilot testing results and feedback. The final survey will hopefully be available at the September 2012 RAB meeting. Feedback on the online automatic survey system and the survey contents was obtained during the pilot testing phase, and the project team had not planned to share the final survey with the RAB to solicit additional comments and feedback prior to the RAB meeting.

M. Fox confirmed that a couple of RAB members participated in the pilot testing phase. The survey was sent to another RAB member who expressed interest but did not respond.

In response to USACE's inquiry, M. Fox confirmed that she will provide a health study update at the upcoming September 2012 RAB meeting. Depending on completion status, the survey and presentation materials may be shared with the Partners prior to the RAB meeting, as suggested by USACE. Community Outreach emphasized that USACE can provide handouts and display the PowerPoint presentation if desired.

In response to Community Outreach's inquiry, M. Fox replied that she does not anticipate significant controversy among RAB members during the health study update. She does not expect the presentation duration to exceed approximately 10 to 15 minutes.

USACE asked whether cancer data from the past five years has been obtained to represent the time elapsed since the original scoping study was finalized in 2007. M. Fox replied that the project team received the updated cancer mortality data and general mortality data. Receipt of cancer incidence data from DC Health is pending.

In response to USACE's inquiries, M. Fox confirmed that health changes and trend statements will be summarized in the final report. Draft report completion is planned for late 2012, followed by development of the communication distribution plan and review by DC Health and DDOE. The final report would be available to the Partners and the community in 2013.

P. deFur inquired about the community health survey time frame and ideal volume of community responses. M. Fox explained that the survey will be available to the community for approximately 6-8 weeks in Fall 2012. The project team hopes to match or exceed the number of survey responses obtained during the 1990s and summarized in the original 2007 scoping study (approximately two hundred responses). Additional responses would be used to compare responses from the Spring Valley and Chevy Chase communities.

P. deFur asked whether DC Health will provide a newspaper press release to broadly notify the Spring Valley and Chevy Chase communities of the community health survey availability. M. Fox replied that

the survey will be advertised via newspaper ads (including the Northwest Current), local listservs, neighborhood associations, and at the upcoming RAB meeting. EPA added that the Advisory Neighborhood Commission (ANC) will also be notified. M. Fox confirmed this and added that the project team would be happy to include any other suggestions from the Partners.

In response to USACE's inquiry, M. Fox clarified that a public comment period is not planned and is not typically included in the health study report process. Review privileges are granted to the study sponsor (DDOE) based on the contract language and to the agency providing health registry data (DC Health).

In response to Community Outreach's inquiry, M. Fox confirmed that survey responses from former Spring Valley residents are welcome. The project team will not track down individuals, but they will request that current residents send the survey link to former residents who may be interested. DDOE added that there are community members who will certainly do this.

Discussion – Federal Funding for Health Study Efforts

USACE noted that their agency received another letter from Congresswoman Norton's office suggesting that the DoD provide additional funding for health study tasks and inquiring about the DoD's plans. In response, the Undersecretary of Defense explained that previous health studies have been completed and two health studies are ongoing. Until these studies are complete, it would be premature to make statements about what additional work need to be conducted.

In response to EPA's inquiry, USACE clarified that Congresswoman Norton's original request for health study funding was developed into an amendment to the defense appropriation bill. This amendment addresses urban sites where one million dollars could be used for health surveys associated with effects of historical military activities. The Spring Valley FUDS is the primary site where this funding applies.

Discussion – ATSDR Health Consultation on the 4825 Glenbrook Road Site

The Partners briefly discussed the status of the Agency for Toxic Substances and Disease Registry (ATSDR) health consultation focused on the 4825 Glenbrook Road site. Details were provided at the November 2011 and January 2012 Partnering meetings, and a brief update was provided at the July 2012 Partnering meeting. Further Partner review and comments are pending receipt of the draft final report.

USACE reminded the Partners that the completion of the draft final report is currently on hold due to disagreements within the ATSDR on how the document should be written. The document is being re-written, and report preparations will not continue until the project lead returns from an extended vacation.

P. deFur noted that he did not receive an official copy of the draft report from ATSDR for review.

USACE confirmed that two report drafts were previously reviewed by USACE, EPA, and DDOE.

H. 4825 Glenbrook Road Work Plan

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

USACE-Baltimore and Parsons provided an update on the draft Site-Specific 4825 Glenbrook Road Draft Remedial Design and Remedial Action Work Plan.

The draft work plan details presented below <u>are pre-decisional</u> and have not been formally approved by USACE or DDOE and EPA to date. The draft work plan is not available for public review at this time. Draft work plan details were provided during the meeting for the purpose of discussing the draft approach with the Partners. Draft work plan updates were previously presented at the April/May/July 2012 Partnering meetings. Updated information on the proposed Engineering Control Structure (ECS) design, site layout, and site preparations is presented below.

Revised Maximum Credible Event (MCE): The Department of Energy (DOE) defines two concentrations (**AEGL** and **TEEL**) that were evaluated as the MCE for each potential airborne contaminant at the site. The definitions and toxicological end points of both values are the same, but the Temporary Emergency Exposure Limit (TEEL) represents the DOE's temporary value until the chemical is reviewed and approved during the Acute Exposure Guideline Level (AEGL) process. Details were provided at the May 31, 2012 Groundwater-Partnering Meeting.

Protective AEGL/TEEL values were evaluated for a total of four potential airborne contaminants: lewisite, arsenic trichloride, hydrogen chloride, and phosgene oxide. Values were modeled using D2SV.

- Previously, the AEGL-2 for lewisite was proposed as the MCE (29 meters, equivalent to 96 feet). This hazard distance is based on the evaporative release of 1 L of lewisite, and was originally selected because it is equal to the corresponding TEEL-2 hazard distance for arsenic trichloride.
- Currently, the TEEL-1 for arsenic trichloride is proposed as the **revised MCE** (49 meters, equivalent to 161 feet). This hazard distance is based on the evaporative release of 1 L of arsenic trichloride and is more conservative. This distance covers all other possible MCE scenarios: the AEGL-2 for lewisite (29 meters), the TEEL-2 for arsenic trichloride (29 meters), the AEGL-2 for phosgene oxide (12 meters), and the AEGL-2 for hydrogen chloride (20 meters).

Engineering Control Structure (ECS) Design: As described at the July 2012 Partnering meeting, a tent with a chemical agent filtration system (CAFS) is planned to be used during high probability excavations. This is recommended because it controls the Maximum Credible Event (MCE), does not require site evacuation should the MCE occur, and accommodates site constraints.

The tent is supported by I-beams and is accessed via doors. Details of the tent design and successful track record during previous high-probability efforts in Spring Valley were provided at the May/July 2012 Partnering meetings.

Draft Tent ECS Site Layout: Three tent locations are proposed to fully encompass all high probability areas during the remedial effort. This layout resolved technical disadvantages with the original layout of two tent locations, as described at the July 2012 Partnering meeting. Efficient excavation is anticipated. The entire tent structure will be lifted off the ground via a crane to reposition it elsewhere at the property.

Draft Tent ECS Sequence: Previously, the sequence of tent locations was proposed to begin in the front yard and proceed toward the backyard. The front-to-back sequence would have slowed excavation progress due to safety concerns. Installation of one tent support I-beam would overlap with a small section of high-probability soil and would require engineering controls. This disadvantage was resolved by proposing a revised tent location sequence: beginning with the front tent location, proceeding to the back tent location, and completing high probability excavation in the middle tent location. This ensures that all tent support I-beams are installed in previously cleared and backfilled soil, leading to greater soil transport access.

Site preparations for the second tent layout will include removing the existing backyard retaining wall, in conjunction with planned back yard sloping to maintain landscape slope and soil stability. The retaining wall will be partially removed in small portions, starting at the top and working down toward the footer, and the front wall face will be removed to the existing ground surface elevation. Placement of the I-beam on top of soil will be completed during this effort. The remainder of the wall and the toe of the footer will be removed under high-probability protocols during the second tent layout. The heel of the footer will be subsequently removed during low-probability excavation, which extends 10 feet behind the retaining wall and to undisturbed saprolite.

The first tent layout covers most of the front yard, including previously excavated and backfilled areas, along with the front portion of the house foundation footprint. The second tent layout covers the back portion of the house foundation footprint along with the high-probability area of soil in the back yard. The third tent layout covers most of the house foundation footprint and encompasses all soil between the

previous two layouts. The overall layout provides sufficient overlap between the three tent locations so that all high-probability areas of soil can be excavated without being hindered by space constraints.

Placement of Tent Support I-beams: Preparations for each tent location include limited soil excavation for installation of tent support I-beams. The first tent layout I-beams will be situated on top of previously excavated and backfilled soil. The second tent layout I-beams will require sloping and removal of portions of the retaining wall. The third tent layout will use cribbing (sand-filled speed shoring), trench and shoring boxes, and backfill as needed to provide the necessary soil elevation for supporting I-beams.

Crane Lift Plan: The draft lift plan was recently submitted for USACE review**.** The proposed crane with outrigger support is similar to the one previously used during Lot 18 efforts on the AU campus. The primary purpose of this crane is to provide necessary stabilization and on-site tent construction support, while lifting the entire tent is a secondary function.

A 120-ton all-terrain crane will be used to establish site layout and removal of ECS support equipment, which will be lifted from a flat-bed trailer and positioned on the backyard equipment pad. (Details of the draft ECS support equipment layout were provided at the July 2012 Partnering meeting.) The crane will be situated at the Kreeger Music Roadway on the AU campus along with site trailers and other equipment.

An all-terrain or similar type of crane will be used to lift and reposition the entire tent structure elsewhere at the property, with a total of 3 crane mobilizations (one per tent layout). The crane will be situated along Glenbrook Road in front of the 4825 Glenbrook Road site.

Near-term Activities: Demolition permit application approval is pending. This includes environmental survey results in which all samples were cleared for asbestos. The demolition notice was posted on August 16, 2012 and the utilities cutoff (for electricity, gas, and water) is dated August 30, 2012.

The visual appearance of the tent will be enhanced by the recently-obtained tan and white tent cover, for the benefit of neighboring residents including AU's President Kerwin.

A fence measuring 10 feet high will be installed between 4825 and 4835 Glenbrook Road. A single contractor bid was received and is under USACE review.

Guard station mobilization will include electricity connections provided by an electrical contractor. AU granted right-of-entry for access to their power sources.

Final Partner approval of the backfill procurement source is pending, with discussion below.

Tentative Document Schedule: An accelerated document review schedule is underway for the following work plan documents. (Details of planned review time frames were provided at the January 2012 Partnering meeting.)

- The Demolition Plan was finalized in February 2012. This document was incorporated into the Site-Specific Work Plan so that both documents can be reviewed concurrently.
- The Chemical Safety Submission (CSS) Annex for Remedial Action was finalized and submitted in August 2012. Final DDESB acceptance of the CSS is anticipated in November 2012.
    - Revision of the Interim Holding Facility (IHF) siting diagram is underway to accurately depict the newly-constructed parking garage, which replaced the previous parking lot footprint. (The maximum IHF safety distance does not require revision because it was originally measured to the edge of the parking lot.)
- The draft final Site-Specific Work Plan for Remedial Design and Remedial Action is currently under revision by USACE to incorporate additional Partner comments. The addition of the draft final Appendix M anticipated in mid-September 2012. Finalization is anticipated in October 2012.

Tentative Remedial Action Schedule: Three phases of remedial action are planned: demolition, the remaining low-probability test pits in the back yard including the utility trench, and all planned high-probability and low-probability soil removal areas.

Preliminary site mobilization activities, such as public space and building permit applications, are underway. House demolition is tentatively anticipated to begin in early October 2012, followed by initial low-probability efforts in Winter 2012 (including test pits and trenches, utility rerouting, and site preparations for high-probability efforts). High-probability soil removal will tentatively begin in January 2013, with completion anticipated in September 2013. The remaining low-probability soil removal actions (excavation areas A/B) will be conducted in Fall 2013, followed by site restoration in Winter 2013. The remediated property will be returned to AU as early as December 2013.

Public Outreach Schedule: An informational community meeting is tentatively scheduled for October 9, 2012. This community-wide meeting will tentatively be combined with the October 2012 RAB meeting, and will present the Remedial Design and Remedial Action work plan details for the 4825 Glenbrook Road site cleanup process.

Discussion – Revised MCE

USACE mentioned that they worked closely with EPA to reach a decision on the revised MCE.

EPA noted that the revised MCE is based on arsenic trichloride because it seems to be the most appropriate chemical for hazard distance planning. The most recent effort at the 4825 Glenbrook Road site was suspended due to a small arsenic trichloride release in the area where the upcoming high-probability excavation will begin. The MCE represents a chemical that is or may be present, based on the history of findings and analyses at the site.

EPA added that a release is less likely for the other evaluated chemicals. EPA explained that there are two issues with using arsenic trichloride as an MCE. One, concentrations of this chemical cannot be directly measured and must be back-calculated using HCl measurements with a sufficient confidence level. Two, this chemical lacks toxicity values and associated safety distances. The existing very low value is based on an 8-hour exposure time frame, which is an unreasonable expectation at the 4825 Glenbrook Road site because an arsenic trichloride release would likely occur instantaneously. USACE and EPA chose the TEEl-1 hazard distance for arsenic trichloride, which is conservatively based on a 1-hour exposure time frame and is a realistic expectation of what could potentially occur at the site. EPA felt uncomfortable with the use of TEEL-2 or the AEGL-2 due to the lack of peer review. Monitoring for arsenic trichloride at approximately half of the TEEL-1 is feasible by converting HCl detections

EPA noted that the decision to request Shelter-in-Place (SIP) participation by nearby residential properties is driven by the detection limit rather than an actual breach of the ECS. SIP and corrective measures will be put into effect if a particular number of detection cycles are met at any time during the remedial effort. The TEEL-1 simply provides the size of the circle within which SIP would be requested. AU and P. deFur agreed with the use of the TEEL-1, which appears to be consistent with the university's opinion.

P. deFur inquired about the potential exposure time course for arsenic trichloride. Although the instantaneous release with a one hour exposure time frame is the most conservative scenario, there is no realistic scenario in which arsenic trichloride would be released slowly for a long duration. EPA confirmed that this statement is true outside of the ECS. Due to highly conservative planning that would address a catastrophic event, there are only two unlikely scenarios in which arsenic trichloride detections would occur outside of the ECS: a structural breach or a chemical release through the filtration system. Any loss of negative pressure inside the ECS may generate concern because it indicates that air is escaping from the structure.

EPA clarified that low-level detections of chemical agent, HCl, and other chemicals are expected to occur inside the ECS, which is why a protective structure is required. These low-level detections will not cause alarm and are incorporated into planning for the normal high-probability excavation routine.

AU noted that their concerns focus on the unlikely event of a chemical breaching the ECS. They feel assured that this risk is severely limited by engineering and safety controls such as the backup generators and the immediate actions taken inside the ECS. AU does not anticipate any issues during their team's review of USACE's comment responses and the revised MCE.

AU inquired about potential MCE impacts on the campus athletic fields. USACE explained that no impacts are anticipated because the 161-foot hazard distance will only slightly touch the outer emergency access portion of the athletic field. Coordination between USACE and the AU athletics director will ensure that the emergency access road is always immediately accessible to AU during an athletic event as needed. AU added that they also want to ensure that individuals do not wander into the 161-foot hazard distance circle. AU confirmed that the athletics director will be the key contact for communication on these safety issues.

Discussion – Pre-Decisional Details of the Draft Tent ECS Sequence

Parsons emphasized that the tent layout footprints have not changed. Revisions to the draft tent ECS sequence consisted of the order in which the layout footprints will be excavated.

In response to EPA's inquiries, Parsons clarified that low-probability excavations in the backyard are still planned. USACE and Parsons emphasized that all high-probability areas defined in the decision Document must be excavated under high-probability engineering controls. The revised tent location sequence ensures that all high-probability soil, including areas adjacent to the backyard retaining wall, will be excavated under the protective structure. Otherwise, a small structure with engineering controls would have been necessary to support placement of the second tent layout's back I-beam.

The Partners briefly discussed excavation of high-probability soil under the first tent location. The front portion of the concrete basement slab will be cut followed by excavation of the underlying gravel layer and soil. The intent is to leave as much exposed slab in place to provide a clean work surface and foundation for the final tent location. If AUES-related items are encountered underneath the house footprint close to the tent edge, then the project team will establish a cut-off point. USACE clarified that the remaining basement soil will not be left in place as a sheer working wall. Temporary clean backfill and geofabric will be used to mark the limit of excavation under the first tent location. Parsons added that temporary backfill under the first tent location is necessary to provide site access for trucks.

USACE noted that a significant portion of the concrete basement slab will be removed during the third and final tent location.

In response to AU's inquiries, USACE replied that the revised tent layout sequence will not impact the planned remedial action schedule or the safety and stability of the adjacent 4835 Glenbrook Road property to the north.

In response to EPA's inquiry, Parsons confirmed that the high-probability portion of the backyard retaining wall will be removed first, followed by the low-probability portion. This allows the back tent support I-beam to be installed under low-probability conditions. No landscape slope challenges that would impact the use of equipment are anticipated in this area.

Discussion – Crane Lift Plan

USACE inquired about the time frame required for each tent repositioning effort using the crane. Parsons replied that each tent repositioning will take approximately one week.

In response to AU's inquiry, USACE clarified that the crane will be mobilized and demobilized from the site during each tent repositioning effort and will not remain on-site during high-probability excavations.

Community Outreach asked whether the crane will swing overtop of the adjacent 4801 Glenbrook Road property, which would potentially threaten landscaping features such as a pagoda, and emphasized the need for communication with the residents on this issue. USACE replied that this crane position has been used during previous efforts. The crane boom will swing in the direction of the 4801 Glenbrook Road

property, but there appears to be sufficient space to minimize impact to the adjacent property. USACE added that these are key items that will be communicated to the project team on a weekly basis so that no parties are surprised by crane efforts and other activities.

USACE confirmed that the crane lift plan typically provides the proposed crane's swing radius. The lift plan is included electronically as Appendix D with the site-specific draft work plan.

AU inquired about crane transportation for the ECS support equipment setup. USACE explained that the crane will be driven from Glenbrook Road through the 4825 Glenbrook Road backyard fence gate and onto the AU campus staging area at Kreeger Music Roadway. This crane transportation effort will be conducted during a weekend to minimize disturbance to the campus community. Parsons clarified that the crane will be wheeled instead of on tracks, with an estimated on-campus transportation time frame of 20 minutes. AU mentioned the possibility of transporting the crane at night, and USACE replied that this depends on the supplier's road use restrictions.

AU also inquired about crane transportation and crane staging for the tent repositioning efforts. USACE replied that Glenbrook Road traffic impacts will include a minimum of a temporary single-lane closure. Traffic will be directed past the closed lane, and road closure permits will be coordinated as necessary.

Discussion – Demolition Permit Approval

USACE mentioned that a regulator recently expressed concern about the use of the driveway as a construction entrance during demolition and the remedial effort. USACE had clarified that the driveway is paved, and the regulator seemed satisfied by this response.

The Partners briefly discussed the demolition permit application and associated schedule. All substantive requirements have been met. Additionally, the Advisory Neighborhood Commission (ANC)'s 30-day requirement for posting the demolition notice will be met on September 17, 2012.

Discussion – Demolition Effort

The Partners briefly discussed whether unhappy residents have the power to stop the demolition effort. P. deFur stated that they cannot because the project is following CERCLA guidance. USACE added that the purpose of the recent public comment period was to gather and respond to all formal concerns regarding the 4825 Glenbrook Road selected remedy as described in the FS and DD.

Parsons confirmed that tent fabric procurement is anticipated in mid-September.

USACE clarified that their agency and their contractors are not permitted to donate salvaged demolition materials to Habitat for Humanity. Demolition and salvage efforts at other sites have sold materials to a metals recycling facility and then deposited the money back into the national treasury.

USACE asked whether general house renovation features can be dismantled and removed in preparation for the demolition contractor. All utilities have been turned off and associated safety issues have been resolved. Parsons replied that this may not be practical because features such as kitchen cabinets, inactive lighting fixtures, and flooring will likely be removed concurrently with the house structure, if the demolition contractor cannot obtain a salvage permit. The value of salvaged materials is generally far lower than the equivalent value of the time required to segregate the materials. Parsons added that the demolition operator will sort recyclable materials such as metal, brick, and concrete into piles.

AU confirmed that they would like installation of the planned 10-foot-high fence between 4825 and 4835 Glenbrook Road. USACE mentioned that DDOE had expressed concern regarding this request, and Parsons subsequently provided verification that the fence installation was requested by USACE and approved by AU. USACE added that both fences must be reworked for low-probability efforts to establish a small front yard fence and a small backyard fence.

In response to Community Outreach's inquiry, Parsons and USACE clarified that a temporary guard station will be situated on the AU campus. Once the project trailers and support equipment are

established, these will serve as the guard station and the temporary guard structure will be removed. Guard efforts will include roving site patrols.

Community Outreach inquired about the temporary front yard fence which appears to extend onto the adjacent 4801 Glenbrook Road property where landscape restoration was previously completed. USACE clarified that the fence is situated on DC right-of-way property, and this portion of landscaping has not been maintained. Community Outreach emphasized that this information differs from details previously shared with the Koreans, so consistency is essential. Parsons will try to adjust the fence location as needed to avoid the landscaped tree in DC public space and to ensure that the upcoming right-of-entry request reflects the most current work plan details.

In response to USACE's inquiry, Parsons replied that right-of-entry for the 4801 Glenbrook Road property will be requested upon completion of Appendix M to ensure that all work plan details are available. All other information for the ROE package can be compiled in the meantime. Parsons added that they need to obtain verification of soldier pile details from the contractor. The entire ROE package, excluding the soldier pile verification, will tentatively be submitted to USACE for review by September 14, 2012.

USACE asked when the 4801 Glenbrook Road property will be impacted by soldier pile installation, and Parsons agreed to check this time frame. USACE added that the Koreans should be briefed and the ROE should be signed approximately 6 weeks prior to the soldier pile installation.

The Partners briefly discussed available sources of clean backfill. One backfill procurement source was not approved by AU. Another source was approved by all Partners. Parsons emphasized that backfill costs depend on supply and demand, and costs will increase as the project team waits to make a decision.

Partner concurrence was obtained for one preferred backfill procurement source. In response to EPA's inquiry, AU confirmed that they reviewed and are satisfied with metals concentrations and other soil chemistry data associated with this source. Parsons will check whether this source can provide sufficient backfill for the entire 4825 Glenbrook Road site, or if a second source must be identified. USACE added that the project team will be informed as soon as the necessary backfill quantity is verified or if there is a need for a second backfill source.

Discussion – Tentative Document Schedule

USACE clarified that the Chemical Safety Submission (CSS) safety distances for the Interim Holding Facility (IHF) at the Federal property already include the new adjacent Washington Aqueduct facility.

In response to inquiries from AU and P. deFur, USACE replied that the final CSS will be distributed as soon as DDESB approval is obtained. The key components of the CSS are described in the Remedial Design and Remedial Action work plan and almost exactly match previous details for the IHF.

USACE-Huntsville asked whether the Partners chose to keep and use the site-wide CSS, or close out the site-wide CSS in favor of using a site-specific CSS. USACE-Baltimore replied that the site-specific CSS will be used. USACE-Huntsville agreed with this decision and noted that close-out evaluation paperwork for the site-wide CSS will be required, based on a newly-established DDESB process.

Parsons will evaluate whether the first ECS tent layout can be established earlier than currently planned, as suggested by USACE. This effort may be completed concurrently with initial low-probability activities as long as it does not interfere with low-probability site access. Parsons clarified that this refers specifically to ECS tent setup in preparation for January 2012 high-probability excavations.

In response to Community Outreach's inquiry, USACE confirmed that soldier piles will probably be installed during low-probability time frames and staggered whenever additional ECS support is required during high-probability tent moves.

USACE clarified that water will be supplied by a temporary fire hydrant connection, followed by re-establishment of the connection to the DC water supply during the remedial effort.

DDOE inquired about the necessary time frame for on-site DC police during the site activities, to aid in preparation of the Memorandum of Agreement (MOA). USACE confirmed that DC police on-site support will be necessary during high-probability excavations tentatively beginning in January 2013. They are welcome to provide support before high-probability operations begin. Any lane closures on Glenbrook Road will be coordinated with the DC Police, as needed.

Next Steps

USACE-Baltimore will provide electronic copies of the USACE legal counsel concurrence for moving forward with the planned demolition time frame (based on the knowledge that all requirements have been met and regardless of final permit approval) to EPA and DDOE for their reference.

Parsons will adjust the planned 4825 Glenbrook Road temporary fence location as needed to avoid the landscaped tree in DC public space and to ensure that the 4801 Glenbrook Road right-of-entry request reflects the most current work plan details.

USACE-Baltimore will inform the project team as soon as the necessary backfill procurement quantity is verified from the agreed-upon source or if there is a need for a second source to provide sufficient backfill for the 4825 Glenbrook Road site.

Parsons will evaluate whether the first ECS tent layout can be established earlier than currently planned, concurrently with initial low-probability activities and in preparation for high-probability excavation, as suggested by USACE.

I. 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.

Partner discussion of one additional topic is summarized below.

Discussion – Public Outreach

The Partners briefly discussed the upcoming informational community meeting schedule. USACE emphasized that the meeting can be held prior to low-probability and high-probability efforts as long as the work plan details are nearly finalized, to prevent last-minute changes to details that were already shared with the community. A November 2012 community meeting will not provide sufficient time for informal community feedback before the remedial effort begins. Community Outreach added that the community would prefer proactive discussion of low-probability and high-probability efforts during the same meeting.

The informational community meeting will tentatively be combined with the October 9, 2012 RAB meeting, pending RAB feedback and concurrence at the September 2012 RAB meeting. This community-wide meeting will present the work plan details for the 4825 Glenbrook Road site cleanup process and the details of the Public Protection Plan (which is included within the work plan).

Next Steps

USACE will obtain RAB feedback and concurrence on the combined format of the October 9, 2012 RAB and informational community meeting.

J. 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 list was reviewed. Discussion of other Parking Lot topics is summarized below.

Discussion – Parking Lot Topics

- EPA confirmed that their risk assessor is available to discuss their agency's review of the arsenic toxicity level at the September 2012 RAB meeting, as requested during the July 2012 Partnering meeting.
- AU mentioned that the pending revisions to the cleanup level for arsenic in soil will be reviewed by the National Academy of Sciences during the next couple of years.
- EPA and USACE mentioned that the National Research Council recently published a report on recovered chemical warfare materiel (RCWM) cleanups with suggestions for improving the U.S. Army's current approach. The Spring Valley FUDS was occasionally mentioned in the report, while Redstone Arsenal in Alabama was discussed as the primary case study where these suggestions could be applied.
- USACE confirmed that they received the EPA ALOHA model input parameters from AU, for the purpose of forwarding them to Michael Myirski of USACMA, as requested. [These parameters were requested by M. Myirski for the purpose of preparing a formal response to draft work plan comment responses for 4825 Glenbrook Road.]
- Community Outreach mentioned that USACE and ERT's assistance with creating the new administrative record organizational system was deemed unnecessary. An alternative organization system was designed.

K. Agenda Building

The next meeting is tentatively scheduled for Tuesday, October 30, 2012. Upcoming meetings are tentatively scheduled for Tuesday, December 11, 2012. A separate Groundwater meeting will tentatively be scheduled in October/November 2012 or may be combined with the October 2012 Partnering meeting, depending on participant availability.

Discussion – Future Meeting Schedule

USACE-Huntsville clarified that they do not anticipate receiving FY2013 funding for project travel until late October 2012.

Community Outreach noted that RAB presentation and discussion topics are often based on the previous Partnering meeting. Scheduling Partnering meetings on the same day as the evening RAB meeting will not provide sufficient time to share this information via the RAB presentation.

L. Adjourn

The meeting was adjourned at 1:30 PM.