

**Spring Valley Partnering Meeting  
November 3, 2015  
Spring Valley Project Federal Property Conference Room**

Name	Organization/Address	
Sherri Anderson-Hudgins	USACE - Huntsville	<b>X</b>
Thomas Bachovchin	ERT	<b>X</b>
Brenda Barber	USACE - Baltimore	<b>X</b>
Todd Beckwith	USACE - Baltimore	<b>X</b>
Janelle Boncal	Parsons	
Bethany Bridgham	American University	<b>X</b>
Sean Buckley	Parsons	<b>X</b>
Paul Chrostowski	CPF Associates, American University Consultant	<b>X</b>
Tom Colozza	USACE - Baltimore	
Jennifer Conklin	DOEE	
Kathy Davies	EPA – Region III	
Jessica Greene (in place of Dr. Peter deFur)	Environmental Stewardship Concepts/RAB TAPP Consultant	<b>X</b>
Diane Douglas	DOEE	
Bill Eaton	URS	
Chris Gardner	USACE – Corporate Communications Office	<b>X</b>
Alma Gates	RAB Member – Horace Mann Representative	
Steven Hirsh	EPA –Region III	<b>X</b>
Dawn Iovan	EPA – Region III	
Carrie Johnston	ERT – Community Outreach Team	
Dan Noble	USACE - Baltimore	<b>X</b>
Cliff Opdyke	USACE - Baltimore	
Randall Patrick	Parsons	<b>X</b>
Amy Rosenstein	ERT – Risk Assessor, Independent Consultant	
Lattie Smart	ERT - Community Outreach Team	<b>X</b>

Jim Sweeney	DOEE	<b>X</b>
Tenkasi Viswanathan	USACE – Washington Aqueduct	
Cheryl Webster	USACE - Baltimore	
Ethan Weikel	USACE - Baltimore	
Nan Wells	ANC 3D Commissioner	
Maya Werner	ERT	
Kellie Williams	USACE - Huntsville	
Bruce Whisenant	USACE - Huntsville	<b>X</b>
Rebecca Yahiel	ERT – Community Outreach Team	<b>X</b>
Alex Zahl	USACE - Baltimore	<b>X</b>

### Summary of 3 November 2015 Spring Valley Partnering Meeting

#### Consensus Decisions

- None

#### 3 November 2015 Action Items

- DOEE will ask his permitting person about the possibility to incorporate groundwater LUCs into dig permits.
- USACE will provide further clarification in the FS regarding the approach to address the Public Safety Building, as requested by AU.
- USACE will inquire as to whether the Army would reimburse AU for remedial action expenses, if, in the future, AUES-related contamination is identified during construction activities.

#### Tuesday 3 November 2015

##### Check-in

The Partners conducted their normal check-in procedure. The agenda was revised to accommodate attendees only participating in a portion of the meeting.

##### A. Pilot Project

#### The goal of this segment of the meeting was to provide an update on pilot project planning.

U.S. Army Corps of Engineers (USACE), Baltimore District provided a brief update on the status of the pilot project. USACE has contacted a couple of manufacturers and based on the responses, it is unclear whether an instrument can be obtained. The technology appears to be at the point of transition where it has been proven in the research and development phase but no one has begun manufacturing the instruments for more wide-spread use. The Time-domain Electromagnetic Multi-sensor Tower Array Detection System (TEMTADS) manufacturer showed some willingness to make an instrument for USACE. The manufacturer of the Man Portable Vector (MPV) also expressed interest in building one for USACE and estimated that it

would take approximately three to four months to build; however, the firm would not commit to a specific deadline. The pilot project will hinge on whether USACE can obtain commitment from a manufacturer to build the instrument in a timely fashion.

In response to a question from Earth Resources Technology (ERT) regarding whether USACE had contacted Black Tusk Geophysics to use the MPV they own, USACE was not aware of Black Tusk Geophysics. USACE noted that the TEMTADS would be demonstrated at a Baltimore District project site where USACE is expecting to talk to representatives and see the instrument in use. One goal for USACE in relation to the pilot project will be to require contractor purchase of an advanced geophysical classification (AC) instrument as part of the task order. The instrument would then be delivered to USACE as government property at the end of the project. Including the purchase of the instrument in the contract would reduce the number of contract actions for the Baltimore District.

USACE Huntsville and USACE Baltimore discussed the MetalMapper, another AC instrument. USACE Baltimore has two MetalMappers in-house; however, the instrument is large and not practical for use in Spring Valley. USACE Baltimore noted that the project funding is not an issue; the limiting factor is availability of the AC instruments. Even if one is not purchased as part of the task order, obtaining an existing one to rent could be a challenge, in terms of availability.

The Partners discussed availability of the TEMTADS and the MPV. USACE Baltimore noted that it was not sure who owned the TEMTADS being demonstrated at the project site. ERT stated that the Naval Research Laboratory owns two TEMTADS. ERT used TEMTADS recently at a project in Illinois. Environmental Protection Agency (EPA) Region III recommended discussing options with the Department of Defense (DoD) Environmental Security Technology Certification Program (ESTCP) and suggested that ESTCP could do the pilot project instead of a contractor. USACE Baltimore explained that in order for the pilot project to fit into the overall schedule, USACE is looking to complete the work by a specific date. USACE will continue to work on the scope and look at both the contracting and ESTCP options to achieve the goal.

## **B. Field Activities Updates**

**The goal of this segment of the meeting was to review recent progress on remaining work at properties.**

The Site-Wide RI listed the ten private properties where arsenic screening had not been done. One of the property owners on a property located on 44<sup>th</sup> Street that had not been screened contacted USACE questioning whether their property had been screened. Upon confirmation that the property had not previously been screened, the owner provided right-of-entry access and the sampling was completed. Results indicated no elevated arsenic in the soil. USACE Baltimore explained that there are now just nine private residential properties where right of entry access has not been obtained to conduct soil screening.

USACE Baltimore noted that the report for the soil removal at the property on the 3700 block of Fordham Road was finalized. The property owner confirmed he would like a comfort letter for the removal of the arsenic contaminated soil on his property. USACE will draft the comfort letter for EPA Region III and the District of Columbia's (DC) Department of Energy and Environment (DOEE) to review and sign.

Regarding a different property located on the 3700 block of Fordham Road, DOEE discussed the letter from Washington DC's attorney general to the Northwest Current newspaper. The letter stated that DC would not try to access the Fordham Road property until USACE and EPA Region III had completed their attempts at access.

## **C. Partners Parking Lot**

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

The Partners agreed there was nothing new in the Parking Lot.

**D. Agenda Building**

The next meeting was tentatively scheduled for Tuesday 26 January 2016. The 4825 Glenbrook Road site is expected to be nearly ready to restart high probability activities at the end of January. If the field schedule allows, the Partners will visit the 4825 Glenbrook Road project site following the meeting.

**E. Groundwater Remedial Investigation****The purpose of this segment of the meeting was to review the status of the groundwater remedial investigation report.**

USACE reviewed the Groundwater RI conclusions. There is no unacceptable risk from groundwater or surface water; excluding the drinking water pathway. In reviewing the document, the Army determined that it is not reasonable to assume that the groundwater would be used as a drinking water source since the entire neighborhood is connected to the municipal water system. Since the RI conclusions are that there are no unacceptable risks, the Army plans to develop a proposed plan for recommending no further action for groundwater.

USACE noted that the Army may be open to performing a feasibility study to explore options for land use controls (LUCs) to ensure private wells are not drilled in Spring Valley FUDS to supply drinking water. However this could only be done if there were a process or mechanism set in place by DC to include it, for example, as part of the process for dig permits. DOEE noted that he had briefly looked into this option and would need additional time to explore whether this could be done. DOEE noted that the approach to not recommend clean up to drinking water standards will likely result in comments from DOEE water quality personnel.

USACE explained that the issue of the appropriate level to clean up groundwater is an ongoing disagreement between the DoD and the EPA. DoD's position is to clean up to reasonable anticipated future land use, and when properties are connected to a municipal water supply, it is not reasonable to assume that groundwater will be used as a drinking water source. EPA Region III responded that groundwater is likely used as a drinking water source somewhere in the District of Columbia. It is not a primary drinking water source but there are embassies that have installed wells for undefined purposes and some federal facilities have wells; though they may be in deeper aquifers. EPA Region III reiterated the position that groundwater needs to be restored to safe drinking water levels.

USACE acknowledged that some wells may be in place for other than drinking water purposes (e.g. landscaping). USACE explained that, if EPA policy were followed in this case, the likely recommended remedy would be monitored natural attenuation (MNA). EPA Region III confirmed this could be an option used and noted that USACE would have to conduct a study to demonstrate that the contamination is already in the process of attenuating.

USACE noted that MNA would be similar to the option of LUCs as it could have an option to continue groundwater monitoring. EPA Region III commented that LUCs are challenging for groundwater because groundwater itself cannot be contained in one place.

In response to EPA Region III's question, USACE explained that monitoring associated with LUCs would be performed to determine when LUCs could be removed. MNA is established as a cleanup approach based on the assumption that drinking water standards can and should be achieved for a site. In this situation, USACE determined that there is no reasonable drinking water exposure pathway to the groundwater, therefore it is not appropriate to identify a drinking water based cleanup objective.

DOEE and EPA Region III will continue to review the document and provide comments, possibly in early December. DOEE confirmed that it will ask the permitting person about the possibility to incorporate LUCs into the dig permits. Overall, it is unlikely that DOEE can ultimately control where private property owners dig.

Paul Chrostowski, CPF Associates, stated that because DOEE, as the permitting authority, requires additional testing of exposed groundwater during construction projects that require dewatering activities on campus, American University (AU) is faced with a financial and schedule burden beyond the drinking water issue. If a remedy were developed to address the groundwater contamination, AU would no longer be burdened with ongoing monitoring for AU Experiment Station (AUES) suite contaminants during construction projects that include dewatering activities.

DOEE responded that the permitting office, which requires the monitoring for dewatering activities, is outside of his jurisdiction. From its perspective, the additional AUES suite monitoring currently required on such permits is not necessary. DOEE noted that the determination to require additional monitoring associated with construction activities is dependent upon the person reviewing the permit application. Reviewers familiar with the former levels of contamination at the Spring Valley FUDS may require additional monitoring.

P. Chrostowski, CPF Associates, noted that AU's contractor on one recent project reviewed the Site-Wide RI and concurred with AU that soil sampling and trenching would be prudent as a result of encountering a test tube during construction excavations. EPA Region III commented that due diligence is appropriate in many situations, not necessarily just in formerly used defense sites (FUDS) like Spring Valley when large construction projects are undertaken.

#### **F. 4825 Glenbrook Road Remedial Action**

**The purpose of this segment of the meeting was to review the status of the remedial action at 4825 Glenbrook Road.**

Parsons completed all excavation activities under Tent 2 and on October 16<sup>th</sup>, the USACE Geologist confirmed that competent saprolite had been reached in the high probability areas under the engineering control structure (ECS). Confirmation samples were collected on October 19<sup>th</sup> with no detections of agent or agent breakdown products in the low level analysis. A total of six intact containers, five intact empty 75mm projectiles with no energetics and one cylinder item with possible fill were encountered during Tent 2 excavations. A total of 106 roll-offs of soil and 487 drums of soil amounting to 910 cubic yards were removed from the site. The Tent 2 total for accumulated scrap glass removed was 58 lbs; all cleared headspace. Identified hazardous waste removed during Tent 2 excavations was shipped to the certified treatment and disposal facility in Port Arthur, Texas. Parsons noted that the one lewisite detection in a soil sample resulted in classifying the represented soil as well as associated rubble as hazardous waste.

Parsons' subcontractor ALS laboratory in Middletown lost their accreditation with USACE, which led Parsons to find a new laboratory to do the analysis for the Hazardous and Toxic Waste (HTW) parameters. During the search for new laboratory it was determined that ALS had been running nine semi-volatile organic compounds (SVOCs) as target analytes utilizing tailored methods developed specifically for those analytes. The subject SVOCs included:

- Benzal chloride;
- Benzyl bromide;
- 2-Bromoethanol;
- 4-Chloroacetophenone;
- 1-Chloro-2,4-dinitrobenzene;
- 2-Chloroethanol;

- Chloropicrin;
- N,N-Dimethylaniline; and
- Diphenyl Ether.

Parsons worked to identify why the analytes had been analyzed with tailored methods. While ALS may have been asked at one point in the past whether they had the capability to develop methods for the SVOCs, it was not a requirement. The Parameters Report (Parsons 2008) indicated that the acceptable approach for analyzing these types of compounds (compounds not detected by standard methodologies) was to treat them as Tentatively Identified Compounds (TICs), not as target analytes. As TICs, if there is a detection, the detection will be “J” flagged in the results, and the analysis would follow the TIC memorandum for SVOCs. Even if there were no detection, the non-detection results would still be documented.

Parsons and USACE reviewed options to determine the best approach for analyzing the SVOCs in the confirmation samples for Tent 2 including requesting analysis for only the SVOCs at the ALS Middletown laboratory and running all other analyses at the USACE accredited ALS Kelso Laboratory location. Because USACE policy does not permit any sample to be analyzed by laboratory that no longer has DoD accreditation, Parsons determined that all analyses would be performed at the DoD accredited laboratory and the SVOCs would be run as TICs.

In response to EPA Region III’s question, Parsons explained that there had only been one detection of one of the SVOCs (benzyl bromide) during the remedial action at 4825 Glenbrook Road. The detection was in a grab sample taken from the area of extensive soil contamination in the front yard of the property. Parsons also performed a search of the available database and the SVOCs were not mentioned in any previous analyses for the site. Chloroacetophenone was mentioned in an analysis; however it was 1- or 2-Chloroacetophenone, not 4- Chloroacetophenone.

USACE confirmed for EPA Region III that USACE Baltimore’s quality assurance point of contact as well as the USACE Baltimore and USACE Huntsville chemists reviewed and approved the proposed strategy to analyze the nine SVOCs as TICs.

ERT clarified that the laboratory analyzing the SVOCs using tailored methods, instead of as TICs over the last few years was likely a result of a miscommunication with the laboratory. ERT noted that there was nothing inherently special about the subject SVOCs. The miscommunication could have occurred during a time of personnel transitions and changes in projects in the 2008-2009 timeframe. ALS had just started running analyses for the project at that time. ERT emphasized that the Parameters work group clearly stated that the SVOCs could be run as TICs; another accredited laboratory would not need to develop tailored methods for the compounds.

Parsons noted that the Tent 2 confirmation samples were the last samples to be analyzed by ALS. Parsons re-solicited proposals to fulfil the laboratory requirements for the project. Parsons explained that APL was the only laboratory able to meet all statement of work requirements including following the TIC memorandum. Parsons’ chemist also had previous positive experience working with the laboratory.

AU inquired as to whether ALS losing its accreditation would raise questions about previous sampling results at the property. Parsons responded that while ALS temporarily lost their DoD certification, the laboratory continues to maintain their EPA accreditation. All results continue to be validated by a third party data validator. Parsons emphasized that the excavations at 4825 Glenbrook Road are not delineated primarily by soil characterization, rather by when competent saprolite is reached. USACE explained that agent and agent breakdown product analyses continue to be performed by the Army’s Edgewood Chemical and Biological Center (ECBC) laboratory, not the commercial laboratory.

Parsons reviewed planned activities associated with the move to the Tent 3 location. Activities include conducting extensive decontamination activities on equipment used during the high probability excavations under Tent 2. This conservative measure includes washing, scrubbing and bleaching equipment including

the excavators. The decontamination is conducted on the equipment before it is removed from the tent structure. Following decontamination, the tent can be opened to establish easy access for the crew to remove infrastructure including cameras, electric lines, and air lines. A crane is then scheduled to arrive in mid-November to move the structure to the Tent 3 location. The crane will be staged within the property boundaries in the front yard.

In response to AU's question, USACE confirmed that Shelter-in-Place was suspended and would be suspended until late January/early February 2016. USACE explained that 30 days prior to the restart of high probability operations, Shelter-in-Place participants would be notified and be offered the opportunity to re-train prior to the resumption of the program. The entire system would be re-tested, including the siren tests and ring-down system.

The Partners briefly discussed the schedule. In response to EPA Region III's question, USACE confirmed that the excavations under Tent 2 were completed one month ahead of the revised estimated schedule. Overall, the project continues to remain on schedule.

Aside from high probability excavations under Tent 3, the low probability efforts include removal of a couple areas of contaminated soil along the north and south property lines. Parsons and USACE clarified that when the crew is working along the southern property line, no further work with the soldier pile is required. The soldier pile will remain in place. Crews will just remove the wooden lagging between the soldier pile as needed during their excavations.

## **F. Site – Wide Feasibility Study**

**The purpose of this segment of the meeting was to discuss comments on the Feasibility Study (FS) under review by the Partners.**

USACE briefly reviewed the status of comments submitted to date by the Partners and offered to discuss any significant comments to date. USACE noted plans to brief the Restoration Advisory Board (RAB) on the Site-Wide FS at the November RAB meeting, including the alternatives reviewed to address HTW risks as well as munitions hazards. The presentation will describe the alternatives likely to be the formal preferred alternatives in the Proposed Plan (PP). The draft PP is expected in early November; USACE expects to make the PP available for Partner review after the holidays.

### **1. AU Public Safety Building Discussion**

USACE reviewed the approach described in the FS. In response to a comment submitted by AU, USACE explained that USACE does agree that AUES-related debris remains under the foundation of the Public Safety Building (PSB). At some point in the future, the Army is committed to addressing it. USACE offered to add further clarification of this position in the FS if the draft was not clear enough. P. Chrostowski agreed that AU understands the Army's approach and confirmed that AU would like to see the approach more formally expressed in the FS and subsequent Proposed Plan.

The Partners discussed how to address the remedial action for the debris under the building during the unspecified period of time between the Decision Document (DD) and the removal of the building. EPA Region III commented that the FS should indicate an approach for interim measures to be implemented until the PSB is no longer present. The interim measures would ensure protective measures are in place to address the unacceptable risk until the area can be accessed to remove the debris (upon removal of the building). USACE noted that the risk assessment developed for the PSB determined that as long as the building remained in place and in good repair, the presence of the building was an acceptable control to prevent exposure to the debris under the building. EPA Region III and P. Chrostowski explained that this measure would likely be presented as a form of LUCs. EPA Region III commented that the restrictions AU already implemented to prevent excavation in the vicinity of the PSB foundation could be referenced as part of the remedy in the DD.

AU inquired whether, if AU were to remove the building in 10 years, there would be funding to pay for implementation of the remedy. AU asked whether the university would have to wait after the building was removed, possibly years, until the AUES-related debris could be excavated and removed from the campus.

USACE confirmed that if the remedy is specified in the DD, the Army is required to fund implementation of it; however when it can be implemented based on the availability of funds for any given year is unclear. USACE noted that due to the nature of this project, the DD is signed by the Deputy Assistant Secretary of the Army (DASA), giving higher levels of oversight to ensure priority remedy implementation. The FUDS program, under which Spring Valley is being addressed, is also projected to continue on for a long time as well.

AU explained that the building is expected to be no longer used for Public Safety operations once the new development on the East Campus is completed. The potential for unclear timing of a future remedy may influence the university's plans for the building and whether a new office operation would be relocated to the building. USACE responded that AU could move another office into the building. As long as the building remained in good repair and restrictions continued to be maintained, the interim measures would remain protective.

## **2. Discussion of Excavation and Disposal Remedy on AU**

P. Chrostowski, CPF Associates, noted that AU supports the remedy of excavation and disposal to address the chemical contamination on the AU campus. AU requests that any remedial action be coordinated closely with the university to minimize impacts to campus activities and operations. AU does not want any remedy that includes LUCs or phytoremediation.

## **3. Remedial Action Objectives (RAO) Discussion**

P. Chrostowski, CPF Associates, explained that AU's other comments related to issues previously voiced with the Army, including during meetings with the Army and AU's President Kerwin. USACE confirmed that the Army and AU continue to disagree about the RAO. AU's position remains that any chemical on the AUES list detected above background is considered a contaminant from the AUES and should be addressed. The Army's position is that a chemical exceeding background levels would not drive the RAO. The chemical would have to present a human health risk at the detected concentration.

## **4. Discussion of Possible Future Remedial Actions at AU**

P. Chrostowski, CPF Associates, further commented that AU's position considers future impacts. AU is working to ensure that the campus is remediated to the fullest extent possible, to ensure that the university does not have to, at some point in the future, react to a situation that arises where additional AUES – related contamination is identified. This would require AU to re-engage with USACE to address the contamination which would not only be a burden to AU but also to USACE. AU's focus is to ensure reduction in the burden of precautions that previously had to be taken during construction projects. The current construction near Beaghley Science Building was a test case of the cleanup to date; no injuries or exposures related to AUES contaminants occurred. If any AUES-related chemicals are identified in concentrations above action levels during construction or other campus activities, AU will come back to the Army to remediate the contaminated area.

USACE replied that while the Army will complete the remedial actions described in the Decision Document, five year reviews will also occur at the site. However, if AU identifies something possibly AUES-related, the timeframe it may take for USACE to respond to AU to remediate the AUES-contamination is unclear.

EPA Region III noted that the Army has the option to perform a removal action in such a scenario. Another, longer process would be to revise the DD. USACE commented that neither option would be convenient if AU was in the process of a building construction when the contamination was identified.

In response to P. Chrostowski's question, USACE confirmed that he would inquire as to whether the Army would reimburse AU for remedial action expenses if AUES-related contamination is identified during construction activities at some future date.

USACE Huntsville and EPA Region III confirmed that this has occurred in the past. In some cases, depending on the type of AUES-related material found, such as a munition item, an emergency response would be immediately initiated from the government.

P. Chrostowski, CPF Associates, noted that AU is cautious in excavating areas located within the AUES fenceline, such as the Beaghley Science Building. Borings and trenches were taken to check for contamination related to AUES. One possible AUES-related test tube was found; expedited analysis confirmed no associated contamination. Further sampling results are pending. USACE confirmed that AU may always need to react to any possible AUES-related debris when undertaking construction activities within the former AUES fenceline.

USACE explained that if AU is concerned about future funding and timeframe to remediate the area under the PSB, the university may want to factor this into plans for the building once public safety operations are moved out of the building. USACE is still actively working on the Spring Valley FUDS and has available funding to complete the remedial action in the near-term.

AU replied that the university campus planning process includes presenting a plan to the city that includes any and all possible development activities the university could potentially undertake. The most recent iteration of the plan did not include rebuilding the PSB; however, AU may reconsider this as an option because the funding is currently available in the near-term to complete the required remediation under the building foundation. This would potentially reduce the burden of possible delays placed on AU caused by unanticipated finds during demolitions or construction activities (such as the test tube find, or groundwater sampling results). AU noted that an option the university could explore was to move forward with removing the building to allow for the Army to complete the remediation, and wait until a future point in time to redevelop the area.

## **5. Discussion of Level of Coverage to Address Munitions Hazards**

DOEE explained that the community may not understand the difference between the expected preferred alternative (conducting geophysical surveys in all accessible areas and excavating selected geophysical anomalies) and what was already done at some properties during the RI phase of the project. This perception could result in comments from the community during the PP comment period.

ERT responded that in some cases, application of the preferred alternative would result in very minimal additional activities on a property because the same properties already had extensive geophysical coverage during the RI.

The FS laid out three general levels of geophysical coverage. The first level was the level of geophysical coverage obtained at some properties during the RI phase. The second level, accessible areas coverage, was a step above the first where some additional geophysics would be conducted beyond what might have previously been done. For example, maybe some additional plants could be removed to gain more coverage. The third level, full-coverage geophysical mapping, would require removal of nearly all vegetation and any small outdoor structures. Such an effort would not be practicable at this site. The likely preferred alternative would be the accessible areas coverage level. The application of the alternative that is ultimately selected would be property specific since the level of geophysical coverage, if any, could vary greatly from one property to the next. The FS was written using the general standards for the different levels of coverage in such a way so the selected alternative would be applied to each of the 100 properties, regardless of previous work. The only other option would have been to write 100 separate FSs; one for each property. Instead, a property-specific remedial action work plan would likely need to be developed to clearly define accessible areas for a given property.

USACE confirmed that site-specific work plans would likely be developed for each property during the remedial design. USACE recommended that the Partners review these site specific work plans and possibly visit the subject properties to confirm the work plan would achieve the objectives of covering all accessible areas on the property. DOEE and USACE agreed that such work plans and the determination made about accessibility would be, to some extent influenced by property owner considerations as well.

DOEE thanked ERT and USACE for the clarification.

#### **6. Unlimited Use and Unrestricted Exposure (UU/UE) Discussion**

In response to EPA Region III's question, USACE confirmed that each alternative described in the FS would result in an UU/UE determination. If EPA Region III disagreed with that determination, the alternative would need to be re-evaluated. USACE further explained that due to the current uses of the FUDS, the sites are already basically UU/UE. EPA Region III commented that taking the properties to an UU/UE level in the area of the identified potential unacceptable munitions hazards but keeping an overarching site-wide determination (possible institutional controls in the form of munitions safety education) could be confusing. EPA Region III confirmed that the site-wide caveat was important to include but recommended clarifying the UU/UE discussion in the FS.

#### **7. Cost Estimation Discussion**

DOEE questioned why USACE would not opt to excavate all identified anomalies on each property instead of digging selected anomalies if it would likely only cost five thousand more per site. ERT responded that the cost estimates in the FS do not reflect economies of scale and that the general cost differences between the two options could be different. If a property only had 10 identified anomalies, the costs would likely not be that different. If the property had 500 identified anomalies, the costs would be significantly different.

#### **8. Presentation of the FS to the RAB**

USACE explained that the FS information to be provided to the RAB would be similar to what was previously presented to the Partners. EPA Region III requested that the Army not present any alternatives as the preferred alternative at the RAB. USACE and ERT confirmed that at the RAB, they would review the FS analyses and show which ones were the highest ranked alternatives, or most favorable alternatives as a result of the FS analyses. USACE would not formally present any one alternative as the preferred alternative and agreed with EPA Region III that formal presentation is the purpose of the PP. EPA Region III explained the content of the FS is not typically provided publically before it is finalized and the PP is issued. USACE replied that the FS would not be made available for comment, but USACE felt it was important to brief the RAB and be available to answer questions on the FS analyses before it was finalized. In response to EPA Region III's request, USACE agreed to reiterate the regulatory process which is being followed in developing the various documents.

USACE reviewed the timeline for the FS and noted that, pending acceptance of comment responses, the FS would likely be finalized by the end of the calendar year 2015.

#### **H. Adjourn**

The meeting was adjourned at 11:46.