

**Spring Valley Partnering Meeting  
June 13, 2017  
Spring Valley Project Federal Property Conference Room**

Name	Organization/Address	
Thomas Bachovchin	ERT	
Brenda Barber	USACE - Baltimore	<b>X</b>
Todd Beckwith	USACE - Baltimore	
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	
Kathy Davies	EPA – Region III	
Laura Williams for Dr. Peter deFur	Environmental Stewardship Concepts/RAB TAPP Consultant	<b>X</b>
Diane Douglas	DOEE	
Bill Eaton	AECOM	
Chris Gardner	USACE – Corporate Communications Office	<b>X</b>
Steven Hirsh	EPA –Region III	<b>X</b>
Holly Hostetler	ERT	<b>X</b>
Dawn Iovan	EPA – Region III	
Carrie Johnston	ERT – Community Outreach Team	<b>X</b>
Carlos Lazo	USACE – Government Affairs Liaison	<b>X</b>
Lowell (J.R.) Martin	USACE – Site Operations Officer	
Steve Norman	ECBC	
Dan Noble	USACE - Baltimore	<b>X</b>
Cliff Opdyke	USACE - Baltimore	
Randall Patrick	Parsons	<b>X</b>
Amy Rosenstein	ERT – Risk Assessor, Independent Consultant	
Tom Rosso	ECBC	

Jim Sweeney	DOEE	<b>X</b>
Tenkasi Viswanathan	USACE – Washington Aqueduct	
Kellie Williams	USACE - Huntsville	
Bruce Whisenant	USACE - Huntsville	<b>X</b>
Rebecca Yahiel	ERT – Community Outreach Team	<b>X</b>
Alex Zahl	USACE - Baltimore	

**Summary of 13 June 2017 Spring Valley Partnering Meeting**

**Consensus Decisions**

- None

**13 June 2017 Action Items**

- USACE Baltimore will change the signature authority statement for the Site-Wide Decision Document (DD) to reflect who will actually sign the document.

**Tuesday 13 June 2017**

**A. 4825 Glenbrook Road Remedial Action**

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

Parsons provided a brief update on the status of the remedial action at 4825 Glenbrook Road.

**1. Recent Activities**

All intrusive work was stopped on April 18 due to the need to revise the work plan and the need to mobilize a full Personnel Decontamination Station (PDS) for low probability operations. During that time, site personnel packaged the granulated activated carbon filters from the Chemical Agent Filtration System (CAFS) at 4825 Glenbrook Road. Although the filters did not contained anything hazardous, the filters will be sent to an incinerator for proper disposal of Spring Valley Formerly Used Defense Site (FUDS) waste. Since a PDS was to be installed, the decision needed to be made concerning what organization was best positioned to quickly mobilize a team and equipment to the site. U.S. Army Corps of Engineers (USACE), Parsons, Edgewood Chemical Biological Center (ECBC), and the U.S. Army 20th CBRNE Command (Chemical, Biological, Radiological, Nuclear, Explosives)/CBRNE Analytical and Remediation Activity (CARA) collectively agreed that ECBC would be the quickest to mobilize to 4825 Glenbrook Road.

On May 15 site preparation activities began, including grading and installing a gravel pad to support the full PDS. On May 16 the third and final Interim Holding Facility (IHF) unit was swapped out and shipped back to Edgewater. All 3 installed units are new or refurbished and do not need any maintenance.

On May 23 new teams began to mobilize because Parsons needed additional staff to rotate in should contingency operations above Modified Level D be necessary. All new personnel were quantitative fit tested for Self-Contained Breathing Apparatus (SCBA) and full-faced respirators. Training was conducted to reorient personnel to the safety procedures and apparatus. There is a section in the ECBC PDS for medical monitoring in the event of a chemical casualty. The ECBC Miniature Chemical Agent Monitoring System (MINICAMS) shed will be used to monitor the excavation as well as monitoring personnel as they exit the PDS if there were a casualty.

EPA Region III inquired when Level C would be instituted and if there would always be Level B personnel standing by.

Parsons explained that Modified Level D is still the standard operating procedure. If there is a detection on the MINICAMS, Parsons would bring the Level B team out. If detections continue, there will be a half-staff Level C team that would go downrange as the Modified D team was coming out. The Level C team would then mitigate the hole. If there is a detection above 1 short-term exposure limit (STEL) then the Level B contingency would be in effect.

In response to a question from EPA Region III, Parsons explained that there is no medic on site because Level C and Level B operations are not sustained at the site. The response times of the Washington D.C. fire department were deemed appropriate to arrive in time to treat someone experiencing a respiratory issue. In addition, the presence of the PDS allows personnel to be fully decontaminated in order to be sent in an ambulance. There are personnel staffing the PDS and there are teams prepared to operate in Level C and Level B. Because of the heat the teams are not standing by; even the Level D excavating team is operating on a 50/50 work/rest cycle at this time. Teams are rotated to facilitate constant excavating. Soil is staged until the end of the day for loading into drums in order to provide more time for excavation.

USACE added that the work/rest cycles are 50/50 in the morning and during the hotter part of the day, and then 75/25 at the end of the day.

Personnel were trained to ensure they were accustomed to working in Level C. All onsite personnel came from a building assessment project Parsons is conducting in Edgewood; therefore the teams are already trained in Level C operations.

On June 2 all work plan approvals were granted to begin operations.

To model the potential hazard distance, the worst case scenario of the detected black substance was combined with the agent breakdown product concentration, similar to the model for the hazard distance for the shipment. This combination resulted in a quantity of 1.02 grams of mustard (HD). In addition, the quantity of soil in a 30-gallon poly drum was assumed, which is the maximum size filled at this time. The most conservative atmospheric stability of D, 1 m/s wind speed, and a maximum temperature of 95 degrees F were also taken into account. With the assumed concentration and other assumptions, the release would still be too small to reach the Acute Exposure Guideline Level (AEGL)-2 at any distance. There should be no hazard distance that extends beyond the site bounds.

On May 31, Revision 6 of the Site Specific Work Plan was finalized. The revision allows for low probability operations in Modified Level D, Level C, and Level B. Standard operation is Modified Level D, but the other levels are available for contingency operations. Parsons distributed a CD of Revision 6 of the Site Specific Work Plan to the regulators.

Intrusive operations began on June 5. Work continues in the curved retaining wall area. The teams are encountering small amounts of Chemical Agent Contaminated Media (CACM) and American University Experiment Station (AUES) debris, but not football or basketball size quantities that were originally found. Parsons is treating all CACM and AUES debris as potentially hazardous and putting it in drums.

In response to a question from Paul Chrostowski, CPF Associates, American University Consultant, Parsons confirmed that there were no air detections; false positives or real positives. An ECBC study found that the MINICAMS will respond to the CACM with a false positive that is not confirmed by Depot Area Air Monitoring System (DAAMS) tubes.

In response to a question from EPA Region III, Parsons and USACE explained that any ring off, whether a false positive or not, would be treated as a real ring off. The project was halted in order to elevate the Personal Protection Equipment (PPE) for the team's protection on the site.

P. Chrostowski, CPF Associates, commented that for internal purposes at American University (AU), AU assumes that all of the CACM is HD because AU really does not know.

USACE - Huntsville noted that when the black material is found, a sample is taken and sent to ECBC for definitive analysis.

EPA Region III, USACE, and Parsons agreed that sometimes a false positive is a reaction to something very similar to HD, and sometimes a false positive can be triggered by something unrelated to HD, such as a diesel engine starting up near the MINICAMS.

## **2. Area B Low Probability Removal**

As of June 7, 54 drums of soil have been removed. In total, 584 cubic yards have been excavated out of 668 expected cubic yards or 80.2% complete. All disposal characterization samples have cleared headspace. There have been low level detections of agent and agent breakdown products in the disposal characterization split samples from the drums collected in the low probability area. All of the drums will be shipped to an incinerator.

## **3. Future Activities**

- Continue excavation along the property line towards the top of the hill.
- Once the AC units are relocated to a permanent location, areas with failed confirmation samples will be over-excavated.
- Areas of elevated arsenic in the former high probability areas will be over-excavated.

## **4. Schedule**

- Complete low probability operations early July 2017 - adjustments to the schedule will be made as work progresses.
- Complete restoration of 4825 Glenbrook Road late summer of 2017 as previously scheduled.

## **5. 4835 Glenbrook Road**

The Fry family (father and two sons) attended the May RAB and made some significant claims about their recollections of their activities at 4825 Glenbrook Road and 4835 Glenbrook Road during the construction of the 2 properties. During and after the meeting, James Fry (the father) indicated he had taken a liter bottle of liquid from 4835 Glenbrook Road and kept the bottle in a safety deposit box in West Virginia. USACE took the claims very seriously and followed up with the Fry family repeatedly after the RAB. On May 16, USACE informed USACE HQ leadership, who directed USACE to engage external law enforcement. On May 17, USACE reached out to the Fry family in the morning. That afternoon, the USACE District Engineer (DE) contacted the father and the son. During the conversation with the USACE DE, James Fry admitted that he lied about the bottle to see if he could get USACE's attention.

USACE also engaged with the Federal Bureau of Investigations (FBI), and EPA. The FBI was prepared to launch a full scale response. The USACE DE informed the FBI of the details of his call with James Fry. The FBI ran background checks on James Fry and decided to close the file unless additional information was received.

EPA Region III noted that the case was handled by EPA's criminal enforcement division. The concern was if there was a bottle with chemical agent in a safe deposit box in a bank somewhere. Even though the bottle may have been there for 20 years, it is not known if the bottle was leaking or not, or if the bottle may leak in the future.

USACE has significant concerns about the credibility of this family now.

The RAB passed two motions:

- Host a site visit with the Fry family to tour the sites and describe their recollections in detail to USACE.
- Host an open forum at one of the RAB meetings for the Fry family to present their concerns.

At this point, based on interactions with the Fry family, USACE sought to discuss next steps with the Partners concerning whether to pursue the site visit and how far to continue interactions. Most of the claims made by the Fry family about 4825 Glenbrook Road have been resolved. There will not be any issue at 4825 Glenbrook Road. The areas of debris on 4835 Glenbrook Road that the Fry family is recalling are now under the poured basement floor and in the crawlspace. In order to even investigate the Fry family's potential claims the process of investigation would significantly damage the home.

In response to a question from Bethany Bridgham, American University, USACE explained that no claims about 4825 Glenbrook Road have been substantiated recently. Some of the items from the transcripts have been validated and substantiated, such as ladles. USACE has not been able to find other items. In some of the recent transcripts, the Fry family claims that there are items under the crawlspace of both homes. USACE meticulously went through the crawlspace at 4825 Glenbrook Road and did not recover any items. There was no debris or glassware under the crawlspace.

P. Chrostowski, CPF Associates, commented that this project is important to AU, and AU has done a lot of their own investigation. AU has relied on everything USACE provided, but also performed their own reviews of historical aerial photography, transcripts, grey literature, published items, and newspapers, and have conducted their own air monitoring in the house at 4835 Glenbrook Road. He noted that so far he had not seen anything that alarmed him on this subject. AU would like the issue to be resolved definitively, but he believed that the issue is similar to that of the PSB where there may be something underneath the house, but as long as it is undisturbed it is not a hazard to anyone. He had not seen anything to indicate there was a hazard. He did not believe there is a downside to the site visit and RAB presentation, if the visit and presentation provide new information.

EPA Region III commented that he believed that if USACE does not conduct the site visit then it may always be said that the site visit was refused. He did not see any downside to the site visit. He suggested talking to the RAB about the possible RAB presentation.

USACE Baltimore noted that at the RAB meeting, the Fry family expressed concern about threats to their health. B. Barber reached out to the Agency for Toxic Substances and Disease Registry (ATSDR) and asked to set up doctor appointments for the Fry family.

ERT - Community Outreach added that the Fry family also claimed to never have received the ATSDR materials, but the materials were sent to the same address that was given for James Fry.

P. Chrostowski, CPF Associates, commented that one thing that he was continuing to rely on for his assessment of 4835 Glenbrook Road was the work that USACE is conducting at 4825 Glenbrook Road. He believed that if there is something under the house, it might be similar to what USACE has been finding recently, such as the black substance or glassware. As long as any potential items are undisturbed, there is not an issue for anyone. He was not sure if there is anything that can be done to arrive at a definitive closure. He believed the evidence is fairly strong that there is no imminent hazard, but if the house should be disturbed for some reason in the future, certainly whoever goes under that slab will have to be aware of the potential hazards.

EPA Region III explained that an institutional control would apply in that situation. There is no institutional control in the Decision Document for 4835 Glenbrook Road.

In response to a question from P. Chrostowski, CPF Associates, USACE explained that the site visit could be conducted and an Explanation of Significant Differences (ESD) created after the site visit if the Partners strongly agree based on information gained from the site visit. An institutional control similar to the PSB could be created. The 3-year limit applied to definitive statements made about what would be

done at the PSB. There was no statement made about what would be done at 4835 Glenbrook Road. USACE did not believe there would be a limit, because decisions would still have to be made if the house is disturbed. There is no evidence to support an institutional control.

EPA Region III commented that it did not disagree, however the expectation is that if someone ever decides they need to go under the house for activities such as plumbing, piping, or radon remediation, those activities would trigger something that would be covered by an institutional control. Eventually AU may sell the house to someone who does not have the depth of knowledge about the property.

USACE Baltimore explained that there will be a site-wide institutional control. The institutional control would explain that the area is a FUDS and will always be a FUDS. If someone excavates in the area, the institutional control warns what items may be found. In the event someone is excavating and finds an item that looks odd, the institutional control directs the public to implement the 3 Rs (Recognize, Retreat, and Report).

EPA Region III inquired if the institutional control states 'something that looks odd' or 'looks like a munition'.

USACE Baltimore explained that USACE has yet to write the Land Use Controls Implementation Plan (LUCIP) so the LUCIP may say whatever is determined appropriate.

EPA Region III suggested that addressing 4835 Glenbrook Road in the LUCIP is worth consideration.

P. Chrostowski, CPF Associates, commented that the decision depends on USACE's evaluation of the Fry family's credibility at this point. The Partners are all in agreement about everything else. The Fry family's statement is the only reason to single out 4835 Glenbrook Road, unless something turns up in the final days of the investigation that points to something under that house.

USACE Baltimore reiterated that it was unclear whether the Partners recommended pursuing the site visit. It is unclear whether the Fry family is being intentionally duplicitous or just cannot remember details from 25 years ago. If their testimony is that USACE should pay attention to 4825 Glenbrook Road and 4835 Glenbrook Road, then USACE has been making that effort. USACE's actions have to be based on USACE's investigations.

In response to a question from EPA Region III, USACE Baltimore confirmed that USACE had previously invited the Fry family for a site visit. Now USACE is not sure what to believe. The Fry family admitted willfully fabricating this story to get the attention of USACE.

In response to a question from EPA Region III, USACE Baltimore confirmed that it will share USACE's concerns with the RAB during the conference call on June 15.

EPA Region III commented that it believed there was no benefit to the site visit other than honoring USACE's previous invitation. The Fry family will likely say that any items or debris will be under somewhere USACE cannot look. That is the problem. The Fry family has already made claims to that effect. The same claims were made about 4825 Glenbrook Road; that everything was somewhere under the house where USACE could not look.

USACE Baltimore confirmed this and added that USACE could not look under the house at 4825 Glenbrook Road until the house was gone, and then the items were found somewhere else.

EPA Region III commented that it had no preference on the decision but strongly suggested that USACE Baltimore explain to the RAB why USACE might change the site visit plan.

In response to a question from USACE Baltimore, AU explained that the property will be available for a site visit. The house has a reputation and the question will always be open. At this time, AU believes there is no imminent hazard based on the evidence that AU has seen, the testing AU has conducted, and the opinion of the regulatory agencies.

In response to a question from EPA Region III, AU confirmed that the new AU president will live at 4835 Glenbrook Road. The AU representative added that the previous president lived at the house throughout his term. Some house systems need to be addressed, including repairing the water line.

In response to a question from EPA Region III, USACE; CPF Associates; and Parsons explained that no radon reduction system was installed at 4835 Glenbrook Road. P. Chrostowski, CPF Associates, added that AU had conducted Volatile Organic Compound (VOC) testing in the basement and that test would not have been run with an active radon reduction system present.

DOEE commented that a radon sample may have been taken years ago.

EPA Region III and P. Chrostowski, CPF Associates, agreed that radon is intermittently present in Spring Valley.

In response to a question from USACE Baltimore, EPA Region III explained that the EPA's investigative division may or may not share the results of their investigation concerning the Fry family.

EPA Region III commented that EPA tried to locate some of the former workers in 1997. At that time, the former workers told the EPA civil investigator that they were advised not to talk to EPA. EPA Region III understood that the former workers wanted immunity.

USACE confirmed that the workers wanted immunity from prosecution.

EPA Region III suggested giving a USACE presentation to the RAB for the benefit of RAB members that have not been on the board for 10 or 15 years. He believed there are people that do not know the history of activities at 4835 Glenbrook Road.

USACE Baltimore confirmed that a presentation on 4835 Glenbrook Road may be given at the September RAB meeting.

USACE was able to verify some of the claims made in the transcripts by the Fry family. At the same time the Fry family made those claims, in those same transcripts, the Fry family was also repeatedly asked where more items were buried. The Fry family kept saying there were items behind the retaining wall towards the Korean ambassador's house. USACE did find items buried behind the retaining wall, but there were other claims that were not verified. The Fry family's claims about items underneath 4825 Glenbrook Road did not pan out. No one said there was anything under 4835 Glenbrook Road. When the Proposed Plan was published, the document excluded 4835 Glenbrook Road. At this point, the Fry family claimed there were more items buried under 4835 Glenbrook Road.

In response to a question from ERT - Community Outreach, EPA Region III explained that he does not have a copy of the old interview with the Fry family. He noted that email technology was not even available at the time of the interview.

## **B. Site-Wide Decision Document (DD)**

**The goal of this segment of the meeting was to review the status of the Site-Wide Decision Document.**

USACE Baltimore provided a brief update on the Site-Wide DD.

The Site-Wide DD was sent to USACE Headquarters (HQ) to be signed, and then sent on to the Deputy Assistant Secretary of the Army (DASA). On June 2, USACE briefed Mr. Collins, DASA, on the Site-Wide DD to obtain his concurrence. The DASA will not sign the document because the signature would require the document to undergo additional legal review for legal sufficiency by the Office of the General Council of the Army. The DASA did not impose the extra review on USACE because the USACE legal review had already been performed and deemed the document sufficient. The USACE General's signature will be the final step.

EPA Region III pointed out that the Site-Wide DD declaration indicates that the signature authority is delegated to the DASA and the Deputy Commanding General.

USACE Baltimore explained that new policies have been released that state the Commanding General (CG) of USACE can sign the document. The signature authority can be further delegated down to 2-star generals, but since there are no 2-stars in position at this time, the 3-star general will sign the document.

EPA Region III commented that the declaration should reflect who will actually sign the document.

USACE Baltimore confirmed that the declaration needs to be corrected. USACE Baltimore noted that the first Spring Valley Site-Wide DD was signed on June 2, 1995 by the DASA at that time. The DASA stated that no further action was necessary in Spring Valley 1995. USACE provided a copy of the 1995 Site-Wide DD to the current DASA.

The Site-Wide DD was reviewed by J.C. King, Office the DASA. USACE Baltimore sent the reviewed document to Parsons.

EPA Region III inquired about the change in wording from munitions to UXO and the significance of that change in wording.

USACE Baltimore explained that in J.C. King's opinion, the investigation is for munitions. USACE's decision to investigate for munitions is because USACE knows from the past that some of the munitions could be Munitions and Explosives of Concern (MEC). J.C. King wants the document to clearly state that reason.

In Section 2.9.2.3 of the Description of Alternatives, J.C. King directed USACE to change the description of the alternatives to say that USACE performs digital geophysical mapping (DGM) coverage, investigates anomalies, and removes munitions. The previous wording stated that USACE would perform DGM coverage, and remove anomalies. In his review, J.C. King commented that no one removes anomalies. The process is performed by investigating anomalies and removing munitions found. Some anomalies will not be removed, such as a sewer line. The munitions are then analyzed to determine whether they are MEC or not. In USACE Baltimore's opinion, the change in description was a major change. Throughout the Site-Wide FS/Proposed Plan process, the four alternatives were described in the original way, and the new wording changes the up-front descriptions of the alternatives.

Another change concerns USACE's plan for education and awareness initiatives for remaining explosive safety hazards. The review stated that the Army has a formal program called the 3Rs (Recognize, Retreat, Report) which is the plan USACE would implement. The document now names the Implementation of the 3Rs as the safety education portion of USACE's land use control.

Section 2.11 addresses the issue of principle threat waste (PTW) and whether or not the issues in Spring Valley are PTW or source material that was just low level waste. The compromise language that the DASA and USACE agreed to was that whether or not MEC is PTW, for Spring Valley and the Site-Wide DD of remedial actions, USACE will treat any finds of munitions or MEC. The preference for treatment would be satisfied because the Site-Wide DD states that USACE will treat these items on site through the Explosive Destruction System (EDS) or the Circulating Bed Combustor (CBC).

USACE will take all necessary steps to ensure protection of human health and the environment; to address the unacceptable risks posed by MEC at the site.

EPA Region III commented that it was not sure the reference to 'significant factors' was in the document he was sent to review.

USACE Baltimore replied that it believed the reference to 'significant factors' was in the original document.

The last two sentences that discuss MEC in the second paragraph were the sentences approved by Department of Defense (DoD).



USACE Baltimore requested that DOEE and EPA Region III review Section 2.11 again. USACE Baltimore will make the change to the signature authority statement. USACE hopes to have the document signed by the end of June.

EPA Region III plans to concur with decision, not the document. DOEE did not know the timeline for its concurrence.

In response to a question from EPA Region III, USACE Baltimore explained that the total cost is \$19,224,200.00. In addition to having the Site-wide DD signed by June 30, USACE plans to award the contract on June 30. The remedies with respect to soil and PSB will be funded this summer and work will begin in those areas first.

In response to a question from EPA Region III, AU explained that the demolition process of the PSB has begun. All personnel and infrastructure have been moved out.

P. Chrostowski, CPF Associates inquired when AU may expect USACE to begin the soil remedy on campus.

USACE Baltimore explained that USACE is sorting through the technical approaches by the contractors bidding on the work. Some of the proposals have suggested starting work at PSB first, and then once the PSB wraps up the crews and assets would move into the soil remediation.

EPA Region III commented that the contractors would need to formulate a design and a Site-Wide RA work plan, which may take up to six months.

USACE Baltimore explained that USACE expects the PSB and the soil remedy to be quicker than six months. The work requires three work plans; PSB, soil removals on campus and the Spaulding/Captain Rankin area, and for any houses. The timeline will depend on the contractor that gets the award and what technical approach the contractor chooses.

In response to a question from EPA Region III, USACE Baltimore confirmed that the contract will be awarded to a single contractor.

In response to a question from EPA Region III, USACE Baltimore explained that the sampling will be divided into the three work plans.

EPA Region III commented that the contractor could put the lab information, methods, and Quality Assurance information into one work plan to prevent the work plans from having to be reviewed three times.

USACE suggested that those sections might be added as appendices and only need to be approved once.

USACE Baltimore explained that the PSB will require the full Spring Valley suite for confirmation and analysis.

EPA Region III commented that the other two work plans will be less than PSB.

USACE Baltimore confirmed this and explained that is because the other two work plans will focus on what the Remedial Action Objective (RAO) will require to be cleaned up. USACE will require analysis for that clean-up and the required confirmation samples will focus on those analytes. The houses may require contingency sampling; if a munition is found and a sample is warranted, a sample will be collected.

In response to a question from EPA Region III, confirmation samples for cobalt will be taken at the houses in the Spaulding/Captain Rankin area. If no munitions are found at a particular house with in the RA area, there will not be any samples collected.

## **1. Expended Livens**

USACE sought the regulators' input concerning the expended Livens found near the AU President's office. USACE inquired if the regulators recommended soil sample collection at the site, and what type of sampling might be appropriate.

In response to a question from DOEE, USACE Baltimore explained that the Livens will undergo headspace testing, but has not been tested yet. It is believed the Livens would headspace negative since the item has been in shallow soil for over 100 years.

USACE had reports from USACE's Site Operations Officer that there were no obvious signs of discoloration or odor, and the soil surrounding the Livens appeared to be fill dirt. This led USACE to believe that the Livens was likely transferred from another area.

EPA Region III inquired about what was found in soil samples near expended Livens in the past, and if the findings were metals.

USACE Baltimore explained that there was a Livens found at Dalecarlia, and those samples all came back negative. Another Livens was found in Dalecarlia woods that had remnants of FS smoke. It is not known whether the remnants were found in the Livens or in the soil.

USACE Huntsville added that a Livens was found in the backyard at 4835 Glenbrook Road that had a pin hole. Livens were found at 4825 Glenbrook Road, but were not individually tested.

In response to a question from EPA Region III, USACE Huntsville explained that the item found on the SCRA property was a Stokes mortar.

EPA Region III and P. Chrostowski, CPF Associates, agreed that if sampling were to be conducted, testing for metals would be sufficient. Arsenic would be detected in tests for metals. FS smoke contaminants would be zinc, arsenic, etc. Anything volatile or organic would be gone in the 100 years that have passed since production.

USACE Huntsville added that if an item contained lewisite the contaminant would be arsenic.

### **C. Pilot Project**

**The goal of this segment of the meeting was to provide an update on the Pilot Project.**

USACE Baltimore provided a brief update on the Pilot Project.

The Pilot Project is complete. USACE inquired if the Partners had any issues with USACE sending final assurance letters to the Pilot Project homeowners when the Site-Wide DD is signed. The assurance letters would say the actions have been carried out at the properties. USACE did not have any concerns.

In response to questions from EPA Region III, USACE Baltimore confirmed that USACE has no issue with accessibility of the properties, and plans to use the same standard for the remaining 92 properties.

The Partners had no objections to USACE sending final assurance letters to the three Pilot Project homeowners.

### **D. Groundwater Feasibility Study**

**The goal of this segment of the meeting was to review the status of the Groundwater Feasibility Study.**

USACE Baltimore provided a brief update on the status of the Groundwater Feasibility Study (FS).

The Spring Valley Groundwater Study is in the FS review process. USACE has received comments from DOEE and AU and still needs comments from EPA Region III and Dr. Peter deFur, Environmental Stewardship Concepts/RAB TAPP Consultant.

USACE will provide full detailed responses to all comments.

**E. Open Issues and New Data**

None

**F. Future Agenda Items**

1. Groundwater FS.
2. 4825 Glenbrook Road.
3. 4835 Glenbrook Road/Fry family.
4. Site-Wide DD.
5. Site wide Remedial Action (RA)

**G. Agenda Building**

The next meeting was scheduled for Tuesday, August 3, 2017.

**H. Adjourn**

The meeting was adjourned at 11:33 a.m.