

**Spring Valley Partnering Meeting  
December 5, 2019  
Spring Valley Project Federal Property Conference Room**

<b>Name</b>	<b>Organization/Address</b>	
Allyn Allison	USACE - Huntsville	
Brenda Barber	USACE – Baltimore	<b>X</b>
Brian Barone	DOEE	<b>X</b>
Matt Beatty	Weston Solutions	
Todd Beckwith	USACE - Baltimore	<b>X</b>
Janelle Boncal	Parsons	
Sean Buckley	Parsons	<b>X</b>
Paul Chrostowski	CPF Associates, American University Consultant	
Ed Fisher	American University	
Chris Gardner	USACE – Corporate Communications Office	
John Gerhard	Weston Solutions	
Ivanna Goldsberry	USACE - Baltimore	<b>X</b>
Whitney Gross	ERT – Community Outreach Team	<b>X</b>
Steven Hirsh	EPA – Region III	<b>X</b>
Bryan Hnetinka	Weston Solutions Project Manager	<b>X</b>
Holly Hostetler	ERT	<b>X</b>
Carrie Johnston	ERT - Community Outreach Team	<b>X</b>
Julie Kaiser	USACE	<b>X</b>
David King	USACE - Baltimore	
Kevin Kingdon	Black Tusk Geophysics	
Carlos Lazo	USACE, Government Affairs Liaison	
Caitlyn Martin	Weston Solutions	<b>X</b>
Chris Moran	Weston Solutions	<b>X</b>

Dan Nichols	American University	
Dan Noble	USACE – Baltimore	X
Steven Norman	ECBC	
Randall Patrick	Parsons	X
Steve Rembish	Parsons Risk Assessor	
Tom Rosso	ECBC	
Todd Steelman	USACE – Site Operations Officer	X
Dave Tomlinson	DOEE	
Joe Vitello	EPA Region III	X
Amy Walker	USACE - Huntsville	
Bruce Whisenant	USACE – Huntsville	X
Rebecca Yahiel	ERT – Community Outreach Team	X

### Summary of 5 December 2019 Spring Valley Partnering Meeting

#### Consensus Decisions

- None

#### 5 December 2019 Action Items

- U.S. Army Corps of Engineers (USACE) Baltimore will review the 4825 Glenbrook Road Post-Removal Risk Reduction Summary document first and expects to send the document to the Partners for review after the winter holidays.
- In response to a suggestion from USACE Baltimore, Weston Solutions confirmed that Weston Solutions will work with the Public Safety Building (PSB) site supervisor and Edgewood Chemical Biological Center (ECBC) to create a plan for chain of custody tracking and to separate items sent to the lab for chemical analysis or head space analysis. The plan will be shared with Kim Ferris, USACE, Brenda Barber, USACE, and Todd Beckwith, USACE.

#### Thursday 5 December 2019

##### A. 4825 Glenbrook Road

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

Parsons provided a brief update on 4825 Glenbrook Road.

##### 1. Recent Activities

- Continued the backfilling of select areas.
- After this week only the soil in roll-offs from Grid -10, -90 and Area 4 remain to be transferred to drums this winter. Barring the generation of any additional waste, all the waste except for some intact items and scrap material has been removed.

- Excavated to the footer of the foundation of 4835 Glenbrook Road. Power-washed the foundation and added waterproofing sealant across the entire exposed foundation of 4835 Glenbrook Road. The crew wore Personal Protective Equipment (PPE) to stay dry while applying the waterproofing sealant.
- Installed a J-Drain system; a channeled plastic barrier intended to sheet water away from the foundation of the house down to the footer. The original J-Drain in place before excavation activities only extended partially along the foundation. The new J-Drain was installed along the entire length of the foundation.
- Still need to restore the water line.

## **2. Near and Mid-Term Schedule**

- Continue to backfill areas to existing grade. Need agreement regarding final grading plan and utility placement.
- Drum soil from Area 4 and Grid -10, -90. Drumming of soil to be performed at Federal Property.
- Determine final disposition for Area 4.
- Begin restoration of utilities at 4835 Glenbrook Road.

## **3. Tentative long term schedule**

- Fall - Continue limited backfill.
- Winter 2019/2020 - Address remaining Area 4 and Grid -10, -90 roll-off soil, begin restoration of utilities, and continue final backfill.
- Spring - Final restoration of 4801 Glenbrook Road and 4825 Glenbrook Road.

## **4. 4825 Removal Methodology - Confirmation Sampling Overview for the Post-Removal Risk Reduction Summary**

- Grids were excavated down to competent saprolite or when a site boundary wall was reached and “original confirmation” samples were collected. The confirmation of competent saprolite was determined by Parsons’ geologist and then confirmed by a U.S. Army Corps of Engineers (USACE) Baltimore District geologist.
- Original confirmation samples were analyzed for chemical agent and agent breakdown products (CA/ABPs) and the comprehensive list of Spring Valley parameters, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, explosives, pesticides and Polychlorinated biphenyls (PCBs), total cyanide, fluoride, iodine, and perchlorate.
- Grab samples are analyzed for all the same parameters as original confirmation samples.
- Results of the original confirmation samples determined whether additional over-excavation in a particular location was necessary.
- Original confirmation samples that contained arsenic (As) in amounts greater than 20mg/kg were first over-excavated an additional 2 feet and then additional confirmation samples were collected, known as hazardous and toxic waste (HTW) confirmation samples.
- HTW confirmation samples were only analyzed for As and any other metals that exceeded the comparison values in the preceding confirmation sample before additional over-excavation in a specific location.
- If As was still greater than 20 mg/kg after the initial 2-foot over-excavation, then the specific location was over-excavated in additional 1-foot increments and HTW confirmation samples were collected until As was less than or equal to 20 mg/kg or bedrock was reached, with the exception of 2 small areas: the north wall of Grid -10, -90 and Area 4 (Grid -10, -30). The As was part of the assessment of risk that determined there was no unacceptable risk associated with As.

In response to questions from Department of Energy and Environment (DOEE), Parsons explained that the competent saprolite is not uniform and level across the site, the level of the competent saprolite undulates. The sample collected to the east in Area 4 was taken at approximately even with the current bottom of Area 4. The current bottom of Area 4 is equal in level to the next adjacent grid. The base of Area 4 was higher

in elevation when the original confirmation samples were collected. Soil sample 14 had As in exceedance of 20mg/kg so the location was excavated as an HTW grid.

In response to questions from DOEE, Parsons and USACE Baltimore explained that the depth of Sample 14 was 10.5 feet from the original elevation. Sample 14 was collected at 320 feet and Sample 31 was collected at 317 feet. Excavation in Area 4 went 4 feet below Sample 14 in some areas.

In response to questions from USACE Baltimore, Parsons confirmed that there are some areas in Area 4 that could be excavated further, but the air monitoring system may continue to have interferent issues. Additionally, some areas of Area 4 have been excavated to bedrock.

All confirmation sample locations cleared for agent and ABPs. Further excavation was only required for HTW (metal) concentrations in exceedance of respective screening criteria.

### **5. 4825 Glenbrook Road - Possible Courses of Action**

- Course of Action 1:
  - No further action.
  - No additional cost.
  - Completion date by mid-summer 2020.
  - Recommended by Parsons and USACE Baltimore; requesting Regulator concurrence.
- Course of Action 2:
  - Area 4: resume an open air, low probability excavation until bedrock or refusal is reached across the entire grid.
  - Need to address how to perform air monitoring relative to the interferent issue (ring-offs for Lewisite (L)).
  - Need to address messaging to the public in regard to the change in air monitoring approach and methodology at this point in the project. The current work plan and standard operating procedures (SOPs) require work to stop when ring-offs occur. The interferent ring-offs in Area 4 led to the review of the possible courses of action in Area 4.
  - Rough Order of Magnitude (ROM) Cost of ~\$5.5M.
  - Extend the project another year, with the completion date of summer 2021.
- Course of Action 3:
  - Area 4: resume low probability excavation under engineering controls until bedrock or refusal is reached across the entire grid.
  - Air monitoring consistent with protocols previously used at the site.
  - ROM Cost of ~\$8M.
  - Extend the project 12-18 months; primarily to reset the site, bring the equipment back, and retrain the crews. Although the project would be low probability excavation, there would be significant challenges to resetting the site.

In response to a question from DOEE, USACE Baltimore confirmed that 4825 Glenbrook Road is intended to be returned to American University (AU) for unlimited use. Since all the sample results are below screening levels, including the samples from Area 4, the property does not necessarily need institutional controls (IC). USACE Baltimore would need to discuss with the USACE Baltimore Office of Counsel about the potential need to prepare an Explanation of Significant Difference (ESD) to document a slight change in the remedy outlined in the 4825 Glenbrook Road Decision Document (DD). The 4825 Glenbrook Road DD was written that no contamination would be left on the property. While in trace amounts below screening levels, there is a small amount of contamination left in Area 4. USACE Baltimore has not considered implementing ICs for the small amount of contamination at 4825 Glenbrook Road, but is open to discussion.

In response to questions from DOEE, USACE Baltimore and Parsons explained that the only constituent found in the sub-slab sampling that does not have a screening level is 1,4-Dichloronaphthalene. All the other constituents have screening levels, and all the samples were well below those levels. Parsons provides detailed discussion in the Post-Removal Risk Reduction Summary document about comparison levels that may be used to assess the 1,4-Dichloronaphthalene. The issue at 4825 Glenbrook Road is Oxathiane and Dithiane. Oxathiane and Dithiane are below the screening criteria based on the residential risk, and the screening criteria takes into account any residual risk associated with vapor contamination hazard. The residential risk level applies for Area 4 and 4825 Glenbrook Road. Parsons could not provide information on the sub-slab sampling project at 4835 Glenbrook Road since Parsons is not part of that project.

DOEE pointed out that ICs may be an option at 4835 Glenbrook Road out of an abundance of caution. A single layer vapor barrier might be placed on the concrete rather than tearing up the concrete and putting in a multi-layer barrier under the building. Since there was uncertainty for the sub-slab samples under the building, ICs may be less expensive and easier to perform than a clean-up effort.

USACE Baltimore explained that USACE Baltimore would need to first discuss ICs internally, then with Parsons, and then discuss ICs and a course of action with AU because ICs were not the original intent for the property. The original intent for the property was unrestricted release for residential re-use. The ICs would likely be minor for the particular areas in order to achieve release for the entire property. If ICs are placed on the property, those ICs may limit AU's ability in the future to make changes to the property, whether AU decides to keep or sell the property. A vapor barrier at depth may not be as difficult for AU to manage from the long-term real estate perspective, but AU and any future owner would have to disclose the ICs during a potential sale of the property.

Environmental Protection Agency (EPA) Region III pointed out that even though 4825 Glenbrook Road and 4835 Glenbrook Road had similar issues and are associated with each other, 4825 Glenbrook Road and 4835 Glenbrook Road each had a separate Record of Decision (ROD).

In response to questions from USACE Baltimore, Parsons confirmed that the Post-Removal Risk Reduction Summary document is expected to be ready for review by USACE Baltimore by the end of next week [Ed. the week of December 9]. The document will include the drawings and presentations from today's Partner meeting and discussion of the possible courses of action. To address comments from EPA Region III and DOEE about taking the backfill into account, a detailed risk assessment will be included as an appendix to the document. The entire backfill is not currently available for a bottom-line risk number.

USACE Baltimore will review the document first and expects to send the document to the Partners for review after the winter holidays.

In response to a question from USACE Baltimore, Parsons confirmed that the As level at the bottom of Area 4 is above the established clean-up level, but Parsons did not know the number. All the As numbers were combined for the property as a whole, including the bottom of Area 4. The area will be backfilled to a similar level, so if the property owner were to install a footer, the new footer would not likely go deeper than the top of the saporlite. The new footers would be at a similar depth based on the top cover placed by Parsons.

## **B. 4835 Glenbrook Road**

**The goal of this segment of the meeting was to review the status of 4835 Glenbrook Road.**

USACE Baltimore provided a brief update on 4835 Glenbrook Road.

All the results for the latest round of sub-slab soil gas sampling came back clear for agent and ABPs. There were detections of VOCs and SVOCs in the samples. David Kline, Edgewood Chemical Biological Center (ECBC), is preparing a table to compare and contrast the first round of sampling to the second round of

sampling. The ABPs seen previously in the first round of sampling have dissipated and there are no detections of ABPs in the current round of sampling.

ECBC completed excavations at Area 2 and found 12 additional small pieces of glassware towards the front porch and front yard. The glassware dissipated completely, and the area has been cleared. The USACE Baltimore team will need to determine if any additional action is warranted at the property. It appears that both the glassware and the soil gas contamination has dissipated, indicating that the source material was the soil along the shared property line.

ECBC is having some trouble with software reporting so the official lab reports are not available yet. Once the official lab reports are delivered, USACE Baltimore will internally discuss possible options and prepare a formal briefing for the Partners and AU to assess next steps and courses of action.

### **C. Site-Wide Remedial Action (RA)**

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

Weston Solutions provided a brief update on the Site-Wide Remedial Action (RA).

#### **1. Public Safety Building (PSB)**

##### **a. Recent Activities**

- Completed soil benches #1, #2 and #3. Working on benches #4 and #5 this week.
- The sanitary sump construction rubble and water was removed using a vacuum truck and transported offsite for disposal.
- Soil removed from the slope will be re-used as restoration backfill if soil samples test clear for VOCs, SVOCs, Metals, Explosives, Cyanide, chemical warfare agent (CWA), and ABPs. No detections in the preliminary soil results for PSB slope soils (first three benches) above the remedial goals, regional screening level (RSL), or background levels. Soils are brought to the Federal property, separated into piles for each bench of the slope, and then consolidated after testing if determined clear.
- The black tar paper pipe (containing asbestos) was uncovered adjacent to the western and northern walls of the former PSB foundation using unexploded ordnance (UXO) screening and hand digging methods. The pipe was covered in plastic, broken into pieces, and placed in drums for disposal.
- AU-recommended contractor, Bradleigh Mechanical, installed a temporary heated water line this week to supply Jack Child Hall during the winter.

In response to a question from DOEE, Weston Solutions explained that the black tar paper pipe was an old drainpipe.

- The team discovered a sanitary sewer line running from the Jack Child Hall on the Bench #3. The team installed supports to protect the sanitary sewer line during excavations.
- A concrete block for flowable fill was uncovered in the northeast corner of the former PSB. The concrete block is in the way of the benching and is being broken up and removed. Soil may need to be replaced to keep the benching intact.

In response to a question from DOEE, Weston Solutions and USACE Baltimore explained that USACE Baltimore and Parsons performed work in that area between 2009 and 2011. PSB excavation was conducted to remove debris from the front corner of the former PSB. When the team went back to fill in the excavation, there was no way to use soil to fill in the excavation due to either weather or water infiltration and the slope present at that time. The team used the flowable fill material to stabilize the area and placed soil on top. The team utilized a 'burrito wrap' stone technique around the back of the building.

- Broken lab glassware: glass tubing and pipettes were excavated at the northwest corner of the former PSB during hand-excavation around the tar paper pipe. Headspace analysis of the glassware and associated stained soil was negative for CWA.
- Lab bottles: two glass lab bottles were encountered against the former PSB cinder block wall on the eastern side. One bottle was intact and stoppered, but no liquids were observed. The bottles were sent to ECBC for analysis.

In response to questions from DOEE, Weston Solutions explained that both bottles were found intact, only one bottle was stoppered. The other bottle was a Squibb cobalt blue bottle. All soils sampled so far have been cleared for restoration backfill. Results for the Bench 5 soil samples are pending.

USACE Baltimore pointed out that the glass bottles were not sent to ECBC with a chain of custody.

In response to a suggestion from USACE Baltimore, Weston Solutions confirmed that Weston Solutions will work with the PSB site supervisor and ECBC to create a plan for chain of custody tracking and to separate items sent to the lab for chemical analysis or head space analysis. The plan will be shared with Kim Ferris, USACE, Brenda Barber, USACE, and Todd Beckwith, USACE.

#### **b. PSB Current Schedule**

- Complete soil benching on the slope above the former PSB this week and pull down the remaining cinder block wall at the former PSB.
- Break up and remove the former PSB foundation slab next week.
- Set up the area for sub-slab soil screening table.
- Install groundwater sump & controls, as required.
- Begin sub-slab soil excavation with UXO Tech support and soil screening in 1-foot lifts.
- Current schedule estimate: PSB demolition and excavation work ~12 weeks in November, December, January and into February, followed by site restoration activities.

#### **c. PSB Planned Tasks**

- Complete the excavation and benching of the soil on slope above the former PSB to allow for safe excavation below the former PSB concrete foundation.
- Pull down the former PSB cinder block walls and evaluate perched water versus groundwater encountered along the 5th soil bench elevation.
- Based on the groundwater evaluation, install groundwater sumps along the north wall and start pumping water to the frac tank, as needed. Collect water samples from the frac tank to characterize the water for disposal.
- Break up and remove the former PSB concrete slab using wet methods to control dust.

In response to a question from DOEE, Weston Solutions and USACE Baltimore explained that if an item or substance is found that violates the low probability determination, then work would stop and the path forward would be discussed with USACE Baltimore. Finding a single instance would not necessarily mean that work would not continue in low probability, but there would be a discussion. If the team determines that the probability must be elevated to high probability, then a new contract would be necessary. Currently, the project is not set up for high probability work, and a new contractor that is prepared to perform a high probability action would need to be found. Many years ago, a small amount of chemical agent was found in Lot 18, but since that time tons of debris and contaminated soil have been removed, and none of the contamination has been agent. A piece of Munitions and Explosives of Concern (MEC) was found at the former PSB in the past, but the project was determined to be low probability going forward. Over 100 pieces of munitions debris (MD) have been found near the former PSB and in Lot 18, but the single item was the only item that qualified as MEC. The MEC item was a burster that was torn open and the high

explosive was visible inside. USACE Baltimore expects to find MD debris and glassware at the former PSB site, but no agent is expected to be found as the items are analyzed and tested.

In response to questions from DOEE and USACE Baltimore, Weston Solutions confirmed that lifts are screened during excavation and soil samples are collected for any stained soil. Weston Solutions works with USACE Baltimore to determine the collection of soil samples based on materials and soils observed. All soil sampling is documented.

## **2. Southern AU Exposure Unit**

### **a. Recent Activities**

- Shallow soil sampling was conducted using a hand auger at RA1, RA2, and RA3 September 5-9, 2019.
- Deeper Geoprobe soil sampling to 10 feet at the center point and 5 feet at the step-out grid points was completed at RA1 on November 6, 2019.
- Results for pre-excavation characterization soil samples:
  - RA1 (AU-03) - Cobalt (Co) was detected above the cleanup goal (46.8 mg/kg) at the center point of the triangular sampling grid (max. of 79 mg/kg). No Vanadium was detected (max. 104 mg/kg) above the cleanup goal of 390 mg/kg. Soil samples collected down to 10 feet
  - RA2 (AU-02) - No Co was detected (max. 8.7 mg/kg) above the cleanup goal (46.8 mg/kg). Location is near large tree within the drip line/root zone.
  - RA3 (AU-05) - no Mercury (Hg) was detected (max. 1.3 mg/kg) above the cleanup goal (11 mg/kg).

In response to a question from DOEE, Weston Solutions confirmed that no water was found at the 10-foot depth in RA1.

### **b. Planned Remediation**

- RA1 (AU-03) - Soil removal is proposed using an excavator at the center point down to 10 feet below ground surface and extending out 2.5 feet (5 ft by 5 ft excavation area) - no Co exceedance was detected at the step-out locations.
- RA2 (AU-02) - Soil removal by hand digging to 1 foot below ground surface is proposed around the center point and extending out 2.5 feet (5 ft by 5 ft excavation area).
- RA3 (AU-05) - No excavation work is proposed.

In response to a question from DOEE, Weston Solutions explained that the purpose of the pre-excavation characterization soil samples was to provide the confirmation samples. The 5-foot depth excavations would serve as the side walls and the 10-foot excavation would eliminate the 0 -10 foot risk.

## **3. Residential Properties Update**

### **a. Recent Activities**

- Completed intrusive investigations at 13 properties in October 2019.
- Completed 34 residential properties and 4 Federal/City lots to date.

### **b. October Intrusive Investigations:**

- Eight new properties intrusively investigated.
- One previously completed property to investigate portion outside of the “area of focus.” No blind seeds were placed on the property and no additional vegetation was removed.
- Four properties were revisited to investigate targets located under hardscape & requiring District Department of Transportation (DDOT) permits.
- Intrusive operations began on October 7, 2019 and were completed on October 21, 2019.

### **c. October 2019 Intrusive Investigations Results**



- No MEC/ Material Potentially Presenting an Explosive Hazard (MPPEH) items recovered.
- Thirteen (13) MD items recovered.
- All MD items were transferred to ECBC for headspace. Sample results were non-detect for Mustard and Lewsite.

#### **d. Progress Since the October Partner Meeting:**

- Received USACE Quality Assurance (QA) approval of excavation results for 13 properties (intrusive complete).
- No Advanced Geophysical Classification (AGC) Surveys performed since last Partner meeting. Began vegetation removal at a property on December 2 and began geophysical surveys on the property today, December 5.
- Began site preparation phase (HD video, planimetric survey, and landscape appraisal) at one new property.
- Work initiated at 81 of 92 properties.

#### **e. Current Status of Properties**

- Property Availability: Twelve (12) properties have approved landscape plans since the October Partnering meeting. Currently have 17 properties with approved landscape plans/available for geophysical surveys.
- Geophysical surveys/Intrusive Investigations: Vegetation removal began on Monday, December 2. Geophysical surveys began on Thursday, December 5. Intrusive investigations scheduled to begin in February 2020.
- RA Property Summary (RAPS) Memos: Four Draft Final RAPS Memos delivered to USACE/EPA/DOEE. Several more in Draft/Draft Final production.
- Root Cause Analyses (RCAs)/Field Variance Forms (FVFs): No new RCAs/FVFs.

USACE Baltimore and Weston Solutions noted that work on one property is pending results of easement investigation by the USACE Baltimore Real Estate Department to determine legal authority for permission to conduct activities on the property.

In response to a question from DOEE, USACE Baltimore explained that the recent pending easement is the first for the Spring Valley Site-Wide RA.

#### **D. Groundwater Feasibility Study (FS)**

**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 Groundwater Feasibility Study.

The current plan is to sample the wells again in the spring. A sampling plan with details of the sampling parameters will be sent to the Partners for review and comment. Some wells have been sampled multiple times with no issues, and therefore do not need to be sampled again. Other wells will be sampled again to confirm that the As concentrations along Glenbrook Road are below the maximum contaminant levels (MCLs).

#### **E. Open Issues and New Data**

1. Restoration Advisory Board (RAB)/Technical Assistance for Public Participation (TAPP) Consultant:

USACE Baltimore is awaiting word from the RAB on the RAB's preference of the two companies and potentially three individuals that have applied for the TAPP position. Once USACE Baltimore receives the RAB's preference, USACE Baltimore can contact the successful candidate company and begin negotiations. The position will be 8a Sole-Sourced, so the process will likely be completed by March 2020.

**F. Future Agenda Items**

1. Groundwater
2. 4825 Glenbrook Road/4835 Glenbrook Road
3. Site-Wide RA
4. TAPP Consultant

**G. Agenda Building**

The next meeting was scheduled for Thursday, February 13, 2019.

**H. Adjourn**

The meeting was adjourned at 11:28.