

**Spring Valley Partnering Meeting
October 18, 2018
Spring Valley Project Federal Property Conference Room**

Name	Organization/Address	
Brenda Barber	USACE – Baltimore	X
Brian Barone	DOEE	X
Todd Beckwith	USACE – Baltimore	X
Bethany Bridgham	American University	X
Sean Buckley	Parsons	X
Paul Chrostowski	CPF Associates, American University Consultant	X
Chris Gardner	USACE – Corporate Communications Office	
Alma Gates	RAB Member – Horace Mann Representative	X
John Gerhard	Weston Solutions	X
Whitney Gross	ERT – Community Outreach Team	
Steven Hirsh	EPA –Region III	X
Bryan Hnetinka	Weston Solutions Project Manager	X
Holly Hostetler	ERT	X
Carrie Johnston	ERT – Community Outreach Team	
Carlos Lazo	USACE, Government Affairs Liaison	X
Chris Moran	Weston Solutions	X
Dan Noble	USACE – Baltimore	X
Steven Norman	ECBC	
Randall Patrick	Parsons	X
Tom Rosso	ECBC	
Dave Tomlinson	DOEE	X
Bruce Whisenant	USACE – Huntsville	X
Rebecca Yahiel	ERT – Community Outreach Team	X
Alex Zahl	USACE – Baltimore	X

Allyn Allison	USACE – Huntsville	
David Kline	ECBC	
Michael Knudsen	ECBC	
William Krebs	RAB Community Member	X
Gabriel Rothman	Army Chemical Materials Activity (CMA)	
Tom Smith	RAB Community Member	X
Todd Steelman	USACE – Site Operations Officer	

Summary of 18 October 2018 Spring Valley Partnering Meeting

Consensus Decisions

- None

18 October 2018 Action Items

- Site-Wide Remedial Action: a hard copy of the Final LUCIP will be sent to EPA Region III, District Department of Energy and Environment (DOEE), and American University (AU). U.S. Army Corps of Engineers (USACE) Baltimore will notify Weston Solutions on how many hard copies of the Final LUCIP will be needed for USACE Baltimore. A hard copy of the Final LUCIP will be placed in the Information Repository (IR) located at the Tenley-Friendship Library.
- USACE Baltimore agreed to send the MPV Target Selection Memo to EPA Region III and DOEE; and coordinate with Weston Solutions to set up the first anomaly review board meeting.
- USACE Baltimore agreed to set up a November call for the regulators to include EPA Region III, DOEE, Cliff Opdyke, USACE Risk Assessor, Dawn Iovan, Toxicologist, EPA Region III, P. Chrostowski, CPF Associates, and U.S. Army Public Health Command (USAPHC) to discuss options and the path forward for 4835 Glenbrook Road.

Thursday 18 October 2018

A. 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. Planning Documents

a. Final Land Use Control Implementation Plan (LUCIP) - the electronic version of the Final LUCIP is available, and Weston Solutions offered hard copies to the Partners.

In response to a suggestion from Environmental Protection Agency (EPA) Region III, Weston Solutions agreed to send the electronic version of the Final LUCIP to the Partners. A hard copy of the Final LUCIP will be sent to EPA Region III, District Department of Energy and Environment (DOEE), and American University (AU). U.S. Army Corps of Engineers (USACE) Baltimore will notify Weston Solutions how many hard copies of the Final LUCIP will be needed for USACE Baltimore. A hard copy of the Final LUCIP will be placed in the Information Repository (IR) located at the Tenley-Friendship Library.

b. Draft Community Outreach Package - USACE Baltimore is conducting a final review of the Draft Final Letters and Brochure.

USACE Baltimore confirmed that final legal comments on the Draft Final Letters and Brochure were received October 17. Those comments will be incorporated into the Draft Final Letters and Brochure, and the documents will be sent to EPA Region III and DOEE the week of October 22. When EPA Region III and DOEE approve, USACE Baltimore will organize the first mailing.

In response to a question from EPA Region III, USACE Baltimore explained that the letters are notices; one notice is for individual residential property owners and one notice is for institutional property owners. The brochure will be the 3 Rs (Recognize, Retreat, and Report) Safety Brochure.

c. Draft Final Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) for soil remediation at the Public Safety Building (PSB) - Finalizing responses to comments from AU, DOEE, and EPA for the Draft Final UFP-QAPP.

2. Residential Properties

a. Recent Activities

The team is performing Advanced Geophysical Classification (AGC) surveys in the Dalecarlia Woods. AGC surveys for the residential properties began on October 17; several properties that have undergone site video, civil survey, landscape appraisals, and property walkthroughs with the homeowners. While other properties have just undergone site video, civil survey, and landscape appraisals.

This is the first large group of properties with Right-of-Entries (ROEs) in place. As more of the AGC surveys are completed, the team will begin seeking ROEs for the next group of properties.

In response to a question from Alma Gates, Restoration Advisory Board (RAB) Member – Horace Mann Representative, Weston Solutions explained that there have been no ROE refusals, only delays with achieving homeowner concurrence for removing vegetation.

In response to a question from USACE Baltimore, ERT Community Outreach Team confirmed there have been no ROE refusals. Some property owners have asked to delay work until later in the year. All 18 initial property owners have been contacted. The team has obtained 26 ROEs and is in the process of obtaining 9 more ROEs.

In response to questions from EPA Region III, Weston Solutions explained that the some properties had previous geophysical surveys conducted during the Site-Wide Remedial Investigation (RI). There is existing data, however the data was collected using older methods. The properties will be re-surveyed. The Performance Work Statement (PWS) is the scope of work for the project.

The team has completed four of the 13 grids in the Dalecarlia Woods. The cued Man-Portable Vector (MPV) surveys have been completed in Grids H4, H5, H6, and H7, but the team will return to re-collect some data. As data is collected, it is reviewed and evaluated by Black Tusk Geophysics (BTG). If the quality of the data is not up to the specified standard, the data is re-collected for quality assurance. When all data is approved, excavation lists will be compiled to be presented to USACE and the Partners for review.

b. Anomaly Review Board Discussion

EPA Region III suggested anomaly review boards with USACE geophysicists, Weston Solutions geophysicists, and the Partners. Initially, at least one physical meeting will be held to determine if anomaly review boards would be beneficial or necessary, given the new technology. The meetings would give the Partners the opportunity to voice concerns, comments, or concurrences.

USACE Baltimore suggested a monthly meeting to accommodate the anomaly review boards if deemed necessary.

USACE Baltimore noted that three USACE-approved documents are available for Partner review:

- Instrument Verification Strip (IVS) Memos for the MPV and G858
- MPV Target Selection Memo.

The USACE geophysicist team includes Amy Walker, USACE Huntsville, Tom Colozza, USACE Baltimore, and David King, USACE Baltimore. A. Walker has been handling most of the final approvals for anomaly selection.

EPA Region III clarified that the anomaly review board should include any unusual anomalies, not the initial dynamic survey of all anomalies.

In response to a question from USACE Baltimore, Weston Solutions confirmed that the Dalecarlia grid excavation list is expected to be available the week of October 22.

EPA Region III suggested an Adobe Connect meeting if a physical meeting is not possible.

USACE Baltimore pointed out that the Dalecarlia grids will not have foundations. He suggested waiting for the first residential excavation list to be ready.

EPA Region III agreed, unless something unusual is found at the Dalecarlia grids.

Per EPA's request, USACE Baltimore agreed to send the MPV Target Selection Memo to EPA Region III and DOEE and will coordinate with Weston Solutions to set up the first anomaly review board meeting.

c. Future Activities

- Three (3) Landscape Removal Plans have been approved by homeowners. The first landscape removal will occur the week of October 22 to prepare for blind seed testing and AGC surveys.
- Weston Solutions and USACE will conduct blind seed testing for quality control (QC) on all the properties. Each property will receive at least two blind seeds from Weston and an unidentified number of blind seeds from USACE, no matter the size of the property. Each property in the entire remediation plan will have 4-5 blind seeds planted by Weston Solutions and USACE Baltimore. A separate Weston Solutions QC team will plant the blind seeds, independent from the regular field team of geophysicists.

In response to a question from DOEE, USACE Baltimore and Weston Solutions explained that the blind seeds are placed at depths between 6 to 30 inches.

3. Public Safety Building (PSB)

- Completed installation of two heat pump units on October 11 at the Jack Child Hall (JCH), the building adjacent to the PSB.
- The new heat pumps will supply heat to JCH to replace the gas-fired heating. This will allow the abandonment of the gas line that crosses within the soil excavation area at the former PSB.
- Working to expedite gas line shut-off, purge, and capping of the gas line with Washington Gas.
- Current estimate to begin PSB mobilization is January 2019, pending funding for Edgewood Chemical Biological Center (ECBC) efforts at the PSB.
- Work at PSB expected take 12 weeks to complete.

In response to a question from USACE Baltimore, Weston Solutions confirmed that Washington Gas is checking on the paperwork for the gas line removal. Once the paperwork is approved, the Washington Gas work crew may visit the site the following week. At that time, Washington Gas will remove the gas meter at the JCH, purge, excavate, cut, and cap the gas line at the AU property. The Washington Gas team will

return later to excavate the street and remove the gas line at the main. Once the gas line is cut and capped at the edge of AU property, the excavation work may continue at the PSB.

The mechanical inspection passed for the new heat pumps, but the electrical inspection did not pass. The work code requires service outlets to be placed near the electrical units for the new heat pumps. The service outlets are expected to be installed today (October 18) and a second electrical inspection is scheduled for Monday, October 22.

USACE Baltimore noted that AU confirmed the new heat pumps are working.

The Initial Utility Mark-out of the site were based on investigation borings. A second Utility Mark-out will be created prior to excavation to verify utilities and identify the 'Unknown' line, which is believed to be a water line. Weston Solutions will confirm the water line by locating the water pipes in the JCH basement.

The final PSB traffic control plan will include three flaggers and signs. Excavated soil will be stored at the Federal Property to await laboratory results and disposal. Backfill soil will be transported from the Federal Property to the PSB.

In response to a question from Tom Smith, RAB Community Member, Weston Solutions is monitoring the water line construction work occurring on Rockwood Parkway. It is unclear if the DC Water work will be completed before work at the PSB begins. The trucks associated with the PSB work will be traveling in the opposite direction of most of the water line work.

USACE Baltimore noted that USACE receives construction schedule updates from DC Water and will verify the water line completion date before excavation work begins at the PSB.

In response to questions from DOEE, Weston Solutions explained that pending ECBC budget agreements, work at the PSB is expected to begin in December or January. Various permits have been obtained for the work, including excavation, public space, access, and landscape permits.

4. Soil Borrow Pile - New Source Sampling

An additional 1,000 cubic yards of soil borrow is required to complete the Site-Wide Remediation tasks. The Partner-approved soil source is Aggtrans in Jessup, MD.

5. Spaulding-Rankin Property/4710 Woodway Lane

- Completed cobalt soil sampling for Pre-excavation Soil Removal Delineation on August 7.
- Evaluated analytical results to plan soil removal at the 6 Identified Locations. The revised Hazard Index (HI) was 2.0 for cobalt for the entire property, 0-10 ft. interval.
- Due to heavy rain and saturated soil, the homeowners were concerned about access to the site. Mobilization was delayed until October 17.
- Work is expected to take 10 days to complete.
- Working closely with the homeowners and arborist to minimize the impact of the excavation operations on the property and vegetation.
- Using soil vacuum, or air spade, to extract soil around tree roots without damaging the tree roots. Sassafras trees in the front yard of the property have interwoven root systems between trees. The soil vacuum extraction method will be used to protect the roots.
- Laying down plywood pathways to protect the property from excavation equipment.

The six planned excavations include: two locations in the front yard, two locations on the lawn and patio in the backyard, and two locations in the woods in the backyard. Approved access routes are planned to minimize impact to the plants and property. Backfill is stored on the property to quickly move the backfill into holes around trees and other plants to minimize shock to the plants.

B. 4835 Glenbrook Road

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

USACE Baltimore will maintain the lease for 4835 Glenbrook Road to implement the work safely at 4825 Glenbrook Road. Soil gas sampling and future work discussions will resume when efforts are completed at 4825 Glenbrook Road.

The sample volume and health standard discussions for the two mustard (HD) breakdown products, 1,4-Dithiane and 1,4-Thioxane, are ongoing after the last Partners meeting.

ECBC and Beacon Environmental provided USACE Baltimore with theoretical uptake rates for some of the soil gas samples, but stated that the Spring Valley team must use the uptake rates and duration of the sampling in the ground to convert the data into an estimated volume. However, there is no existing health standard for the 2 breakdown products to compare with the estimated volume.

Paul Chrostowski, CPF Associates, American University Consultant noted that he believed a health standard could be developed. There are several scientific papers available on structure activity relationship analysis, an active area of research. That data would give information from an authoritative source. AU would be satisfied with an estimated concentration if there is a comparison health standard.

The Partners discussed researching available toxicity data on mustard (HD) breakdown products.

USACE Baltimore agreed to set up a November call for the regulators to include EPA Region III, DOEE, Cliff Opdyke, USACE Risk Assessor, Dawn Iovan, Toxicologist, EPA Region III, P. Chrostowski, CPF Associates, and U.S. Army Public Health Command (USAPHC) to discuss options and the path forward.

In response to a question from DOEE, P. Chrostowski, CPF Associates confirmed that there may be outside personnel who may contribute to the discussion and agreed to research a list of experts and resources.

In response to a question from A. Gates, Restoration Advisory Board (RAB) Member – Horace Mann Representative, P. Chrostowski, CPF Associates explained that rather than conducting a separate study, AU will perform a quality review check of the EPA and USACE findings before giving concurrence.

C. 4825 Glenbrook Road Return-to-Work**The goal of this segment of the meeting was to review the status of the Return-to-Work at 4825 Glenbrook Road.**

Parsons provided a brief update on the Return-to-Work at 4825 Glenbrook Road.

1. Recent Activities

- On September 4 the team began site work preparation for the Personnel Decontamination Station (PDS), dress-out structure, and cascade system. The first structure (the dress-out structure) was received on September 13.
- On September 27 the miniature chemical agent monitoring system (MINICAMS) shed was delivered.
- All equipment was delivered by October 4.
- On October 10 Parsons and Zimmer personnel arrived and began training. Some of the personnel are returning team members and some personnel are new to the project. All personnel have Level B work experience. There are enough returning personnel to ensure that each team has a team member with experience at 4825 Glenbrook Road.

2. Near Term Schedule

- The week of October 15 will be used to train personnel, including working with the concrete chainsaw. Training scenarios for Level B operations will also begin, including a ‘man-down’ drill.

- The week of October 22 will be used to continue training scenarios and possibly begin clean backfill removal. Areas to be excavated are currently covered with gravel, clean backfill, and a plastic barrier that will need to be removed.
- On October 23 and 25 ambulance and hospital staff training will be conducted in Baltimore at the Lifestar facility.
- The week of October 29 may have additional backfill removal.
- The week of November 5 Level B work may start, beginning with removal of the former stockpile area left behind at the time of the exposure incident. Work will be contingent on favorable weather conditions.

In response to questions from USACE Baltimore and EPA Region III, Parsons explained that there will be three site teams with three people to a team. Each team will consist of two unexploded ordnance (UXO) technicians and a heavy equipment operator. Usually one person is kept back to keep one team member fresh. In the past, if site operations included hand-excavation there would be three technicians and the heavy equipment operator. Personnel will be rotated into the teams.

3. Tentative Schedule

- Fall /Winter – Resume the soil removal operation along the 4825/4835 Glenbrook Road property line.
- Spring/Summer – Potential completion of remedial activities at 4825 Glenbrook Road. Start of site restoration for Glenbrook Road sites 4801, 4825, and 4835.

In response to a question from AU and P. Chrostowski, CPF Associates, Parsons and USACE Baltimore explained that the projected date for completion of restoration at 4825 Glenbrook Road is July/August 2020. Activities at 4801 Glenbrook Road and 4835 Glenbrook Road will likely require access through 4825 Glenbrook Road, delaying completion at 4825 Glenbrook Road. Backfilling is expected to occur at 4825 Glenbrook Road in winter 2019 and reseeded of the property in Spring 2020.

In response to a question from P. Chrostowski, CPF Associates, USACE Baltimore explained that the solution to the soil gas question will be determined post-remedial action. Once the soils are removed along the property line, a decision will be made for next steps. The solution may include an additional round or more of sampling, or a different plan, based on the upcoming conference call with the regulators.

In response to a question from USACE Baltimore and Parsons, AU confirmed that she would discuss timing of the seasonal water shut-off with the AU Athletic Director.

D. Groundwater Feasibility Study (FS)

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

Todd Beckwith, USACE Baltimore provided a brief update on the Groundwater Feasibility Study (FS).

After the last Partner meeting, USACE Baltimore submitted the Draft Groundwater Proposed Plan (PP) for a Land Use Control (LUC) and Long-term Monitoring Alternative. A few weeks later USACE Baltimore received a letter from DOEE requesting USACE Baltimore initiate dispute resolution under the Defense and State Memorandum of Agreement (DSMOA) program. A disagreement exists between USACE Baltimore, EPA, and DOEE concerning groundwater cleanup requirements. DOEE believes that the Land-Use Control Alternative is not appropriate because it does not identify an objective of obtaining drinking water standards in the groundwater. The dispute resolution process under DSMOA is a 3-Tier process. The Tier-1 meeting is planned for November 5, and will include USACE Baltimore District Commander Colonel John T. Litz and DOEE Deputy Director Richard Jackson. If the disagreement is not resolved at Tier 1, then the dispute resolution process will advance to Tier-2. The Tier-2 level will involve a member of the USACE Senior Executive Service (SES) or General Officer and the Director of DOEE. USACE Baltimore is waiting to hear from USACE Headquarters (HQ), who will be the designated Tier-2

representative. If the disagreement is not resolved at Tier-2, then the dispute resolution process advances to Tier-3. The Tier-3 level will involve the Deputy Assistant Secretary of the Army for the Environment Safety and Occupational Health (DASA (ESOH)) Eugene Collins and the Washington DC Mayor.

In response to questions from AU and USACE Baltimore, T. Beckwith confirmed that there are formal DSMOA timeline guidelines for setting up meetings for each Tier of the dispute resolution process. Every effort is made to stay within the guidelines, but the DSMOA memorandum allows for scheduling flexibility to accommodate the representatives. Each Tier takes ~1 month to schedule. If the process reaches Tier-3, the meeting will likely be held in the new year.

DOEE noted that he believed there is a sense of urgency on both sides to have the meetings as soon as possible to quickly resolve the issue. DOEE has been satisfied with USACE's response to the dispute resolution request.

The initiation of dispute resolution response letter from USACE Baltimore District Commander Colonel J. T. Litz is expected to be delivered to DOEE early next week.

The November RAB meeting will be shortly after the Tier 1 meeting. T. Beckwith plans to present the Groundwater PP at the RAB and explain that USACE and DOEE are still in the dispute resolution process. T. Beckwith asked how EPA Region III and DOEE would prefer to present EPA's and DOEE's position at the November RAB meeting.

EPA Region III asked the attending RAB members what they would prefer for presentation from the regulators. He noted that he plans to request Kathy Davis, EPA Geologist to attend.

In response to a question from William Krebs, RAB Community Member, T. Beckwith confirmed that he would attend the November RAB meeting to present USACE Baltimore's position.

W. Krebs, RAB Community Member noted that the RAB will want someone to explain the dispute.

In response to a question from A. Gates, RAB Member, T. Beckwith explained that the last groundwater monitoring was conducted three years ago. The monitoring program was discontinued when enough data was obtained to write the Remedial Investigation report (RI) for the Groundwater Decision Document (DD).

A. Gates, RAB Member suggested that the USACE Baltimore presentation to the November RAB begin with the last monitoring results so the community knows where things left off, and then move forward in the presentation to the outcome of the Tier 1 meeting.

W. Krebs, RAB Community Member added that the RAB will want to understand the significance of the difference between USACE's, EPA's, and DOEE's positions.

DOEE confirmed that DOEE will have someone at the November RAB meeting. He noted that the RAB members' requests seem to indicate that the RAB would prefer a broad overview and basics of the dispute rather than the technical details.

T. Smith, RAB Community Member added that it would be helpful to ensure that whoever is selected to represent the regulators can answer questions from the RAB with authority and knowledge.

DOEE confirmed this.

P. Chrostowski, CPF Associates stated that AU is going to wait to hear what the dispute resolution process decides before AU makes a formal comment on the Groundwater PP. AU knows EPA's position, will wait to hear DOEE's final position, will consider other factors and then form AU's comment on the Groundwater PP.

In response to a question from DOEE, T. Beckwith explained that USACE Baltimore has not scheduled any new rounds of groundwater sampling. A monitoring plan will need to be put in place after the Groundwater

DD is signed. He noted that Diane Douglas, DOEE had suggested in the past that one of the more active alternatives for groundwater treatment such as pump and treat or in-situ groundwater treatment would be more appropriate.

P. Chrostowski, CPF Associates stated that AU is not favorably disposed to any alternative that involves the installation of long-term intrusive activity on AU campus.

In response to questions from A. Gates, RAB Member, T. Beckwith explained that there is one location for a high detection for perchlorate located at Kreeger Hall and one location for a high detection for arsenic on Glenbrook Road. The highest detection for perchlorate was 146 parts per billion, found in the shallowest well in front of Kreeger Hall. That shallowest well is now below the drinking water standards. Other wells on Glenbrook Road had perchlorate detections of 60-70 parts per billion and now those wells are below drinking water standards. There was one well at Sibley Memorial Hospital that still had perchlorate above the drinking water standard, but during the risk assessment the perchlorate level was identified as not being an unacceptable risk.

A. Gates, RAB Member commented that it would be useful to reiterate the declining detection levels at the November RAB meeting.

T. Beckwith confirmed this.

P. Chrostowski, CPF Associates agreed and pointed out that the sampling numbers do not necessarily reflect the current numbers, since the sampling data is from 3 years ago.

A. Gates, RAB Member replied that the declining numbers from 3 years ago are encouraging and may have continued to decline since the sampling was conducted.

E. Open Issues and New Data

To follow up on the issue of the homeowner who conducted their own arsenic sampling on their property, C. Opdyke, USACE Risk Assessor talked to the homeowner about risk assessment and instructed the homeowner to contact USACE Baltimore if there was anything further the homeowner wanted to do with his sampling data. USACE Baltimore stands by the USACE sampling protocols and data gathered in 2001-2002. There has been no further contact from the homeowner.

F. Future Agenda Items

1. Groundwater FS
2. 4825 Glenbrook Road/4835 Glenbrook Road
3. Site-Wide PP
4. Site-Wide RA

G. Agenda Building

The next meeting was scheduled for Tuesday, December 4, 2018.

H. Adjourn

The meeting was adjourned at 11:11.