

**Spring Valley Partnering Meeting
July 16, 2020
Spring Valley Project Conference Call**

Name	Organization/Address	
Allyn Allison	USACE - Huntsville	X
Brian Barone	DOEE	X
Matt Beatty	Weston Solutions	
Todd Beckwith	USACE - Baltimore	
Kimberly Berg	USACE - Baltimore	
Janelle Boncal	Parsons	
Sean Buckley	Parsons	
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	
Whitney Gross	ERT – Community Outreach Team	X
Bryan Hnetinka	Weston Solutions Project Manager	
Holly Hostetler	ERT	X
Carrie Johnston	ERT - Community Outreach Team	
Julie Kaiser	USACE	X
David King	USACE - Baltimore	
Kevin Kingdon	Black Tusk Geophysics	
David Kline	CCDC	X
ZaKerra Lance	ERT - Community Outreach Team	
Carlos Lazo	USACE, Government Affairs Liaison	
Caitlyn Martin	Weston Solutions	

Chris Moran	Weston Solutions	
Dan Nichols	American University	X
Dan Noble	USACE – Baltimore	X
Steven Norman	CCDC	
Randall Patrick	Parsons	
Steve Rembish	Parsons Risk Assessor	
Tom Rosso	CCDC	
Todd Steelman	USACE – Site Operations Officer	
Amanda Sticker	USACE - Huntsville	
Joe Vitello	EPA Region III	X
Amy Walker	USACE - Huntsville	

Summary of 16 July 2020 Spring Valley Partnering Conference Call

Consensus Decisions

- The Partners reached a consensus decision to perform a third round of soil gas sampling at 4835 Glenbrook Road.

16 July 2020 Action Items

- Site-Wide Remedial Action (RA): U.S. Army Corps of Engineers (USACE) Baltimore will update the Partners on the status of the remaining properties.
- Public Safety Building (PSB): USACE Baltimore will update the Partners on progress during the upcoming 4 to 6 weeks of intrusive activity to remove the remaining contamination.
- Groundwater Feasibility Study (FS): USACE Baltimore will ask Todd Beckwith, USACE if there are any issues with turbidity or other issues with any of the wells during sampling, and will email the response to the Partners.
- 4835 Glenbrook Road: in response to a question from Environmental Protection Agency (EPA) Region III, USACE Baltimore confirmed that they would check the logs to determine what the conditions were during August 2018 and October 2019.

Thursday 16 July 2020

A. Site Check-Ins

The goal of this segment of the meeting was to review the status of the Site-wide Remedial Action, 4825 Glenbrook Road, the Public Safety Building (PSB), and the Groundwater Investigation.

USACE Baltimore provided a brief update on the Site-wide Remedial Action, 4825 Glenbrook Road, the Public Safety Building (PSB), and the Groundwater Investigation.

The sites have instituted COVID-19 prevention measures and the site teams have been able to maintain progress on all projects.

The response to COVID-19 has been difficult to predict. The site teams operate with the understanding that, at any day, any one of the sites may have to shut down and go into an undetermined period of inactivity.

1. Site-Wide Remedial Action (RA)

The Site-Wide geophysical surveys and intrusive anomaly investigations at the private residences has continued without delays from COVID-19 prevention measures. Any delays to the Site-Wide activities have been due to coordination with the landowners. The Site-Wide team is active in the field today.

To date, 60 out of the 92 total homes have been intrusively investigated. The team is noticing more logistical difficulties with obtaining the approval of landscape plans by the property owners to allow geophysical surveys to begin. There may be a small group of properties at the end of the project that will be very difficult, if at all possible, to obtain approval to complete remedial activity.

USACE Baltimore recently modified the contract with the contractor performing the work to extend the Period of Performance (POP) to allow more time to complete the project. Initially, when the contract was awarded in June 2017, the Site-Wide effort was expected to be completed by June 2020. USACE Baltimore is satisfied with the progress made by the contractor through the pandemic. The contractor has received a 24-month extension with the expectation that an additional 24 months (to June 2022) will be sufficient to complete the Site-Wide Remediation and there would not be a need to extend the contract any further. The contractor has projected completing the RA investigations by fall of 2021 and will not need to extend to summer of 2022.

The field teams will be working on smaller groups of properties. To date, each group of properties included 8 to 10 properties. The recent timeline modification of the contract changed the assumption by USACE and the contractor that work will instead be completed in groups of 3 to 5 properties. This modification affects the schedule and budget, so the contractor received an additional budget to accommodate the less efficient schedule.

In response to a question from USACE Baltimore, ERT confirmed that the team expects to perform intrusive investigation at 5 to 6 properties in August 2020. The team is working with eight property owners now. The remaining groups of properties include more reluctant homeowners that are either selling their homes, are new home owners, or are reluctant to begin the intrusive investigation at this time. USACE Baltimore reiterated that there may be homeowners who will refuse to approve the landscape plans. USACE Baltimore will update the Partners on the status of the remaining properties as the project continues.

In response to a question from EPA Region III, USACE Baltimore explained that the team is meeting resistance because, until now, the teams have been working with the groups of homeowners that were eager to complete the remedial action as soon as possible. Those homeowners were prioritized into the first groups of properties that were intrusively investigated. Now that those groups of properties have been completed, USACE Baltimore is reaching out to the homeowners that did not volunteer. Some homeowners do not become involved until USACE Baltimore actively reaches out to them. Some of the remaining homeowners are not convinced that there is a risk or believe that the intrusive investigation may increase any existing small risk.

In response to a question from USACE Baltimore, ERT confirmed that at the beginning of the COVID-19 pandemic, 5-6 homeowners were willing to allow the work but due to concerns about COVID-19, they do not want extra people on their property. At this time, there are still a few homeowners that are very nervous about COVID-19. The Outreach Team is developing different ways to explain the effort to homeowners

during the pandemic. Several homeowners who we have completed RA work with have volunteered to speak about their experience participating in the project to reluctant homeowners.

USACE Baltimore expects to complete remedial activity at 70 properties with few issues, but the possibility of completing remedial activity at the last 22 is unclear at this time.

2. 4825 Glenbrook Road

Final remedial activities were completed at 4825 Glenbrook Road and the team remains in place to perform restoration of the site.

3. Public Safety Building (PSB)

Due to issues with COVID-19 and travel restrictions, the team from the U.S. Army Combat Capabilities Development Command Chemical Biological Center (CCDC Chemical Biological Center) were unable to support the Workplan-required daily monitoring at the PSB site. As a result, the PSB site was completely shut down for approximately sixty (60) days. Recently, the issues with COVID-19 and travel restrictions were resolved and the team mobilized last week to begin site preparations. Intrusive activities will likely resume today. USACE Baltimore will update the Partners on progress and anticipates 4 to 6 weeks of intrusive activity to remove the remaining contamination.

The current plan is to complete restoration at the PSB and withdraw from American University (AU) campus before the Fall semester begins.

4. Groundwater Feasibility Study (FS)

The Partners reviewed and approved an additional round of groundwater sampling at certain wells for certain analytes. The U.S. Geological Survey (USGS) field team collected and submitted the samples for laboratory analysis. USACE Baltimore will share the results with the Partners.

In response to a question from DOEE, USACE Baltimore explained that the groundwater sampling team were only onsite for a couple days and achieved the sampling. USACE Baltimore will ask Todd Beckwith, USACE if there were any issues with turbidity or other issues with any of the wells during sampling and will email the response to the Partners.

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.

The soil around the foundation of 4835 Glenbrook Road, the south foundation in particular, was known to contain low-level chemical agent breakdown product (ABP) contamination, specifically mustard (HD) ABPs. The south foundation of 4835 Glenbrook Road faces the property line of 4825 Glenbrook Road. The team suspected that the source of the contamination originated from 4825 Glenbrook Road, and perhaps 4801 Glenbrook Road, and extended onto the 4835 Glenbrook Road property.

To determine whether the contamination extended underneath the house, CCDC drilled soil borings into the basement slab inside the house. The team collected a large number of soil samples from approximately thirty bore holes at multiple levels. A set of approximately fifty-five soil samples were analyzed for chemical agent and ABPs, specifically the HD ABPs observed in the soil against the outside foundation of the house.

All the soil samples tested negative for chemical agent and ABPs; there were no detections underneath the house.

After the samples were collected, a group of ten of the bore holes were set up for potential soil gas sampling at a later date. The Partners decided to conduct soil gas sampling in July 2018.

Passive soil gas samplers were installed into the ten bore holes. Some of the bore holes were along the south foundation and other boreholes were scattered over the footprint of the house. The samplers remained in the ground for a period of weeks and then removed.

The analysis of the passive soil gas samplers can only determine if an analyte is present or not. There is no way to determine the concentration of an analyte in the soil vapor or the volume of the soil gas sampled.

In August 2018, results from the soil gas sampling efforts indicated trace amounts of ABPs, specifically HD ABPs were detected in soil gas samples from eight of the ten borehole sites. The boreholes with detections included four boreholes along the foundation wall closest to the property line shared with 4825 Glenbrook Road, where contaminated soil remained to be removed; plus four additional boreholes further toward the center of the house. The team suspected that the positive results could be due to the close proximity of the contaminated soils on 4825 Glenbrook Road to the exterior foundation walls of the house.

In October 2019, CCDC completed another round of soil gas sampling in the same bore holes once the contaminated soil at 4825 was removed. In December 2019, results of the second round of soil gas sampling at 4835 Glenbrook Road showed no detections of ABPs; 0 out of 10 samples showed any traces of ABPs.

On June 15, 2020, all remaining remedial excavation was completed at 4825 Glenbrook Road, including removal of arsenic-contaminated soil that extended into the front yard of 4835 Glenbrook Road.

USACE suggests that the combination of the removal of all known contaminated soil against the foundation of the house and the clear second round of soil vapor samples are sufficient to show that the question of potential contamination under the foundation of 4835 has been adequately addressed.

USACE Baltimore requested input from the Partners on the completion of the soil gas sampling effort at 4835 Glenbrook Road.

In response to a question from Department of Energy and Environment (DOEE), USACE Baltimore confirmed that the most recent round of soil gas sampling was performed in October and the previous round of soil gas sampling was performed in August.

DOEE noted that conditions during different times of the year may produce different results in soil vapor sampling.

In response to a question from DOEE, USACE Baltimore confirmed that USACE has considered conducting a third round of soil gas sampling to confirm the October results and is prepared to conduct the sampling if the Partners determine that course of action. An additional round of soil gas sampling will add two to three months to the completion schedule if the Partners decide to conduct a third round.

DOEE confirmed that since the house is a residential home, an additional line of evidence is recommended from DOEE's perspective.

USACE Baltimore confirmed this.

EPA Region III agreed with DOEE's comment that changes in indoor air concentrations based on the time of year be taken into consideration when testing for volatiles. Multiple lines of evidence could be one more step to prove or show there is not an issue.

In response to questions from EPA Region III, USACE Baltimore explained that it was not known what the soil profile of the foundation was during August 2018; if some of the soil removed from the foundation had been replaced with clean fill or if the conditions of the October 2019 confirmation sampling in the basement were the same or similar to conditions at the time of the original detections. USACE Baltimore did not know if sampling had been conducted with the area exposed without soil, or if there was any potential pathway for contaminants to migrate away from the basement because the whole side of the foundation had been exposed. The soil profile was controlled based on whether an area was active at the time; if work in an area was active, there is a greater chance that the foundation wall would have been exposed. If work in the area was in a period of inactivity, the team would have filled the area back in to prevent issues with ponding or surface water run-off. USACE Baltimore could check the logs to determine whether the area around the foundation was active or not.

In response to a question from EPA Region III, USACE Baltimore confirmed that USACE Baltimore would check the logs to determine what the conditions were during August 2018 and October 2019. If the Partners decide to collect a third round of soil gas samples now or in August 2020, the samples would be collected at the same time of year as when the positive results were collected previously. The sampling effort would not have much control over the soil profile along the south foundation wall because the site team is performing activities to restore the compaction level and backfill of clean fill at the property. The south foundation wall may be exposed or covered up, or a combination of both. The site team is in the process of removing all the temporary clean fill and replacing the clean fill in layers with the appropriate compaction to leave the site in the final condition of restoration. If the soil gas sampling is conducted during the August window, there will be no control over what is going on with the foundation soil. If the soil gas sampling is conducted later in the year, the soil will be replaced but the timeline will be pushed farther in the future.

In response to a question from USACE Baltimore, AU confirmed that a third round of soil gas sampling is acceptable to AU.

In response to a question from USACE Baltimore, DOEE and EPA Region III confirmed that conducting soil gas sampling at 4835 Glenbrook Road during August 2020 is acceptable, with the understanding that the soil profile of the foundation may not be controlled.

In response to a question from EPA Region III, USACE Baltimore explained that the team is actively laying in clean fill and compacting the soil toward the final level now. Low areas of the site are managed to prevent the need to pump out water from heavy summer rains. However, at any time in the next several weeks, the contractor may be opening up a trench that will go along the property line into the house on the south side to re-establish permanent sewer and water utilities.

In response to a question from DOEE, USACE Baltimore confirmed that the HVAC system at 4835 Glenbrook Road was kept operational throughout the remedial action. AU retains control of the thermostat and has been maintaining heating and cooling while the house has been unoccupied.

In response to a question from DOEE and USACE Baltimore, AU confirmed that the cooling and dehumidifying systems have been active during the summer to prevent mold and to replicate someone living in the house.

The soil gas sampling at 4835 Glenbrook Road would be conducted under normal HVAC conditions.

The Partners reached a consensus decision to perform a third round of soil gas sampling at 4835 Glenbrook Road. USACE Baltimore will as CCDC to plan to conduct a third round of soil gas sampling at 4835 Glenbrook Road. USACE Baltimore will alert the Partners if there are any obstacles that arise due to COVID-19.

A great deal of work was performed on the property at 4835 Glenbrook Road in 2007 and 2008. In 2008, a report was created that included data collected over the years at 4835 Glenbrook Road. At that time, a human health risk assessment was performed for the house with the available data. In 2010, all the Partners and AU reviewed the report and the risk assessment. The conclusion of the risk assessment at the time was that the house was suitable for residential use and that there were no known issues to prevent the use of the house as a residence. Based on the available data, the risk assessment was accepted by everyone and was endorsed by the Partners. The AU president and his family moved into the house after the risk assessment was approved and the family lived at 4835 Glenbrook Road for a number of years. However, during remedial efforts conducted since 2012, more surface soil and subsurface soil laboratory analysis of analytes of concern have been collected for 4835 Glenbrook Road. The data has been reviewed as it was collected, but there has never been a formal objective review to determine if any of the new data changes the conclusions that were made in 2010 for the use of the house as a residence. In light of all the new data, AU will likely request that the Partners review the issue and submit some form of formal statement about the acceptability of using of the house at 4835 Glenbrook Road as a residence.

AU agreed to the requested the Partners review and formal statement.

USACE Baltimore requested suggestions from the Partners on how to approach an updated formal statement for 4835 Glenbrook Road. The investigation report for 4835 Glenbrook Road included a risk assessment that stated there were no issues and the house may be used for residential purposes. Now, because of the activities that were conducted next door at 4825 Glenbrook Road (leading to the realization that some of the contamination at 4825 crossed the property line onto 4835) more data about 4835 Glenbrook Road has been obtained that would not have otherwise been obtained after a favorable risk assessment analysis.

DOEE suggested that since the new data should be taken into consideration. Since there were new soil gas detections in 2018, there should be a review of the data.

In response to a question from EPA Region III, USACE Baltimore explained that USACE Baltimore is seeking input from the Partners to determine whether to conduct a new risk assessment or simply ask the risk assessors to review the current risk assessment in light of new data and perhaps write a formal statement as to whether the new data affects the risk assessment conclusions. The goal would be to determine the appropriate use of the house in the future. Since the contamination found at 4825 Glenbrook Road has been removed, the risk assessors would need to determine if the new data changes the conclusions of the risk assessment. The risk assessors' findings may not need to be a new formal risk assessment, but instead a document written by the risk assessors to agree that the conclusions are still valid based on activities over the years may be sufficient.

In response to a question from DOEE, USACE Baltimore confirmed that the old risk assessment was a quantitative risk assessment. The soil gas sampling data was from passive samplers, but the new data also

includes the clean soil sampling data from around and underneath the house. If the clean soil sampling results are added to the existing risk assessment, the new data will likely not change the conclusions.

In response to a question from DOEE, USACE Baltimore confirmed that a decision on a revised risk assessment can be deferred until the results of the third round of soil gas sampling are received.

DOEE explained that its preference is to defer any decision on a revised/updated risk assessment.

USACE Baltimore confirmed it is acceptable to wait.

C. Open Issues and New Data

None

D. Future Agenda Items

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

E. Agenda Building

TBD

F. Adjourn

The meeting was adjourned at 9:56 AM.