Spring Valley Partnering Meeting
June 28, 2018
Spring Valley Project Federal Property Conference Room

Name	**Organization/Address**	
Brenda Barber	USACE – Baltimore	**X**
Brian Barone	DOEE	**X**
Bethany Bridgham	American University	**X**
Sean Buckley	Parsons	**X**
Paul Chrostowski	CPF Associates, American University Consultant	**X**
Dr. Peter deFur	Environmental Stewardship Concepts/RAB TAPP Consultant	**X**
Chris Gardner	USACE – Corporate Communications Office	**X**
John Gerhard	Weston Solutions	**X**
Whitney Gross	ERT – Community Outreach Team	**X**
Steven Hirsh	EPA –Region III	**X**
Holly Hostetler	ERT	**X**
Carrie Johnston	ERT – Community Outreach Team	
Lowell (J.R.) Martin	USACE – Site Operations Officer	
Chris Moran	Weston Solutions	**X**
Dan Noble	USACE – Baltimore	**X**
Randall Patrick	Parsons	**X**
Tom Rosso	ECBC	**X**
Jim Sweeney	DOEE	**X**
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	

Michael Knudsen	ECBC	**X**
Gabriel Rothman	Army Chemical Materials Activity (CMA)	**X**
David Kline	ECBC	**X**

Summary of 28 June 2018 Spring Valley Partnering Meeting

Consensus Decisions

- None

28 June 2018 Action Items

- Parsons will send the PowerPoint version of today's Glenbrook Road presentation to the Partners.
- ECBC will follow up on Paul Chrostowski, CPF Associates' request for backup data for the Tentatively Identified Compound (TICs), specifically total-ion chromatograms, the mass-specs of the unknowns, and the library searches for the unknowns.
- USACE Baltimore will send a revised air monitoring location map to the Partners.
- USACE Baltimore will provide the information on the types of sampling equipment utilized by Beacon Environmental to DOEE
- AU will provide a list of Public Safety Building (PSB)-related access, landscape, and utilities contacts to Weston Solutions.
- AU will provide the official AU Campus Move-in dates to Weston Solutions.

Thursday 28 June 2018

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.

1. Recent Activities

There are several grids that the team plans to excavate to remove hazardous and toxic waste (HTW) contaminated soil and metals-contaminated soil. Excavations were conducted to clear the soil of arsenic. Some exceedances for cobalt (Co), vanadium (V), and aluminum (Al) have been encountered. The team plans to review all the values of Co, V, and Al, create exposure point concentrations, and review the associated risk values. Perhaps similar to the remedial plan for the Spaulding/Rankin and southern American University (AU) areas, the areas of exceedance for Co, V, and Al may have to be removed to achieve acceptable levels.

In response to a comment from EPA Region III, Parsons confirmed that one grid cannot be excavated further because the excavation has reached rock.

In response to a question from Environmental Stewardship Concepts/RAB TAPP Consultant, Parsons explained that confirmation samples were collected from the floor and the walls of the excavation and analyzed only for the metals that exceeded levels previously.

In response to a question from ESC/RAB TAPP Consultant, Parsons explained that the Co, V, and Al were encountered in the sidewall.

Due to undulating topography, excavation in some grids extended down 12 feet to reach rock and in others rock was reached at 2 ft.

Several rain events required water to be pumped from the excavation into tanks stored at the Federal Property. The water will be fully analyzed and treated at a facility, even though the water is likely clear. The treatment method is utilized instead of sanitary sewer discharge, because sanitary sewer discharge would require a difficult-to-obtain permit. The team is temporarily backfilling excavations to provide areas in which to work. Final grading and compaction will have to be conducted for permanent backfill. To prevent confusion, permanent backfill operations will not be conducted until all of the temporarily backfilled areas have been removed.

In response to a question from CPF Associates, Parsons explained that the data sent to the Partners on 6/27/18 involved the samples with agent analysis.

2. Future Activities

- Continue to excavate HTW contaminated soil. The sewer line is too close to one grid for safe excavation, so the team plans to hold off excavation in that grid until the sewer line is re-routed.
- Finish this current phase of work by the end of July.
- Keep a minimal crew onsite to maintain sediment erosion controls and site safety and maintenance.
- Re-mobilize in mid-September, train a full crew.
- Begin low probability operations in October.

B. 4825 Glenbrook Road Proposed Plan for the Completion of Low Probability Work

The goal of this segment of the meeting was to review the status of the return-to-work plan at 4825 Glenbrook Road.

1. Return-to-Work Plan

U.S. Army Corps of Engineers (USACE) sought concurrence from the Partners for the proposed plan for return to work at 4825 Glenbrook Road.

Overview:

- Return to work with workers in Level B respiratory protection.
- No additional engineering controls (open air excavation).
- Intrusive work performed only at temperatures equal to or below 75 degrees F.
- Additional air monitoring locations at the site.
- Implement mechanical excavation for all remaining soils. Soils will be removed directly from the excavation area and loaded into drums to minimize excessive handling at the site.

Parsons noted that the general site layout will essentially remain the same as the site layout for the operation to install Geoprobes, because the work will be conducted in the exact same area. This layout will include the Dress Out Trailer, Personnel Decontamination Station (PDS), miniature chemical agent monitoring system (MINICAMS) shed, compressor, cascade air system (enabling the workers to be on supplied air in Level B), and the ambulance. The site layout has also rendered an exclusion zone.

In response to questions from EPA Region III, Parsons confirmed that the exclusion zone means hot zone. A contamination reduction zone (CRZ) corridor will be indicated on the final plan. The CRZ corridor will not extend to the fence because the area extending to the fence is considered the support zone.

The layout configuration worked well for the soil borings. There would otherwise not be enough room to operate.

In response to a question from CPF Associates, Parsons confirmed that the print-out of the presentation did not look the same as the PowerPoint presentation and that Parsons would email the PowerPoint presentation to the Partners.

2. Excavation Process

As discussed at the May Partners meeting, the excavation plan will be a shift from standard operating procedure (SOP). Even though small amounts of debris have been encountered along the shared property line that would typically require hand excavation, the team proposes to utilize mechanical excavation to remove the soils and immediately load the soils into drums. This plan would minimize stockpiling onsite and make the removal process more efficient. The team believes that the work can be safely implemented. No large or intact items have been found at the site, so there is minimal risk.

- Personnel in Level B personal protective equipment (PPE) will excavate with a small excavator.
- The soil will be scraped in 6-inch lifts with an unexploded ordnance (UXO) technician watching the excavation.
- Collected soil will then be placed directly into drums through a screened funnel.
- Representative soil samples will be collected for disposal characterization.
- Once filled and sealed, the drums will be transported for storage at the federal property.
- Soil will be assumed hazardous until:
    - No chemical agent contaminated media (CACM) is detected.
    - No significant quantity of debris in encountered.
    - Disposal characterization samples are tested clear for agent and agent breakdown products (ABPs).

In response to a question from ESC/RAB TAPP Consultant, Parsons confirmed that all workers on the site will be trained and experienced in recognizing CACM and munitions debris.

The drum funnel that was used for previous operations will be paired with a screen; the team will test that process with HTW soil to work out any technical difficulties.

EPA Region III approved of the plan to load contaminated soil directly into drums. He believed that all of the additional handling was a big part of the exposure problem encountered on August 9.

In response to a suggestion by EPA Region III, Parsons confirmed the SOP directs the UXO technicians to wand the area with a metal detector after each lift.

In response to a question from EPA Region III, Parsons confirmed that there is procedure for determining when to discontinue the drumming process once the soil is no longer assumed hazardous.

The only area where the team expects to stop encountering CACM and debris is behind the curved section of the retaining wall. CACM and small amounts of debris have been consistently encountered in reducing amounts in all of the other areas along the shared property line.

CPF Associates commented that from AU's standpoint the plan appears fine and will expedite the process.

The benefit of this change in processing the soil is that mechanical excavation could reduce the excavation time from a 6-month effort to a 2 to 3-month effort, and the risk is very low.

EPA Region III and USACE Huntsville agreed that in addition to the time savings, the risk of exposure goes way down.

In response to a question from ESC/RAB TAPP Consultant and District Department of Energy and Environment (DOEE), USACE Huntsville confirmed that when the time comes there will be a written plan for discontinuing drumming for the Partners to review.

Because there are so many workplans and documents, the team plans to combine all of the SOPs into a single return-to-work document, similar to the document the Partners reviewed for soil sampling. This single document will enable quick reference for the Partners and the site team.

CPF Associates noted that any slides presented to the public showing site workers in the excavation zone should depict the workers dressed out in Level B PPE to avoid confusion.

In response to a question from EPA Region III, USACE Baltimore confirmed that the excavator operator will be in Level B PPE.

3. Soil sampling

The team will continue to collect disposal and characterization samples and monitor for chemical agent and ABPs. Samples clear of agent and ABPs will continue to be sent to external laboratories for Toxicity Characteristic Leaching Procedure (TCLP) and metals analysis. The team is not recommending any significant changes to the confirmation sampling plan. In consultation with Edgewood Chemical Biological Center (ECBC), the team recommends that in the event of a MINICAMS alarm, grab samples be taken for indication of what is in the soil that may have triggered the MINICAMS alarm.

In response to a question from EPA Region III, USACE Baltimore confirmed that samples will be taken at the first MINICAMS alarm at any of the locations.

In response to a question from EPA Region III and CPF Associates, ECBC explained that thiodiglycol is not typically found in soils by itself; dithiane, thioxane, and thiodiglycol are typically found together. Testing for thiodiglycol can be done and ECBC will do it, but ECBC would immediately question where the dithiane is, if thiodiglycol is found. For example, methylphosphonic acid is also a breakdown product of nerve agents, but by itself is not necessarily an indicator. Similarly, for mustard (HD), thiodiglycol by itself is just one of the indicators. ECBC would like to stick with the current plan. If the samples are analyzed further for dithiane or thioxane as breakdown products, then the standard process would be to test for thiodiglycol as well. Thiodiglycol is not an agent breakdown product ECBC would look for if the soil was clear.

CPF Associates requested that ECBC provide more backup data for the Tentatively Identified Compound (TICs), specifically total-ion chromatograms, the mass-specs of the unknowns, and the library searches for the unknowns.

ECBC noted that this analysis is not TICs but a mass spectral assessment of a sample. ECBC cannot verify that the assessment has any capability to detect or not detect certain things. The analysis is a snapshot in time of what is in an extraction.

CPF Associates explained that because there were many unknowns listed in the analyses, stakeholders raise questions about the meaning of those unknowns. If CPF Associates could review a spectrum, he could reassure the stakeholders concerning the unknowns.

In response to a question from Parsons, CPF Associates confirmed that the TIC data received from the commercial lab is fine.

ECBC confirmed he would follow up on CPF Associates' request.

4. Industrial Air Monitoring

The team is not proposing any changes to the industrial air monitoring conducted with the hand-held equipment on site. Parsons will monitor the air downwind and close to the excavation for the following compounds for public protection:

- Arsine (As)
- Hydrogen chloride (HCl)
- Hydrogen cyanide (HCN)
- Volatile Organic Compounds (VOCs)

In response to questions from DOEE, Parsons explained that down-wind is determined by a weather station on site. The team will place the monitors based on the Weather Pack information and the Site Health and Safety Officer oversees the operation.

5. Current Approach to ECBC Air Monitoring Program

The site team will continue to monitor for HD and Lewisite (L) and ECBC will continue to monitor for phosgene (CG), cyanogen chloride (CK), and chloropicrin (PS). The near-real-time air monitoring by the MINICAMS will continue in full 10-minute cycles and the depot area air monitoring system (DAAMS) will continue monitoring as well. Currently the DAAMS monitors for HD and L and industrial compounds at the excavation location and at 4 perimeter locations.

In response to questions from EPA Region III, USACE Baltimore, and USACE Huntsville confirmed that the perimeter monitors are DAAMS tubes that do not provide near-real-time data.

ECBC explained that the perimeter DAAMS monitors provide historical evidence that agent was not detected leaving the site data during the entire period.

USACE Baltimore and USACE Huntsville pointed out that if there is a MINICAMS ring-off, the DAAMS tubes are pulled for analysis.

In response to a question from EPA Region III, ECBC and Parsons explained that general population limit (GPL) is typically used for headspace, such as when an excavator is cleaned and tested before return to the general public. The excavator would be encapsulated, a volume of air collected and tested, and then the excavator would be cleaned down to the GPL before return to the public.

6. Communication Discussion

The Partners discussed important communications points to share with the public. EPA Region III suggested reiterating safety procedures and protocols to the public including:

- If there is a single MINICAMS ring-off, the site is shut-down immediately.
- Since the workers are excavating in Level B PPE, if a shut-down occurs the area can be mitigated immediately without having to wait for a team to dress-out in Level B PPE.
- Analysis is performed on the MINICAMS and DAAMS after a ring-off.
- Procedures and protocols are in place to protect public safety.

7. Proposed Changes to Air Monitoring

Based on the BOI report and partner concerns, ECBC and USACE evaluated two options when assessing potential changes to the air monitoring approach:

- Option A – increase monitoring by expanding the use of existing methods in additional locations.
- Option B - investigate the expansion of the number of chemicals of concern monitored by MINICAMS.

a. Option A

- Advantages of Option A:
  - No technical risk – methods are proven and robust.
  - No impact to project schedule.
  - Contingencies and responses to agent detections are established and approved.
  - Additional monitoring may increase stakeholder confidence.
- Disadvantage of Option A:
  - Does not directly address concerns regarding ABPs with near-real-time air monitoring.

b. Option B

- Advantage of Option B:
  - May address Partner concerns regarding ABPs.
- Disadvantages of Option B:
  - Technical risk - the team would need to develop new processes and procedures.
  - If the methods are developed, the detection limits must be low enough to provide useful data.
  - Will impact the project schedule - ECBC must conduct research and development for this option.
  - Contingencies and responses to ABP detections are not established or approved.
  - There may be industrial hygiene issues introduced by this option.

In response to questions from EPA Region III, Parsons explained that possible industrial hygiene issues mean health and safety issues for any newly monitored compounds. This would impact the existing health and safety plan. Values and limits for specific chemicals must be determined, which may affect protocols such as level of PPE.

8. Steps in Developing New Air Monitoring Methods

- Get concurrence on exact list of ABPs to be investigated.
- ECBC would need to verify that the ABPs are detectable by MINICAMS.
- Verify that ABPs are detectable by solid sorbent tube collection (DAAMS sampling) and analysis via gas chromatography/mass spectrometry (GC/MS).
- Establish appropriate monitoring concentrations.
- Verify ABPs can be transmitted through heated sample lines.
- Verify ABPs do not interfere with detection of HD or L.

CPF Associates commented that he believed there is a mis-communication about air monitoring. He was asking for analytical standards, so that on the mass-spec (MT-80) that ECBC performs, the chemicals could be transitioned from TICs to target compounds. Those compounds could then be quantitated in the soil rather than in the air. He was looking for the air monitoring to expand, if possible, the MINICAMS monitoring to other surrogates, including HCl and As, which will be monitored by the hand-held monitors anyway. That way the compounds could be monitored at the perimeter with the MINICAMS.

USACE Baltimore pointed out that the hand-held monitors were utilized because Arsine cannot be detected with the MINICAMS.

CPF Associates suggested hand-held monitoring stations at the perimeter.

USACE Baltimore and ECBC agreed that if VOCs and other chemicals are not detected at the excavation then those compounds will not be detected at the perimeter.

The Partners discussed the use of hand-held HCl monitors at the perimeter.

USACE Baltimore proposed to add hand-held HCl monitors at points between the AU campus and the excavation, and Glenbrook Road and the excavation.

CPF Associates agreed to this proposal and therefore no new analytical methods were necessary.

Parsons suggested using HCl monitors that data-log.

EPA Region III suggested using separate action response sheets for the MINICAMS and for the hand-held monitors.

9. Team Recommendation for ECBC Air Monitoring

The team recommends additional air monitoring locations using the existing air monitoring program that ECBC has implemented at the site.

Additional air monitoring locations recommended by the team:

- MINICAMS/DAAMS at the drum filling location.
- DAAMS at the mid-point between the excavation area and the current perimeter DAAMS.

In response to a question from EPA Region III, USACE Baltimore, and ECBC confirmed that more MINICAMS will be added instead of a split-line. Two additional MINICAMS will be added to the drum-filling location with similar cycles. Results will be generated every 10 minutes from each of the two proposed locations.

MINICAMS and DAAMS monitors are proposed to be located at the excavation area and the drum-filling location. A DAAMS monitor is proposed to be located at the mid-point between the drum-filling location and the perimeter DAAMS.

In response to a question from EPA Region III, Parsons confirmed that site workplans direct the team to pay close attention to odors onsite. Any unusual odors must be reported to the Site Safety Officer immediately.

USACE Baltimore agreed to send a revised air monitoring location map to the Partners.

10. Air Modeling

There is a 43 ft. distance to the front fence at Glenbrook Road and the 59 ft. distance to the back fence along the AU campus.

Since the last Partners meeting, the Army Chemical Materials Activity (CMA) re-calculated all of the air modeling to include various concentrations associated with differing temperatures. Additionally, CMA calculated the maximum concentrations of HD and L encountered to date and the resultant hazard arc distance for the excavation site. The highest concentration of HD encountered at 360 micrograms/kg results in an acute exposure guideline level for airborne chemicals (AEGL)-1 hazard arc zone of 9 ft.

In response to a question from EPA Region III, USACE Baltimore, and CMA explained that AEGL-1 is the no-effect level, requested by the Partners and the Restoration Advisory Board (RAB).

The highest concentration of L encountered at 72 micrograms/kg results in a protective action criteria (PAC, formerly temporary emergency exposure limit TEEL)-1 distance of 22 ft. PAC-1 is the most conservative of all the limit guidelines.

The HD and L hazard arc distances are well within the proposed zones and distances to the front of the Glenbrook Road area and AU Campus.

In response to questions from DOEE; CMA, USACE Baltimore, USACE Huntsville, and Parsons explained that the hazard arc distances are calculated for volatilization of chemicals off of the soil. Dust monitoring is conducted for any chemicals suspended in soil dust. Dust has not been an issue at this site, but action level protocols may be created for the dust monitoring. Water can be sprayed at the excavation to keep dust levels down, but misters could cause the soil to clump and become difficult to screen. Misters may also cause slip hazards at the excavation site.

USACE Baltimore and Parsons proposed setting up additional dust monitors at the excavation as well as at the drum station.

USACE Baltimore sought concurrence from the Partners for the proposed plan for Return-to-Work at 4825 Glenbrook Road. USACE Baltimore sought general agreement from the Partners before drafting the official plan document, which will be prepared and submitted for a comment period.

In response to a question from EPA Region III, USACE Baltimore confirmed that no excavation would occur in temperatures over 75 degrees.

AU, ESC/RAB TAPP Consultant, DOEE, and EPA Region III each gave verbal concurrence for the plan for Return-to-Work at 4825 Glenbrook Road.

C. 4835 Glenbrook Road Sampling Effort, Execution by ECBC

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

1. Recent Activities

ECBC has partnered with Beacon Environmental to conduct the soil gas sampling.

ECBC has submitted a draft summary report of sampling efforts to USACE Baltimore for review. USACE Baltimore expects to share the summary report at the next partners meeting to facilitate discussion of the final draft summary report for 4835 Glenbrook Road.

At the May Partnering meeting, the Partners agreed that USACE and ECBC would perform soil gas sampling at the 10 soil gas sampling locations installed during the soil sampling effort. The soil gas sampling equipment will be installed in one day, will stay in place for 14 days, and then ECBC will come back to remove the equipment for analysis. The soil gas locations will remain in place. USACE expects the first round of sampling to be completed in July. If there are any detections in the first round of sampling, a second round of sampling will be conducted after the remedial action at 4825 Glenbrook Road is complete.

In response to a question from DOEE, USACE Baltimore explained that information on the types of sampling equipment utilized by Beacon Environmental will be provided to DOEE.

At this time the team does not recommend any further actions at 4835 Glenbrook Road other than the soil gas sampling. Restoration of the sampling locations will be resolved after all soil gas sampling is complete.

In response to a question from ESC/RAB TAPP Consultant, USACE Baltimore explained that the results of the first round of soil gas sampling are expected to be available in early September.

In response to questions from DOEE, USACE Baltimore and ECBC explained that the soil gas sampling is performed indoors in the basement of the house. Sampling locations were drilled during the soil sampling effort and were capped for later soil gas sampling. At this time no rounds of soil gas sampling have been performed, the first round is to occur in July. The locations will remain available in the event a second round of soil gas sampling is necessary.

Schedule

- Summer/Fall
  - Collect soil gas samples at 10 locations, distributed throughout the basement area of 4835 Glenbrook Road.
  - Reach consensus on the path forward for removing the remaining contaminated soil along the 4825 Glenbrook Road/4835 Glenbrook Road property line.
- July
  - Continue to update the RAB on progress of the path forward. Work towards concurrence from the RAB at the July or September meeting.
- September
  - Present final update of workplans to the RAB and announce actual start date for returning to work.
- Fall/Winter
  - Resume the soil removal operation along the 4825 Glenbrook Road/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 Glenbrook Road, 4825 Glenbrook Road, and 4835 Glenbrook Road.

In response to a question from DOEE, USACE Baltimore explained that if ECBC reports any detections in the first round of soil gas sampling, those findings will be presented to the Partners for decision to conduct a second round of sampling.

The Partners discussed the potential for soil gas detections in locations closest to the shared property line as a result of contaminated soil outside of the house yet to be removed along the shared property line. Once that contaminated source soil is removed, the second round of soil gas sampling may prove clear.

D. 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. Remediation components of the planning document phase

- Prepare and Implement Land Use Control Implementation Plan (LUCIP) – responding to Partner comments on the Draft Final LUCIP.
- Draft Community Outreach Package – letters and brochure in review by USACE.
- Achieve Munitions and Explosives of Concern (MEC) Remediation at 91 Residential Properties and 13 Federal/City Lots – Final Advanced Geophysical Classification for Munitions Response Quality Assurance Project Plan (AGC-QAPP) approved and in production.
- Achieve Soil Remediation at Spaulding-Rankin and Southern AU Exposure Units Plus Public Safety Building (PSB) – responding to Partner comments on the Draft Final Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP).

2. Residential Properties and Federal/City Lots

Each step of the Remedial Action process for each property and federal/city lot is logged in Weston's Status Tracker:

- Right of Entry (ROE) sent and received
- Property owner questionnaire
- Date of Civil Survey
- Date of Site Walk
- Date of HD video of existing conditions

A map provided by the civil surveyor is used to work with the arborist to create a landscape inventory of each property to document the plants and the cost to replace those plants. A geophysicist site-walk is then conducted to develop a plan describing what plants will need to be removed for maximum coverage of the geophysical surveys. The removal plan is created in agreement with the property owner.

In response to a question from EPA Region III, the ERT Community Outreach Team explained that some properties we've communicated with are on hold. The property owners had a schedule conflict and asked that action not be taken on the property this summer.

All of the 91 properties were at the same risk level for remediation, therefore the order of priority was given to those residents that expressed interest in being in the first group. A total of 18 property owners were selected to be in the first round of properties addressed. Since that time one property owner changed their mind to have their property on hold.

In response to a question from DOEE, Weston Solutions explained that the "NA" designation in the Site-Walk column on the Status Tracker indicates that the site walk has not been conducted yet. The list of the

first group of properties is divided into groups. Each group receives and ROE letter and start of work together, which is why the second set of properties have the NA designation. This keeps the length of the operation on each property to a minimum.

In response to a question from EPA Region III, Weston Solutions confirmed that the second set of properties will not have to wait until the first set of properties is complete.

In response to questions from EPA Region III, USACE Baltimore explained that after the geophysicist survey is completed, a vegetation removal plan is created. This plan indicates what plants will need to be removed. The homeowner then has the choice of having the plants replaced or reimbursement for those plants.

In response to a question from EPA Region III, Weston Solutions explained that plant cost values will be marked out on a survey map by the arborist, which will be shared with the property owners. At the same time, CP Johnson, the survey company, will send all of the geographic information system (GIS) coverages to Weston for evaluation compared to the vegetation survey map. A map of potential coverages will then be created to share and discuss among the Partners.

USACE Baltimore added that the team may bring a Schonstedt Magnetic Locator to scan areas for steel paved under driveways that other equipment may detect. This will provide more data indicating allowable access for each property.

Two percentage numbers will be used for each property; one percentage value for how much of the property can be remediated, and one percentage value for how much the homeowner allows. Both values may be presented on the same map. If a property is only remediated to 50 percent (as an example), that property will not be considered remediated. We have to acknowledge that in the end, we can only remediate what the property owner will allow us to remediate.

A contractor cleared the site at Dalecarlia Woods for maximum coverage with the G-858 Magnetometer and the Man-Portable Vector (MPV) unit. Work conducted with the MPV is tracked with robotic total station (RTS) laser sighting. The dynamic survey is performed in straight line runs with the MPV laid out in grids to keep the runs straight. The RTS survey unit tracks the MPV and gives the exact location that matches up with the geophysics data as reflected in the dynamic mode of the MPV.

Black Tusk Geophysics (BTG) will perform the dynamic data processing. USACE Baltimore will review the results of the dynamic survey and evaluate the cued target list. At this time only the dynamic survey has been completed in Dalecarlia Woods. Then the team will perform the cued survey in which the MPV is parked over targets for 30-60 seconds. USACE requires an approved probability assessment be in place before any kind of intrusive operations related to UXO begin. Probability Assessments must be approved for all 91 Properties and the Federal/City Lots, as well as the other soil remediation projects as required by USACE.

EPA Region III, USACE Baltimore, and Weston Solutions discussed the process for evaluation of the geophysical data coverage. When the data is collected, the data is sent to BTG for evaluation. BTG is located on the west coast so data is reviewed and very quickly, typically the same day or the next morning. If there is a gap in geophysical coverage and a data point needs to be re-collected, BTG can communicate that to the team. Once there is a cued list, a usability assessment is performed to verify the data.

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. USACE Baltimore geophysicists will know the locations of the Weston Solutions' blind seeds.

3. 3 Rs Safety Brochure

The 3Rs (Recognize, Retreat, and Report) Safety Brochure to be sent out to the public within the Spring Valley Formerly Used Defense Site (FUDS) is under review.

A cover letter and map will accompany the brochure when sent out to the public, approximately 1,600 recipients. An institutional letter and a private citizen letter are both under review.

The Partners agreed that the RAB will be briefed on the mailing before it is sent out to the public.

USACE Baltimore noted that the first mailing is expected to go out at the end of winter 2018/2019 before the residents begin spring planting projects.

ESC/RAB TAPP Consultant suggested sending the mailing this fall to amplify the message before the regular mailing begins.

4. Spaulding-Rankin Exposure Unit

- Completed survey of soil removal locations and proposed soil borings.
- Completed HD video of remediation and access areas.
- Completed Arborist Landscape Evaluation.
- Escorted driller to determine best access routes to drill at the six remediation locations on June 26 and identified good access routes to limit impacts to the landscape.
- Geoprobe soil pre-characterization sampling to determine the extent of required excavation is scheduled for the week of July 9.

5. Public Safety Building (PSB)

- Mobilized ECBC MINICAMS shed to PSB on June 20.
- Mobilized Weston Solutions and Geoprobe crew to PSB June 26 and conducted training scenarios.
- Began coring and sub-slab Geoprobe soil sampling at 13 locations on June 27, with MINICAMS and DAAMS perimeter air monitoring and soil analysis for chemical warfare agent (CWA) and ABPs by ECBC.
- Collecting sub-slab soil samples every 2 ft. for CWA/ABP analysis.
- Planning to drill one geotechnical boring upslope from PSB to verify soil properties for excavation sloping/benching requirements.

Soil boring grids PSB-GR41 and PSB-GR42 have been completed. PSB-GR41 cored down to ~15 ft to saprolite and PSB-GR42 cored down to ~14 ft to saprolite.

In response to a question from CPF Associates, Weston Solutions confirmed that no munitions debris or glassware were found in the soil samples.

6. PSB Issues

- Prepare communications plan for coordinating work with AU.
- Negotiate use of Rockwood Building lower floor for office and restroom use during concrete slab demolition and soil remediation/removal.
- Ensure that sidewalks and street are kept clean at Fletcher Gate and Rockwood Parkway.
    - Current sampling effort: team cleaned and swept dirt off the sidewalk and street. Vehicle tires are now cleaned off prior to exiting onto sidewalk and street. Vehicle access to grass areas will be reduced and strictly controlled. Weston Solutions put down mats and brought in a pressure washer, so no dirt or mud is tracked on the sidewalk or in the street.
    - Excavation effort: Weston Solutions will rebuild the construction entrance and gravel access road. Vehicles will be checked and cleaned prior to exiting onto the sidewalk and street.

In response to a question from Weston Solutions, AU confirmed she (Bethany Bridgham), is the point of contact for this project. AU will provide a list of access, landscape, and utilities contacts to Weston Solutions.

In response to a question from EPA Region III, Weston Solutions confirmed that a decontamination station will be built to spray down vehicles and catch the water run-off.

7. PSB Schedule

- Begin work in August.
- Sub-slab demolition to be conducted in September - October.

AU pointed out that official AU Campus Move-in begins in late August and will prevent any remediation activities during that time.

AU will provide the official AU Campus Move-in dates to Weston Solutions.

E. 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 FS.

The Partners have received the revised Groundwater FS.

The Draft Groundwater Proposed Plan (PP) will be sent to the Partners very soon. Todd Beckwith, USACE Baltimore will set up a meeting with the Partners in late summer/early fall to review the documents and discuss comments.

F. Open Issues and New Data

No new data presented.

G. Future Agenda Items

1. Site Visit for new Partner members
2. Groundwater Feasibility Study/Proposed Plan
3. 4825 Glenbrook Road/4835 Glenbrook Road
4. Site-Wide RA

H. Agenda Building

The next meeting was scheduled for Thursday, August 30, 2018.

I. Adjourn

The meeting was adjourned at 12:41.