U.S. Army Corps of Engineers
Spring Valley Restoration Advisory Board Meeting
St. David's Episcopal Church
Minutes of the June 10, 2008 RAB Meeting

RESTORATION ADVISORY BOARD MEMBERS PRESENT AT THIS MEETING	
Mario Aguilar	Community Member
Greg Beumel	Community Co-Chair
Mary Bresnahan	Community Member
Dr. Peter deFur	Environmental Stewardship Concepts/RAB TAPP Consultant
Steven Hirsh	US EPA Region 3
William Krebs	Community Member
Lawrence Miller	Community Member
Lee Monsein	Community Member
Dan Noble	Military Co-Chair/USACE, Spring Valley MMRP Manager
Malcolm Pritzker	Community Member
Ambassador Howard B. Schaffer	Community Member
Bernard Schulz	American University
James Sweeney	District of Columbia, Department of the Environment
George Vassiliou	Community Member
John Wheeler	Community Member
RESTORATION ADVISORY BOARD MEMBERS NOT PRESENT	
David Feary	Community Member
Bert Weintraub	Community Member
ATTENDING PROJECT PERSONNEL	
Mark Baker	USACE Baltimore
Joyce Conant	USACE Baltimore
Emily Devillier	USACE Baltimore
Lan Reeser	USACE Baltimore
Carrie Johnston	RCAI, Spring Valley Community Outreach Program Manager
Maya Courtney	ERT, Spring Valley Community Outreach Program
Jessica Bruland	Earth Resources Technology

HANDOUTS FROM THE MEETING
I. Final Agenda for the June 2008 RAB Meeting. II. Handout of Corps of Engineers Presentation III. Spring Valley Partners: Area of Investigation Task Force (A sample AOI finalized report) IV. Fort Reno Status Updates (EPA and DDOE) V. Sample Real Estate Disclosures

I. Administrative Issues

A. Co-Chair Updates

Dan Noble, Military Co-Chair, welcomed the group and reviewed the agenda for the meeting.

B. Introduce Guests

Officer Anthony McElwee of the Second District of Columbia Metropolitan Police Department (MPDC) briefly introduced himself and offered to answer any questions about the 2nd Districts role in the event of a chemical emergency at Pit 3. He informed the RAB that two project personnel, Jeff Brewer (Site Operations Officer) and Maya Courtney (USACE Spring Valley Community Outreach Program) attended all the 2nd District MPDC roll calls to brief the officers about the Spring Valley project. He also introduced Sgt. Miles of the 2nd District MPDC.

Question from Ambassador Howard B. Schaffer, Community Member – On selected mornings, a police car is stationed at the entrance to the property where the Pit 3 Area Project is located. What determines whether or not a police officer is stationed there on any particular morning?

Officer McElwee replied that the MPDC Special Operations Division is required to be present on site when excavation is in progress. An officer will not be present if the workers are not currently digging.

D. Noble added that when an officer is on site, they may be posted in areas other than the entrance to the project site, such as the American University (AU) campus or along Glenbrook Road. He thanked Officer McElwee and Sgt. Miles for attending the RAB meeting.

C. Announcements

The meeting minutes for the February, March, and April 2008 RAB meetings are posted on the website.

As a direct result of the siren malfunction that occurred on May 8, 2008, an after-hours hotline is available for responding to potential emergency situations in the Spring Valley neighborhood. If an event occurs after hours or on a weekend, residents can call the hotline. A live operator, available 24/7, will take the caller's information and the nature of the concern, and will contact project personnel. The resident will then receive a call from a project person in a timely fashion. The hotline number is **1-888-393-0059**.

The current issue of the Corps'pondent, the Spring Valley quarterly newsletter, will be sent to residents soon. The hotline number will also be included in the newsletter.

D. RAB Task Group Updates

No task group updates were presented.

II. Agenda – USACE Topics

A. Area of Interest Task Force

Mark Baker, Project Historian, presented a brief introduction to the Area of Interest Task Force (AOITF).

The AOITF was formed as a subcommittee of the Spring Valley Project Partners in 2002, for the purpose of investigating potential areas of interest (AOIs) within the Spring Valley FUDS boundary. The AOITF was comprised of members from USACE, EPA, and the DC Department of Health; along with Peter deFur as the RAB TAPP consultant. The AOITF functioned as a group until November 2007. The AOITF member representing EPA, Terry Slonecker, retired from the EPA and obtained a position with the USGS. As of November 2007 he was no longer available to participate in the AOITF.

The AOITF compiled information on each AOI and made recommendations in a report to the Tier 1 Partners as to whether additional work was necessary according to the following process: After the AOITF refined their recommendation for each report, the group finalized the document by signing the report, and each member indicated whether or not they agreed with the recommendation. The report was then submitted to the Tier 1 Partners. The Partners reviewed the recommendations and if the Partners agreed that additional work was warranted for that AOI, the Partners would decide what geophysical and sampling activities would be conducted, and when this additional work would be incorporated into the Spring Valley Project schedule. If the Partners instead concurred that all necessary work had been completed for an AOI, a final closure document would be produced for that AOI.

M. Baker presented a summary of activities accomplished by the AOITF between 2002 and 2007. During this time period, the AOITF prepared and reviewed reports for all of the identified AOIs (a total of 28 AOIs). He showed a **map** of the AOI locations in relation to streets within the Spring Valley FUDS boundary. A total of 23 AOI reports were finalized.

- Twenty (20) finalized AOIs were recommended for additional investigation.
    - Fourteen (14) reports were unanimously recommended by the AOITF as warranting additional fieldwork, and the Partners agreed. Investigations have been completed or are close to completion in 4 of the areas.
    - Six (6) reports contained a split recommendation. The AOITF was unable to reach a consensus, and the report was forwarded to the Partners. At Partnering meetings, the AOI report author would state their rationale for supporting further investigation at the site, and members with dissenting opinions would explain why additional work was not warranted. A vote among the Partners concluded that additional work was warranted for each AOI, and the reports were signed and finalized. Examples of these AOIs include the Sedgwick Ground Scars (AOI 9) and the 52nd Court Pit and Trenches (AOI 11).
- Three (3) finalized AOIs were recommended for no further action.
    - No solid basis existed for additional investigation on these AOIs. The Dog Wallows (AOI 15) was based on a report of a dog rolling in something with an offensive odor. The Westmoreland Recreation Center (AOI 10) contacted the EPA who requested that the AOITF review information on the property. The Camp Leach Trenches (AOI 25) were originally a concern due to potential munitions disposal. However, documentation suggests that all Camp Leach trenches were backfilled prior to the closure of AUES, and the possibility of buried munitions at Camp Leach is considered unlikely. To date, investigations have not revealed any ordnance-related items or fragments north of Massachusetts Avenue.
- Five (5) reports remained in draft form at the conclusion of the AOITF. These AOIs have not been signed, and are currently under review by the Tier 1 Partners.
    - All 5 reports contain a split recommendation from the AOITF. The exact locations of the Courier Burial Site (AOI 17), Major Tolman's Field (AOI 18), and munitions firing and impact related to the Westmoreland Circle Impact Area (AOI 16) have not been

identified. The possible AUES use of the Washington Aqueduct Railroad Sidings (AOI 23) and the existence of the Third Circular Trench (AOI 27) have not been confirmed.

- The pros and cons of further investigation for these AOIs were presented by M. Baker and Richard Albright at the May 28, 2008 Partnering meeting. The Tier 1 Partners will make the final decision as to whether or not additional work is warranted for each AOI.

When all 28 AOI investigations are complete, each one will have a closure memo that describes the AOI, a summary of completed field work (if any was required), and the results of the investigation. The memo will provide a rationale for the final recommendation that no further action is required, and it will provide a public record of the decisions made by the AOITF and the Tier 1 Partners.

M. Baker showed a sample closure document for an AOI (AOI 4: Liven's Gun Pit) whose finalization and closure process is complete. The report includes administrative information (such as the date that the finalized recommendation for additional work was sent to the Partners), as well as background information regarding the AOI. Field work for this site consisted of arsenic-contaminated soil remediation and geophysical anomaly removal, and a list of the anomalies and scrap items recovered during the investigation is included in the memo. No further action was recommended based on the results of soil sampling, arsenic grid excavation, and anomaly removal, and the Partners signed the closure document in June 2004. A similar report will be produced for each AOI when the investigations, if necessary, are complete.

Question from Ambassador H. B. Schaffer, Community Member – Will these reports be made available to the residents of the affected Areas Of Interest?

M. Baker confirmed that residents can obtain a copy of a report by contacting USACE. These reports are not confidential.

Question from John Wheeler, Community Member – What is the page length of a typical AOI document?

M. Baker replied that a typical closure document spans 2 to 3 pages, not including attachments. With attachments, the report may be up to 20 pages in length. A report that recommends no further action would be approximately 1 page in length, as no field work or investigation results would be described.

Comment from J. Wheeler, Community Member – Based on the short document length, it appears that it would be simple to make the documents available online.

D. Noble agreed that a section of the USACE-Baltimore website could be devoted to the finalized AOI reports signed by the Partners.

Comment from Peter deFur, RAB Technical Advisor – Regarding the attachments referred to by M. Baker, these may consist of appendices such as aerial photographs, maps, historical reports, soil sampling results, and geophysical investigation results. These appendices typically include evidence considered by the AOITF when forming their recommendations, and they provide a reference for the Partners and for any other reader that substantiates the decision whether or not to continue investigative work.

Question from Kent Slowinski, Audience Member – Would it be possible to provide a copy of these AOI reports to the information repository at the Palisades Neighborhood Library?

D. Noble agreed that a copy of each AOI closure report could be placed at the Palisades Neighborhood Library's information repository.

Question from K. Slowinski, Audience Member – Could you please identify the five AOIs that were not finalized by the AOITF?

M. Baker said that the 5 AOIs currently under review by the Tier 1 Partners are the Westmoreland Impact Area, the Courier Burial Site, Major Tolman's Field, the Washington Aqueduct Railroad Sidings, and the possible Third Circular Trench. He added that T. Slonecker left the task group prior to the AOITF's agreement on the exact wording of these documents, and that he is no longer available to sign the

finalized reports. Rather than formulating a guess as to what T. Slonecker would have recommended during an AOITF vote, M. Baker chose to leave the reports in draft form and forward them to the Tier 1 Partners for a final decision.

Question from Ambassador H. B. Schaffer – The signatures on the sample closure document for Liven's Gun Pit (AOI 4) were completed in 2004. When was the first AOI report produced?

M. Baker replied that the AOITF began meeting in the fall of 2002. The AOITF began finalizing the first round of reports during the following spring, in 2003. Finalization of all 23 AOI reports took place between March or April 2003 and October 2007, when the AOITF last met. Thus, all signatures fall within that four and a half year time period.

M. Baker added that P. deFur was originally included as a signatory for the finalized reports. However, the RAB recommended that P. deFur be removed from the signatory list. His continued participation in the AOITF included reviews of all draft reports, and his comments were discussed and incorporated into the reports. As a result, the RAB's voice was expressed during the process of reviewing the documentation relevant to each AOI and making recommendations.

Comment from M. Baker, Project Historian - During the previous RAB meeting, we discussed some challenges that are involved in mapping. The 1918 aerial photographs had to be pieced together into a mosaic, creating difficulties in determining which mosaic of photographs represents the true historical landscape. In particular, T. Slonecker had developed five different data projections that reveal five possible alternative locations for Sergeant Maurer's Burial Pit. These alternative locations tended to be around 15-20 feet apart. M. Baker explained that T. Slonecker had estimated the present location of three features- the building near the fence line, the probable burial pit, and the ground scar, using five different mapping projections. Regardless of the mapping projection, the three features are all positioned in the same relative relationship to one another. However, for each projection, the exact feature locations correspond with different areas on two properties on the 4800 block of Glenbrook Road. The locations of each feature can only be estimated because the features are not visible in the present day. Thus, the proposed location of each feature shifts on the properties depending on the way each feature was projected by the GIS analyst.

M. Baker displayed a poster that featured five **photographs**. He pointed out three features that are visible on a mosaic of 1918 aerial photographs: a building located near the AUES perimeter fence, the location of the probable burial pit, and an additional ground scar that was identified by the EPA in 1986. He offered to pass the poster around the room or to make it available to the RAB following the meeting.

Question from K. Slowinski, Audience Member – Why hasn't T. Slonecker's analysis of the probable burial pit location, including the five alternative burial pit projections, been loaded into the GIS program?

M. Baker was uncertain as to why the analysis was not available at the GIS presentation at the last meeting.

Lan Reeser, Project Team Member, said that the ground scars have now been loaded into the GIS database.

D. Noble noted that M. Baker's presentation of this mapping challenge simply illustrates the effect of piecing together the 1918 mosaic aerial photograph. As you attempt to define the location of a feature in relation to other items, the features can line up on a map in slightly different positions depending on how the mosaic pieces are merged together, which creates shifting on the final analysis.

Comment from K. Slowinski, Audience Member – During the GIS presentation at the previous RAB meeting, I asked whether T. Slonecker's work regarding the location of Sergeant Maurer's burial pit could be displayed in GIS. M. Baker had indicated that the data was not available in the GIS program.

M. Baker noted that a recent conversation with T. Slonecker prompted the review of older data, and USACE is currently pursuing the acquisition of additional data from his department. However, M. Baker was uncertain as to why data layers for the five projections were not available.

L. Monsein added that the point of M. Baker's presentation earlier tonight was to demonstrate that some variation exists in mapping capabilities. He requested that the RAB move on to the next topic.

B. Brief Progress Updates on Phytoremediation, the Residential Arsenic Removal Program, the Groundwater Study, and the Geophysical Survey

D. Noble introduced the USACE progress updates, and turned the discussion over to Emily Devillier.

E. Devillier, Project Team Member, provided brief updates on phytoremediation, the residential arsenic removal program, and the groundwater study. She noted that she is currently assisting Ed Hughes while he is on detail in Harrisburg, PA.

Phytoremediation

Fern planting was completed by May 14, 2008 at all three properties (Lot 15, Rockwood Parkway, and Overlook Lane). All ferns were planted with a spacing of 20 cm (in contrast to the 30 cm spacing used in previous years), which allowed a greater abundance of ferns to be planted at each location.

Each grid is monitored weekly by Edenspace personnel to assess the growth of the ferns and to continually monitor their health. Automatic watering systems were installed at two properties, Rockwood Parkway and Overlook Lane. At Lot 15, ferns will be watered as needed.

Oversaturation of the soil recently occurred due to the recent rainstorms, and the automatic watering systems intensified the problem. USACE requested that Edenspace personnel periodically turn off the watering systems during periods of significant rain.

Comment from Lee Monsein, Community Member – The watering system for Van Ness Street (Lot 15) is not automatic, and is brought by truck. During heavy rain, this schedule could be tailored as necessary to prevent overwatering the ferns.

E. Devillier agreed.

Residential Arsenic Removal Program

Arsenic soil removal was completed on a single property during May 2008. Progress on other properties was slow due to several days of rainfall, which saturated the soil and created muddy, slippery terrain. During these delays, Sevenson completed initial site assessments at several properties and prepared them for the upcoming soil removal process.

Five **photographs** were shown of arsenic removal activities at an Overlook Road property. These photographs featured the original landscape, soil removal in progress, and three stages of clean backfill (pre-backfill, during backfill, and post-backfill). On this property, the heavily saturated ground was allowed to dry out before clean soil was backfilled into the excavated areas, and the workers were careful not to disturb watering systems and other landscaping features. As requested by the homeowner, the finished landscape is perfectly flat, and it will be re-seeded by the end of next week.

Soil removal activities began last week at the 3700 block of Fordham Road.

Groundwater Study

The Partners recently finalized the contract and are working on the draft work plan. The goals of this study are to better characterize the perchlorate plume and to define the shallow and deep groundwater flow patterns.

Shallow and deep wells will likely be drilled during late summer or early fall of 2008, followed by well sampling. A **map** was shown of the new well locations. The shallow wells will be located in the vicinity of Kreeger Hall at AU, while the deep wells will be installed southwest of the Glenbrook Road area.

The shallow wells, which focus on characterizing the perchlorate plume in the groundwater, will be installed with screen liners.

The deep wells, which focus on characterizing the groundwater flow, will use a unique new technology called the FLUTe system (Flexible Liner Underground Technology system). In the FLUTe system, a geomembrane liner is inserted into a borehole, allowing groundwater samples to be retrieved from different depths and from individual fractures in the bedrock. This sampling system provides a more detailed portrayal of how the groundwater is flowing through the area. In addition to the FLUTe system, rock boring and video logging in the deep wells will allow a more precise assessment of the fracture locations within the bedrock.

Question from P. deFur, RAB Technical Advisor – Regarding the new wells that will be installed, what is the difference in depth between the shallow and the deep wells?

Lan Reeser, Project Team Member, replied that the shallow wells typically extend 50 feet underground. The deep wells will reach depths of 250 feet; the bottom 200 feet will likely be located in bedrock.

Geophysical Survey

D. Noble provided a brief introduction to the upcoming geophysical survey work.

As part of the annual survey effort, several properties located near or within AOIs were recommended for geophysical surveys, which will take place during the summer or fall of 2008. Geophysical survey personnel may attend the next RAB meeting to provide additional details on the geophysical survey.

A geophysical survey is a non-intrusive investigation that involves scanning instruments over the ground. The instrument provides a geophysical survey report that identifies the presence and characteristics of unidentified metallic items in the ground (also known as anomalies). These anomalies are sorted and prioritized by a software program, and a geophysical survey technician ensures that the program has correctly chosen the higher-priority anomalies.

The anomaly reports are reviewed by the Anomaly Review Board (ARB) on a property-by-property basis. The ARB selects a list of anomalies that appear to warrant intrusive investigation. They may also select a few low-priority anomalies, with the intention of confirming that those particular anomaly characteristics do in fact indicate a low-priority anomaly. Recommendations for investigating these selected anomalies are presented to the ARB, and once approval is gained from the ARB, these anomalies will be dug out of the ground and identified.

The ARB met at the April and May 2008 Partnering meetings to review the geophysical survey results, and the selected anomalies, for several properties. For each property, a geophysical survey was conducted, a report was produced, the ARB reviewed the results, and agreed to an approved list of anomalies for removal.

The last two meetings of the ARB resulted in 14 properties being approved for anomaly removal. A contract will be developed for completing the intrusive work, and the homeowners will be contacted to ask for their permission to access their property and excavate the anomalies.

In addition, 6 properties have been added to a contract for the summer/fall 2008 geophysical survey efforts. This is the first step of the process that allows the Spring Valley project to continue geophysical surveys on properties near or within Areas of Interest. For an individual property, the complete geophysical survey process typically requires 12 to 16 months. This timeframe spans the activities between initially choosing a property for a geophysical investigation and producing a report on the anomalies that were intrusively investigated. Further details on the full survey process will be provided at the next RAB meeting.

Question from Carrie Johnston, Project Team Member – On the behalf of a Spring Valley community member, could you please explain the distinction between a high probability and a low probability investigation? In addition, what is the likelihood that a large tent or structure will be placed on a property?

D. Noble explained that once a list of anomalies is derived at a particular property, the USACE-Baltimore project members review the historical record for the property. On an individual property basis, the team produces a probability assessment, which includes a recommendation for investigating the anomalies under either low probability protocols or high probability protocols. The USACE-Baltimore District Commander evaluates the recommendation, the property history, and any relevant reports, and makes the final decision as to whether the anomalies are investigated as low probability or high probability.

The majority of properties are recommended as low probability investigations, which are low-risk and involve open-air excavations with an experienced work crew present to identify the excavated anomalies. High-probability investigations are less common, and are typically located in high-risk areas such as the known disposal pit on Glenbrook Road, which requires a containment structure.

C. Military Munitions Response Program

D. Noble provided an update on the Glenbrook Road test pit investigations, the Pit 3 Area investigations, and the upcoming AU Public Safety Building project.

Test Pit Investigation Monthly Update

To date, 71 of 76 test pits have been completed at the first test pit property on Glenbrook Road, adjacent to the Pit 3 property. The five remaining test pits will be excavated when access to the area from the adjacent property is opened. Following completion of the Pit 3 effort, all staging equipment will be removed from the driveway and the remaining five test pits at the first test pit property will be excavated.

Similarly, arsenic grid removal is complete for all areas that are currently accessible at the first property, and backfill is almost complete. The remaining arsenic grids will be excavated once the Pit 3 equipment is removed from the driveway.

Fill dirt and topsoil is currently being placed in the portions of the backyard of the first property that will not be disturbed by the remaining test pit excavations and arsenic soil removal. Per the agreement with the property owner, minimal landscaping will take place, which includes new sod, grass seed, and mulch.

At the property where the Pit 3 investigation is currently in progress, 35 test pits and several arsenic grids in the driveway area remain to be completed. These will be excavated after Pit 3 is completed and the Pit 3 equipment has been removed from the property.

D. Noble showed four **photographs** of the arsenic removal and backfill progress at the first test pit property on Glenbrook Road. One of the photos showed the driveway area of the property. Gravel will be placed in the area where the driveway was located for the remainder of the summer, and after heavy equipment is no longer required to be driven through the area, and the driveway will be repaved.

Question from Ambassador H. B. Schaffer, Community Member – What are the dimensions of the test pits?

D. Noble replied that the test pits measure 3 feet wide by 6 feet long. The depth of each test pit is determined by the depth at which saprolite [weathered bedrock] is located. If saprolite is not reached during excavation, the maximum depth for a test pit is 12 feet, as the equipment does not have the capability to excavate any deeper.

Pit 3 Area Project Update

During May 2008, the site team continued to locate and remove closed-cavity munition items, along with munition-related scrap metal from the East Extension of the ECS in the Pit 3 area.

Large sections of underground concrete are currently being removed during excavation in the East Extension. This concrete belongs to the retaining wall footer and the manhole enclosed within the East Extension, and the intent is to slowly and carefully investigate the presence of any items located against the house foundation as well as the retaining wall and the manhole.

Based on the current East Extension progress and results, the estimated completion date for the East Extension is the end of June. Following the East Extension effort, the South Extension will be built to investigate anomalies located along Glenbrook Road in the D.C. right-of-way.

Four **photographs** of the East Extension structure interior were shown. One photograph showed the extent of excavation reached on May 28, in relation to a 6-foot-tall site worker.

A **diagram** was presented of the Pit 3 project area. This diagram displayed the original ECS location, including the outer wall of the ECS and the 2-foot safety buffer maintained along the inside walls. At the maximum excavation extent of 9 feet, metal was still detected beyond the back wall buffer, which provided motivation for building the East Extension. The sewer pipe and manhole locations were also marked on the diagram. In addition, the diagram featured locations of AUES-related items discovered since the East Extension excavation began on April 28. Some items were discovered at shallow depths, and the majority of the remaining items were found along the concrete house foundation, the concrete retaining wall footer, and the concrete manhole foundation.

Glass bottles containing an unidentified white substance were recovered and are currently undergoing analysis. Approximately 3 to 4 feet of fill dirt still remains before undisturbed, weathered bedrock is reached and additional items may be found as excavation progresses.

Question from Mary Bresnahan, Community Member – Is the retaining wall that is featured in these photographs a part of the original house construction?

D. Noble said that the retaining wall was installed by the builder prior to construction of the house. Due to the property's sloped hillside, the builder cut into the hill and created a flat area on which the house foundation was set. They built the retaining wall to support the exposed slope on the property.

Question from M. Bresnahan, Community Member – Was the manhole present during construction of the house? Is the manhole considered a city easement, or is it privately owned?

D. Noble replied that the manhole was probably placed on the property by the builder. We believe that the builder needed to reroute the large sewer line through the property prior to construction of the house, and that he installed a few manholes behind the retaining wall. The manhole is not a city easement; rather, DCWASA informed us that it is a privately-owned sewer line until it enters the city easement located along Glenbrook Road. The manhole was very likely installed by the builder, in order to allow the continued use of the sewer line.

Question from P. deFur, RAB Technical Consultant – Is the sewer line identified as a storm sewer or a sanitary sewer?

D. Noble said that this particular sewer line is a sanitary sewer. In contrast, the pipes located in the driveway area of the first test pit property belong to a storm sewer.

Question from Larry Miller, Community Member – Can you please define a closed-cavity munition item?

D. Noble replied that a closed-cavity item is one where the contents are uncertain. On-site technicians often visually inspect a closed-cavity item to obtain some knowledge of its identity, and sometimes they already have an idea of its identity when they package it for shipment to the federal property. X-ray analysis performed at the federal holding facility will detect any contents that may be present. X-rays will sometimes provide sufficient information to identify the contents. If this information is insufficient, a PINS analysis will be conducted.

Question from L. Miller, Community Member – All closed-cavity munition items are treated as though a substance of concern is inside the item, correct?

D. Noble confirmed that until the contents are identified, all closed-cavity munition items are treated as if the item could cause the maximum credible event.

Question from Charlie Bermpohl, Audience Member – Quite a few munition items were discovered during the Pit 3 investigation. How many items were found to date, and were chemicals present in any of these items?

D. Noble said that to date, two items containing chemicals have been recovered in the Pit 3 effort since work commenced in October 2007. Other items are still undergoing analysis. The total number of items recovered has not been authorized for release by the USACE Baltimore District Commander at this time, and the number of chemical items recovered may or may not increase as the excavation in the East Extension progresses.

Question from M. Bresnahan, Community Member – What chemicals were found in the items found during the Pit 3 effort?

D. Noble restated that he can only reveal information authorized for release, and that the identified chemical contents of these items are not currently authorized for release. He noted that the RAB members are already aware of the recovery of an arsine round, so it would be logical to conclude that arsine is one of the fillers of the two chemical munitions found. The identity of the chemical filler of other chemical item cannot be released at this time.

Question from M. Bresnahan, Community Member – Is it safe to assume that the second chemical is worse than arsine?

D. Noble said that the chemical is not necessarily worse than arsine. The USACE-Baltimore District Commander simply has not authorized that information to be released.

Question from J. Wheeler, Community Member – Based on the diagram of the Pit 3 project area, it appears that a notable concentration of munition items was found in the East Extension right next to the house. Is it reasonable to suspect that items may be located underneath the house as well?

D. Noble confirmed that multiple munition items were buried next to the house foundation. To date, the deepest item discovered was at an elevation higher than the basement floor elevation. The excavation has not yet reached the depth of the bottom of the house foundation, but current findings suggest that items are probably not buried underneath the house foundation.

Question from George Vassiliou, Community Member – Is there any indication that these munition items belong to Sgt. Maurer's Burial Pit?

D. Noble noted that the location of Sergeant Maurer's Burial Pit is certainly in the vicinity of the Pit 3 Area, but it is uncertain as to whether these particular munitions originated from the Sgt. Maurer Pit. Any of the three burial pits discovered in this area could have been Sgt. Maurer's Burial Pit.

Question from C. Johnston, Project Team Member – Is it correct to say that the munition items found in the original ECS and the East Extension were probably not located where they were originally placed in 1919?

D. Noble confirmed that many of the munition items were likely scattered in the soil sometime after 1919. The majority of the items recovered from the East Extension were located very close to the house foundation, in soil that is generally considered construction fill material.

Question from L. Monsein, Community Member – If these munition items are not buried as deep as the house foundation, it appears that these items must have been moved during construction of the house. Building the concrete foundation walls would have required the construction workers to dig and move a substantial amount of soil.

D. Noble agreed that the munition items were almost certainly moved from their original positions. However, it is unclear whether the items were inadvertently moved as large amounts of soil were shifted around. The workers may not even have noticed them.

Question from G. Vassiliou, Community Member – Regarding the possibility that these munition items were shifted from their original positions, has any information been obtained from the original building contractor?

D. Noble said that he has not questioned the contractor.

L. Monsein added that this question is asked about every six months. Limited contact with the developer provided little, if any, information.

M. Baker explained that in 1993, he obtained a lead on possible munitions at the 4800 block of Glenbrook Road. He and other USACE-Baltimore personnel spoke to one of the developers, who supplied no information other than a contact name and phone number at AU. However, construction worker interviews conducted by Ginny Durrin later revealed that on two separate occasions, a glass bottle was broken in the driveway and a cloud of an unidentified substance was released into the air. The developer has not been forthcoming in providing any additional information.

Question from P. deFur, RAB Technical Consultant – When items are no longer discovered during the excavation of a pit, is the Schonstat used at the bottom of the pit to determine whether any additional items may be buried deeper?

D. Noble confirmed that a Schonstat is used to indicate whether excavation should continue deeper, and showed a photograph with a site worker holding a Schonstat in the East Extension. He added that the worker was standing where the cluster of munition items had been recovered, and that he uses the Schonstat to detect any further items that may require hand-digging before the mechanical digging resumes.

Question from Steve Hirsh, Community Member – Can you please explain why the site worker in the photograph is not wearing personal protective equipment (PPE) while he is standing in the ECS?

D. Noble explained that some non-intrusive work is conducted under a lower protection protocol (modified level D), where all monitors are turned on and running to confirm that the air inside the ECS is clean. In contrast, intrusive work is conducted under a higher level of protection (level B). Work that can be accomplished in modified level D as authorized by the USACE-Huntsville site safety officer who provides authorization based on a preset list of conditions.

Question from Charlie Bermpohl, Audience Member – Earlier in the discussion, you indicated that the munition items found in the East Extension are located in soil that is considered to be construction fill material. Is the project team concerned about soil that may have been removed from the site and outside Spring Valley, considering that it may have contained munitions?

D. Noble acknowledged that it would have been interesting to look through the soil taken offsite during the original 1992 excavation for constructing the houses. He was not aware of the fate of the soil removed from the site, but he noted that D.C. made an effort to locate the soil that had been removed. The trail led to Fort Totten Metro Station and then ran cold after the soil was rejected as fill.

Question from L. Miller, Community Member – Was either the U.S. Army or D.C. responsible for removing the dirt that had been delivered to Fort Totten?

D. Noble replied that the developer removed the material from Fort Totten. Whoever initially received the shipment chose to reject it later, and called the developer to retrieve the soil.

M. Baker added that either the Metro Transit Authority or the National Park Service requested that the developer retrieve the soil.

Upcoming AU Public Safety Building Project

American University and USACE have resolved their differing views of the work plan approach, allowing the AU Public Safety Building investigation to begin. AU signed the right-of-entry document, and the Public Safety Building work plan has been finalized. Additional updates related to the investigation will be presented as the work progresses.

Site preparation activities were initiated yesterday, on June 9, 2008. Real estate personnel met with AU officials to conduct a walkthrough of the building, and they noted current conditions of the building's interior and exterior. They also recorded the building conditions using a video camera.

The Public Safety Building field effort will require a duration of approximately 25 weeks. Intrusive soil removal activities may begin by late June or early July.

III. Community Issues

A. Recent Arsenic Testing at Fort Reno Park

Greg Beumel, Community Co-chair, introduced the next agenda topic, which focused on recent arsenic testing at Fort Reno Park. High levels of arsenic had been reported at the park, but subsequent soil testing and analyses confirmed that arsenic levels were very low. He turned the discussion over to S. Hirsh.

S. Hirsh, Community Member, provided a timeline of the Fort Reno Park arsenic investigation from the perspective of the Environmental Protection Agency (EPA).

- **October 2007** – Richard Albright of the District Department of the Environment (DDOE) drew attention to an aerial satellite imagery map from a colleague's PhD thesis, which suggested that arsenic in soil can be inferred from areas of stressed vegetation. This map was subsequently published in The Examiner. As a result, EPA and DDOE discussed the possibility of taking soil samples at the locations featured on the map, and EPA later provided funding to DDOE for sampling at these sites.
- **April 2008** – Soil sampling at Fort Reno Park was conducted without EPA's knowledge. The samples were taken by R. Albright and the author of the PhD thesis, Terry Slonecker of USGS. Six soil samples were collected from Fort Reno Park using an XRF (X-ray Fluorescence) device. These samples were not taken using the same preparations that are required for arsenic sampling at the Spring Valley FUDS site, and nothing is known about the quality or maintenance of the XRF equipment they used.
    - The XRF is not considered reliable for measuring arsenic levels, but it can be useful to determine whether excavations should continue deeper into the soil. The XRF is periodically evaluated for use in Spring Valley as the technology improves, but its usefulness is still considered insufficient with respect to the goals of the Spring Valley FUDS project.
- **May 13, 2008 (Tuesday)** – S. Hirsh of EPA received a call from T. Slonecker, who reported that a high arsenic level (1100 ppm) was detected at Fort Reno Park. The EPA office directors and DDOE were informed of a potential contamination issue at the schools adjacent to Fort Reno Park (Alice Deal Junior High School and Wilson High School). EPA and DDOE developed a strategy and a funding request for investigating the potential arsenic contamination. They planned to send personnel to the site on Friday morning, March 16, 2008, and an EPA coordinator was also sent to the site. EPA intended to focus on the adjacent schools, because Fort Reno Park is under the jurisdiction of the National Park Service (NPS), and EPA was not prepared to spend money on the scenario at Fort Reno unless the NPS asked for help. The NPS reportedly tried to contact DDOE but was unable to reach anyone.
- **May 14, 2008 (Wednesday)** – The NPS closed Fort Reno Park and issued a warning of potential arsenic concentrations at the park. EPA found out that internal discussions had occurred between

NPS and USGS, both part of the Department of the Interior, regarding the high arsenic results from the XRF. The NPS contacted EPA and requested their assistance at Fort Reno Park. As a result, the scope of EPA's investigation expanded to include the park as well as the adjacent schools.

- **May 15, 2008 (Thursday)** – EPA collected soil samples and XRF readings at Fort Reno Park and the adjacent schools. EPA was unable to determine the exact locations originally sampled by T. Slonecker, because GPS coordinates had not been recorded for each sampling point, so T. Slonecker provided an aerial photo marked with dots showing approximate locations. EPA scanned Fort Reno Park using an XRF and they collected soil samples and sent them to a laboratory for analysis.
- **Discovery of previous data from Fort Reno Park** – The Spring Valley Project found existing arsenic data for Fort Reno Park. In 1999, EPA conducted soil sampling at Fort Reno Park and surrounding parks to determine the background arsenic level for Spring Valley. Very low arsenic levels, in the vicinity of 10 to 12 ppm, were recorded at Fort Reno Park and at Friendship (Turtle) Park. The existing data reassured the community and prevented the cancellation of the 11th Annual May Fair at Friendship (Turtle) Park.
- **Second EPA sampling event** – Multiple agencies, including the US Centers for Disease Control (CDC) and the Department of Health (DOH), agreed that additional samples should be taken due to the discrepancy between the 1999 sampling results (low arsenic levels), the USGS sampling results (high levels), and the current EPA sampling results (low levels). T. Slonecker accompanied EPA during the second round of soil testing at Fort Reno Park, and pointed out the approximate locations of his original soil samples. EPA re-sampled those locations, and took an additional 5 samples in a 5-foot radius around each location.

Both rounds of EPA sampling were analyzed at a laboratory, and results were provided within 24 hours. In addition, the original soil samples taken by T. Slonecker were sent to a USGS laboratory in Denver, CO for a second analysis. The XRF device does not alter the contents of a soil sample; therefore the arsenic levels in each sample remained unchanged between the first and second analyses.

All EPA samples, as well as the second analysis of the USGS samples, revealed very low arsenic concentrations at Fort Reno Park and the adjacent schools. The highest arsenic concentration found was 10.1 ppm, which can be considered as a safe and natural background level.

Elevated levels of lead were detected in a small area of Fort Reno Park. This area has been roped off, and the NPS asked EPA to take charge of soil removal. A funding document is currently in development, which will allow the NPS to pay an EPA contractor for removing the lead-contaminated soil.

Question from L. Monsein, Community Member – Concerning the original samples taken by R. Albright and T. Slonecker at Fort Reno Park, what preparations were made prior to sampling?

S. Hirsh was not aware of the exact methodology used by R. Albright and T. Slonecker prior to collecting samples, as EPA was not involved in the planning process. However, they did not conform to the careful preparations typically made for sampling at Spring Valley properties. For specific details, this question needs to be directed to R. Albright and T. Slonecker.

Question from Larry Miller, Community Member – Can you please identify the aerial imagery process that suggests that stressed vegetation can be attributed to arsenic contamination?

S. Hirsh replied that this aerial imagery process is the focus of T. Slonecker's PhD thesis. The use of satellite imagery to identify regions of arsenic and other contaminant concentrations is not an established procedure.

Question from L. Miller, Community Member – Did anyone previously suggest that stressed vegetation in the Fort Reno area should be attributed to arsenic contamination, or has the use of aerial imagery been amplified as a result of T. Slonecker's PhD thesis?

S. Hirsh said that T. Slonecker's colleagues were aware of his work on hyperspectral imagery, but they had not seen the aerial image used in the PhD thesis until it was released in The Examiner on October 24, 2007. He was unaware of any discussions prior to the aerial image publication that focused on a connection between aerial imagery and arsenic contamination.

Question from L. Miller, Community Member – How did the reported arsenic levels at Fort Reno Park generate additional anxiety regarding potential contamination at Friendship (Turtle) Park? Was this concern based purely on speculation?

S. Hirsh was uncertain as to what initiated the anxiety that focused specifically on Friendship (Turtle) Park. The fire chief present at Reno Park had expressed his concern regarding the reported arsenic contamination. Many community members were alarmed at the possibility of a significant public health threat, and they questioned whether additional parks in the area may also be contaminated with arsenic.

L. Miller noted that Fort Reno Park may be one of the most well-studied parks in the country.

Comment from L. Monsein, Community Member – A significant point regarding the Fort Reno arsenic investigation is that the author of a PhD thesis initiated this crisis. The situation caused a significant amount of anxiety, cost the community hundreds of thousands of dollars, and is akin to committing a crime. The agency divisions that T. Slonecker and R. Albright work for should investigate several things such as whose equipment was used during sampling, whose laboratory analyzed the samples, whether USGS approved their sampling activities at Fort Reno Park, and whether they had permission to publicize the PhD thesis theory and the results of their samples. R. Albright's involvement in this scenario should also be examined, including whether he is still connected to the situation. He should know enough to avoid situations that do not abide by the chain of command.

S. Hirsh noted that the laboratory used to analyze T. Slonecker's samples had been described in the Washington Post as a USACE laboratory. Since T. Slonecker had identified the location of the lab as Manassas, VA, and because USACE does not possess a laboratory in that city, the sampling analysis was finally tracked to a researcher at George Mason University.

Question from Ambassador H. B. Schaffer, Community Member – What is the significance of R. Albright's past experience with the chain of command?

L. Monsein replied that it was his understanding that R. Albright had prior experience with sidestepping the chain of command within his agency. In a chain of command, information cannot be publicized without permission from superiors. If this scenario occurred in the medical field, the person would be fired, they would lose their research grants, and they would be banished from research.

Comment from Malcolm Pritzker, Community Member – Similar to the comparison with consequences in the medical field, T. Slonecker's actions are the equivalent of malpractice in the legal profession, where the person would be disbarred. T. Slonecker made an 1100-part error, based on the comparison between his results (1100 ppm arsenic) and validated results (around 10 ppm arsenic), which caused many problems including anxiety and monetary costs. This situation should be explored through any possible channels, perhaps through the D.C. city council, as the community cannot allow this type of situation to occur again.

Comment from P. deFur, RAB Technical Advisor – Regarding the spectral analysis process used by T. Slonecker, this concept has existed for quite a while, but it has never been scientifically applied to questions focused on chemical contamination. Spectral analysis is often employed to analyze crop growth, and it has assisted research on algae growth in the ocean, but these are very different scientific levels and applications compared to T. Slonecker's thesis. Within those applications, valuable evidence has been obtained from ground-truthing, where the actual levels of soil nutrients, lack of water

availability, or other factors are physically measured and compared with the remote-sensing data. This ensures that the data represented in satellite images accurately represents the actual conditions and features on the ground.

L. Monsein added that spectral analysis data provides an indication that something might be amiss with actual environmental conditions. However, the researcher cannot assume that a particular contaminant or activity must be causing stressed vegetation conditions.

Comment from D. Oakley, Audience Member – After reading T. Slonecker's PhD thesis at George Mason University, I understand some aspects of the conclusions he made. The purpose of the imagery that formed the basis of his thesis was to demonstrate that contamination could be identified by satellite imagery. However, this imagery was not subjected to ground-truthing. Consequently, the image in his thesis states that red sections indicate areas of arsenic-affected grass, suggesting that areas of arsenic contamination exist in areas such as Nebraska Avenue. Single pixels in the image measure 4 meters by 1 meter, and if this diagram is not drawn correctly, the implications and assumptions made in this satellite image may create additional issues in the future.

Question from G. Beumel, Community Co-chair – What department at George Mason University awarded T. Slonecker his doctoral degree?

D. Oakley said that the degree was awarded by the Environmental Science and Policy department.

Question from Ambassador H. B. Schaffer, Community Member – How did the findings of T. Slonecker's PhD thesis get publicized in The Examiner?

S. Hirsh replied that R. Albright had forwarded the aerial imagery map internally to a DDOE employee involved with press releases, with the suggestion that DDOE's use of satellite imagery in identifying contaminated sites might be interesting news. Additional details regarding The Examiner's acquisition of the image are currently unknown.

Comment from G. Vassiliou, Community Member – Whether T. Slonecker's conclusions were correct or incorrect is irrelevant. Many PhD theses have involved mistaken assumptions, which is why the PhD defense is designed to test a candidate's defense of their own theories. The important point here, as stated earlier in the discussion, is that T. Slonecker should have followed the proper chain of command, and he should have allowed his work to be reviewed by his superiors prior to initiating the crisis at Fort Reno Park. This situation cannot be allowed to get out of control, and something must be done.

Comment from M. Pritzker, Community Member – Regarding the PhD thesis, the general public pays no attention to the thesis defense, and the results are not advertised. In contrast, T. Slonecker intentionally publicized an arsenic level of 1100 ppm based on his own thesis, causing significant disruptions and costs to the community.

Question from G. Vassiliou, Community Member – When USGS obtained the results of the second analysis for their original soil samples, were there any data that revealed the source of the high arsenic levels originally obtained from the soil?

S. Hirsh said that the second soil sample analysis revealed very low arsenic concentrations (nothing higher than 10 ppm), and these samples were carefully analyzed by the USGS laboratory in Denver, CO. The reason for the abnormally high XRF arsenic reading, which was elevated two magnitudes above the validated samples, is unknown.

L. Monsein noted that sampling by Parsons, USACE, and EPA is conducted in a more professional manner, with instrument calibration, repetitive sampling, and validation of samples. This detailed sampling methodology should be appreciated.

Comment from L. Miller, Community Member – The primary issue is not the failure to produce accurate measurements. Rather, the primary issue is that multiple steps in the chain of command were disregarded.

It appears that the data results from this erroneous sample were released to the public without authorization or validation, and as a consequence, the community was frightened for several days.

L. Monsein added that the release of this information can be constituted as fraud. Even from the perspective of a non-scientist, an 1100-part error would be very difficult to obtain.

Question from Ambassador H. B. Schaffer, Community Member – This concern is shared by the entire community, and we need to find out whether a follow-up investigation will occur. Will disciplinary action be taken by the City Council or another authority, or will the cause of this event be forgotten?

S. Hirsh acknowledged that this is a good question.

L. Miller added that when the Fort Reno Park arsenic contamination was announced on Channel 5 news, they specifically stated that there was no official word yet as to whether children need to be examined, and they suggested that community members consult their doctors. This situation frightened many members of the community.

G. Beumel said that a Freedom of Information Act request can be prepared and submitted to USGS, for the purpose of obtaining their analysis of the event and the results of any potential investigations. However, the disciplinary status for T. Slonecker may not be revealed as part of USGS's response.

Question from J. Wheeler, Community Member – During the earlier Area of Interest AOITF discussion, you mentioned that T. Slonecker had retired from his career. Is this correct?

M. Baker clarified that T. Slonecker retired from the EPA, but was subsequently hired by USGS.

Comment from Ambassador H. B. Schaffer, Community Member – The RAB should contact Councilwoman Mary Cheh's office to ask whether any investigative or disciplinary action is planned.

L. Monsein agreed that the RAB should take action, but he suggested that the RAB members consider their options and make a decision at the next RAB meeting.

B. Real Estate Addendum for the Spring Valley Neighborhood

G. Beumel, Community Co-chair, turned the discussion over to M. Bresnahan, Community Member.

M. Bresnahan addressed a Spring Valley real estate inquiry that was raised at the previous RAB meeting, which focused on the requirement that a Spring Valley addendum must be included with all property disclosures when any Spring Valley property is listed for sale.

M. Bresnahan provided background information on real estate disclosures and addendums. She distributed a packet of sample real estate disclosures to the RAB, and noted that she discussed this topic with Bert Weintraub, Community Member, and C. Johnston since the last RAB meeting. The specific Spring Valley addendum was not included with the distributed disclosure packet.

Various kinds of disclosures exist for the sale of a property. When a house is listed on the real estate market, a packet of these disclosures are provided to the owner and must be included with the sales contract. Some of these disclosures are required by GCAAR (the Greater Capital Area Association of Realtors), which represents realtors and other real estate professionals in the Washington Metropolitan area. A typical realtor in D.C. is required to be a member of GCAAR, and they are also required to abide by local GCAAR legal requirements that pertain to D.C.

Every real estate company, including those in Maryland and Virginia as well as the District of Columbia, that lists a property in Spring Valley requires that a contamination-related property disclosure be included in the listing. The Spring Valley addendum is required only for the Spring Valley neighborhood, not for AU property or other areas within the FUDS boundary. The Spring Valley addendum is required to protect the seller from liability.

Question from L. Miller, Community Member – Is this disclosure required under the D.C. legal code?

M. Bresnahan replied that parts of the Spring Valley addendum are derived from the D.C. legal code and are required by law. Similarly, the general disclosure distributed to the RAB requires the seller to reveal information about known contamination on the property.

W. Krebs quoted the first line on page 6 of the sample disclosure, which states "In order to comply with the District of Columbia Real Property Seller Disclosure Act…"

L. Miller added that the top of the page describes GCAAR as a private organization, and the bottom of the page states that this disclosure is the required seller's disclosure statement approved by the Washington DC Board of Real Estate.

M. Bresnahan confirmed that the Seller Disclosure Act and the Washington D.C. Board of Real Estate are both related to GCAAR.

Question from J. Wheeler, Community Member – The original question that sparked this discussion was whether the Spring Valley real estate addendum is legally required by the D.C. government. What does this statement about complying with the D.C. Real Estate Property Disclosure Act reveal with respect to Spring Valley?

M. Bresnahan pointed out that in the sample disclosure, a specific question asks the property owner to supply information related to existing soil contamination on the property. This is a standard question that existed prior to the discovery of contamination in Spring Valley, and the property owner is required to provide a response in order to sell the property. Exceptions to this requirement, such as the transfer of property between spouses, are described in the disclosure. A competent realtor will include this disclosure along with the sales contract.

Comment from L. Monsein, Community Member – Laws must be listed in the D.C. Code, and the Spring Valley addendum is not. The first sentence of this disclosure describes it as a worksheet to aid compliance with sales contract attachments. If the RAB were to examine the D.C. Code, it would not include requirements regarding to arsenic or disclosures pertaining to Spring Valley.

Question from L. Miller, Community Member – If a property owner sells a house without using a real estate agent, are they required by law to disclose information relevant to Spring Valley?

M. Bresnahan was not certain. She suggested that a lawyer would provide the best answer to that question.

Question from Bernard Schulz, Community Member – Can you please bring a copy of the D.C. legal code to the next meeting so that the RAB can have a productive discussion? Until all of the relevant information is available, we cannot determine whether the real estate industry and the D.C. legal code require the same disclosure.

M. Bresnahan said that a lawyer would need to provide the legal code.

Comment from M. Pritzker, Community Member –While the disclosure form is interesting, and the RAB members should certainly be aware of what it says, the RAB still does not know what the D.C. legal code requires. In addition, regarding the disclosure's question on the property owner's knowledge of environmental contamination, it is unclear what "actual knowledge" means.

G. Beumel said that, if the RAB would like, a real estate attorney could be invited to a future RAB meeting to explain what disclosures are required by law and what disclosures are required for a property sale in Spring Valley.

Question from M. Pritzker, Community Member – In the event that the property has not been tested, what prevents the seller from liability?

M. Bresnahan replied that several residents have sold their houses prior to environmental testing. She stated that she expresses concern regarding the people whose properties have not been tested.

She added that when these disclosures are filled out, pertinent information can be obtained from USACE by the seller or the realtor for the seller. This information includes whether or not the property was tested, and it is attached to all disclosures and the Spring Valley addendum. Based on this full disclosure to the interested buyer, the seller and the realtor are no longer liable for any environmental contamination that may be discovered on the property.

Comment from J. Wheeler, Community Member – It appears that the provision of this information is enforced by the realtors, and not all sales involve realtors.

M. Bresnahan confirmed both statements. She added that she spoke with an expert on handling these addendums, who suggested that all questions about disclosures on Spring Valley properties be submitted in writing. In addition, C. Johnston may brief the realtors at Long and Foster, as everyone should be educated on this matter.

Question from M. Pritzker, Community Member – Is the legal basis for the Spring Valley addendum an issue that concerns the RAB? If this is an appropriate discussion topic, then the RAB should certainly explore the answer. If not, additional time should not be spent on this discussion.

G. Beumel was uncertain as to whether the legal requirements for the Spring Valley addendum are an appropriate RAB topic of discussion.

IV. Open Issues & Future RAB Agenda Development

A. Next Meeting: July 8, 2008

- Geophysical Survey Process and the related Anomaly Selection Process
- Brief progress updates on Phytoremediation, Arsenic Removal, and Groundwater Study
- Update on OU-3 (Glenbrook Road) Project Area (Pit 3, test pits, and arsenic removal)
- American University Public Safety Building Update

The RAB will not meet in August 2008, and will reconvene on September 9, 2008.

B. Future Agenda Topics

G. Beumel requested suggestions for additional agenda topics to be discussed in July or in the fall of 2008.

Request from L. Monsein, Community Member – A lecture on WWI armaments, given by an Army expert on the subject, would be a good review of the munitions and chemicals used such as mustard gas. In addition, I would like to present a talk on the chemistry, medical aspects, and risk management of arsenic, as I have done in the past.

Comment from P. deFur, RAB Technical Advisor – Results of the groundwater investigation will not be obtained by fall 2008, but this is a topic to look forward to. One existing shallow well with a high perchlorate concentration, PZ-4, is not located near any known or identifiable perchlorate source.

Question from L. Monsein, Community Member – Where is the PZ-4 well located in Spring Valley?

P. deFur pointed out the location of PZ-4 on the map of existing and new wells included in the groundwater study. PZ-4 is a well located near Kreeger Hall on the AU campus. He noted that the well is situated upgradient of the closest munition recovery pit, thus the munition pit is not the perchlorate source for PZ-4. This is one reason why the three new shallow wells were placed upgradient of PZ-4, with the intention of better characterizing the perchlorate source.

D. Noble added that the highest perchlorate concentration measured at PZ-4 was 146 ppb.

Question from L. Miller, Community Member – Regarding the high perchlorate concentration in PZ-4, how deep is the perchlorate located? Shallow wells extend 50 feet deep, correct?

L. Reeser confirmed that shallow wells are installed to depths of 50 feet. The elevated perchlorate levels were present at approximately 35 to 40 feet deep at PZ-4.

V. Public Comments

Question from J. Wheeler, Community Member – During a previous meeting, the RAB discussed a photograph of AUES items laid side by side. The Spring Valley project team did not believe that these items were originally placed in that location after World War I. They suspected that the munitions were collected elsewhere during construction and development, and then secretly buried somewhere in the vicinity of Massachusetts Avenue and 49th Street. Is there any evidence for where these items may have originated?

S. Hirsh said that the two munition items were associated with the 52nd Court munitions recovery. The items were found on a sheet of plastic in a hole, and they had evidently been moved there from their original location prior to their discovery. Criminal investigations took place as a result.

M. Baker added that the 1918 aerial photograph referred to by J. Wheeler shows two sets of trenches. In this photo, a pit is visible at 52nd Court, on the side of the exterior upper trench. The location of the pit shown on the 1918 aerial photograph corresponds with the pit discovered in 1992.

Question from Jeffrey Kraskin, Audience Member – Regarding the Liven's Gun Pit AOI that was shown during tonight's presentation, has this AOI been presented during a previous RAB meeting?

M. Baker confirmed that AOI 4, Liven's Gun Pit, was presented to the RAB prior to tonight's meeting.

Question from J. Kraskin, Audience Member – Do you have a schedule for presenting information on the remaining AOIs during future RAB meetings?

M. Baker noted that during the period when the AOITF was a fully-functioning task group, numerous presentations were given during RAB meetings. All existing AOIs were discussed during those presentations.

Question from P. deFur, RAB Technical Consultant – Are the AOI presentations located on the Spring Valley project website?

M. Baker confirmed that all AOITF presentations that occurred during a RAB meeting should be available in the meeting minutes, which are posted on the website.

Question from J. Kraskin, Audience Member –Do you have a timeline for when the AOI reports will be posted to the Spring Valley website?

M. Baker said that the AOI reports can certainly be posted electronically on the website. A timeline has not been developed for making the AOI reports available, but this can be discussed in the near future.

Question from K. Slowinski, Audience Member – Can you please explain why the Liven's Gun Pit was identified as an AOI, but the range fan is not considered to be a separate AOI?

M. Baker said he was unsure as to why the range fan is not considered to be an individual AOI. During the course of the AOITF, no suggestions were made regarding classifying the entire range fan as a single area of interest.

Question from K. Slowinski, Audience Member –The report for AOI 4, Liven's Gun Pit, reports that an end piece of a 75 mm round was located in the pit, but the historical photograph only displays Stokes

mortars and Livens projectiles being fired. How do you explain the presence of the 75 mm round end piece?

M. Baker replied that a variety of munitions were located across the AU campus. The discovery of a 75 mm round piece inside the historical fence line is not surprising because munition items were scattered throughout the area.

Question from K. Slowinski, Audience Member – It is my understanding that a draft AOI pertaining to Murdock Mill Road was not reviewed by the AOITF. This potential AOI refers to a document that was found at the National Archives in December 2006, which indicated that the Army intended to increase the AUES boundary to include the area southwest of Murdock Mill Road. Why wasn't this potential AOI reviewed by the AOITF?

M. Baker said that he has seen real estate documents that discuss an expansion unrelated to AUES. However, Army documentation from 1918 discusses plans for the expansion of Camp Leach in July and August of 1918. A map in the National Archives shows the Camp Leach boundary extending to Brandywine Street, and this boundary was compared to a present-day street map. Camp Leach was located on the northern part of the AU campus near Massachusetts Avenue North, and consisted of an engineer training camp. The proving ground for the chemical warfare service was situated on the main AU campus and in the vicinity of streets such as 48th, 49th, and Sedgwick Street.

He explained that Camp Leach was not expanded as planned, according to memos sent from Camp Leach to the Department of the Army in September 1918. Camp Leach requested funding to purchase 6000 beds, to build a certain number of tents, to purchase a variety of supplies, and to provide 2 additional regiments and engineer troops. According to the Army's responses, all requests were denied.

Question from K. Slowinski, Audience Member – In regard to the Pit 3 investigation, why has there been very little effort to contact the construction workers who may have placed munition items near the foundation of the house?

D. Noble said that obtaining information from the construction workers is not a closed issue, and that information may be pursued in the future. However, the current focus is on completing the current intrusive effort.

K. Slowinski commented that the lack of curiosity seems illogical. The construction workers who built the house foundation may be able to reveal where other munitions were placed, and whether any munitions were removed from the property for disposal.

D. Noble replied that lack of curiosity is not a factor. Conducting the current intrusive investigation is simply a higher priority.

Question from K. Slowinski, Audience Member – Have AU and USACE discussed the replacement value of the AU Public Safety Building, in the event that it must be removed during intrusive effort on the AU campus?

D. Noble said that there has not been any discussion of the AU Public Safety Building replacement value.

VI. Adjourn

The meeting was adjourned at 9:00 PM.