SPRING VALLEY FORMERLY USED DEFENSE SITE PROJECT
RAB Meeting

January 13, 2015
7:00 – 8:30 p.m.

UNDERCROFT MEETING ROOM
ST. DAVID'S EPISCOPAL CHURCH
5150 MACOMB ST. NW, WASHINGTON, DC

Agenda

7:00 p.m. **I.** **Administrative Items**

Co-Chair Updates
- Introductions, Announcements

Task Group Updates

7:10 p.m. **II.** **USACE Program Updates**

Groundwater Study
Glenbrook Road
Site-Wide Remedial Investigation Document Overview

8:00 p.m. **III.** **Community Items**

8:10 p.m. **IV.** **Open Discussion & Future RAB Agenda Development**

Upcoming Meeting Topics:

- Site-Wide Remedial Investigation Document by Peter DeFur, TAPP Technical Consultant
- 4825 Glenbrook Road Health Consultation Update (ATSDR)

*Next meeting: March 10, 2015

8:20 p.m. **V.** **Public Comments**

8:30 p.m. **VI.** **Adjourn**

Note: The RAB meets every odd month.

Spring Valley

Formerly Used Defense Site

Restoration Advisory Board Meeting

January 13, 2015

"The USACE Mission in Spring Valley is to identify, investigate and remove or remediate threats to human health, safety or to the environment resulting from past Department of Defense activities in the area."

US Army Corps of Engineers

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Agenda Review

- Co-Chair Updates
  - Introductions, Announcements
- USACE Updates
  - Groundwater Study
  - Glenbrook Road
  - Site-Wide Remedial Investigation Report Overview
- Open Discussion & Agenda Development
- Community Items
- Public Comments

Co-Chair Updates

Introductions

Co-Chair Updates

Announcements

- **Website Updates:**
  - November & December Monthly Site-Wide Project Updates
  - Weekly 4825 Glenbrook Rd Project Updates with photos
  - October Partnering meeting minutes
  - November RAB meeting minutes

- **2015 RAB Meetings:**
  - Our 2015 RAB meeting schedule has been posted to the website
  - At the March 10 RAB meeting, Dr. Peter DeFur plans to present on the RI's conclusions

- An *Al Jazeera America* TV story on the project was broadcast over the holidays

Task Group Updates

Groundwater Update

Groundwater

Groundwater Investigation Efforts

- **Several monitoring wells required maintenance.** This field work was completed the week of Thanksgiving.

Well Maintenance at MW-21 & MW-22

- **Sampling MP-5:** The team received a new sampling permit and plans to sample MP-5 on Thursday, January 15, 2015, weather permitting. During the partial day sampling event, Rockwood Parkway will only be open to local traffic. Detour signs will direct commuters to Indian Lane and Glenbrook Road.

4825 Glenbrook Road

4825 Glenbrook Road

Tent Move Activities

The team performed a successful smoke test on November 20 to ensure negative pressure inside the tent at the Phase 2 location.

All site infrastructure set-up, including a new truck door, and training was completed on November 25.

4825 Glenbrook Road

Tent Move Activities

This is a modified photo with a proposed redesign to the front fence at the Glenbrook Road project site.

We are planning to install the new fence to help improve the property's appearance along Glenbrook Road once we receive approval from the City.

4825 Glenbrook Road

High Probability

A large concrete retaining wall at the end of the former driveway was removed to make room for the debris roll-off containers that need to be placed inside of the tent.

4825 Glenbrook Road

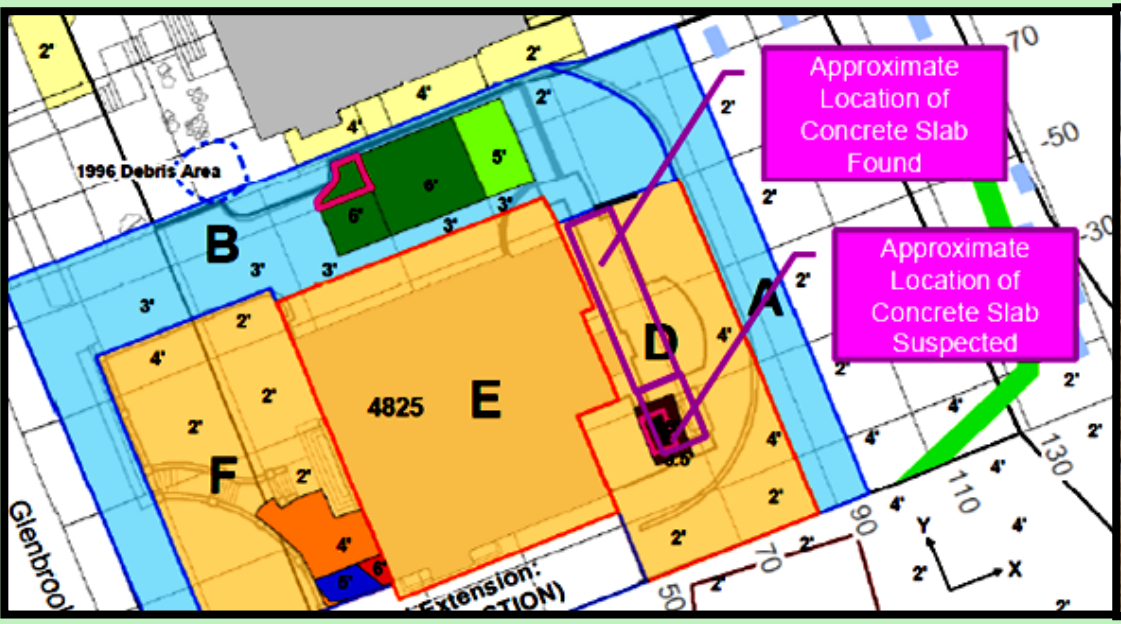
High Probability

During the work, crews discovered two small pieces of American University Experiment Station-related glass and a 75mm munitions debris item, which was found 8 feet below the surface. Based on an X-ray and thorough analysis, the team determined there were no explosives or liquid in the item.

The item was packaged and transported to Federal Property. There were no detections of chemical agents or industrial compounds in the air monitors since beginning work in the second tent location.

4825 Glenbrook Road

High Probability



During the retaining wall removal and soil excavation, the team encountered a thick concrete pad that extends over an approximate 60' X 10' area. We are inspecting the slab as it is being broken into disposable pieces, to ensure it is not associated with any contamination. No contamination on the concrete has been detected to date.

4825 Glenbrook Road

Schedule Update

✓ **December 2012 through May 2013**

Site Preparation/ Initial Low Probability Work

- **Test pits in backyard and re-locating utilities**
- **Install soldier piles to support embankments**

✓ **May 2013 through September 2013**

ECS Set Up, High Probability training, and Pre-Operational Exercises

→ **September 2013 through Winter 2016/2017**

High Probability Excavation

Winter 2017 through Spring 2017

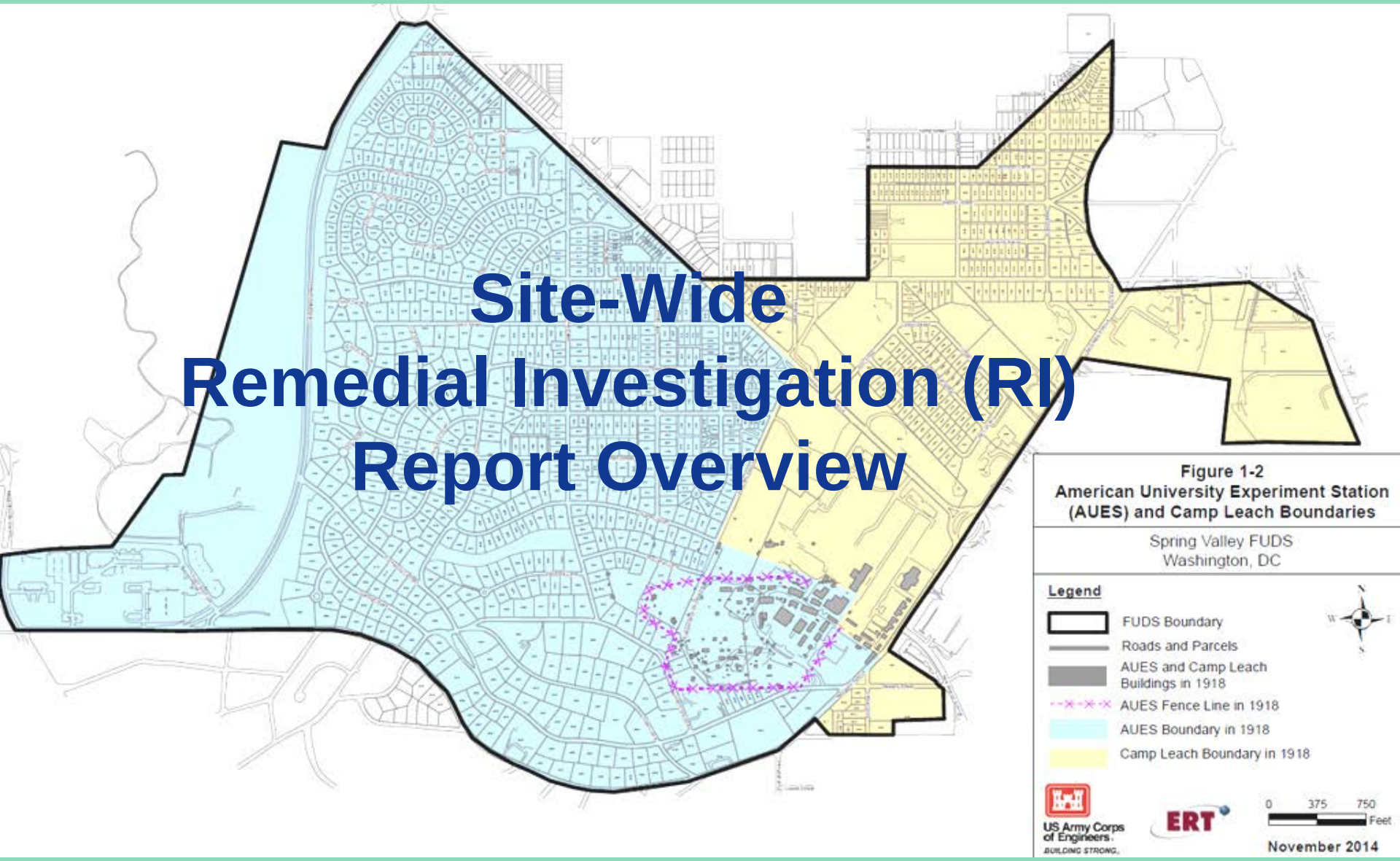
Final Low Probability Excavation

Spring 2017 through Summer 2017

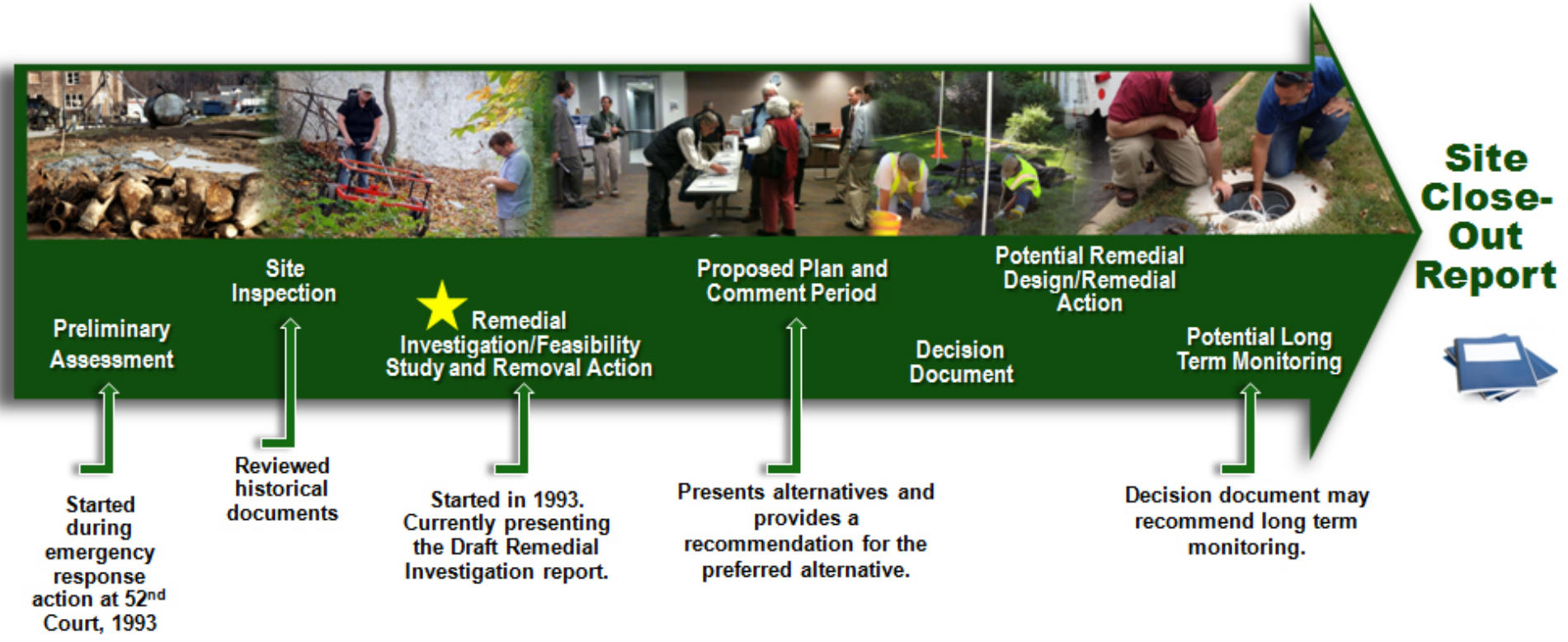
Site Restoration

USACE Updates

Site-Wide Remedial Investigation (RI) Report Overview



CERCLA Process



Spring Valley FUDS
Site-Wide RI Table of Contents

Two primary guidance documents were followed in preparing the Site-Wide Remedial Investigation (RI) Report:

- **The Army MMRP RI/FS Guidance**
- **The EPA Guidance for Conducting RI/FS.**

Each document provides a suggested Table of Contents to address the topics required for an RI report.

A review of the development of the Table of Contents for the SVFUDS RI was presented at the March 2014 RAB meeting.

Spring Valley FUDS
Site-Wide RI Report Organization

Table of Contents:

- **Executive Summary**
- **Section 1** – Introduction
- **Section 2** – Physical Characteristics
- **Section 3** – RI Objectives and Conceptual Site Models (CSMs)
- **Section 4** – Field Activities
- **Section 5** – Investigation Results
- **Section 6** – Contaminant Fate and Transport
- **Section 7** – Risk Assessment
- **Section 8** – Summary and Conclusions
- **Appendices** – A through G

Spring Valley FUDS
Site-Wide RI Executive Summary

The Executive Summary provides a detailed overview of the whole RI report.

- Two subjects to note:
  - 4825 Glenbrook Road was designated as a separate site. However, the Site-Wide RI discusses 4825 Glenbrook Road as needed to provide the history and investigations in context.
  - The groundwater study will have its own stand alone RI. However, a summary of current groundwater sampling data will be provided in Appendix G once it is complete.

Spring Valley FUDS
Site-Wide RI Section 1: Introduction

This RI is notably different from traditional RIs because no singular set of objectives or work plan was established.

- While typical RIs follow the CERCLA sequence of events, this RI is an extremely complex site involving several ongoing and concurrent activities over many years, focusing on different potential hazards and/or investigation types or locations, as well as time-critical and non-time critical removal actions.
- Each of these ongoing and concurrent activities resulted in completed standalone reports documenting the findings.

Spring Valley FUDS
Site-Wide RI Section 1: Introduction

- Previous efforts are organized by the following key activities types:
  - Initial investigation and characterization
  - Follow-on investigation and characterization
  - Geophysical investigations
  - Removal actions
- Tables list the key finalized standalone documents that provide a summary of previous site activities, describing when and why they were performed.
- Includes definitions and Primary Units of Investigation:
  - Operable Units (OUs)
  - Points of Interest (POIs)
  - Areas of Interest (AOIs)
  - Range Fan
  - Munitions Response Sites (MRSs)

Spring Valley FUDS
Site-Wide RI Section 2: Physical Characteristics

- Describes the physical characteristics and surface features of the region, and the tools used to support and plan investigation and characterization activities in the SVFUDS.
- Key topics covered:
  - **GIS:** how it was developed and applied to investigation planning.
  - **Ground Scars:** how they were mapped and used to guide sampling and investigation.
  - **Cut and Fill Maps:** how they were developed and used to help determine topography changes relative to circa 1918 conditions.
  - **Environmental Setting:** including regional and local geology, soils and the relevance of saprolite, hydrology, hydrogeology, ecology, and demographics.

Spring Valley FUDS
Site-Wide RI Section 3 and 4

- Section 3: RI Objectives and Conceptual Site Models (CSMs)
  - Describes the RI objectives of characterizing nature and extent of any potential hazardous and toxic waste (HTW)/munitions constituents (MC)/ chemical warfare materiel (CWM) contamination or MEC hazards within the SVFUDS resulting from the past Department of Defense (DOD) activities.
  - CSMs communicate the current knowledge about risks at the site. These CSMs discuss the primary sources, release mechanisms, interactions, and receptors within the SVFUDS.

- Section 4: Field Activities
  - Provides a description of the technical procedures used to perform the RI field activities.
  - Field activity processes covered include:
    - Sampling and data collection
    - Removal operations
    - High and low probability intrusive investigations
    - Phytoremediation efforts
    - Soil excavations

Spring Valley FUDS
Site-Wide RI Section 5: Investigation Results

- Organized per the four previously discussed activity types.
- Summarizes the results of all the investigations and place them into the context of the nature and extent of contamination discussion.
- Presents the rationale for each key event and summarizes findings to provide a more complete characterization
- Further references are provided in the appropriate RI appendix.

Spring Valley FUDS

Site-Wide RI Section 6: Contaminant Fate & Transport

- Discusses the fate and transport mechanisms potentially affecting releases and distribution of constituents and examines how these mechanisms affect migration of the constituents.

- Key topics include:
  - Potential contaminant sources;
  - Routes of migration;
  - Migration and persistence; and
  - The focus on SVFUDS constituents, including arsenic, mustard, lewisite, CWM agent breakdown products, metals, and PAHs.

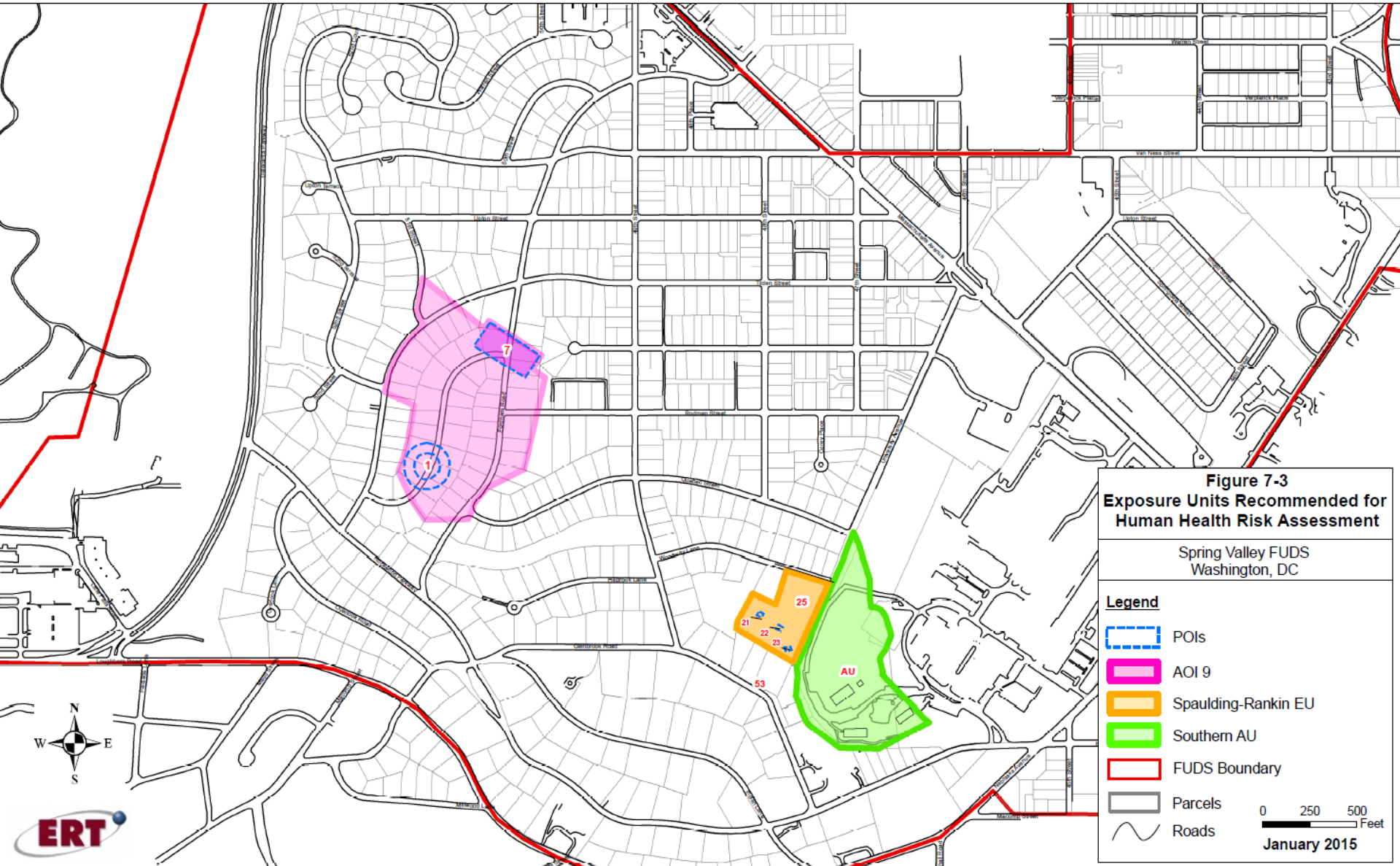
Spring Valley FUDS
Site-Wide RI Section 7: Risk Assessment

- Integrates multiple risk-related issues to obtain a comprehensive understanding of risks/hazards remaining within the SVFUDS.
- Section 7 includes the following key elements:
  - Quantitative Human Health Risk Assessments (HHRAs);
  - Review of previously completed HHRAs and risk screening procedures;
  - Arsenic derivation and protectiveness of 20 mg/kg arsenic as the soil cleanup goal, and arsenic potentially remaining in soil beneath city streets;
  - External health-related studies;
  - MEC Hazard Assessment (MEC HA) and MRS Prioritization Protocol (MRSPP);
  - Screening Level Ecological Risk Assessment; and
  - Uncertainty discussions focusing on the sufficiency of the existing sampling to characterize risk, DGM (geophysics) limitations, and the potential for remaining disposal areas or burial pits

Spring Valley FUDS
Site-Wide RI Section 7: Risk Assessment

- The overall HHRA strategy included:
  - Review of the older (pre-2005) standalone HHRAs to see whether their conclusions were still protective in light of updated EPA guidance.
  - Analysis of supplemental sampling based on AOI Task Force recommendations (potential AOIs not previously addressed, or potential data gaps, etc.)
- The result was identification of exposure units (EUs) that integrated those older HHRA samples with the more recent supplemental samples, and re-screening the EU based on the combined single data set.

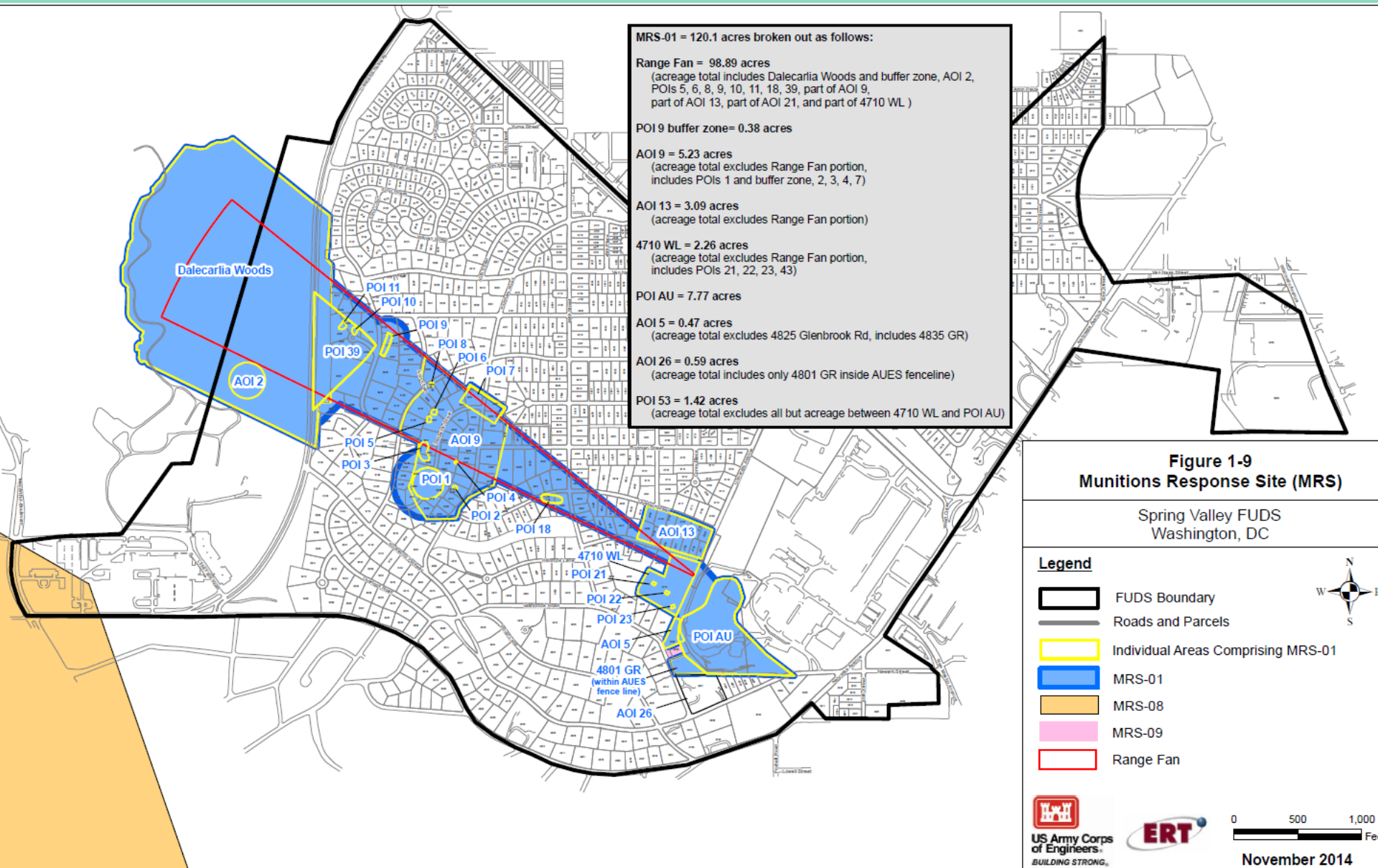
Spring Valley FUDS
Site-Wide Human Health Risk Assessment



Spring Valley FUDS
Site-Wide RI MEC Hazard Assessment Summary

- MEC HA is a qualitative hazard assessment that looks at the acute explosive hazards associated with remaining MEC at a site.
  - Analyzes site-specific conditions that affect the likelihood that a MEC accident will occur.
- At SVFUDS, the MEC HA was organized around three primary activities:
  - **Ballistically Fired Testing** (e.g., Range Fan);
  - **Statically Fired Testing** (e.g., Circular Trenches); and
  - **Disposal** (e.g., 52nd Court, Lot 18).
    - Disposal is further divided into ‘known’ and ‘possible’ disposal areas.

Spring Valley FUDS
Site-Wide RI Munitions Response Site (MRS)



Spring Valley FUDS
Site-Wide RI MEC Hazard Assessment Summary

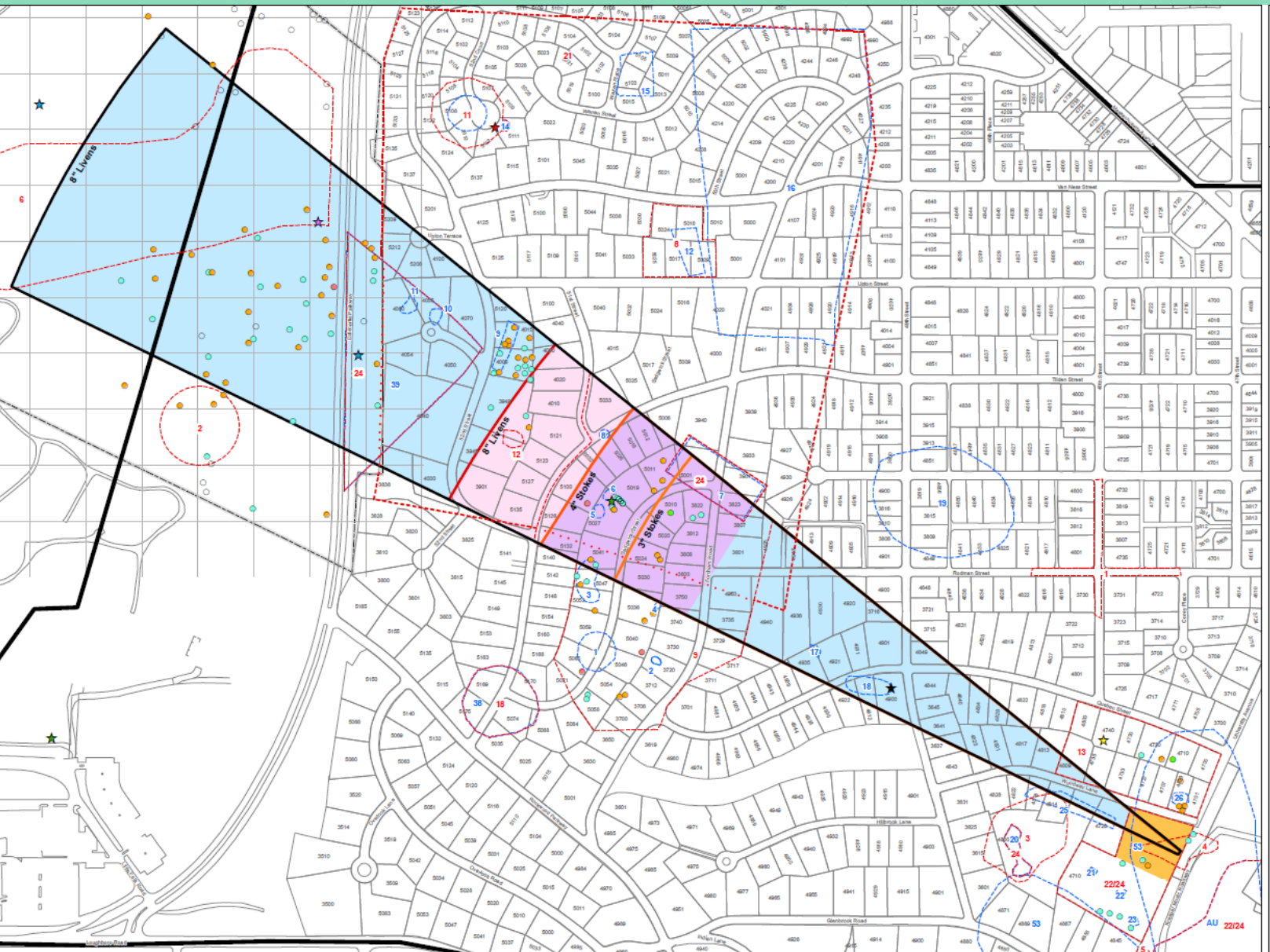


Figure 7-6
Ballistically Fired Testing Areas (MEC HA)

Spring Valley FUDS
Washington, DC

Legend

Range Fan Component Areas
- Function Test Range (3-4")
- Function Test Range (8")
- Range Safety Buffer
- Firing Point

Items
- Livens Projectile (MEC)
- Stokes Mortar (MEC)
- 75 mm Projectile (MEC)
- Thermite Grenade (MEC)
- Pipe with Explosives (MEC)
- Disposal Area (MEC/CWM)
- 75 mm MD
- Livens MD
- Stokes Mortar MD
- MD (miscellaneous)
- Non-AUES MD

Range Fan
- 3" Stokes Yards
- 4" Stokes Yards
- 8" Livens Yards
- Area of Interest (AOI)
- Point of Interest (POI)
- Parcels
- FUDS Boundary

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November 2014

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Spring Valley FUDS
Site-Wide RI MEC Hazard Assessment Summary

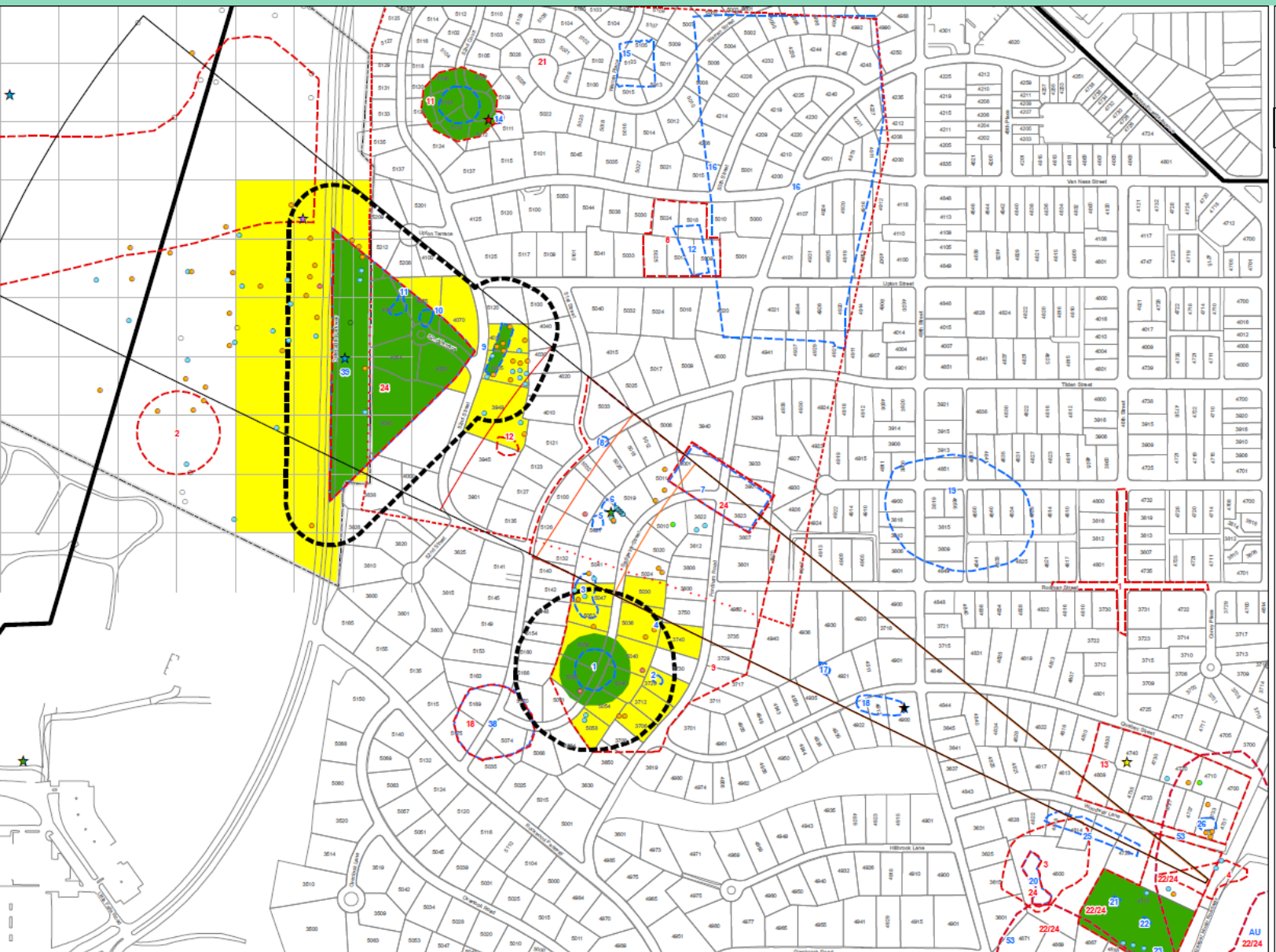

Figure 7-7
Statically Fired Testing Areas (MEC HA)

Spring Valley FUDS
Washington, DC

Legend

Statically Fired Testing Areas
- Discrete Static Testing Area
- Potential DMM Disposal Investigation Area (150 foot)
- Geophysical Coverage

Items
- Livens Projectile (MEC)
- Stokes Mortar (MEC)
- 75 mm Projectile (MEC)
- Thermite Grenade (MEC)
- Pipe with Explosives (MEC)
- Disposal Area (MEC/CWM)
- 75 mm MD
- Livens MD
- Stokes Mortar MD
- MD (miscellaneous)
- Non-AUES MD

Range Fan
- 3" Stokes Yards
- 4" Stokes Yards
- 8" Livens Yards
- Area of Interest (AOI)
- Point of Interest (POI)
- Parcels
- FUDS Boundary

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November 2014

US Army Corps of Engineers
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Spring Valley FUDS
Site-Wide RI MEC Hazard Assessment Summary

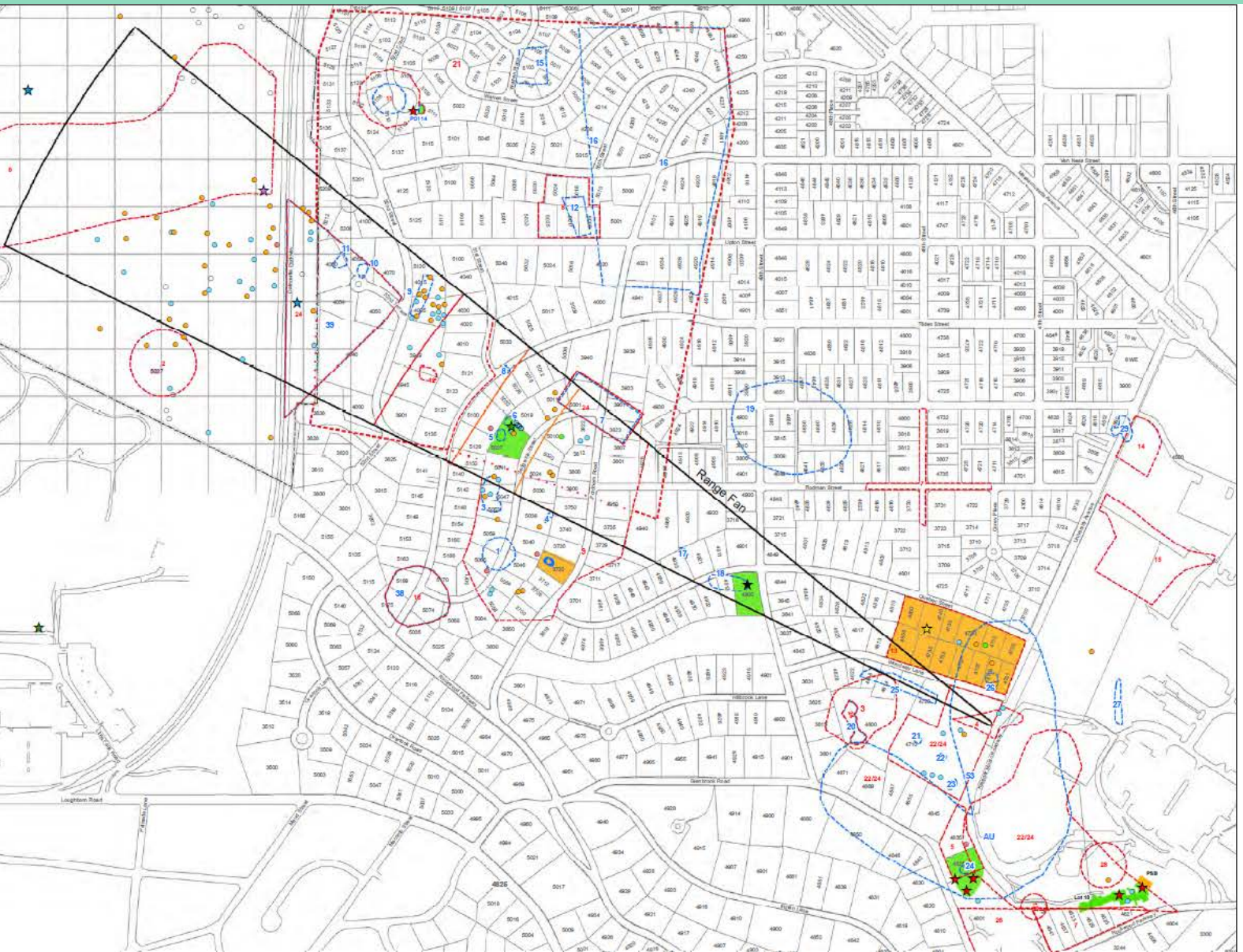

Figure 7-8
Known and Potential Disposal Areas (MEC HA)

Spring Valley FUDS
Washington, DC

Legend

Known Disposal Area
Possible Disposal Area

Items
- Livens Projectile (MEC)
- Stokes Mortar (MEC)
- 75 mm Projectile (MEC)
- Thermite Grenade (MEC)
- Pipe with Explosives (MEC)
- Disposal Area (MEC/CWM)
- 75 mm MD
- Livens MD
- Stokes Mortar MD
- MD (miscellaneous)
- Non-AUES MD

Range Fan
- 3" Stokes Yards
- 4" Stokes Yards
- 8" Livens Yards

Area of Interest (AOI)
Point of Interest (POI)
Parcels
FUDS Boundary

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November 2014

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Spring Valley FUDS
Site-Wide RI Conclusions and Appendices

- **Conclusions:**
  - Dr. Peter DeFur plans to present his evaluation of the RI conclusions at the March 10th RAB meeting.

- **Appendices:**
  - A) All Figures
  - B) Technical Memos and Signed Documents of Record
  - C) Key Investigation or Removal Reports
  - D) Completed HHRAs and Screening Documents
  - E) HHRAs for Residential and AU Exposure Units
  - F) MEC HA Scoresheets and MRSPP Scoresheets
  - G) Groundwater Summary Report (available at a later date)

Spring Valley FUDS
Tentative Schedule for Site-Wide RI Report

January 13	USACE gives RAB overview of the RI document.
February 10	End of Interagency Partner's 60-day review. Partnering meeting to discuss RI review, adequacy and conclusions of the Draft-Final RI document.
February - March	USACE contacts homeowners, who may be directly effected by the RI report, ahead of public release.
March 10	USACE and Dr. Peter DeFur brief the RI conclusions at the RAB meeting. Tentative start of the formal 45-day public comment period.
Mid-April	Community meeting to brief the community on the RI document's content and conclusions.
Late-April	Public comment period ends. USACE addresses public comments and finalizes the report.
Next Steps	Feasibility Study to be conducted to evaluate alternatives for addressing any unacceptable risks or hazards identified in the Final RI Report.

Spring Valley FUDS
Restoration Advisory Board

Community Items

Spring Valley FUDS
Restoration Advisory Board

- **Reminder: Our next meeting will be**

  March 10th

- **Upcoming Agenda Items**
  - **Suggestions?**

  - Site-wide Remedial Investigation Presentation by Dr. Peter DeFur, TAPP Technical Consultant
  - 4825 Glenbrook Road Health Consultation Update (ATSDR) - TBD

Spring Valley FUDS
Restoration Advisory Board

- **Public Comments**

- **Wrap-Up**

U.S. Army Corps of Engineers
Spring Valley Joint Restoration Advisory Board Meeting
St. David's Episcopal Church
Minutes of the January 13, 2015 RAB Meeting

RESTORATION ADVISORY BOARD MEMBERS PRESENT AT THIS MEETING	
Dan Noble	Military Co-Chair/USACE, Spring Valley MMRP Manager
Greg Beumel	Community Co-Chair
Ralph Cantral	Community Member
Paul Dueffert	Community Member
Lee Monsein	Community Member
George Vassiliou	Community Member
John Wheeler	Community Member
Tom Smith	Community Member
Mary Bresnahan	Community Member
Mary Douglas	Community Member
Dr. Peter deFur (Represented by Laura Williams)	Environmental Stewardship Concepts/RAB TAPP Consultant
Alma Gates	At Large Representative – Horace Mann Elementary School
James Sweeney	Agency Representative – District Department of the Environment
Linda Argo	At Large Representative – American University
Steve Hirsh	Agency Representative – US Environmental Protection Agency Region III
RESTORATION ADVISORY BOARD MEMBERS NOT PRESENT AT THIS MEETING	
William Krebs	Community Member
Malcolm Pritzker	Community Member
Kathleen Connell	Community Member
Lawrence Miller	Community Member
ATTENDING PROJECT PERSONNEL	
Lan Reeser	USACE, Spring Valley Technical Manager
Andrea Takash	USACE, Public Affairs Specialist
Maya Werner	Spring Valley Community Outreach Program

Carrie Johnston	Spring Valley Community Outreach Program
Rebekah McCoy	ERT
HANDOUTS FROM THE MEETING	
I. Final Agenda for the January 13, 2015 RAB Meeting II. Army Corps of Engineers Presentation	

AGENDA

Starting Time: The January 13, 2015 RAB meeting began at 7:05 PM.

I. Administrative Items

A. Co-Chair Updates

Greg Beumel, Community Co-Chair, opened the meeting. He turned the meeting over to Dan Noble.

D. Noble, Spring Valley Project Manager and Military Co-Chair, welcomed the group. He wished everyone a Happy New Year and noted that this is the first RAB meeting in 2015. He also noted that this was the anniversary month of the project. January 5th marked the 22nd anniversary of the Spring Valley project.

D. Noble reviewed the evening's agenda and noted that he would present all agenda items in Todd Beckwith and Brenda Barber's absence.

B. Introduce Guests

D. Noble introduced and welcomed Rebekah McCoy as the new recorder who will take over recording the meetings and producing the minutes.

C. General Announcements

D. Noble announced that the November and December monthly overall project updates and the weekly Glenbrook Road updates are continuing to be posted to the website, along with the October partnering meeting minutes and the November RAB meeting minutes. The 2015 RAB meeting schedule has also been posted online. At the next RAB meeting, Dr. Peter deFur, the RAB's independent technical consultant, will give a presentation on the conclusions of the Draft RI report.

D. Noble announced that the Al Jazeera America piece aired multiple times during the week of Christmas.

D. Task Group Updates

No task group updates were presented.

II. USACE Program Updates

D. Noble, Spring Valley Project Manager and military Co-Chair, provided a brief status update on the groundwater investigation, which focused on the well maintenance event and the sampling event to occur Thursday, January 15; A status update on the current high-probability schedule

and progress to date for 4825 Glenbrook Road; And an update and overview of the Site-Wide Remedial Investigation Report, which focused on the report's organization.

A. Groundwater Study

Well Maintenance: Several monitoring wells that have been used for many years required maintenance. This fieldwork was completed in late November 2014.

Upcoming Sampling event: A new public space permit was received in order to sample the new multiport well on Rockwood Parkway. The sampling event is scheduled for this Thursday, January 15th. Results are expected in a few weeks. An announcement for the sampling event was sent to the wider community email list, given via fliers to the surrounding homes, and posted to the project website. The sampling event is scheduled to take one day. Rockwood Parkway will only be open to local traffic. Sampling results from this new well are important because it will complete the data set needed to write the Groundwater RI report.

B. Glenbrook Road

Tent Move: On November 20, 2014, the team performed a successful smoke test of the engineering control structure (ECS) in its new location to verify that it was under negative pressure. The following week, high probability activities resumed inside of the ECS. Digging resumed on December 1, 2014.

Fencing: After discussions with residents along Glenbrook Road, USACE is planning to install a new, more attractive and permanent fence. The plan is to have the fence color be all grey. There will be an ANC meeting on Wednesday, January 14th to discuss the variance for the fence since it is being proposed at 10 feet. B. Barber will be at the meeting to speak with the ANC about the pending fence permit.

Question from Alma Gates, RAB Member – How tall is the fence now?

D. Noble replied that the current fence is 8 feet high. More information will be available at the ANC meeting tomorrow.

Question from Lee Monsein, RAB Member – Is it a chain link fence with slats?

D. Noble explained that it is a chain link fence with a privacy fabric. The fabric that is currently being used is see-through, while the new fabric will block any view of activity in the front yard area.

High Probability: A large concrete retaining wall at the end of the former driveway was removed to make room for the roll-off containers. It was important to get a roll-off inside of the tent because it is the most efficient way to get large volumes of uncontaminated soil and rubble out of the tent every day.

As the crews continued to dig through the soil at the end of the driveway, a couple pieces of laboratory glass and an intact 75mm munition item were found. On December 10th, after a thorough assessment, the munition item was found to be empty, classifying it as munition debris. The 75mm was found in the curved area behind the driveway against the retaining wall. These items were found 8 feet deep in fill material, which means they were most likely moved from somewhere else on the property. The original location of the items is unknown.

As the crews lifted up the brick backyard patio, they ran into a substantial concrete pad about a foot below the brick patio. The team believes the concrete pad extends the entire area of the

brick patio as a foundation. The crew is currently working on breaking up the concrete slab into small pieces to ensure it is clear of contamination.

Schedule: USACE remains on schedule in the High Probability Excavation phase, which will run through the winter of 2016/2017. The team is currently excavating under the second tent location, which began late November 2014 and is scheduled to be completed November 2015. The concrete slab should not prevent USACE from meeting that date.

Question from Nan Wells, ANC3D Commissioner – How do you test for contamination when you run into a full concrete slab? What chemicals do you test for?

D. Noble explained that as long as the building materials are in contact with uncontaminated soil, then the team believes that those building materials remain uncontaminated. When the team knows that building materials are in contact with contaminated soils, then the building materials (including brick and concrete) will be ground up and submitted for testing as necessary. USACE is testing for the same chemicals that are being tested in the soil. If chemicals are detected in the soil, then the concrete and brick will also be tested for mustard or lewisite.

Question from Audience Member – Are you excavating to bedrock?

D. Noble confirmed that the crews are excavating to bedrock or competent saprolite. The crew dug down to bedrock at the first tent location, and will do the same at the second location.

Question from Ken Shuster, Audience Member – Do you feel that the concrete slab was built more recent than 1918?

D. Noble conformed this. The concrete slab was built when the house was built in 1992 and was obviously part of the patio design.

Question from K. Shuster, Audience Member - Could you explain why you determined that this should be a high probability site; was there some basis or just a precaution?

D. Noble replied that this decision was based on what had previously been found at the property. Chemical Warfare Material was found at the property and USACE had every expectation that they would find more as they continued to dig.

Comment from K. Shuster, Audience Member – As I understand it, the previous phase was not a high probability phase and was also on this property.

D. Noble explained that USACE had designated certain areas of the property as low probability areas and others as high probability areas.

Question from Ginny Durrin, Audience Member – What do you suspect is under the second concrete slab? There are two squares on the map. What does it say for the lower square?

D. Noble replied that the map states “approximate location of concrete slab suspected.” USACE knows the upper portions are the dimensions of the slab, while the bottom half of the slab size is approximate. The crew is starting its removal from the 4835 Glenbrook Road side of the property and moving towards the 4801 Glenbrook Road side. At this point, the team can only guess that the slab extends similar to the brick patio.

Question from K. Shuster, Audience Member – So you do not have any geophysical information that would indicate that there is something you might run into?

D. Noble explained that USACE does not have any good reliable geophysical data for this property.

Comment from G. Durrin, Audience Member – I thought that earlier they thought there would be something under the back porch under that second purple slab.

D. Noble replied that USACE knows that the area under the brick patio has mustard and lewisite contaminated soil. They are anticipating that there might be some debris along with the contaminated soil. However, they do not know for sure because the results were from a soil boring. Back in 2009 and 2010, the team knew of a debris area right off the patio that was found with a test pit. This debris area was removed under the first tent (excavated in the 2009 time-frame), which went right up to the foundation wall of the patio.

C. Site-Wide Remedial Investigation (RI) Document Overview

The Site-Wide RI document was provided to the Partners on December 9th, which began the 60-day Partner review. This Partner review period will end on February 9th. The next Partnering meeting has been scheduled for February 10th. At this meeting, the Partners will review the Partner comments and see where EPA and DDOE stand with respect to the analysis of the data and the conclusions of the Site-Wide RI report. Afterwards, once the Partners' comments are addressed, the draft RI report will be publically released. USACE hopes to share the contents of the report at the March 10th RAB, which would also be the start of the 45-day public review period.

The CERCLA Process: The FUDS site is remediated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which is the regulatory framework prescribed for the Spring Valley FUDS. Throughout the project, USACE has followed the EPA guidance on remediation under the CERCLA process. USACE is currently in the process of presenting the RI report. USACE will then write and present a Feasibility Study, followed by a Proposed Plan with a legally required public comment period. Once the Proposed Plan is finalized, a Decision Document will get the proper Department of Defense signature, and will be followed by the Remedial Design of any action recommended or required by the Decision Document. There is always a chance for long term monitoring or long term oversight at the site, depending on what is required by the Decision Document.

Guidance Documents: Two primary guidance documents were followed in preparing the Site-Wide RI report.

- The **EPA Guidance for Conducting an RI/FS** applies to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process used at the Spring Valley FUDS.
- The **U.S. Army MMRP (Military Munitions Response Program) RI/FS Guidance** applies to the MMRP portion of the Spring Valley FUDS.

Report Organization: The Table of Contents (TOC) for the RI report is a hybridized version of the two guidance documents listed above to satisfy the requirements of both documents and the

TOC (presented to the RAB in March 2014). The RI report includes an Executive Summary, followed by 8 sections and 7 appendices. The report is about 300 pages long from the Executive Summary through Section 8. Appendices A through G are very long and will only be presented electronically.

Executive Summary: The Executive Summary is just over 30 pages. About 22 of those pages is a tabular summary of the important areas of the site. The text is about nine pages long. The Executive Summary covers all eight sections, including the conclusions and recommendations.

To Note: 4825 Glenbrook Road was designated as a separate site. However, the Site-Wide RI discusses 4825 Glenbrook Road as needed to provide the history and place investigations in context. This property has its own set of documents and is on its own CERCLA path. The groundwater study will have its own stand alone RI report and Feasibility Study. USACE hopes to bring the groundwater study and the Site-Wide project back together in the Proposed Plan, but did not want the progress to wait on either document. The Site-Wide RI document is a presentation of the surface and subsurface soil at the site. A summary of the current groundwater sampling data will be provided in Appendix G once it is complete.

Section 1 - Introduction: This section is lengthy and detailed due to having 22 years of information and events, which have all been summarized and explained. Section 1 is organized and arranged around key activities that were conducted on the site over the years, including characterization and investigation, geophysical investigations, and removal actions. In the RI, there is a list of older documents that are important for the project and support the RI's conclusions. During the 22 years of the project, a lot of reports were produced that have important analyses and important conclusions that impact the conclusions of the overall RI report. These reports were summarized in tables in the RI. The important reports are included in the appendices in their entirety. Over the years, USACE has organized the site in different ways; Operable Units (OUs), Points of Interest (POIs), Areas of Interest (AOIs), Range Fan, and Munitions Response Sites (MRSs). All of the terms are explained in Section 1 and used throughout the document.

Section 2 – Physical Characteristics: Section 2 describes the site and what is important and significant for the site. Key topics covered include ground scars, cut and fill maps from the historical aerial photography, and the basic environmental setting of the site.

Section 3 – RI Objectives and Conceptual Site Models (CSMs): Section 3 describes what the objectives of the RI were, and what it set out to do. It uses CSMs to explain why there was a need for a RI.

Section 4 – Field Activities: Section 4 discusses completed field activities and how those activities support the objectives of the Remedial Investigation. USACE discusses the soil sampling and data collection, the different removal operations, the concept of high and low probability intrusive investigations and how those were done, all of the soil excavations, and the phytoremediation efforts (where some arsenic contamination was remediated using ferns).

Section 5 – Investigation results: Section 5 presents the results of all the investigations and places them into the context of the nature and extent of contamination discussed. This section presents only data USACE has gathered; it does not include conclusions, recommendations, or analysis.

Section 6 – Contaminant Fate and Transport: The EPA requires a discussion on contaminant fate and transport of contaminants in the environment. This section answers questions such as: What happens to certain chemicals when they are released into the environment? Do they break down, do they bioaccumulate, are they highly mobile, or highly immobile? What the contaminants were, what the sources are, how the releases occurred and what would happen to these chemicals and contaminants once they got into the environment? At Spring Valley, a lot of the focus is on arsenic, mustard, lewisite, chemical warfare material, agent, breakdown products, metals, and PAHs.

Section 7 – Risk Assessment: Section 7 is the most complex and detailed section. This section analyzes the data for the risk assessment to see if there is any remaining unacceptable risk in Spring Valley from the presence of these contaminants. Risks relate to chemical contamination, while hazards relate to the presence of munitions items that could present hazards based on their design to be explosive. A human health risk assessment (HHRA) is discussed along with a MEC HA (Munitions and Explosives of Concern Hazard Assessment). Human health and threats to public safety are discussed. The EPA further requires that ecological risks be evaluated; a screening level ecological risk assessment was completed and the results of that effort are presented in this section.

Risk: At the March 2014 RAB meeting, Tom Bachovchin, ERT Inc., gave a detailed presentation on the review of all pre-2005 HHRAs. Post-2005 HHRA findings were also included in the RI report. Section 7 includes a discussion of supplemental sampling that was recently completed to address potential gaps in data sets and conclusions. As a result of the review of all pre-2005 HHRAs, a few exposure units (EUs) were identified where USACE felt a current risk assessment needed to be completed. Additionally, Section 7 includes a summary of the old risk assessment conclusions and a discussion of what still needs to be formally assessed at the EUs with the updated screening process. EPA is constantly updating their toxicology database, as to what levels of contaminants may or may not pose a risk. Based on that information and the new data, USACE performed a new formal risk assessment in three EUs.

Hazard Assessment: The Munitions and Explosives of Concern (MEC) hazard assessment (HA) was conducted to look at the acute explosive hazards associated with remaining MEC at the site. MEC is a subset of munitions related items that could be found. The MEC HA analyzes site-specific conditions that affect the likelihood that a MEC accident will occur. The Department of Defense (DoD) guidance states that it is the MEC that presents the hazard, not, for example, munitions debris (MD). If you had a site with munitions debris items, but no MEC, then there would be no hazard from munitions at that site. If you have a site that has MEC present, then you do have a potential hazard and you would formally evaluate that hazard. You then come up with a semi-quantitative number that describes the relative level of the hazard. The MEC HA was presented at the March 2013 RAB meeting.

The RI will present the potential MEC hazards that possibly remain in Spring Valley. In Spring Valley, the MEC HA was organized around three primary activities that the soldiers undertook during WWI; ballistically test firing munitions (e.g., Range Fan), statically testing munitions (e.g., circular trenches), and the disposal of munitions and munitions items (separated into ‘known’ and ‘possible’ disposal areas). The Army guidance states that when a site is assessed for MEC, the site must be separated into Munitions Response Sites (MRSs). The MRSs were identified and are presented in Figure 1-9 in the RI report.

If an area does not have MEC, then there is no hazard associated with that area. The MRSs identify areas that will be evaluated for those hazards. Any areas outside these MRSs are not considered for further evaluation because their hazard is zero since no MEC has been found there. Out of the 660 acres, only 120 acres are being discussed in the RI report for potential residual unacceptable hazards. The original site at 52nd Court is not included in the MRS because it was a single, intact disposal pit that was fully addressed in the 1993 Operation Safe Removal. The MEC was completely removed from that area and thus there is no longer any residual hazard to be analyzed. Additionally, two other instances where MEC was found were associated with amnesty rounds that were found over the years. One round was located on Nebraska Avenue on a sidewalk adjacent to the American University campus in October 1993. In 1994, someone left the second piece of MEC at the front gate of the Federal Property site. USACE does not know where those two items came from so there is no way to analyze potential hazard.

USACE has formally identified three MRSs: MRS-01, MRS-08 and MRS-09. MRS-01 is discussed in the most detail since MRS-09 is 4825 Glenbrook Road, which has its own MEC HA scoring. MRS-08 is a large range fan associated with Battery Vermont, a civil war battery on the grounds of what is now Sibley Hospital. This range fan is about 900 to 1,000 acres and is formally a part of the Spring Valley site. According to the Army, Spring Valley is 1,600 acres because it includes the Civil War range fan, due to the small overlap on the western edge of the site. At the time the FUDS program managers were putting the site together, they did not want to double count acreage, which would occur if the two sites were separate. There are many Civil War FUDS sites in the area because of the circle of forts and batteries that were in DC to protect the capital from the Confederacy. It was determined through a written document that there was nothing to look for in the Civil War Range Fan since it was never used. The battery was prepared in case the city was attacked, but as far as the Army knows, guns were never even placed or fired at the Battery of Vermont because the city was attacked from the north and an attack never came from across the Potomac River from Virginia. The Civil War Range Fan was categorized as 'no further action' needed. The RI report covers this topic because it is formally part of the SV FUDS site.

Question from Tom Smith, RAB Member - Will the RI report outline and explain why the three MEC areas are not part of this report?

D. Noble replied that the report will explain why the two MEC areas are not a part of the formal evaluation since the hazard in MRS-01 is formerly evaluated.

T. Smith clarified that he was asking about the three MEC instances outside of the light blue area, such as the item left on Nebraska Avenue.

D. Noble replied that there is a detailed explanation of 52nd Court and why it isn't in the current evaluation. He is not sure how much detail is provided about the amnesty rounds. D. Noble made the statement that all the MEC has been found in the blue area and since there were some exceptions he wanted to mention those exceptions.

Question from T. Smith, RAB Member – Are all the AOIs included in the report or only the AOIs associated with the SV FUDS site?

D. Noble replied that all the AOIs and their memorandums are included. A full explanation about all the AOIs, what was done about each one, and what the Partner consensus was about each of the AOIs, including the ones that are off the SV FUDS site are included in the RI report.

Statement from Audience Member – It looks like what you are saying is that the blue areas have been investigated for MEC.

D. Noble confirmed this. The blue area on the map is where USACE investigated and found MEC.

The audience member stated that it is not clear if the white areas have been investigated for MEC.

D. Noble replied that they have been investigated.

The audience member asked if by not shading it blue, USACE was saying that they have not found MEC in those areas.

D. Noble replied that they are saying both, there has been some level of investigation of the whole site.

The audience member asked if the entire site has been investigated for MEC.

D. Noble replied with yes, but clarified that this does not mean that every acre of ground was searched for MEC. Even within the blue area, quite a bit of ground has not been searched for MEC, but in an investigation you do not examine every piece of ground. You examine enough to where you think you know what is occurring and what the hazards are. Then you define that by establishing your MRSs.

The audience member asked if USACE is concluding that there is no potential for MEC in the white colored areas.

D. Noble replied no, all of Spring Valley is a FUDS site, and one could find a piece of MEC anywhere on a FUDS site. In the end you have to say, this is where it was when we found it and these are the areas where more work needs to be done to address the potential hazard, and in the other areas no further work is needed at this time. It is not saying that you could not find a piece of MEC somewhere else on the site, but based on a good investigation, these are the areas were the potential hazards exist and these are the areas where the chance of hazards are very remote.

Question from Audience Member – Is that also assuming that all burial pits would be within the blue areas? That there would not be any pits outside the blue areas.

D. Noble replied that the possible pit areas are within the blue areas. The only known disposal area outside the blue area, which is not included for reasons previously stated, is 52nd Court.

Question from Mary Douglas, RAB Member – Do you deal with the Fordham Road property that won't grant access in the uncertainty section?

D. Noble replied yes and no. That property is discussed since it is a Point of Interest that USACE has not been able to investigate further. It is called out as a possible disposal area. For other reasons, it is included in the blue area and there is a formal recommendation on what to do about that area in the RI report.

M. Douglas asked what is the formal recommendation.

D. Noble explained that formal recommendations of the RI will be presented at the next RAB meeting in March. The RI formally recommends whether or not a particular area needs to proceed to a Feasibility Study in order to look at alternatives for further remediation, because the RI has identified either unacceptable risk or unacceptable hazard associated with that area. The FS will look at alternatives for what can be done to reduce those risks or hazards to an acceptable level. Basically, the RI decides which areas go on to the FS for further evaluation, and which areas get declared 'no further action' areas.

In summary, the areas that will be evaluated in the MEC HA are: the range fan, the ballistic test firing (which was divided up into five distinct sections), the static test fire areas (five locations in green) including the circular trenches and a few locations in the Spalding-Rankin area (concrete bomb pits), and known and possible disposal areas. Small disposal areas have been found along Sedgwick Street, Quebec Street, Glenbrook Road, and the Lot 18 Public Safety Building disposal areas. All the areas will be discussed and scores will be assigned to them. However, scores may not be assigned because sometimes the document concludes that there is no need to calculate a MEC HA score and explains why. 52nd Court is also a known disposal area. Possible disposal areas include POI 2, AOI 13, and the footprint of the Public Safety Building. Evaluation of the potential hazard score associated with those areas will be included in the RI report.

Appendices: Section 7 is supported by appendices D, E, and F. Appendix D has the completed HHRAs and screening documents. Appendix E has the HHRAs for the residential and AU EUs. Appendix F includes the MEC HA and MRSPP score sheets, as well as the formal MEC HA itself. The key investigation and removal reports appear in their entirety in Appendix C. Since the Site-Wide RI is being released ahead of the Groundwater RI, a summary about groundwater study will be included in Appendix G. Appendix G will discuss where the wells and surface water locations are sited, how many wells there are in Spring Valley, what the accumulated sampling results have been, and which potential contaminants of concern were identified in Spring Valley groundwater. Appendix G will also explain that a full Groundwater RI report, which presents the results of the entire groundwater investigation, will be separate and forthcoming in the near future.

Dr. deFur is also reading and reviewing the RI report. At the March 10th RAB meeting, Dr. deFur plans to present his evaluation of the RI conclusions. At this meeting, D. Noble will give updates as needed on current activities and then briefly present the results of the RI report. Afterwards, Dr. deFur will give a more detailed explanation of what the document says, what the results are, and what he thinks about them.

Question from M. Douglas, RAB Member –Would you please give me a better understanding of what you are actually saying [the site-wide HHRA map] is? Are you saying that they are sites with health risk or are you just going to give an assessment? But you wouldn't be doing an assessment if there was not a risk?

D. Noble explained that was not necessarily true. USACE is saying that the site-wide HHRA is a combination of current risk assessment data and data from the previous HHRAs. At the time the previous HHRAs were written with the guidance we had; we are now asking if that data is still up to date or if it was still good enough. The data sets were combed through and screened for concentrations that might be of concern, those numbers change over the years. In 1995 when the first risk assessment was written, the standards that were used to screen the data then have changed, so the data had to be rescreened again using the new standards. In the end after doing

all the analysis, USACE concluded these areas of the site had results that were either out of date and needed to be redone, the sites have new data that had been collected, or the standards had changed. For those areas USACE needed to formerly assess whether or not there is unacceptable risk.

M. Douglas asked if the change in data that was updated was the data that had been presented to us in the past year?

D. Noble replied yes. It is not the only reason, but USACE had collected new data that had never been analyzed at all, which had to be formerly incorporated into a risk assessment, if the data after being screened showed that there might be a concern. USACE had collected new data that when screened, was not of concern and it was set aside. All data is presented but you can see that the results are not of concern because they don't exceed screening levels.

Schedule: USACE plans to present the RI results at the next RAB meeting on March 10th. The Partners are currently reviewing the report. USACE will receive their comments around the February 10th Partners meeting. There are two issues that could impact whether the results can be presented at the March 10th meeting. USACE has been coordinating very closely with the Partners over the years about the RI document. USACE is hoping that the information and the conclusions in the report are not surprising to the Partners. If, at the February 10th Partner meeting, there are differences in opinion and areas of concern that have to be sorted out, the 30 day time period to answer those comments before the March 10th RAB meeting may be too optimistic. If there are only minor concerns and minor comments, then USACE will be able to release a public document.

Additionally, another issue arises if the report identifies areas where there is unacceptable risk and unacceptable hazard remains. Before those findings are released to the public, USACE feels obligated to contact these private property owners to let them know that their property is in an area where there may be remaining unacceptable risk or unacceptable hazard, and explain what that means. Between February 10th and March 10th, after USACE receives comments from EPA and DDOE, USACE plans to contact and inform these homeowners and invite them to the March RAB meeting to learn more and have their questions answered. They will have a chance to not only hear from the Army, but hear from the other agencies and an independent technical consultant who have been heavily involved in the site's decision making over the years. USACE will also offer to meet privately with those homeowners to describe what the report says and why. Due to potential larger attendance at the March RAB meeting, USACE may hold the meeting in a different venue.

Question from Tom Smith, RAB Member – Is the length of the public comment period set by a statute or regulation?

D. Noble replied no, explaining that there is no legal requirement for a public comment period on an RI report. USACE is having a RI public comment period because of a suggestion in the EPA guidance. If the site is complex, if it was a lengthy process and if there has been a lot of public interest over the years, then there is nothing wrong with having a public comment period on your RI document. USACE thinks that Spring Valley meets all those criteria and thus set aside 45 days for the public comment period of the RI report. Ideally, USACE would like to kick off the public comment period on March 10th when they first publically present the results. USACE will also schedule an additional public meeting about halfway to two-thirds of the way through the

public comment period with the goal to review the RI report in detail with interested community members.

Comment from T. Smith, RAB Member – I would worry, even though Easter is early, you might have a problem drawing people to a mid-April meeting because they will be away or maybe just returning.

D. Noble replied that USACE is certainly flexible in establishing what that date is. If late April or early May is better, we can do that.

T. Smith stated that the only problem is that it doesn't allow for time before anyone who would like to come to that community meeting to give you any public comments.

D. Noble replied that USACE wants to schedule it so that there are still a couple of weeks of public comment time after the meeting.

T. Smith asked if that meeting date would be flexible. The late April date that says public comment period ends is flexible?

D. Noble confirmed this. The date would be based on when USACE could have the public meeting, since they want to have at least two weeks after the public meeting for public comment. If USACE has to extend the public comment period to accommodate that, they will.

Once the public comment period is over, just like USACE did for the Glenbrook Road Proposed Plan, the document will be finalized and will include a document that has all the public comments and their written responses from USACE.

D. Noble added that there is potentially a lot of work to be done before the public comment period begins, based on the Partner comments which are due February 10th. USACE asks for the community's patience as they work through the process and potentially adjust the schedule. In the end, there will be people that may be upset by this document. Additionally, USACE cannot answer the questions about when the potential work would be done. The property owners will have to live with the RI report results while USACE writes the Feasibility Study, the Proposed Plan, and the Decision Document.

Question from Mary Douglas, RAB Member – Will these property owners be blind sided?

D. Noble replied that he would think that the property owners would have heard about Spring Valley and the Corps but some probably will be blindsided.

Comment from M. Bresnahan, RAB Member - Properties have been tested and have their approval letters.

D. Noble stated that homeowners have arsenic results letter, which he hopes would make them familiar with the project.

M. Bresnahan followed up asking if there could be additional problems that they did not pick up when they did the initial testing.

D. Noble replied that the arsenic results letters speak to arsenic contamination. USACE is talking about other potential hazards in those three other exposure units.

M. Bresnahan asked if those homeowners have been notified of this possibility when they received the results of their arsenic testing.

D. Noble explained that the arsenic results letters were fairly straightforward. They stated that USACE tested for arsenic, this was the result, there is no concern based on this result. There might be some statement about that if there are any problems that are determined in the future; the Army is committed to addressing them, in accordance with the law.

M. Bresnahan asked if this would be the time where these new issues get addressed, since some new contamination issues have come up?

D. Noble replied yes.

M. Bresnahan stated, so no new issues have been brought up since they received that letter.

D. Noble replied that if a resident got a letter stating that the arsenic levels on their property were fine, then we haven't made any contact with them since. The only other instance would be for the 100 property owners who were contacted by USACE in order to look for munitions on their property, which was in addition to the arsenic letter.

M Bresnahan asked if some residents had not responded to [USACE]?

S. Hirsh replied that it was not a matter of things that were done in the past. This is a matter of evaluating everything that was done and asking whether or not there was an antimony issue (for instance). He was not saying that there was an issue with antimony, but there is a possibility. If that was the case and the partners determined there was unacceptable risk due to antimony, they would have to go back to those properties and deal with the antimony. There is not an issue with arsenic at this time.

M. Bresnahan stated she thought that she saw the end of this process by the end of 2017. But, based on the CERCLA Process, there could still be questionable contaminated areas that would need to be addressed.

D. Noble replied yes, that is the process USACE is going through.

S. Hirsh stated that the way Spring Valley works is not the way the process normally works. Normally you do a study, determine whether you have unacceptable risk, make a decision, and remediate the unacceptable risk. In the case of Spring Valley, most issues were handled as they came up through removal actions. The arsenic cleanup, all approximately 180 properties, was a removal action. Everything has been a removal action except for Glenbrook Road.

M. Bresnahan stated so [USACE] will be notifying residents that there could be potentially an issue on their property.

D. Noble confirmed this. USACE will be potentially notifying residents that they live in an area where there is still an issue that needs to be addressed.

G. Vassiliou asked if this notification would be prior to the meeting in March?

D. Noble confirmed this.

<u>Question from J. Wheeler, RAB Member</u> – Does ATSDR have a roll in this process?

S. Hirsh explained that ATSDR has a role in the superfund process, but they do not have a direct role in the creation of the RI and the FS. There are things that they have to do because the law says that they have to do it; those items have been completed already. There are other things that they do because they have been petitioned to do them. They provide input, which has changed or

guided some of the investigations in the past. Typically ATSDR doesn't get involved in determining how you should remediate a site, they say what is hazardous, or what is a concern.

Question from Ginny Durrin, Audience Member – How many years have you known that there could be an issue with the heavy metals in the area? It seems like the wait has been very long to deal with this, why couldn't it have been dealt with many years ago?

D. Noble explained that USACE felt arsenic needed to be removed right away and thus performed removal actions early on.

G. Durrin replied that she was talking about these new issues, these people that are going to get blind sided by the new information.

D. Noble replied that the process is what it is. It is what USACE has to go through to reach this point in the CERCLA process. It does take this long to reach this point.

G. Durrin replied, I am just talking about the heavy metals being a giant surprise for all the homeowners. When were you aware that you would not be able to satisfactorily leave Spring Valley without bringing this up?

D. Noble responded that USACE has known for a long time that they will reach points in the CERCLA process where they would have to make decisions based on the analysis of the data collected and then state whether or not there is an unresolved issue.

Statement from G. Durrin, Audience Member – Why are you leaving Spring Valley now, why couldn't you leave Spring Valley after this has been cleaned up?

J. Wheeler stated that they are never going to leave Spring Valley.

D. Noble replied that USACE is not stating that there is any unacceptable risk in the area, what they are saying is that this was an area that the evaluation of all data said needs a formal evaluation. That evaluation is in the final results of the RI. When you read the RI report, you will see a statement about each of these areas and a statement of whether there is unacceptable risk in any or all of these three areas. USACE is not reporting the results of the RI report right now because the Partners are still reviewing it. The RI is only evaluating risk in the three areas.

G. Durrin asked why are you meeting with other people and not with me? I am right outside that area.

D. Noble replied that these areas all represent owners. If you are a homeowner in one of those areas, then USACE will potentially send you a letter and offer to meet with you. If you live elsewhere, then you will not be contacted because the analysis of the data stated that there are no issues with the land that you own.

G. Durrin reiterated her original question, how long have you known that there could possibly be an issue and why is it that today there's going to be a discussion about the possibility that the heavy metals impact their dirt?

D. Noble explained that USACE knew there was a possibility that there could be issues in this area since January 5th, 1993. USACE had to get to the point where they could determine what those issues might be and take the appropriate remedial actions. With that first discovery in 1993, USACE knew there was a problem in this area and needed to ask questions: What is the scope of the problem? What contaminants might we be worried about? How much information do we need to gather to make a rationale reasonable judgment? For the answers, USACE needed

to plan, talk with the regulators, go through a long expensive multi-year process to collect information and data.

Question from N. Wells, Audience Member – If I were a property owner in the evaluated areas, what are my responsibilities to advise future owners or other residents living on the edge of these areas about the possible contaminants, especially after the groundwater assessment. What are the possibilities that the contamination could move into another area. But I think that legal responsibilities will be very important considerations to the homeowners.

D. Noble replied that USACE could bring in a lawyer to talk about CERCLA liability if that is something that the RAB wanted to discuss. As far as the people who live on the edges of the evaluated areas, that will be addressed when USACE talks about the RI conclusions publically. The contamination is a community issue. As we talk about what the potential remaining risks and hazards might be, USACE will work through that process with the community to get to the Decision Document. USACE will inform the residents who own properties in the evaluated areas first.

Question from M. Bresnahan, RAB Member – As you know I am a real estate agent. If I was asked to list a property in that area, what kind of paperwork would we get for the disclosure stating that everything was fine and happy, for the property to be put on the market.

D. Noble replied, you would get copy of the letter that USACE is going to send to the property owner.

M. Bresnahan asked if that was in addition to the arsenic letter.

D. Noble explained that people in the potential areas should be able to provide you with an arsenic results letter and this latest letter that they would receive from USACE. In 2002 almost everyone received a letter with their arsenic results. For 180 of those people, they were told that they had unacceptable levels of arsenic on their property and USACE would come clean it up. The last cleanup was done in 2011. There were people who waited nine years for their cleanup and lived with the knowledge that their property had unacceptable levels of arsenic. USACE has been through this process before and it is the reality of the situation and what has to happen. D. Noble suspects that there will be people upset because they will get a letter informing them that it is a multi-year process to get to the point where we can address the concern USACE states in the letter.

Statement from G. Durrin, Audience Member – In the pecking order of the severity of contaminants to analyze and deal with at Spring Valley, you put the metals at the bottom of the pecking order because you have waited 22 years to start dealing with them. They should not be at the bottom of the pecking order if it involves soil that needs to be remediated.

S. Hirsh replied that some of the additional contaminants have already been remediated and not just for arsenic. For instance during cleanup at one property, USACE found mercury which was remediated along with the arsenic. At other properties semi-volatiles were found and remediated. The RI is a different kind of assessment.

Question from M. Bresnahan – Does this have anything to do with the way some of the contaminants were relabeled, or the doses were relabeled? And how they have changed over time.

S. Hirsh replied that it has to do with the way the contaminants were assessed. For 20 years arsenic has been the predominant chemical of concern at Spring Valley aside from chemical warfare material.

M. Bresnahan replied that arsenic is a footprint, and when you clean up the arsenic you can come up with other things.

D. Noble explained that standards change. There was a standard in 1993 that said that there was not a problem. As USACE worked, the standards changed and it did become a problem. Antimony may not have been a problem in 1993 but by 2007, the antimony standard changed and was significantly lowered. USACE went back and looked at the complete data set and determined it could potentially be a concern now. An additional assessment determines if there is a problem, and if it is acceptable or not. USACE is moving to inform people now because now is when we know there is a problem. This is the result of USACE's multi-year collection and analysis of data. USACE now realizes that there might be lingering concerns in these areas.

Statement form P. Dueffert, RAB Member – I live a block from one of the evaluated areas and I am thankful that there have been 20 years of investigation and that everything has been analyzed thoroughly. I am happy to know that they are rechecking the data and going through it again, along with updating their analyses. If there is a problem, I want to know about it, and expect to know about it. I am thankful for the work that has been done. This stuff has taken time because there have been issues for 20 years.

Question from George Vassiliou, RAB Member – Will the owners be notified with a list of possible substances on their properties?

D. Noble replied that the letter would be detailed enough to inform them what the concern is.

G. Vassiliou stated that looking at the figure, it looks to be about 40 properties or so in the evaluated area.

D. Noble replied that the areas he is seeing are just those that were analyzed and evaluated for chemical concern. We are also analyzing whether there is unacceptable hazard with respect to remaining munition items in a much larger area.

N. Wells noted that there might be dormitories included in the areas. Another audience Member noted that American University (AU) facilities might be impacted.

D. Noble replied that there are no AU dormitories, but there are some AU facilities within the evaluated areas.

Question from T. Smith, RAB Member – This is going to raise anxieties among some folks prior to when letters go out. Are you prepared to deal with that?

D. Noble replied yes, and hopes that people will come to the March RAB meeting if they are concerned. This meeting will give them a chance to hear what the results are from the Independent Technical Consultant, Dr. Peter deFur.

T. Smith stated that if his property was in one of the areas being evaluated, he would be on the phone the next day asking for some information, and if the response was, well it is being reviewed, that would not make him happy.

D. Noble replied that USACE would state that after February 10th, they will be contacting and sending letters to the property owners who are directly impacted. USACE will then offer to meet with those property owners privately and answer any questions they may have about the report.

Question from T. Smith, RAB Member – When is the next Corps'pondent going out?

D. Noble replied that USACE has not set the date yet for the next Corps'pondent.

A. Takash noted that the last Corps'pondent went out in November 2014.

D. Noble stated that USACE sends out about three *Corps'pondents* a year.

Question from N. Wells, Audience Member – Are these materials subject to the Freedom of Information Request.

D. Noble replied that they are not because they are draft and pre-decisional. However you would not have to request it because we are putting the document out for public review.

J. Wheeler stated that the data is already public.

S. Hirsh replied that most of the 15,000 pages of appendices are already in the Administrative Record.

Question from A. Hengst, Audience Member - Would you be willing to post the maps dated November 2014, to the website in much larger format before March 10th and as soon as possible.

D. Noble stated that three of the maps have already been put out, when USACE briefed the RAB and community on the MEC HA. The new map is the MRS map.

Question from A. Hengst, Audience Member – The RAB sent a team to Fort Leonard Wood to do some research on the AUES FUDS, will that be part of the historical discussion in the RI report?

D. Noble can't recall if the historical investigation is detailed to that extent. The historical document is certainly referenced but the report was prepared in 1994.

A. Hengst clarified that he was asking about when the team found photos, but only one of the two CDs made it back to the RAB.

D. Noble stated that he did not know if there was that much detail in the RI report.

A. Hengst asked if the RI would include the discoveries that Rick Woods made in Dalecarlia Woods.

D. Noble replied that the Rick Woods area is an AOI, so there is a description in the AOI memo.

A. Hengst asked if it talks about the site visit that the USACE made to the Rick Woods area.

D. Noble stated that he thought the AOI memo mentioned that a site visit was done with Rick Woods. This would be in the appendices of the RI and would have to be searched for.

A. Hengst asked about the transcripts of the interviews with the [4835 Glenbrook Road] construction workers.

D. Noble replied that he did not think that the transcript made it into the document. He also stated that this information would specifically relate to 4825 Glenbrook Road site.

Question from Audience Member – Would it be possible to provide a 90 day comment period from the start considering that it has taken 22 years to get to this point and there is still a great amount of interest?

D. Noble replied that USACE could consider it.

The audience member asked if they could ask for a vote of everyone there to see who was interested.

G. Beumel noted that people need to think about it. You can make the comment period as long as you want but it means that you don't move to the next step. Every day you extend the comment period is a day longer it takes for someone's property to be cleaned up. If USACE thinks there are enough people who need that long to read the report then they can extend the comment period. However it will be two months until the report will be released and the public will see it.

The audience member stated that most people have a full time job and would not have enough time to review the document.

G. Beumel replied that normally there is not a public comment period on an RI. Further, the Partners have coworkers to refer to and review different parts of the report to make sure that if there is a problem it doesn't get overlooked. USACE has added having Peter deFur, an Independent Technical Consultant, review the document. This means there will be three different groups of people who are representing the community and not the Army. Forty-five days may not be appropriate, more because of the issue with the dates. If you decide to have the public meeting on April 14th, half the community might be doing their taxes that day or might be on vacation which would be a good reason to extend the comment period.

T. Smith stated that the RAB would be in a better position to have this discussion after they have heard the results of the report in March.

G. Beumel agreed and stated that the community needs to know what the results are first. His expectation is that there will be certain sections of the report that will need to be focused on but that they have not determined which sections.

M. Bresnahan stated that Peter deFur will be doing a thorough job of looking at the report and he would be able to answer the community questions that come up.

Question from P. Dueffert, RAB Member – Will the RI report be issued prior to the next RAB meeting, or will we get it at the meeting or after the meeting? What is the timing on that, assuming there are no delays.

D. Noble responded that DC and EPA will most likely have comments that would impact the report and will need to be addressed. The report will be released when USACE can assemble the Partners' comments, reach an agreement with the Partners on how to address their comments, and incorporate any changes into the document. Then a draft would be publically available for review.

P. Dueffert asked if there was a target for the release of the public draft. Would it be March?

D. Noble replied that it could be March 10th. Ideally, USACE would like to release the draft to the public and begin the public comment period when they present the results to the RAB. If there is a lot to be changed based on the Partners' comments, 30 days may not be enough time to

complete the edits. It would still be a good idea for Peter deFur to present the results of what the initial draft states and to discuss some of the major issues that are being debated.

Question from M. Douglas, RAB Member – Do you think it would be possible for the RAB to get a copy of the Executive Summary in hard copy at the March 10th meeting?

D. Noble confirmed that the Executive Summary will be available once the RI report is released for public review. If the Army is going to state that there is an issue in a particular area, and the community disagrees, it is unlikely that the issue would be dropped. However, it is unlikely that anyone in the community would state that there is not a problem. People tend to either agree or think that there are additional problems.

Question from Davis Kennedy, NW Current Reporter – Are the properties, that would receive supplemental letters, the ones in the areas that are colored on the maps?

D. Noble confirmed this. Those are the areas that the RI document is evaluating and are where we will reach formal conclusions on.

D. Kennedy asked if the people who don't live where the map is colored can be happy.

D. Noble confirmed this, according to the Army.

D. Kennedy asked if levels could change.

D. Noble agreed and explained that there might have to be a re-evaluation of the Spring Valley FUDS site sometime in the future.

III. Community Items

No Community items were presented.

IV. Open Discussion and Agenda Development

A. Upcoming Meeting Topics

- Site-Wide Remedial Investigation Document by Peter DeFur, TAPP Technical Consultant
- 4825 Glenbrook Road Health Consultation Update (ATSDR**)**

B. Next Meeting: Tuesday March 10, 2015

D. Noble asked the RAB members to pay attention to their email as USACE will be trying to communicate with them about progress and the March 10th RAB meeting location and agenda. D. Noble asked everyone to stay tuned and stay flexible as USACE works through this next phase of the project.

C. Open Discussion

No additional agenda topics were shared.

V. Public Comments

D. Noble thanked everyone for attending.

VI. Adjourn

The meeting was adjourned at 8:46 PM.