



# FACT SHEET

07/26/01

U.S. Army Corps of Engineers  
Baltimore District  
P.O. Box 1715  
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## Formerly Used Defense Site Spring Valley

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### **Operable Unit 1:**

**Period:** January 5, 1993 to June 1995

**Purpose:** Assess the existence and extent of potential ordnance or chemical warfare material-related contamination associated with AUES activities in the Spring Valley FUDS (approximately 660 acres), excluding the Spalding and Captain Rankin areas.

### **Strategy:**

- Perform extensive search and review of historical records including aerial photographs.
  - Identified a total of 53 points of interest as possible areas of contamination.
- Take soil samples from 1918 elevation and test for chemical warfare agents and their breakdown products.
- EPA take split samples and tests for their full suite of metals and organic compounds.
- Geophysical surveys at all points of interest considered as potential ordnance burial areas.

### **Results:**

- Sampling
  - Soil samples collected at 13 areas, which included 17 points of interest.
  - EPA Region III took samples from same areas and analyzed for full suite of compounds.
  - No chemical agents or agent breakdown products were found. Several metals were identified but found to have no elevated health risk.
- Geophysical surveys
  - A total of 492 properties surveyed with electromagnetic device, EM-31.
  - 1,900 anomalies identified; Anomaly Review Board recommends 840 for excavation.
  - One spent Livens smoke round; two amnesty rounds; one 3-inch Stokes mortar found during the digging of a basement.
  - 20 scrap ordnance items found.
  - No burial pits located (excluding the original Jan '93 find by a construction worker).

**Conclusion:** Record of decision was signed June 2, 1995 – No Further Action. Excluded Spalding/CPT Rankin Area.

### **Operable Unit 2:**

**Period:** December 1994 – June 14, 1996 (though not closed out)

**Purpose:** The Spalding and Captain Rankin areas (POIs 21-23) include three bunker structures located at the Holmes property. POI 22 (the Spalding area) is a bunker incorporated into the house, and POI 21 (the CPT Rankin area) consists of two bunkers that remain on the property. During the OU-1 RI, an EE/CA was done on the CPT Rankin area. Based on the findings of the EE/CA, a Non-Time Critical Removal Action (NTCRA) of soil debris found within the POI 21 structures and confirmation soil and concrete sampling of the Spalding and CPT Rankin area.



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## **Strategy:**

- Extensive review of AUES records to determine the type/extent of research conducted at the bunkers.
- Removal and disposal of soil debris.
- Collect and analyze soil and concrete samples for three bunkers and surrounding areas where testing occurred.

## **Results:**

- No chemical warfare materials (CWM), their specific breakdown products, explosives, or their breakdown products were positively detected in the soil debris or concrete sampling.
- Arsenic was detected at concentrations that exceed the risk-based concentration. However, the risk assessment indicated that no remedial action was necessary.

## **Conclusion:**

- Based on sampling and analyses of various media in and around the areas, the RI concluded that no hazardous soil, soil debris or concrete contamination remains.
- Record of decision was not signed pending the review of concerns from D.C. government.

## **Operable Unit 3:**

**Period:** Work for this Operable Unit began in March 1999 and continues today. Excavation of first pit began in March 1999.

**Purpose:** Involves the investigation of suspect burial sites and associated soil contamination on and around POI 24, which is located on the Korean Ambassador's property. POI 24 was mis-located on the ground during the OU-1 investigation because we unknowingly used an interim map product that placed it 150 feet from its placement in the final map product. Based on this, the purpose of this investigation has grown to additional burial sites on adjacent properties. It includes the 4801, 4825 and 4535 Glenbrook Road properties, the Small Disposal Areas and the stream running from the SDA into the 4801 (Korean Ambassador's property).

## **Strategy:**

- Based on EPIC's analysis of aerial imagery and photographs from the period to help locate potential burial pits on the ground.

## **Korean Property**

- Excavation of the first pit began March 29, 1999 and was completed on March 29, 2000.
- The metal vapor containment structure was used; no evacuations were required.
- Over 600 items were recovered, 288 of which were ordnance items – 14 contained chemical warfare agent (predominantly mustard).
- Soil from the pits was removed and replaced with clean soil.
- Soil samples gathered near the pits showed elevated levels of arsenic.
- A Risk Assessment and Engineering Evaluation Cost Analysis was prepared.
- Army and EPA recommended the removal of the top two feet of surface soil in those areas with arsenic values that were elevated in comparison to the background levels of



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arsenic.

- Soil removal completed in March 2001.

### **Small Disposal Area**

- Area investigated Jan 8-11, 2001 under evacuation conditions.
- Surficial burial site.
- Removed laboratory glassware and metal items.
- No CWM or ordnance found.
- Found elevated arsenic and mercury – conducted removal of contaminated soil.
- Restoration plans being developed.

### **Stream Sediment Removal**

- Contaminated soil removed in the spring of 2001 in the upper and lower portions of the stream.
- Currently awaiting AU's approval of upper stream restoration plan.

### **Test Pits at 4825 Glenbrook**

- Looking for the burial site of ceramic containers holding CWM.
  - DC Health and EPA base their location on ground scar data and the "SGT Mauer" photo.
- Completed 23 test pits and 185 feet of trench on the property.
- Identified one burial site, currently under investigation.
- Have found 10 75-mm rounds and 40 bottles to date. Testing results for 12 bottles to date found five with lewisite derivative and two with mustard agent.
- Top two feet of arsenic-contaminated soil was removed in conjunction with the soil removal at 4801.

### **4535 Glenbrook (AU President's Residence)**

- Several elevated readings of arsenic found on the property.
- Risk assessment under review by AU.
- Probable "hot spot" removal necessary on the property.

### **Conclusion**

- No document produced to date.

### **Operable Unit 4:**

**Period:** August 2000 to present.

**Purpose:** Expanded arsenic testing based on the finding of elevated arsenic at the OU-3 properties.

### **Strategy:**

- Surface and subsurface testing for arsenic at residential properties and the southern third of AU that are within the "Baker Valley" area of the FUDS.
- Sampling plan based on EPA's 1996 *Soil Screening Guidance*.
- Expand to other properties based on results.

### **Results:**

- Private residence:
  - 61 properties initially identified for sampling.



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- 42 properties were sampled (late summer/fall 2000).
- 8 had elevated results.
- 8 additional properties sampled in Jan/Feb 2001.
- 8 properties sampled April 2001.
- 10 properties requiring risk assessments and potentially one more (awaiting grid results).
- AU sampling:
  - 28 lots at AU.
  - CDC sampled in late Nov 2000 – composite results averaged 31.3 ppm.
    - Grid sampling 4-5 Jan 2001 – results back 17 Jan 2001 with range of 3 – 498 ppm.
  - Composite sampling was completed February 14, 2001.
  - Follow-on grid sampling results were received April 2001.
  - AU reviewing plan for removal of contaminated soil at the CDC and adjacent intramural field.

**Conclusions:** No RI prepared to date.

## **Operable Unit 5:**

**Period:** April 2001 – present.

**Purpose:** Comprehensive FUDS-wide soil sampling for arsenic contamination with additional testing for other contaminants at remaining points of interest of concern. This includes the testing of properties associated with the Sedgwick trench that began in Apr 2001. Will include geophysical efforts to evaluate remaining potential pits and trenches site-wide, including the intrusive removal of known anomalies at two properties on Sedgwick Street.

## **Strategy:**

- Based on community request for area-wide soil sampling at a public meeting February 13, 2001.
- EPA, DC Health and Corps developed the plan and received community comments.
- Area-wide sampling began May 31.

## **Results:**

- Properties sampled to date:
  - 369 of 1,200.
  - 227 are in the CTA (104 properties left to sample in CTA but have no ROEs for them).
- ROEs to date: 675.
- Several Sedgwick trench properties have elevated arsenic results.
- Roughly 15% of properties to date sampled under the comprehensive sampling plan have quadrant results over 13 ppm.