A Presentation to the
Facilities Disposition and Site Remediation Committee
Savannah River Site
Citizens Advisory Board

M-Area Chemical Oxidation (MACO)
M-Area Operable Unit (MAOU)
Small Arms Training Academy (SATA)
Advanced Tactical Training Academy (ATTA)

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June 8, 2010
Purpose

Provide a description to the Citizens Advisory Board Facilities Disposition and the Site Remediation Committee of:

- Status update of M-Area Chemical Oxidation
- Status update of M-Area Operable Unit
- Deactivation and decommissioning and remediation activities at the Small Arms Training Area
- Upgrades at the Advanced Tactical Training Area
Acronyms

- ABRP: A Burning Rubble Pile
- ATTA: Advanced Tactical Training Academy
- D&D: Deactivation and Decommissioning
- ft: foot / feet
- LLAZ: Lower Level Aquifer Zone
- MACO: M-Area Chemical Oxidation
- MAOU: M-Area Operable Unit
- MCB: Miscellaneous Chemicals Basin
- msl: mean sea level
- PCE: Tetrachloroethylene
- ppm: parts per million
- PSVE: Passive Soil Vapor Extraction
- SATA: Small Arms Training Academy
- SVE: Soil Vapor Extraction
- TCE: Trichloroethylene
- TCLP: Toxicity Characteristic Leaching Procedure
- ug/L: Micrograms per liter
- VOC: Volatile Organic Compound
- WSI: Wackenhut Services Incorporated
M-Area Chemical Oxidation (MACO)
MACO Demo Project

Site Location
MACO Demo Project

- Project Site
- M-Area PCE / TCE contamination plume
- Southeast of A-14 Outfall Source Area
Persulfate Injection Begins
12/10/2009

Persulfate Injection Ends
12/21/2009

MOP001C
TCE (ppm)
MACO Summary and MACO II

- TCE concentrations remain less than 1 ppm for 4 months after injection

- MACO II Tentative Plan
  - Push-Pull Test
    - Determine destruction versus dilution at MACO I
  - Vadose Injection near A-014 Outfall
M-Area Operable Unit (MAOU)
MAOU Background

- Produced and tested uranium fuel and target assemblies from 1952 and 1988
- Operable unit includes Production Area, Test Reactor Facilities, Liquid Effluent Treatment Plant, and Salvage Yard Area
Progress to Date

- Deactivation and decommissioning of 23 buildings completed
- Early actions in the Production Area and the Salvage Yard completed
  - Removal of radioactively and hazardous soil, concrete, and sewer lines
Final Remediation Action

- Grouted 14 manholes along inactive process sewer lines
- Constructed two passive soil vapor extraction (PSVE) cells and loaded with 4,355 cubic yards of VOC contaminated soils for treatment
- Installed four soil vapor extraction wells to address remaining contaminant migration at 313M, 320M, and 321M
- Activities completed August 10, 2009 through March 24, 2010
MAOU Path Forward

- Start operation of the passive SVE cells and the conventional SVE wells: June 23, 2010
- Submit the Revision 0 Post-Construction Report: August 18, 2010
Small Arms Training Area (SATA)
Location and Background

- Constructed in 1950’s as a Small Arms Training Area (SATA)
- Used for security qualifications and testing
- Consists of:
  - Three ranges
  - Administrative / Control building
  - Weapons cleaning shed
  - Storage buildings / structures
- Lead present in soil
  - Hazard to industrial worker
  - 4.8 times greater than regional screening level
  - Exceeds TCLP threshold
    - Hazardous
  - Approximately 11,000 cubic yards of contaminated soil
Removal Action General Scope

- Lead Contaminated Soil Removal
  - Berm
  - Fill Area
  - Between Firing Position and Berm
- D&D of Buildings
  - Administrative / Control / Storage
SATA Scope of Work

• Admin/Control building and other ancillary facilities will be Deactivated and Decommissioned (D&D’ed)

• Storage containers will be D&D’ed or relocated at the Advanced Tactical Training Area (ATTA)

• Ballistic walls will be D&D’ed or relocated at ATTA

• Mobile targets will be relocated at ATTA

• Concrete sidewalks and equipment pads will be removed

• Lead contaminated soil will be excavated and shipped offsite for disposal
Schedule

• Soil Characterization 07/07/2010
• Start D&D 06/01/2010
• Excavation Start 08/18/2010
• Complete D&D 12/31/2010
• Site Restoration 06/29/2011
Advanced Tactical Training Area (ATTA)
Background

The ATTA was constructed in 1984 for advanced weapons and tactical training of the Site’s security force.
Location and Background
ATTA Scope of Work

This project will relocate and establish several functions that are currently located at the Small Arms Training Academy (SATA) to the Advanced Tactical Training Academy (ATTA) for the SRS Site Security Contractor (WSI). The functions to be relocated include, as depicted in the figure listed below, showing the ATTA site locations and modifications.

- Design and build an approximately 8400 square feet Administration Training Building
- Repair and maintain the access road to ATTA range
- Provide a fiber optic cable or wireless communications circuit
- Design and build a weapons cleaning facility
- Procure and install a weapons storage facility
- Procure and install a maintenance storage facility
- Procure and install two ammunition magazine storage vaults at ATTA
- Relocate the BEAR target system currently at SATA to ATTA range
- Relocate the Rogers Range currently at SATA to ATTA range
ATTA Schedule

- Construction Start: 11/08/10
- Construction Complete: 07/20/11