



Fort Detrick Remedial Investigation/Feasibility Study

Status Update

Fort Detrick Restoration Advisory Board Meeting
12 October 2006
Fort Detrick, Maryland



Area B Status Update Discussion

- **Area B Performance-Based Contract Disposal Sites**
 - Area B-2
 - Area B-3
 - Area B-6
 - Area B-8 and the Trenches North of B-8
 - Area B-10 and B-10 Grove
 - Area B-11
 - Area B-18
- **Area B Five Sites (formerly Close-out Sites)**
 - B-Ammo
 - B-20 North
 - B-20 South
 - B-Grid
 - B-Skeet
- **Area A and B Monitoring**



Area B PBC Disposal Sites



Standardized Area B Disposal Site Approach

- Discussions with MDE in December 2005 resulted in a mutual understanding of the requirements necessary to close out Area B disposal sites
 - EPA Presumptive Remedy for CERCLA Landfills is an appropriate approach to streamline the process
 - Maryland COMAR 26.04.07.21 for sanitary landfill closure considered to be relevant and appropriate requirement
- All Area B Disposal Sites will follow the same basic approach
 - Presumptive Remedy
 - Combined Remedial Investigation/Feasibility Study



Area B Disposal Sites

Presumptive Remedy

- **Presumptive Remedy**
 - EPA Preferred technologies to be used at all appropriate sites.
 - For Landfills, the presumptive remedy is containment based on historical patterns of remedy selection and scientific-engineering evaluations.
 - Benefits of following the presumptive remedy process:
 - Focused data collection
 - Stream-lined site assessments
 - Accelerated remedy selection decisions
 - Time and cost savings
 - Hazardous waste sites are remediated faster
 - Promotes consistency in remedy selection.



Area B Disposal Sites

Remedial Investigation/Feasibility Study

- **RI and FS Submitted as One Document**
 - To improve efficiency by minimizing redundant information and shortening overall review time
 - To accelerate the schedule
 - To provide a better understanding of the big picture. The reviewer can see the proposed remedy in the FS to better understand the data needs of the RI. This is consistent with the Presumptive Remedy approach
- **Existing Data Used to Characterize Site**
- **Qualitative Risk Assessment Performed**



Area B Disposal Sites

Feasibility Study Alternatives

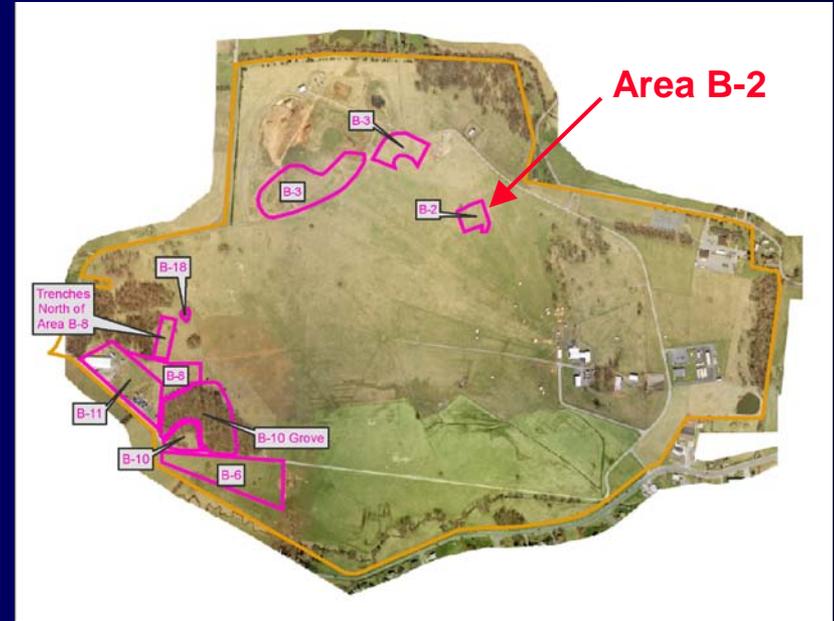
- **1) No Action**
 - Provides baseline for which to evaluate other alternatives
 - Not considered protective of human health and the environment
 - Does not meet Applicable or Relevant and Appropriate Requirements (ARARs)
- **2) Landfill Cap and Land Use Controls**
 - Construction of impermeable landfill cap to contain waste in place
 - Considered protective of human health and the environment
 - Meets ARARs, including COMAR 26.04.07.21 for Sanitary Landfill Closure
- **3) Excavation and Disposal**
 - Excavation of waste materials and combination off-site and on-site disposal
 - Precautionary measures include negative pressure containment structure and testing for biological pathogens
 - Considered protective of human health and the environment
 - Meets ARARs



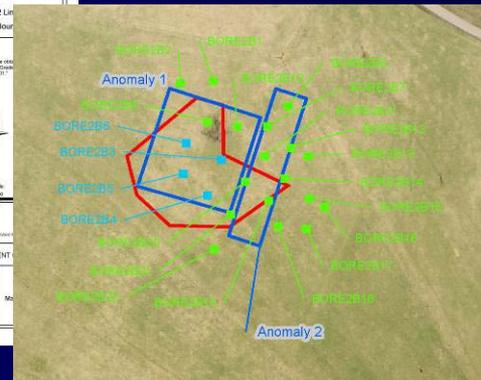
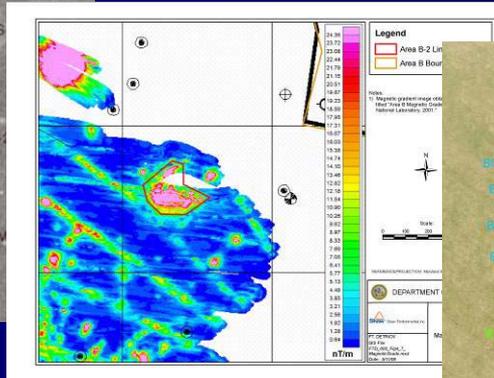
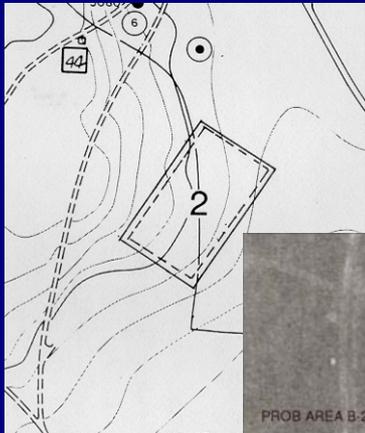
Area B Disposal Sites

Area B-2

- ✓ Draft RI/FS submitted to MDE 12 July 2006
- ✓ MDE Comments Received 17 August 2006
- ✓ MDE comments resolved
- Document to be finalized October 2006
- Proposed Plan and Record of Decision in early 2007
- Landfill Cap design in 2007
- Landfill Cap installation in 2008



Area B-2 Limits of Waste determined through analysis of historical maps, aerial photography, geophysics, and soil borings



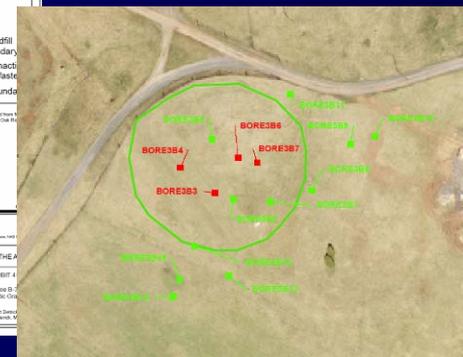
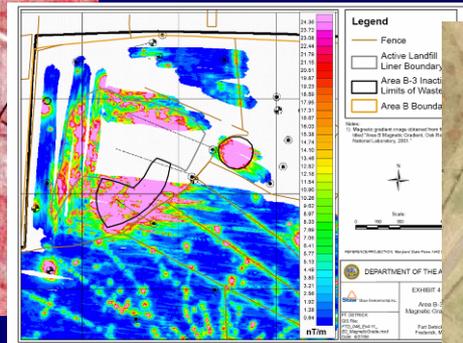
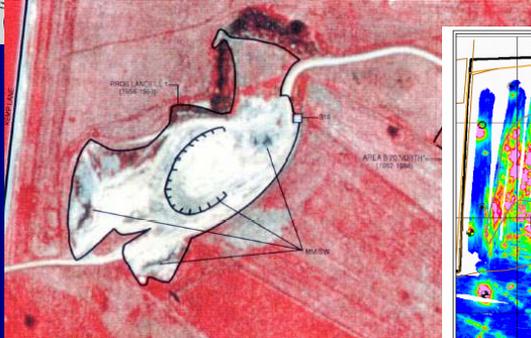
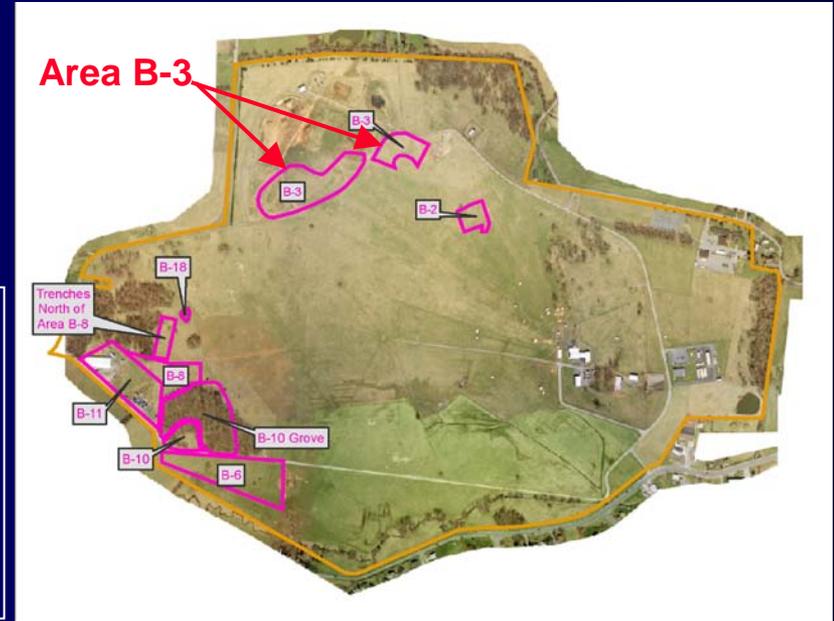


Area B Disposal Sites

Area B-3

- ✓ Draft RI/FS currently under Army Review
- RI/FS to be submitted to MDE in November 2006
- Proposed Plan and Record of Decision in early 2007
- Landfill Cap design in 2007
- Landfill Cap installation in 2008

Area B-3 Limits of Waste determined through analysis of historical maps, aerial photography, geophysics, and soil borings



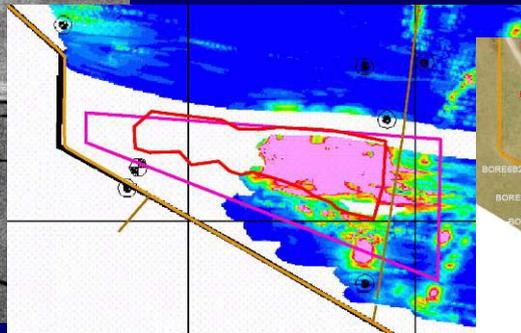
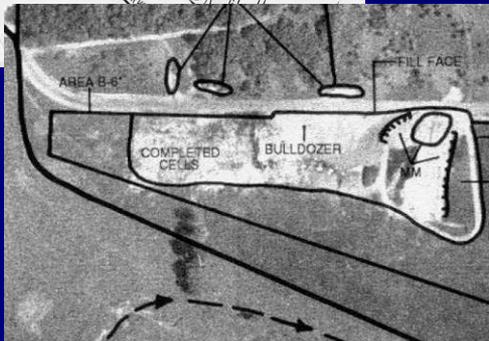
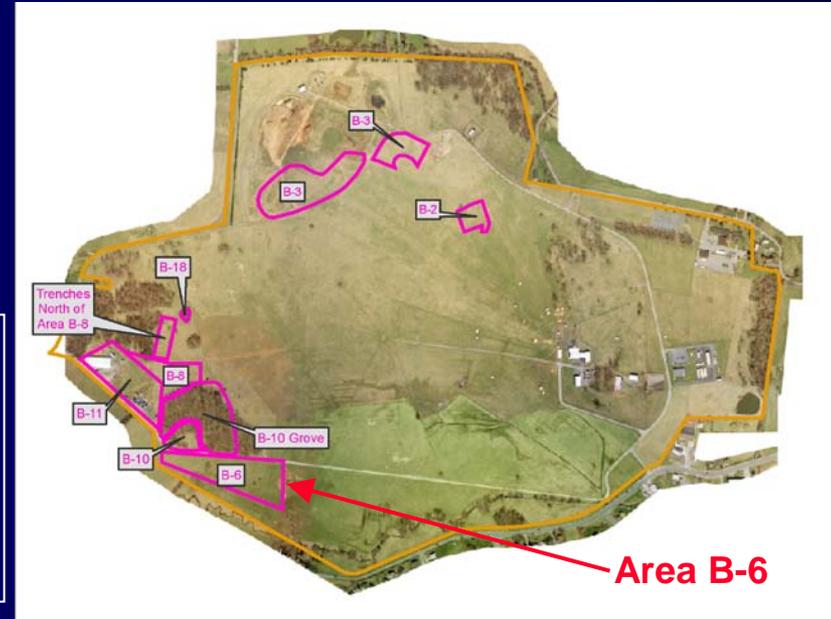


Area B Disposal Sites

Area B-6

- ✓ Draft RI/FS currently under Army Review
- RI/FS to be submitted to MDE in October 2006
- Proposed Plan and Record of Decision in early 2007
- Landfill Cap design in 2007
- Landfill Cap installation in 2008

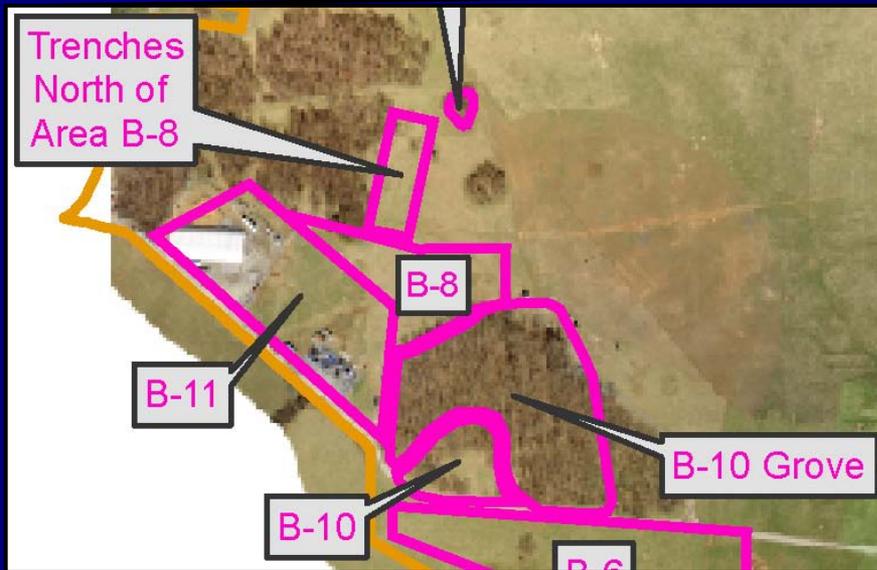
Area B-6 Limits of Waste determined through analysis of historical maps, aerial photography, geophysics, and soil borings



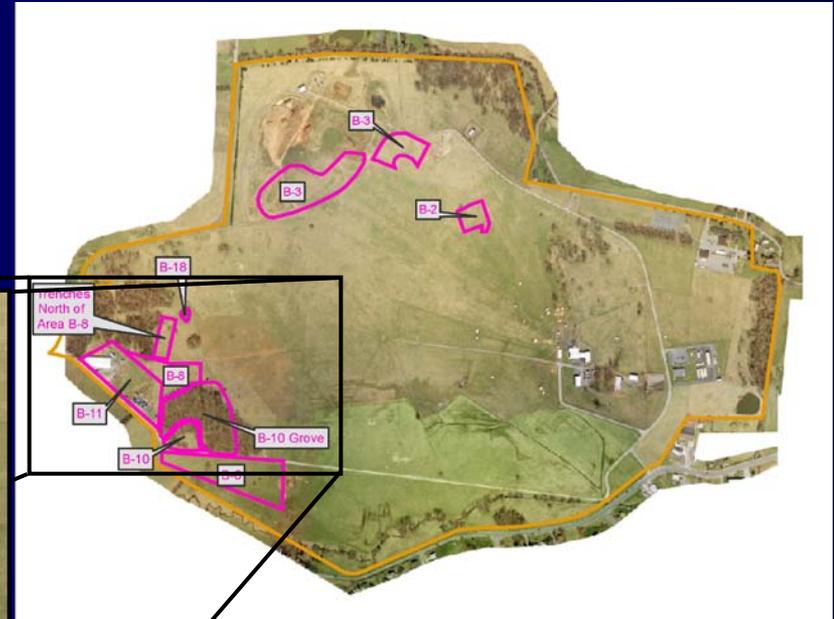


Area B Disposal Sites Western Disposal Areas

- ✓ Draft RI/FS currently being developed
- RI/FS to be submitted to MDE in Nov/Dec 2006
- Proposed Plan and Record of Decision in early 2007
- Landfill Cap design in 2007
- Landfill Cap installation in 2008



Area B-8 and the Trenches North of B-8
Area B-10 and B-10 Grove
Area B-11



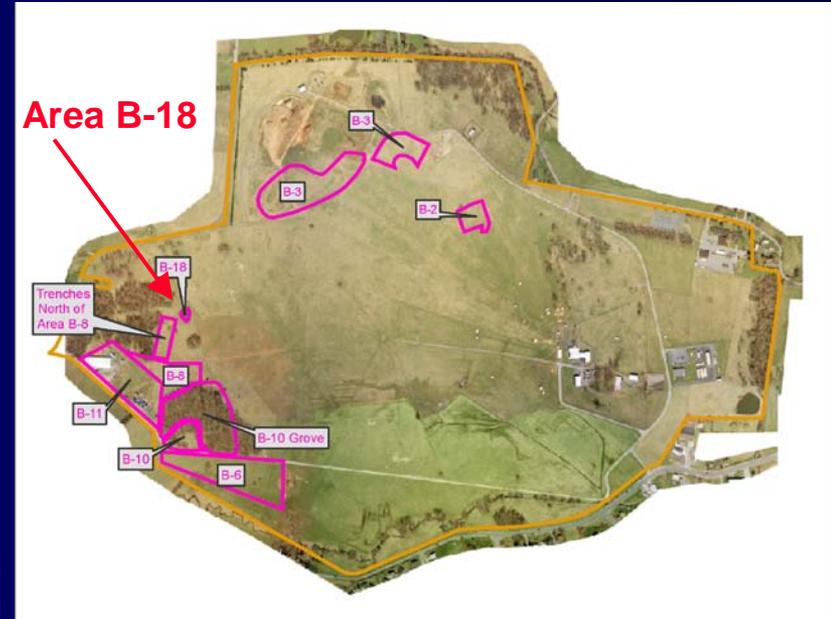
Limits of Waste to be determined through analysis of historical maps, aerial photography, geophysics, and soil borings



Area B Disposal Sites

Area B-18 (Former Sinkhole)

- ✓ Draft Site Inspection Work Plan currently being developed
- Site Inspection work plan to be submitted to MDE in October 2006
- Field Work in November 2006



Surface metal debris will be removed and geophysical investigation will be performed to verify that there is no buried waste



Area B Five Sites

- Remedial Investigation Draft Final Report has been submitted to Army and MDE on August 31, 2006 for following 5 Area B Sites:
 - B-Ammo
 - B-20 North
 - B-20 South
 - B-Grid, and
 - B-Skeet
- Comments have been received from the Army.
- Awaiting comments from MDE.
- Preliminary recommendation is for No Further Action at all 5 sites.



Area A

Long-Term Monitoring

- **Building 568 TCE Spill Site**
 - Long-term monitoring conducted September 2006
 - Data currently under analysis and evaluation
 - Next event scheduled for March 2007
 - Periodic 5-year review scheduled for 2007
- **Area A Water Towers**
 - Monitoring conducted in September 2006
 - No significant issues
 - Next event scheduled for March 2007



Area B

Groundwater Monitoring

- Periodic sampling conducted September 2006
 - Data currently under analysis and evaluation
- Next event scheduled for December 2006



Upcoming Activities

- **October 2006**
 - Finalize Area B-2 RI/FS
 - Submit Area B-6 RI/FS to MDE
 - Submit Area B-18 Site Inspection Work Plan to MDE
- **November 2006**
 - Submit Area B-3 RI/FS to MDE
 - Submit Area B-8/B-10/B-11 RI/FS to MDE
 - Finalize RI for Five Area B Sites (Close-out Sites)
- **December 2006**
 - Site Inspection at Area B-18
 - Area B Periodic Sampling