Defense Logistics Agency

THE FORMER MEMPHIS DEPOT

RESTORATION ADVISORY BOARD (RAB) MEETING

Agenda

Thursday, October 19, 2006 -- 6:00 p.m.
Ruth Tate Senior Citizens Center
(formerly the South Memphis Senior Citizens Center)
1620 Marjorie Street
Memphis, Tennessee

Welcome and Introductions	3 min.	Mr. Michael Dobbs **Environmental Manager** **Defense Distribution Center (DDC)**
Review and Approve Agenda	4 min.	Mr. Mondell Williams **RAB Co-Chair**
OLD BUSINESS **Community RAB Housekeeping Issues**	5 min.	Mr. Williams
NEW BUSINESS **Environmental Restoration Program Update**	20 min.	Mr. Tom Holmes **e^2M**
Dunn Field Property Sale Status Report	15 min.	Mr. Harold Duck **Corps of Engineers**
Base Realignment and Closure Cleanup Team	5 min.	Mr. Turpin Ballard **Environmental Protection Agency**
RAB Comment Period	15 min.	Mr. Williams
Public Comment Period	15 min.	Mr. Williams
Adjournment	3 min.	Mr. Dobbs

Memphis Depot

Environmental Restoration Program Update

Presented by

Tom Holmes, Project Manager
engineering-environmental Management Inc.

Memphis Depot Restoration Advisory Board Meeting
October 19, 2006

Presentation Overview

Updates:

- Disposal Sites Remedial Action Completion Report (RACR)
- Main Installation Remedial Action (RA)
- Source Areas Remedial Design (RD)
- Off-Depot Groundwater RD
- Project Schedule/Next Steps

DUNN FIELD

Disposal Sites Remedial Action

Excavation, Transport and Disposal (ET&D):

- March 2006: Completed ET&D at five former Disposal Sites on the western portion of Dunn Field
- August 2006: U.S. Environmental Protection Agency (EPA) approved the Remedial Action Completion Report (RACR)
- The Final RACR will be available in the Information Repositories for public reference

MAIN INSTALLATION

Remedial Action

- **Enhanced Bioremediation Treatment (EBT)**
  - Speeds up a natural process that exists in the environment to break down solvents in groundwater
  - To treat groundwater in two areas in the shallow aquifer where concentrations of solvents are the highest
- **Monitored Natural Attenuation (MNA)**
  - A natural process that will improve the groundwater conditions over time
  - To treat groundwater containing low levels of solvents in the shallow aquifer
- **Land Use Controls**
  - Restricts certain activities on the site to ensure the protection of human health over the long term

MAIN INSTALLATION

Remedial Action

Enhanced Bioremediation Treatment (EBT)

- **May 2006: Construction of the remedy began**
- **September 2006: Construction was completed and sodium lactate injections began**

Treatment Area 1 (southwest corner of MI)

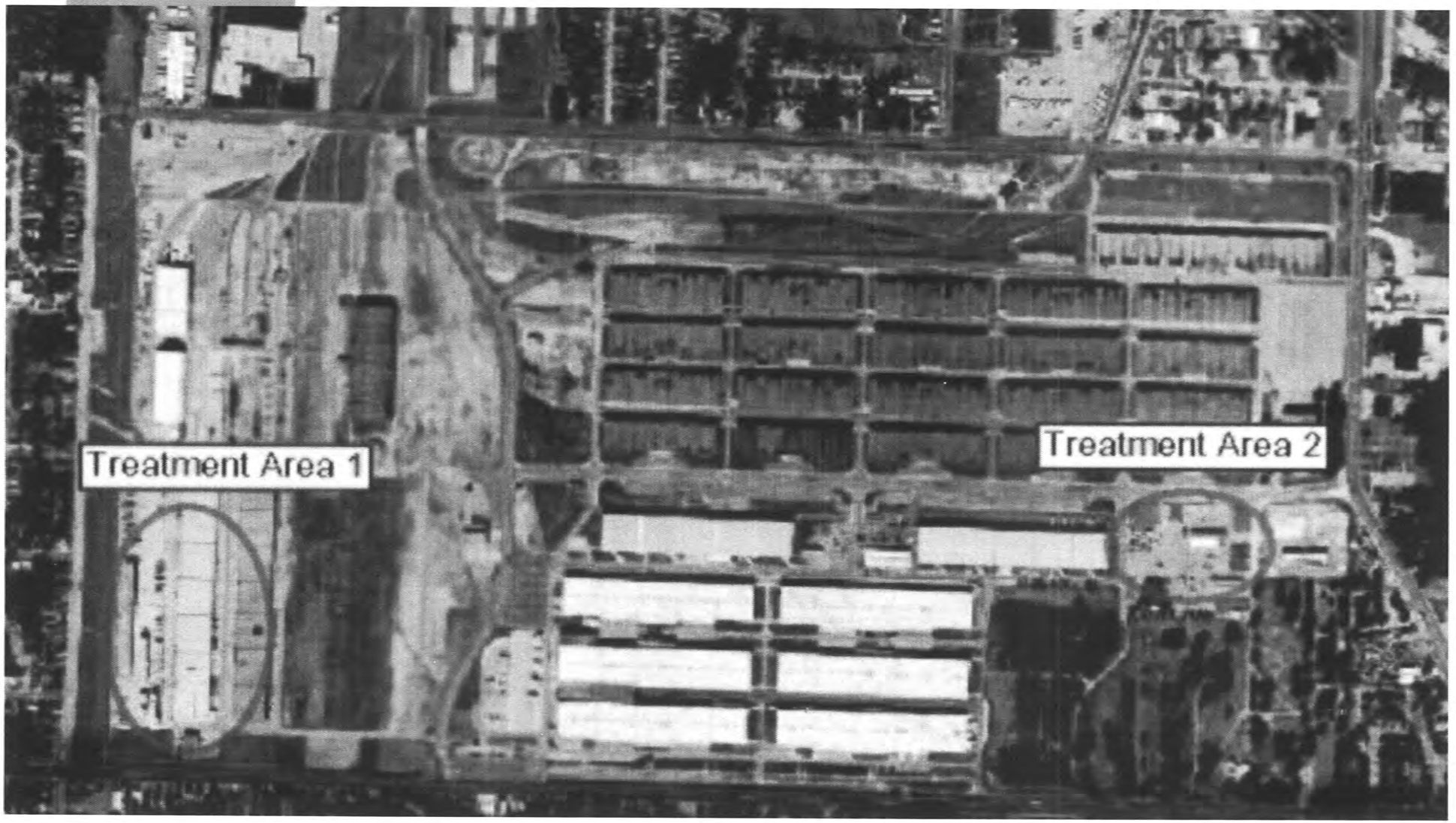
- **37 injection wells**

Treatment Area 2 (southeast corner of MI)

- **12 injection wells**

MAIN INSTALLATION

Remedial Action



MAIN INSTALLATION

Remedial Action

Sodium lactate injection unit

MAIN INSTALLATION

Remedial Action

- EBT Injections will occur for two years;
  - bi-weekly during first year and monthly during second year
- Cleanup goals in the EBT areas expected to be achieved after second year (Fall 2008)
- Cleanup goals in the MNA areas are expected to be achieved by Fall 2015
- Interim RACR will be prepared and submitted to EPA and TDEC in 2008 for review and approval

DUNN FIELD

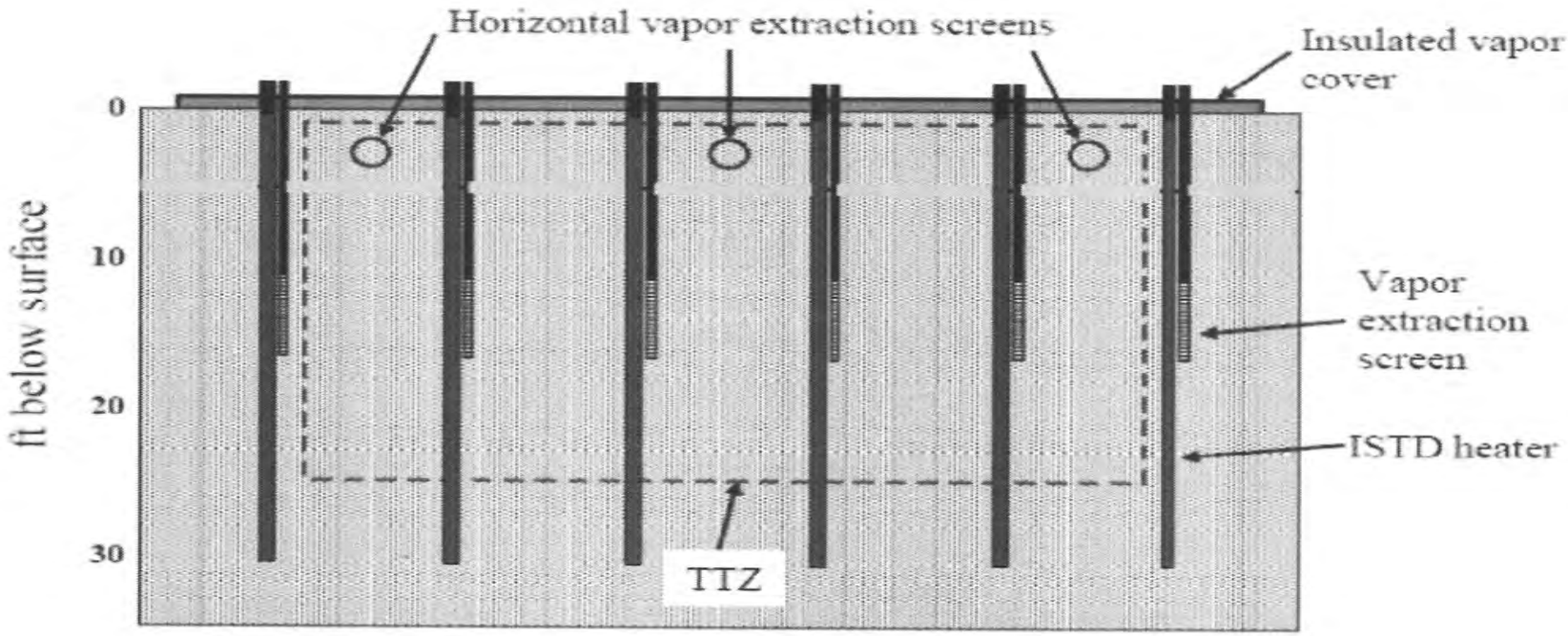
Source Areas RD

- Thermal heating and Soil Vapor Extraction (SVE) in top layer of soil (loess)
- Standard SVE in fluvial sands
- Zero-Valent Iron (ZVI) injection in groundwater
- Will be completed in a phased approach
- Samples will be collected after both SVE phases to ensure remedial goals were met
- Wells will be installed to determine groundwater conditions and confirm ZVI injection locations

DUNN FIELD

Source Areas RD

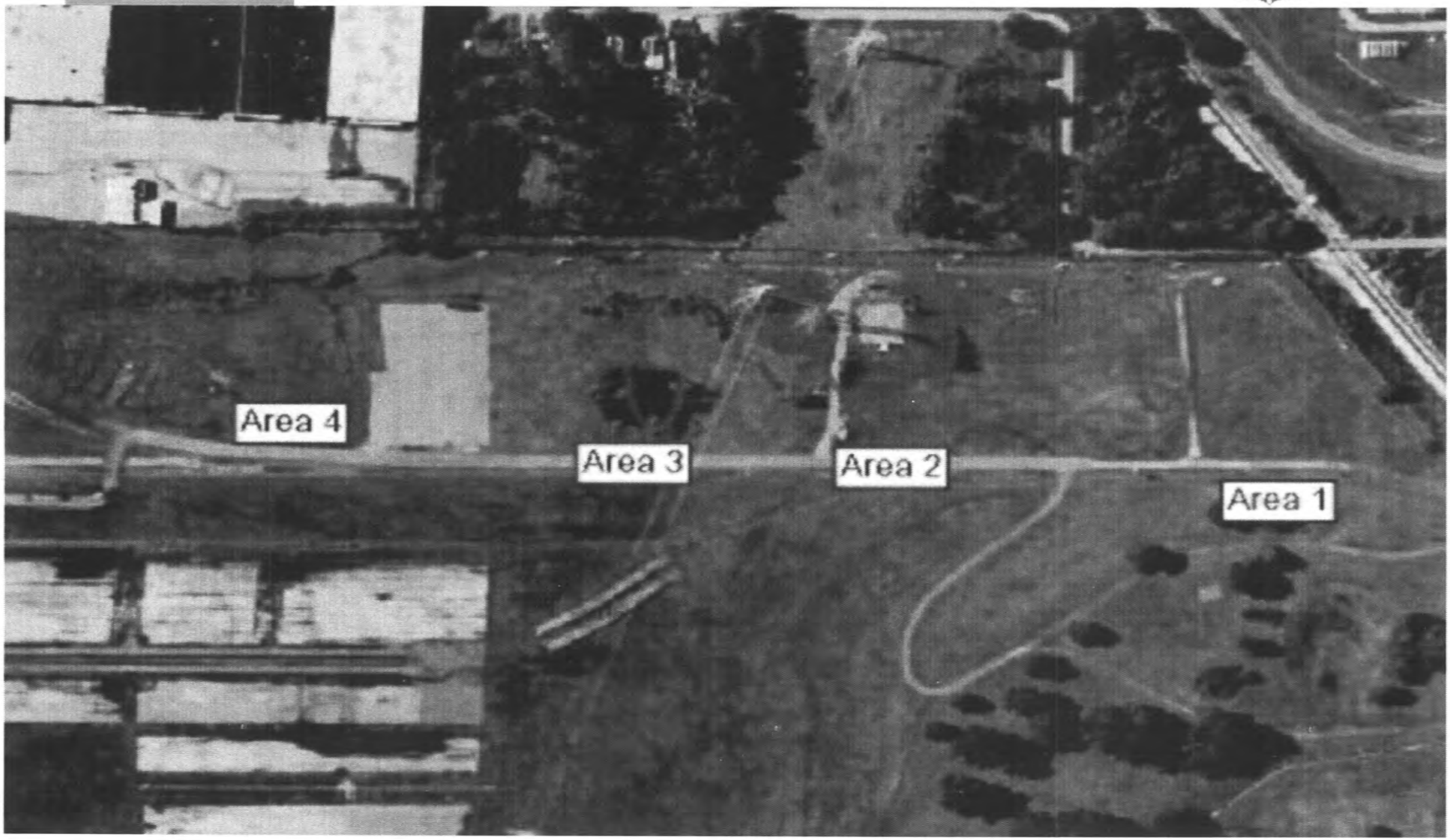
Thermal Heating SVE



Proposed cross-section of the treatment area. Heaters, shown in red, would extend slightly below the target treatment depth.

DUNN FIELD

Source Areas RD



DUNN FIELD

Source Areas RD

- EPA and TDEC are currently reviewing the Pre-final Source Areas RD
- Final RD to be completed in Spring 2007
- Upon final approval, the completed RD will be available in the Information Repositories for public review
- Public Briefing to be held in Summer 2007
- Remedial Action Work Plan to be completed in Fall 2007
- Remedial Action to begin in Fall 2007

DUNN FIELD

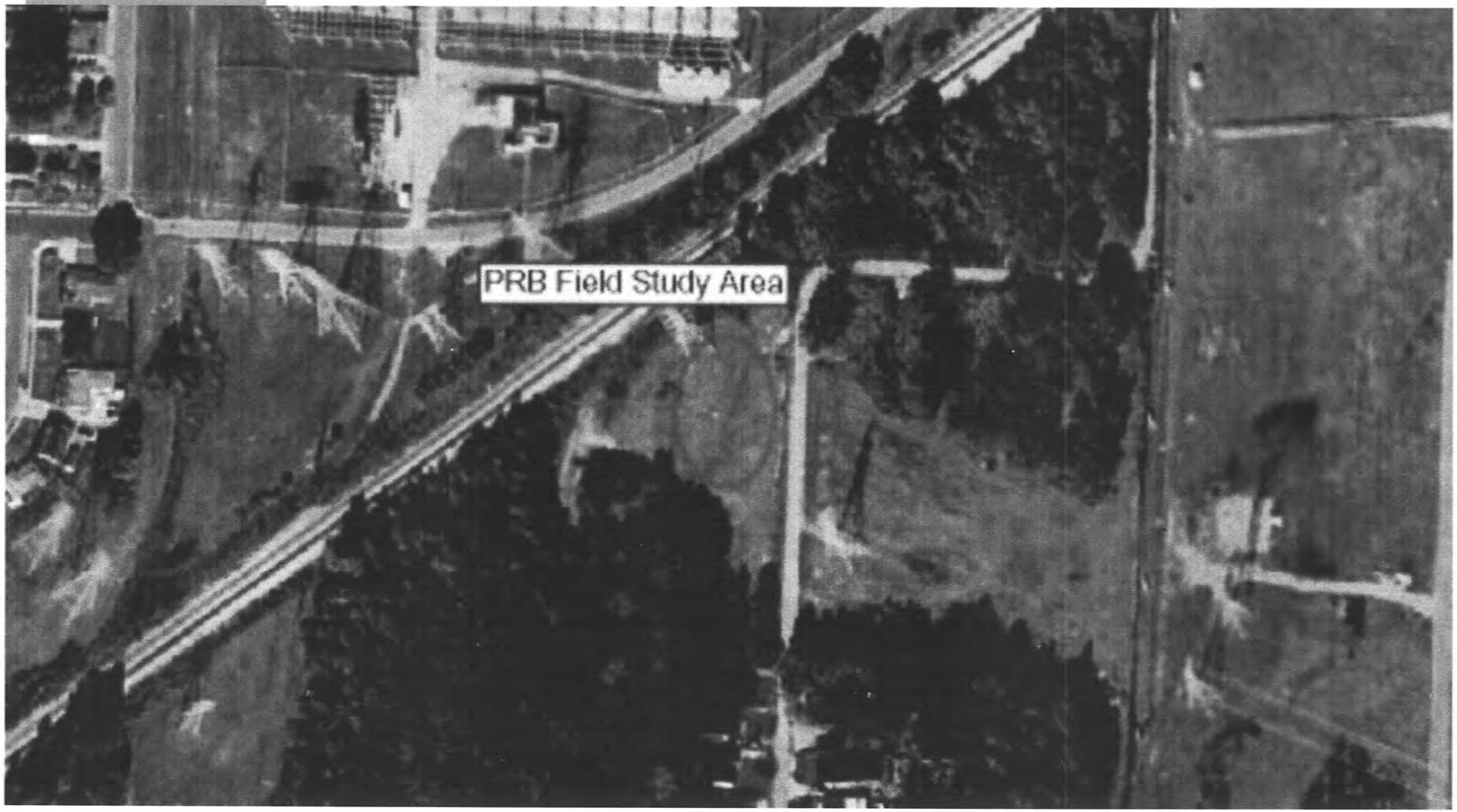
Off-Depot Groundwater RD

Permeable Reactive Barrier (PRB) Implementation Study

- Construction of PRB test wall was completed in June 2006
- Contractors are analyzing data based on confirmation sampling
- The results will be presented in a Technical Memo to the BCT in December 2006

DUNN FIELD

PRB Study Area



DUNN FIELD

Off-Depot Groundwater RD

- EPA and TDEC provided comments on the Intermediate Off-Depot Groundwater RD
- CH2M Hill is preparing the Pre-final RD
- Final RD to be completed in Fall 2007
- Upon final approval, the completed RD will be available in the Information Repositories for public review
- Public Briefing to be scheduled in Fall 2007
- Remedial Action Work Plan to be completed in Winter 2007
- Remedial Action to begin in Winter 2007

Next Steps

Fall/Winter 2006:

- **Continue Main Installation Remedial Action**
  - **Enhanced Bioremediation injections and Monitored Natural Attenuation**
- **Continue Dunn Field Source Areas RD**
  - **Soil Vapor Extraction and Zero-Valent Iron**
- **Continue Dunn Field Off-Depot Groundwater RD**

Projected dates are based on current information and may be subject to change

Next Steps

2007:

- Complete Dunn Field Source Areas Remedial Design (RD)
  - Conduct Public Briefing on RD
- Complete Source Areas Remedial Action (RA) Work Plan
- Begin Source Areas RA
- Complete Dunn Field Off-Depot Groundwater RD
  - Conduct Public Briefing on RD
- Complete Dunn Field Off-Depot Groundwater RA Work Plan
- Begin Dunn Field Off-Depot Groundwater RA

Projected dates are based on current information and may be subject to change

Next Steps

2008:

- Complete Five-Year Review for Main Installation and Dunn Field
- Receive EPA 'Operating Properly and Successfully' (OPS) Determination for the Main Installation Remedial Action (RA)
- Complete Finding of Suitability to Transfer (FOST) #5 for Main Installation

Projected dates are based on current information and may be subject to change

Next Steps

2009:

- Continue long-term monitoring for Main Installation and Off-Depot Groundwater
- Operate and maintain Source Areas SVE

2010:

- Receive OPS determination for Dunn Field Source Areas and Off-Depot Groundwater RAs
- Complete FOST #6 for Dunn Field

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