

THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 638

Memphis Depot



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Dunn Field Remedial Investigation Overview

Presented to **Memphis Depot Restoration Advisory Board**

Steve Offner, PG, Project Manager, CH2M HILL November 15, 2001





Presentation Overview



- The Remedial Investigation (RI) Process
- Environmental History of Dunn Field
- Dunn Field RI Sampling
- Sampling Locations
- Dunn Field Risk Assessment
- Next Steps on Dunn Field

The Remedial Investigation (RI)



- A regulatory process required by law
 - Comprehensive Emergency and Response Compensation and Liability Act (CERCLA)
- Determines the nature and extent of environmental impact caused by past operations
- Identifies potential risk to human health and the environment
- A scientific basis for future cleanup decisions
- Reviewed by State and Federal regulators
 - U.S. Environmental Protection Agency (EPA)
 - TN Department of Environment & Conservation (TDEC)

DUNN FIELD Environmental History



- <u>1980s</u> Preliminary assessments of environmental conditions at Dunn Field
 - installed groundwater monitoring wells
- 1992 Completed an initial RI Report & installed additional wells
- 1996 Interim Record of Decision (ROD) for groundwater extraction system

DUNN FIELD Environmental History



1995 to 2000 - Collected and analyzed soil, sediment and groundwater samples

1998 – Groundwater extraction system

- To date, approx. 101 million gallons of groundwater diverted from shallow aquifer to municipal sewer system for treatment

2000 to 2001 – Completed Chemical Warfare Materiel (CWM) removal action

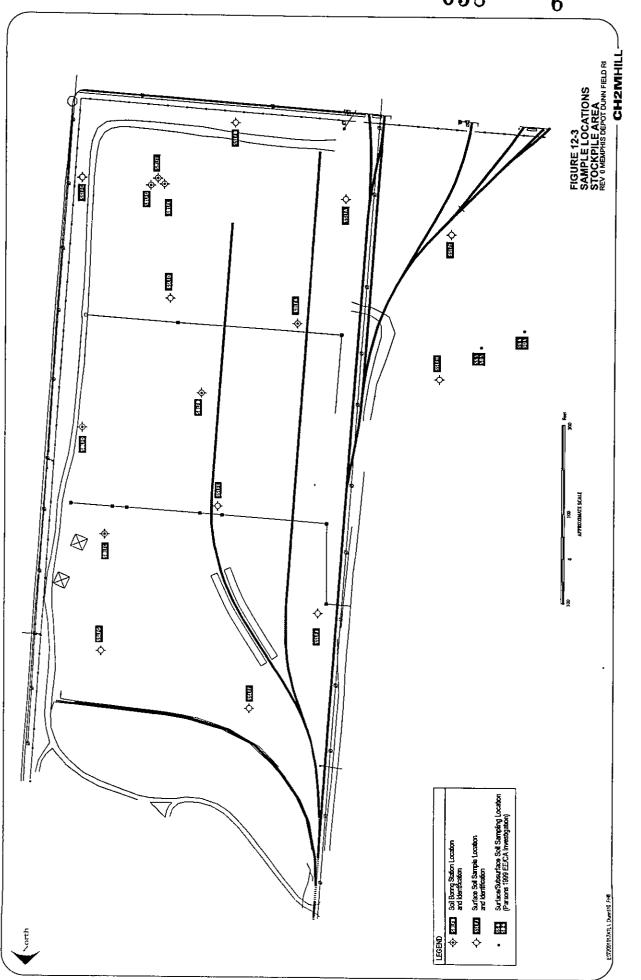
Dunn Field RI Sampling



- Soil gas, surface soil, sub-surface soil, sediment and groundwater samples
- More than 2,000 samples tested for over 300 compounds, including:
 - -Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), pesticides, herbicides, PCBs and metals
 - -More than 520 locations tested for presence of soil gas (to identify disposal locations)
 - -Analyses performed by EPA-approved laboratory

LEGEND ---- DUNN FIELD PERIMETER AREA EXTENTS ATUCAD1/PROJECTS/148071 DDMT/DunnField RI 2001/8071DFRI01-1-3 dgn DUNN FIELD stocke" FIGURE 10-1 Area Designations at Dunn Field
Rev 0 Memphis Depot
Dunn Field RI Sauroe Ri Report 1900

CH2MHII



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 Location and Identification Surface Soil Sample Location and Identification 4 Zezz Sol Bonng Sation Location and Identification ž

Risk Assessment



- Dunn Field divided into 4 study areas based on past land-uses:
 - Northeast Open Area (20 Acres)
 - Disposal Area (14 Acres)
 - Stockpile Area (30 Acres)
 - Groundwater (on and off Dunn Field)
 Not used for drinking water
- Determines potential health risk associated with future land-use options:
 - Assessed industrial, recreational and residential scenarios
- Evaluates potential risk associated with solvent vapors
 - What is the relative risk of vapors moving through soil into air and residential property?

Next Steps on Dunn Field



Nov. 2001 to Jan. 2002

- Complete DRAFT Dunn Field RI Report
 - •start 60-day review by EPA & TDEC (Rev. 0)
- Complete Soil Vapor Extraction (SVE) pilot test

·part of the Dunn Field Feasibility Study

Next Steps at Dunn Field



Feb. 2002

- Complete DRAFT Dunn Field RI Report (Rev. 1)
- Present findings of the RI data collection at the Feb. 2002 RAB Meeting

March 2002

 Present findings of the RI Risk Assessment at the March 2002 RAB Meeting

Next Steps at Dunn Field



Spring 2002

- Complete Dunn Field Feasibility Study (FS)
 - Rev. 1 for review by EPA, TDEC and RAB
- Copies of Dunn Field RI Report and FS placed in Depot's Information Repositories

Summer 2002

- Final Proposed Plan for Dunn Field
 - Public Comment Period

Next Steps at Dunn Field



Fall 2002

- Final Dunn Field Record of Decision expected to be signed by TDEC & EPA
- Remedial Design phase begins

Projected dates in this presentation are based on current information available and may be subject to change.

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