The Former Memphis Depot
2245 Truitt Street
Memphis, TN 38114

DATED MATERIALS – PLEASE DELIVER THIS IMMEDIATELY

FOR YOUR INFORMATION

INFORMATION REPOSITORY

New Address:

Community Outreach Room
2245 Truitt Street
Memphis, TN 38114
(901) 774-3683

Please call ahead for an appointment to ensure that we are available to assist you. Located in the Memphis Depot Business Park.

New Documents:

- Dunn Field Revised Proposed Plan
- Dunn Field Off-Depot Groundwater Remedial Design
- April 2008 Dunn Field Groundwater Semi-annual Monitoring Report
- 2008 RAB & BCT minutes
- 2008 RAB & Public meeting presentations

How to reach us...

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EnviroNews is published by the former Memphis Depot to update the public on the environmental cleanup program. If you have comments, questions or suggestions for future articles, please call the Community Information Line at (901) 774-3683.

Visit the Former Depot's website at www.ddc.dla.mil/memphis

FORMER DEPOT

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EnviroNews

FORMER MEMPHIS DEPOT ENVIRONMENTAL RESTORATION PROGRAM
THE DEPOT
RESTORE, REUSE, REVITALIZE

Dunn Field Source Areas Remedial Action

The Fluvial Soil Vapor Extraction (SVE) system began operating in July 2007 and by November 2008 more than 3,000 pounds of chlorinated volatile organic compounds (CVOCs) have been removed from the soil in the fluvial deposits. SVE works by pulling air and CVOCs through the soils to a treatment system that captures and filters out contaminants. The treatment system also prevents CVOCs from moving through the soil down to the groundwater, which reduces CVOC levels in the groundwater. The system is expected to operate until July 2012.

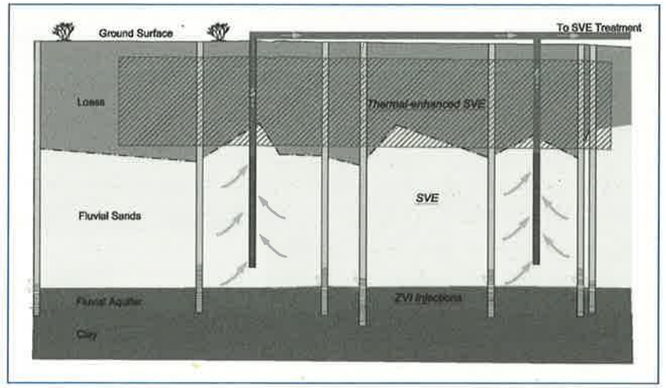


Diagram of the Fluvial Soil Vapor Extraction system located at Dunn Field. Thermal-enhanced SVE is conducted in the loess layer of soil, marked by the highlighted box.

Thermal-Enhanced Soil Vapor Extraction

The Thermal-enhanced SVE treatment system began operating in May 2008 and removed more than 12,000 pounds of CVOCs by November 2008. The Base Realignment and Closure (BRAC) Cleanup Team agreed to use Thermal-enhanced SVE instead of conventional SVE to remove CVOCs from the loess deposits that contain more clay than the sandier fluvial deposits. The BRAC Cleanup Team includes the Defense Logistics Agency, the U.S. Environmental Protection Agency and the Tennessee Department of Environment and Conservation.

Thermal-enhanced SVE uses heat to turn CVOCs in the soil into vapor to be collected by SVE wells installed in the loess. Soil temperatures reached the goal of 100° Celsius (212° Fahrenheit) within the treatment area of 5 to 30 feet below ground.

The vapor and condensate were treated to safely remove CVOCs, and both air and condensate discharges met the operating permit limits.

Environmental contractors collected confirmation soil samples at all the locations identified in the Loess/Groundwater Remedial Action Work Plan. By December 2008, the soil remedial goals had been met at all of the treatment areas, and the heating system was turned off.

Zero-Valent Iron Injections (ZVI)

The Source Areas Remedial Design called for completing the Thermal-enhanced SVE treatment system and then injecting ZVI into groundwater beneath the source areas at Dunn Field that had CVOC levels above 1,000 parts per billion (ppb). Groundwater samples collected prior to starting the Fluvial SVE and the Thermal-enhanced SVE showed that the highest CVOC level was 49,000 ppb. Based on recent sampling and the effectiveness of the SVE treatment, CVOC levels in the groundwater under the Dunn Field source areas are now below 100 ppb, so ZVI injections are not necessary.

UPCOMING MEETINGS

Off-Depot Groundwater Remedial Design Public Briefing

February 5, 2009 at 6 p.m.
Ruth Tate Senior Center,
1620 Marjorie Street.
Look for advertisements in the *Commercial Appeal*.
Call the Community Information Line,
(901) 774-3683,
for more information.

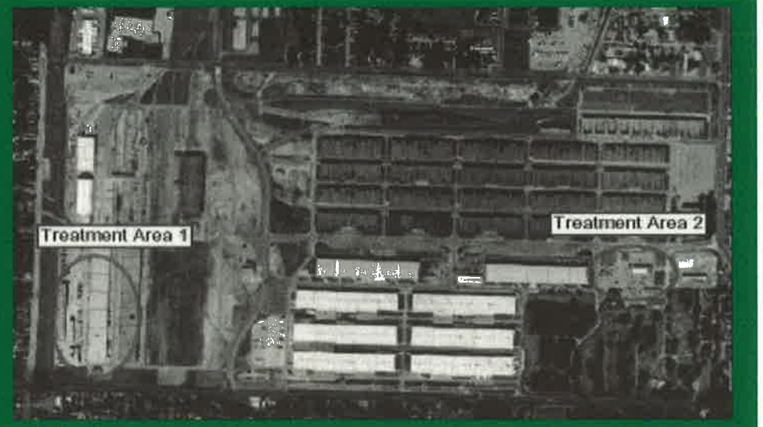
Visit the Former Depot's website at www.ddc.dla.mil/memphis

PROJECT UPDATE:

Remedial Actions Continue at Main Installation

In September 2006 the environmental contractors began treating groundwater beneath the Main Installation (MI) impacted by chlorinated volatile organic compounds (CVOCs) by injecting sodium lactate into wells placed in the shallow fluvial aquifer, approximately 90 feet below the surface. Injection wells are located at Target Treatment Areas (TTA) 1 and 2 as shown. This treatment method is called Enhanced Bioremediation Treatment (EBT).

Quarterly groundwater sampling results confirm that CVOC levels are decreasing in both TTA1 and TTA2 (see diagram at right), but the remedial goals have not yet been met. Based on the sampling results, the monthly lactate injections will continue until February 2009. Environmental contractors will continue to perform quarterly groundwater monitoring.



Aerial view of Main Installation treatment areas. Treatment Area 1 is located in the lower left corner, and Treatment Area 2 is located on the right side of the diagram.

Monitored Natural Attenuation (MNA) and Land Use Controls

MNA, the natural breakdown of CVOCs, is also being tracked in the shallow aquifer beneath the MI where low levels of CVOCs are present. Semi-annual groundwater monitoring tracks the progress of MNA. Cleanup goals in MNA areas are expected to be achieved by 2015.

Annual site inspections have been conducted since 2005 to document that the required Land Use Controls are being properly maintained.

Main Installation Source Area Study Under Way

During the fall of 2008 the environmental team studied potential source areas impacting groundwater beneath the MI including the areas being treated by sodium lactate injections. The environmental team includes the Defense Logistics Agency (DLA) and their contractors who work in consultation with the U.S. Environmental Protection Agency (USEPA) and Tennessee Department of Environment and Conservation (TDEC) to ensure the safest and most effective methods of environmental cleanup at the former Memphis Depot. The team examined past operations as well as soil and groundwater sampling results from previous studies to confirm appropriate areas for further study.

Five potential soil source areas on the MI, above the groundwater plumes, were identified for further study. Environmental contractors then developed a sampling grid for each of these areas and gathered data from over 300 membrane interface probe (MIP) locations on the sampling grids. The MIP can detect chlorinated volatile organic compounds in soil and the readings are categorized as "clean," "possible source area" or "likely source area."

Environmental contractors confirmed the MIP readings by analyzing soil samples collected from the MIP locations. In late January 2009, the DLA, USEPA and TDEC will begin reviewing the MIP survey results in order to determine what, if any, additional actions are necessary to treat the soil and reduce impacts to the groundwater.

The MI Source Area Evaluation which identified the potential source areas is available in the Information Repository (IR) for public information. The study report will be available in the IR following approval by the BRAC Cleanup Team.

DLA Hosts Public Comment Period and Meeting

During November 2008, the Defense Logistics Agency (DLA) conducted a public comment period and hosted a public meeting for the Dunn Field Revised Proposed Plan (RPP). The RPP proposed changes to the environmental cleanup remedies selected in the Dunn Field Record of Decision (ROD) signed in April 2004.

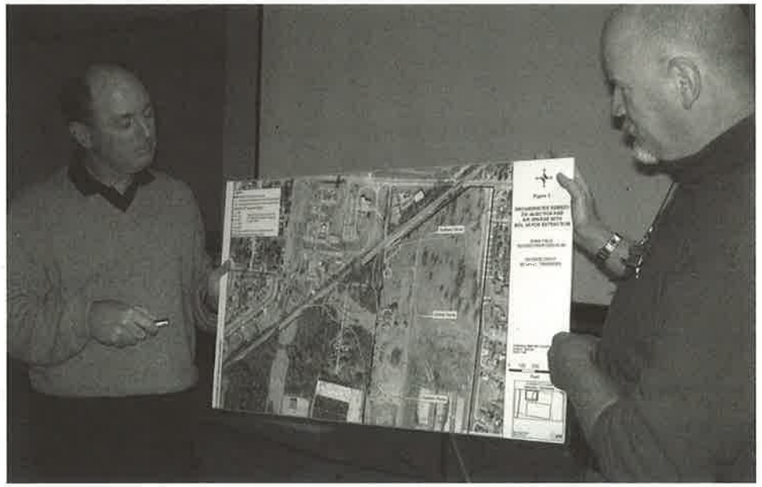
At the November 13 public meeting, Mr. Thomas Holmes, project manager from engineering-environmental Management, Inc. (e^2M), presented information from the RPP and described the proposed changes and clarifications to the remedies selected in the 2004 ROD. The one fundamental change to the selected remedies proposed in the RPP was the use of air sparging (AS) and soil vapor extraction (SVE) instead of a permeable reactive barrier to treat shallow groundwater that has moved to the north west of Dunn Field.

The 30-day public comment period that ended on November 25 provided the public an opportunity to comment on the proposed changes to the 2004 ROD presented in the RPP. DLA received no public comments at the public meeting or during the public comment period.

The proposed changes to the 2004 ROD will now be documented in a ROD Amendment anticipated to be signed by the DLA, the U.S. Environmental Protection Agency and the Tennessee Department of Environment and Conservation in the winter of 2009.

The ROD Amendment will be available to the public at the Information Repository, 2245 Truitt Street, within the Memphis Depot Business Park. It will also be included in the Administrative Record that can be seen on the Internet by going to the former Memphis Depot website at:

www.ddc.dla.mil/memphis



Mr. Tom Holmes, engineering-environmental Management, Inc., and Mr. Turpin Ballard, Environmental Protection Agency, explain groundwater flow direction during the Dunn Field Revised Proposed Plan Public Comment Meeting.

Myers Recognized for Contribution to RAB

At the October 9 meeting, Mr. Torrence Myers was honored for his service to the Restoration Advisory Board (RAB). Myers recently retired from the Memphis Light Gas and Water Division (MLGW) and the RAB in fall 2008.

Commemorating Myers' contribution, Defense Distribution Center (DDC) Commander, Brigadier General Peter J. Talleri, United States Marine Corps, issued a letter of appreciation and an engraved DDC coin, "Your presence at RAB and other public meetings provided an important link to the community. The information you willingly provided regarding the operations of MLGW drinking water system and the questions you've asked regarding the environmental restoration activities during RAB meetings, helped our efforts to keep the community informed of the environmental restoration process at the former Memphis Depot."

Myers, who was unable to attend the October 9 meeting, had been a member of the RAB since February 2002. MLGW will continue to be represented on the RAB by Mr. William Winford, who assumed Myers' position at MLGW.