

Dunn Field Record of Decision... continued from cover

"This is a giant step forward for the environmental program, and for the community," said Michael Dobbs, Environmental Manager for the DDC, who also serves as the Depot's Base Realignment and Cleanup (BRAC) Environmental Coordinator.

"The Dunn Field ROD is the final document in the decision-making phase of the cleanup program. The studies are done, we've reached agreement on the best cleanup solutions for the site, and we are now moving forward to design and implement the cleanup remedies that will ensure the site is safe for current and future use."

The ROD outlines the nature and extent of environmental conditions at Dunn Field, and provides an evaluation of various cleanup technologies for restoring the site. It also documents the chosen cleanup remedies to restore environmental conditions at Dunn Field to acceptable, health-protective standards for the intended reuse of the site.

The remedies that have been selected satisfy the regulatory requirements outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The remedy is summarized as follows:

- Soil and buried materials from disposal sites within areas totaling 7,200 square-feet on the western portion of Dunn Field will be excavated and removed for offsite disposal;
- Soil vapor extraction (SVE) will be used to remove solvents in the subsurface soil (on the western portion of Dunn Field);
- Groundwater beneath the western portion of Dunn Field and offsite to the west will be treated using a combination of Zero-Valent Iron (ZVI) injections, a Permeable Reactive Barrier (PRB), and Monitored Natural Attenuation including long-term monitoring.
- Land use controls will be implemented, which consist of the following institutional controls: deed and/or lease restrictions; Notice of Land Use Restrictions; existing zoning restrictions and existing groundwater well restrictions, to control exposure to affected soil and groundwater over the long term.

The ROD states that TDEC and EPA will also conduct reviews within five years of the start of a Remedial Action, and every five years thereafter, to ensure the remedies continue to be protective of human health and the environment.

The ROD also includes a Responsiveness Summary that addresses community questions about the site and the proposed cleanup remedies that were raised during the Dunn Field Proposed Plan Public Comment Period.

The ROD for Dunn Field is now available for public reference at the Memphis Depot's three Information Repositories, located at the Memphis Depot, Cherokee Branch Library, and the Memphis/Shelby County Health Department.

For more information on the environmental restoration program at the former Memphis Depot, call the Community Relations Office at (901) 544-0613. □

Wells help cleanup planning:

As part of the Memphis Depot's ongoing environmental cleanup program, seven additional groundwater monitoring wells have been installed in the surrounding community. The wells are mainly being used to collect data that will help scientists to design and monitor the groundwater cleanup remedy, as outlined in the Dunn Field Record of Decision (ROD).

In May and June, monitoring wells were installed near the following areas:

- One well near the railroad tracks in the field west of Rozelle Street (Dunn Field);
- Five wells near the railroad tracks on Memphis Light, Gas, and Water property south-east of Menager Road and east of Meadowhill Street (Dunn Field);
- One well near the intersection of Sparks Street and Dempster Avenue (Main Installation).



New groundwater monitoring wells have been installed in the cleanup remedy for groundwater at Dunn Field.

Main Installation Remedial Design completed

The Remedial Design (RD) has been completed for the Main Installation (MI) at the former Memphis Depot, clearing the way for the approved cleanup actions to begin.

The RD is the seventh of eight steps outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Approved by the Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC), the RD describes the implementation steps for the approved cleanup remedy to ensure the ongoing protection of human health and the environment.

The cleanup remedy for the MI is an enhanced bioremediation treatment (EBT) program that will be used to treat chemicals known as volatile organic compounds (VOCs) in the shallow groundwater aquifer beneath the MI.

The affected groundwater is in the thin water-bearing layer known as the Fluvial aquifer. This aquifer is about 90 feet below the ground surface. This water is not used for drinking water, so there is no exposure to the community. The city's drinking water is drawn from the Memphis Sand aquifer, located roughly 250 feet below the ground surface.

EBT works by giving nutrients to naturally occurring organisms in the groundwater. The nutrients encourage the growth of more organisms and speeds up the natural bioremediation process. These organisms break down VOCs into other compounds that degrade to safe natural compounds over time. The nutrient will be provided by injection of sodium lactate, a safe, natural substance found in human skin tissue. The MI RD provides a design for mobile units that will inject sodium lactate into the groundwater through wells at different locations on the MI.

The RD also includes a Land Use Control Implementation Plan (LUCIP) for site-specific land use controls that will prevent future residential development on the site. A Long-Term Groundwater Monitoring Plan (LTM) outlines periodic testing of groundwater to make sure the EBT is working and cleanup objectives are being met.

The final phase of the CERCLA process is Remedial Action (RA). This is when the construction and operation of the cleanup remedy will take place. MACTEC Engineering and Consulting, the Depot's Remedial Action contractor, is currently preparing a draft of the RA work plan. □