



## **Approved groundwater remedy to be implemented in community**

**September 2004**—The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) and its environmental contractors will begin the early implementation of a component of the approved cleanup remedy to treat groundwater in the Depot community this fall.

In June and August of 2004, the Depot installed additional groundwater monitoring wells in adjacent neighborhoods west of Dunn Field at the former Memphis Depot. The new wells are providing data needed to design and monitor the groundwater cleanup remedy for Dunn Field, as outlined in the Record of Decision (ROD). The remedy involves three components: 1) using Zero-Valent Iron (ZVI) placed in the ground as a Permeable Reactive Barrier (PRB); 2) injecting ZVI in areas where high concentrations of compounds are present; and 3) treating lower-concentration areas using monitored natural attenuation (MNA).

As the groundwater flows through the ZVI, the concentrations of chlorinated volatile organic compounds (CVOCs), such as the solvents found in the groundwater beneath Dunn Field, are reduced through chemical reactions with the iron.

Based on the data collected from the offsite monitoring wells, the environmental team was able to confirm the boundary of affected groundwater that has moved off-site from Dunn Field and determine where CVOC concentrations are the highest. The BCT recommended the early implementation of ZVI injection at two unoccupied sites adjacent to Dunn Field to treat the groundwater before the PRB is installed. The installation of the PRB is scheduled to begin in early in 2007.

To monitor the effectiveness of the ZVI injection, seven additional monitoring wells will be installed beginning October 4, 2004, at the two specified sites:

- Four wells on vacant property owned by the City of Memphis and Memphis/Shelby County along Rozelle Street, near the corner of Menager Road;
- Three wells on Memphis Light, Gas, and Water property:
  - One on each side of Menager Road near Ragan Street
  - One inside the MLGW substation, north of Menager Road

In addition to the monitoring wells, ZVI injection borings will be installed in a roughly linear pattern at both sites to depths of 85 to 100 feet below ground surface. The drilling equipment will consist of a large drill rig and a support truck. Prosonic Corporation will install the monitoring wells. ARS Technologies will install the injection borings and inject the ZVI. The ZVI injections will begin October 18 to 25, 2004. Additional support vehicles will be needed for the ZVI injections. Both contractors will be under the direction of MACTEC Engineering and Consulting.

The Depot anticipates drilling no more than five days at each site to install the monitoring wells. The ZVI injection should take no more than 30 days. The team will make every effort to minimize noise and disturbance to the community.

**The Depot's environmental team will be giving a presentation on the early implementation of ZVI injection at the Restoration Advisory Board (RAB) meeting on October 21, 2004. The meeting begins at 6 p.m. at the South Memphis Senior Citizens Center, 1620 Marjorie Street. The public is welcome to attend.**

**For more information, please call the Memphis Depot Community Relations Office at: (901) 774-3683**