



## Groundwater monitoring program expanded in Depot community

**August 2004**—The Memphis Depot is expanding its off-site groundwater monitoring program and will install an additional seven groundwater monitoring wells in the Memphis Depot community between August 9 and 24, 2004. The data collected from these wells, and those installed in June 2004, will be used to design and monitor the groundwater cleanup remedy for Dunn Field, as outlined in the Record of Decision (ROD).

New monitoring wells will be installed in the following areas:

- On Memphis Light, Gas, and Water property:
  - south of Menager Road between Ragan and Rozelle Streets (155)
  - near the old railroad tracks on the south side of Menager Road near Ragan Street (151)
  - between Ragan Street and the old railroad tracks north of Menager Road (152)
  - between Ragan Street and the old railroad tracks south of Person Avenue (153)
- On Mississippi Valley Corporation property southeast of the railroad tracks and west of Rozelle Street (157)
- On RLR Investments' property below the power lines south of the railroad, adjacent to MW-67 (154)
- In the city right-of-way at the end of the cul-de-sac of Meadowhill Cove (156)

The drilling equipment will consist of a large drill rig and a support truck, operated by ProSonic Corporation under the direction of MACTEC Engineering and Consulting.

Sampling results from all monitoring wells will be used by the Depot to monitor groundwater conditions beneath the Depot community, and to clearly define the boundary of affected groundwater that has moved off-site from Dunn Field. The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) will use the data to design a Permeable Reactive Barrier (PRB) as part of the approved remedy for groundwater.

A PRB is an underground barrier of iron particles, called zero-valent iron (ZVI). As the groundwater passes through the barrier, the ZVI naturally breaks down the chemicals, called volatile organic compounds, into safe compounds that degrade over time. Since the groundwater beneath the Depot community is deeper than 50 feet, the PRB will be formed by injecting a gel containing ZVI into the ground through a series of boreholes spaced five to 15 feet apart. The Depot's environmental team has proposed a 1,000-foot-long PRB located in the natural path of the groundwater flowing from Dunn Field. Using information from the monitoring wells, scientists can confirm the boundary of affected groundwater. This will allow the cleanup team to determine the best possible locations for the boreholes and the amount of ZVI required to achieve the best cleanup result.

The Depot anticipates drilling no more than two days at each well location. The team will make every effort to minimize noise and disturbance to the community.

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

For more information, please call the Memphis Depot Community Relations Office at the new number - (901) 774-3683.