SANDY BEACH ROAD (TARRANT COUNTY) PELICAN BAY AND AZLE, TEXAS

EPA REGION 6
CONGRESSIONAL DISTRICT 12

Contacts:
Vincent Malott 214-665-8313

EPA ID# TXN000605649
Site ID: 0605649

Updated: December 2009

Current Status

EPA is nearing completion of the groundwater monitoring well network as part of the Remedial Investigation to determine the extent of the trichloroethyene (TCE) contaminant plume in the Paluxy aquifer. EPA is completing 11 additional groundwater monitoring wells bringing the total number of monitoring wells installed at the site to 17 (see figure below). EPA completed a site-wide groundwater sampling event the week of November 16th that included both monitoring wells and selected private water supply wells. The analytical data report will be available in early December 2009. EPA has also identified the proposed source area at a former dump site located on the north side of Sandy Beach road and is working to secure property access to complete the investigation. The Sandy Beach Road Ground Water Plume site consists of a TCE contaminated ground water plume approximately one-half mile wide by one mile long. The plume is present beneath residential areas within parts of Pelican Bay, Azle, and unincorporated areas of Tarrant County.

EPA collected samples from the two inactive City of Pelican Bay supply wells in late September 2008 to determine contaminant concentrations in the Paluxy Aquifer. The samples were analyzed in the EPA Houston Lab and results indicate that the contamination from the source area is migrating laterally within the Paluxy aquifer. In addition, testing of the two closed Pelican Bay supply wells by the USGS has provided data indicating transport of the TCE from the Paluxy aquifer to the Glen Rose within long-screened supply wells, typical of the private supply wells in the area. The upper Glen Rose does not appear to be the primary migration pathway based on the flow meter testing. EPA completed installation and sampling of six multi-port monitoring wells in June 2008. The monitoring wells were completed to sample separate intervals in the Paluxy aquifer and the upper part of the Glen Rose Formation. The monitoring wells were installed to identify the leading edge of the TCE plume originating from the former dump site on Mountain View Drive (north of Sandy Beach Road). The monitoring wells are constructed with continuous multi-channel tubing that allows sampling from 7 discrete depths to identify the plume geometry. The sampling results from all wells were non-detect for TCE, indicating that the contaminant plume has not advanced to these well locations. The boundary of the TCE plume map at the end of this summary has been updated to reflect this new information.

EPA has located a source area for the ground water contamination in the former dump site located on Mountain View Drive, north of Sandy Beach Road. Sample results from a soil gas survey completed in October 2007 provided data indicating past disposal of TCE along the eastern side of the former dump site. The attached figure illustrates the general location of the disposal activity. EPA completed a geophysical assessment in December to assess the approximate depth of the dump and presence of drums or other metal debris in the trichloroethylene “hot spot”. The geophysical report was finalized in February 2008, but the preliminary results did not identify the presence of drums or debris that warrants excavation at this time. The next phase of field work is vertical soil gas profiling over the TCE hot spot to determine concentrations in the soils above the water table, as well as the installation of monitoring wells across the site.

EPA has completed residential water line connections to the City of Azle water supply system for those

residences with contaminated private water supply wells within the City of Azle or in adjacent area of Tarrant County. Three additional residential water line connections to the City of Pelican Bay are pending amendments to the City water supply infrastructure, and still retain the filtration systems maintained by the TCEQ.

Benefits

The predominant threat to human populations is the ingestion of TCE contaminated drinking water and the potential for exposure by inhalation of TCE vapors. Exposure to the contamination has been temporarily mitigated due to the installation of filtration systems on the contaminated residential wells by the TCEQ. EPA provided bottled drinking water to the affected residents until the filtration units were installed and proved to be fully working. The City of Pelican Bay water supply system continues to operate the wells completed in a deeper aquifer unaffected by the contamination. The water supply for Azle is unaffected by the contamination.

National Priorities Listing (NPL) History

NPL Inclusion Proposal Date:	April 27, 2005
NPL Inclusion Final Date:	September 14, 2005

Site Description

The site is an area of ground water contamination located beneath residential areas within parts of Pelican Bay, Azle, and unincorporated areas of Tarrant County. The City of Pelican Bay supplies potable water to approximately 1,500 residents. The water supply for Azle is from surface water and is unaffected by the contamination. The plume has affected three public water supply wells in Pelican Bay and as many as 12 residential drinking water wells in Azle, Tarrant County and Pelican Bay. Two of the municipal supply wells and nine of the residential wells had TCE concentrations above the accepted health-based level for TCE. The public water supply wells were shut-down and filtration units have been placed on the affected private water supply wells, or a public water supply line was extended to the home or business.

The contaminated ground water plume contains TCE and lesser amounts of 1, 2-dichloroethene and the gasoline additive MTBE. The contamination has been detected in the Paluxy aquifer and the upper part of the Glen Rose Formation at a depth of approximately 40 feet to 200 feet below ground surface. Private water supply wells, which range in depth to 200 feet, are typically completed in the upper part of the Glen Rose Formation. Two wells in the Pelican Bay public water supply system that produced water from the Glen Rose Formation have been closed due to contamination. Ground water contamination has not been detected in the Twin Mountains aquifer at a depth of approximately 400 feet at the site. The principal production wells in the Pelican Bay public water supply system produce water from the Twin Mountains aquifer. The water supply for Azle is unaffected by the contamination.

Wastes and Volumes

The TCE plume is approximately one-half mile wide by one mile long as defined by the 5 ppb limit. The source of the contamination may be a former dump site located along Sandy Beach Road. The extent of the ground water contamination is being investigated during the remedial investigation.

Record of Decision (ROD)

A Record of Decision is pending completion of the Remedial Investigation/Feasibility Study and issuance of the Proposed Plan for public comment.

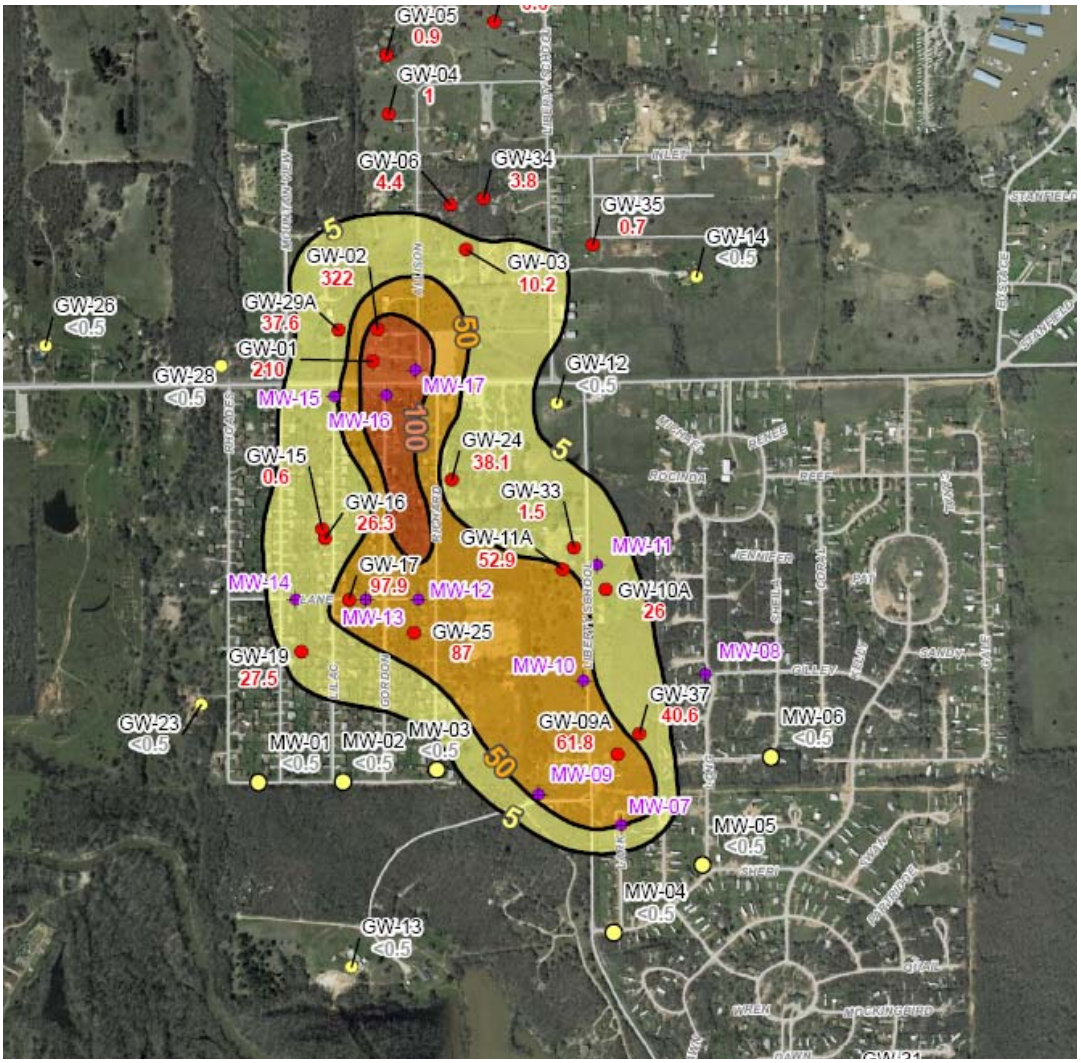
Site Contacts

EPA Remedial Project Manager:	Vincent Malott	214-665-8313
EPA Site Attorney:	Jeff Clay	214-665-7132
EPA Community Involvement Coordinator	J. McKinney	214-665-8132

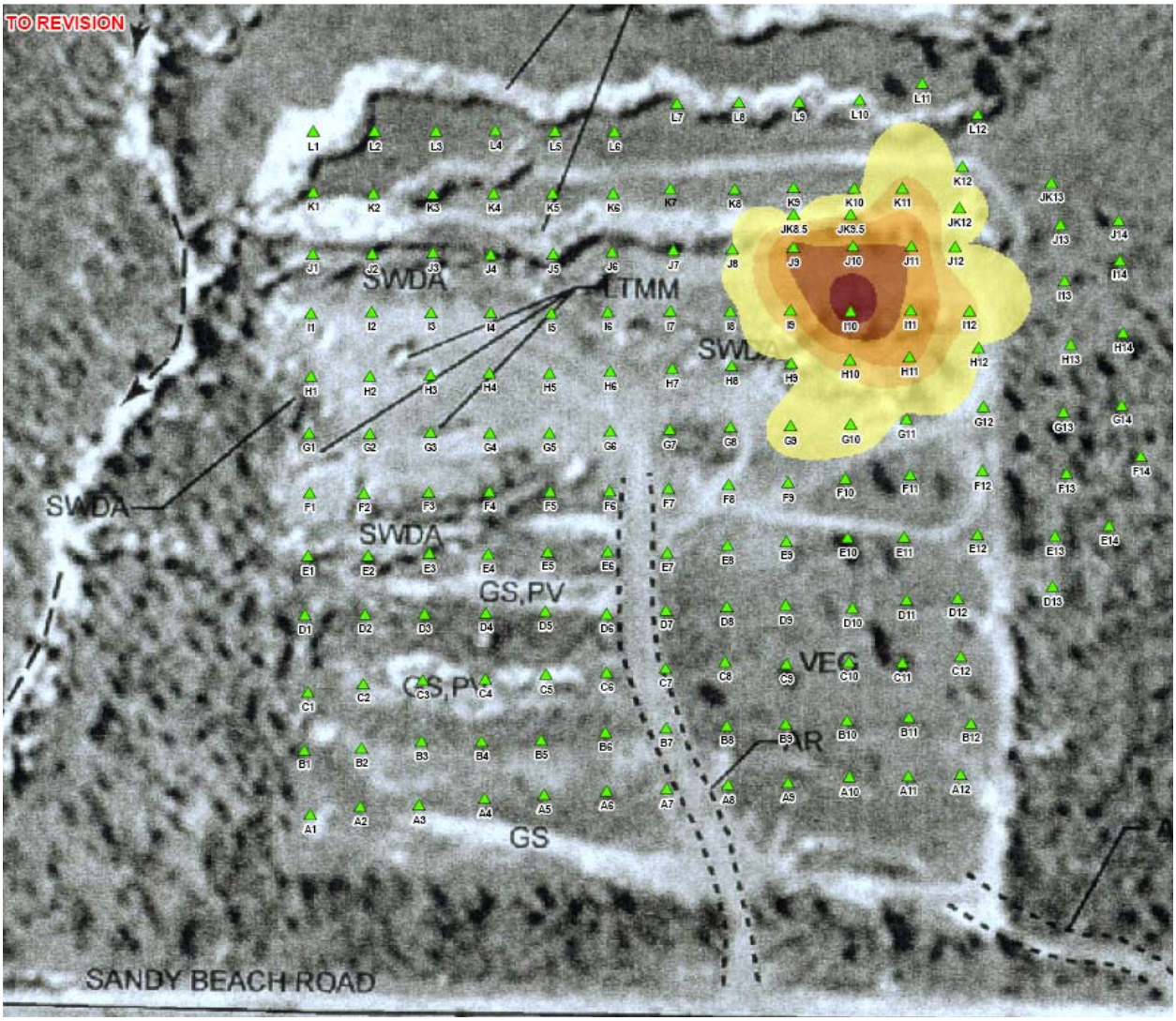
EPA Regional Public Liaison: Donn Walters 214-665-6483
TCEQ Project Manager Marilyn Long 512-239-0761
EPA Superfund Region 6 Toll Free Number: 1-800-533-3508
Information Repository: Azle Public Library, 609 SE Parkway, Azle, TX 76020

Site Map

The following site map illustrates the project boundaries of the TCE plume in groundwater and the proposed monitoring well locations (purple well designations MW-07 to MW-17) to complete the ground water investigation.



The site map illustrates the TCE vapor detected near the ground surface based on sampling in October 2007. The boundaries of the TCE vapor has been projected onto a 1963 aerial photo of the former dump site to illustrate where the disposal likely occurred relative to features of the dump site.



The second site map illustrates the same boundaries of the TCE vapor projected onto a current aerial photo of the site as it appears now.