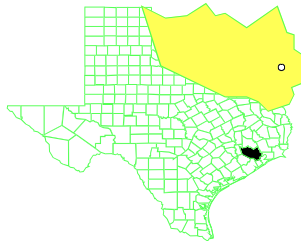


BRIO REFINING SUPERFUND SITE

Harris County, Texas



EPA REGION 6 CONGRESSIONAL DISTRICT 22

Contact:
Gary Miller 214-665-8318

EPA ID# TXD980625453
Site ID: 0602601

Updated: May 2009

Current Status

The site is currently in an operations and maintenance phase. A ground water contamination plume has been discovered in the Fifty-Foot Sand water bearing zone. The Brio Site Task Force is preparing an investigation plan to access this plume.

The site was deleted from the National Priorities List in December 2006.

Benefits

The completion of the construction of the containment remedy in 2004 will provide long-term reduction of risk to human health. The installation of the subsurface barrier wall and the groundwater control system will ensure that contaminated groundwater is contained underneath the site and will not discharge into surface water. The multi-layer cover system over the site reduces the risk from direct contact with the residual wastes at the site.

The site is currently ready for anticipated use (non-residential).

National Priorities Listing (NPL) History

Proposed Date: 10/05/1984
Final Date: 3/31/1989

Deletion Proposal Date: 06/23/2006
Final Deletion Date: 12/28/2006

Site Description

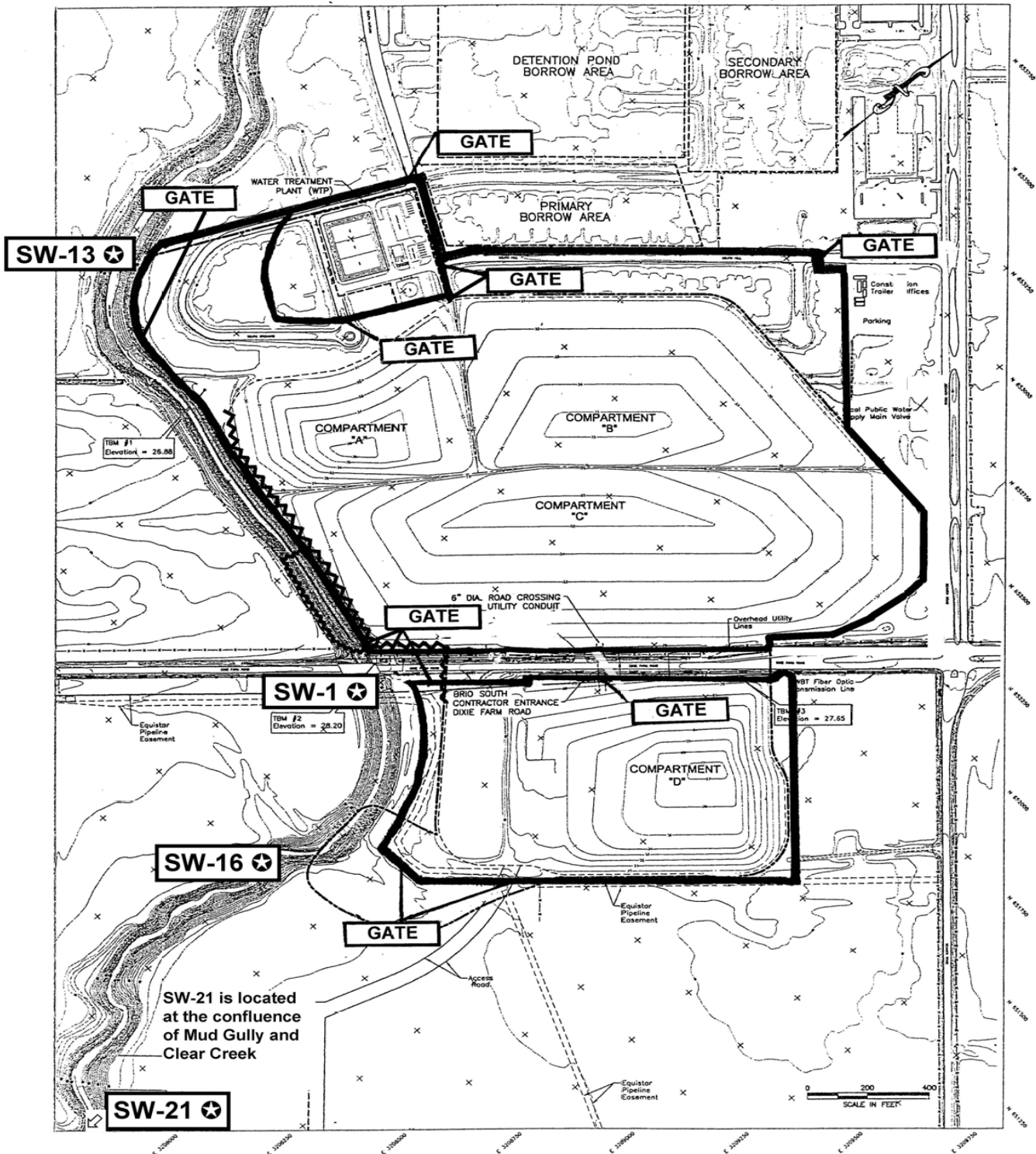
Location: The site is located almost 20 miles south of Houston at 2501 Dixie Farm Road in southern Harris County, Texas.

Population: Approximately 3600 people live within the 2000 census tract surrounding the site.

Setting: The site occupies approximately 58.1 acres. Dixie Farm Road divides the site into two parcels. The current land use of the surrounding area is residential to the northeast across Beamer Road. A buffer of undeveloped land exists to the north, west, and south of the site. The property to the south is being used as a wetland and forest habitat as part of a Natural Resource Restoration Project implemented by the Brio Site Task Force.

Hydrology: The Numerous Sand Channel Zone (NSCZ) and the Fifty-Foot Sand are the two uppermost water bearing units at the site. The upper zone, the NSCZ at 14-feet to 32-feet below ground surface, lies below the upper clay and flows toward and discharges into Mud Gully to the west. The Fifty-Foot Sand is separated from the NSCZ by the Middle Clay Unit, which varies between 8 and 20-feet thick. The fifty-Foot Sand occurs at a depth of 52-feet to 61-feet below ground surface and ranges in thickness from 35-feet to 45-feet. Groundwater in the Fifty-Foot Sand flows in a south-southeastern direction.

Site Map



FENCE LINE **—————**
 SOIL BENTONITE SLURRY WALL **- - - - -**
 SHEET PILE BARRIER WALL **~~~~~**
 SURFACE WATER SAMPLING LOCATION **☆**

BRIO SITE

FIGURE 1-1

Wastes and Volumes

The processing activities at the site included reclamation of petrochemicals from various source materials, most of which were residues, tanks bottoms, and tars of other processes performed at off-site locations. Some of the notable contaminants include 1,1,2-trichloroethane; 1,2-dichloroethene; 1,1-dichloroethane; 1,2-dichloroethane; 1,1-dichloroethene; vinyl chloride; phenanthrene; and bis-(2-chloroethyl) ether.

Health Considerations

The risk assessment concluded that there is an elevated health risk associated with exposure to residual wastes at the site. The implementation of the remedy has addressed this risk.

The site's Environmental Indicator status is human exposure under control and ground water migration under control.

Record of Decision (ROD)

The original ROD was issued on March 31, 1988. An Amended ROD was issued on July 2, 1997.

Main cleanup components of the Amended ROD included:

- Vertical Barrier Wall - A sub-grade barrier wall to limit the potential for off-Site migration of contaminated ground water in the NSCZ.
- Site Cover - A composite cap including a gas collection layer, a flexible membrane liner, compacted clay, and top soil to promote vegetative growth.
- Groundwater Flow Control - A ground water pumping system to control the migration of Site contaminants.
- Mud Gully – Improvements to the gully to allow for long-term maintenance and stability.

Construction completion was achieved on April 28, 2004.

Site Contacts

EPA Remedial Project Manager:	Gary Miller	214-665-8318
State Project Manager:	Faye Duke	512-239-2443
EPA Community Coordinator and Regional Public Liaison:	Donn Walters	214-665-6483
State Community Relations	Bruce McAnally	512-239-2141
EPA Site Attorney:	Anne Foster	214-665-2169
EPA State Coordinator:	Kathy Gibson	214-665-7196
EPA Toll-Free Telephone Number:		1-800-533-3508