

Lessons Learned from the Sikes Disposal Pits Superfund Site

by Tom Davis,
Lockwood Andrews & Newman, Inc.

Sikes disposal pits Superfund site was an 185-acre uncontrolled hazardous waste dump—the depository for a variety of chemical wastes created by nearby petrochemical complexes during the 1960s. The site is located about two miles southwest of Crosby, immediately north of old U.S. Highway 90 and roughly 20 miles northeast of Houston, Harris County, Texas.

The site is characterized by river alluvium overlying Texas coastal plain deposits. Shallow water-bearing zones occur in the alluvium. A second water producing zone is found in a sandy silt zone at about a 65 foot depth. The Chicot and Evangeline Aquifers occur below this zone, beneath several hundred feet of clay. The site lies within the 100-year floodplain of San Jacinto River.

The Record of Decision (ROD) for the Sikes disposal pit site called for onsite incineration of sludge and soils and treatment of contaminated water; this was accomplished in two phases. In the first phase (October 1990 through January 1992), the site was prepared for remediation, including construction of flood control structures, installation of a temporary incinerator, and construction of a water treatment facility. During the second phase, all wastes were incinerated eliminating the threats to human health and the source of contamination to the ground water; removal of treatment facilities and site restoration were completed in 1994.

Incineration is now finished, the incinerator facilities have been removed and the site has been planted with local grasses. The preliminary Close Out Report documenting completion of construction activities was signed in January 1995. The final

Close Out Report is issued and site deletion should occur in early 1998. O&M began in 1996, second year ground water monitoring was conducted in 1997.

BIOGRAPHICAL SKETCH

Tom Davis served for three years as the on-site construction manager and was later promoted to project manager for this two-phase, \$116,000,000 hazardous waste superfund site funded by two government agencies. In addition, he supervised a health and safety inspection and provided oversight services on behalf of Lockwood Andrews and Newman (LAN) to the TNRCC. LAN participated in a joint venture that operated under a complex, multi-document contract. Tom managed the project to closure; one of the first major superfund sites successfully completed in the United States. This project won the highest award in Texas for engineering and management from the Consulting Engineering Counsel of Texas.