## NPL Site Narrative for Highway 71/72 Refinery

## HIGHWAY 71/72 REFINERY Bossier City, Louisiana

The Old CITGO Refinery (Bossier City) site is located in downtown Bossier City, Louisiana, about 2 miles east of downtown Shreveport and 1,800 feet north of the Red River. The former refinery site consisted of about 215 acres in Bossier City, Bossier Parish, Louisiana. Historically, the site has been divided between north and south by present-day Old Minden Road. U.S. Highway 71 (Barksdale Boulevard) and Louisiana State Highway 72 (Old Minden Road) intersect in the middle of the refinery. The site is bordered on the north by the Illinois Central Gulf Rail Lines railroad and on the south by Kansas City Southern railroad.

In 1923, Louisiana Oil Refining Corporation built the refinery for the production of home heating and fuel oils. The 215-acre site consisted of a 120-acre bulk storage area located north of Old Minden Road and a 95-acre refinery process area located to the south. Arkansas Fuel Oil Corporation acquired the refinery in 1936 and operated it until 1948 when the refinery operations were shut down and process equipment was dismantled. Between 1948 and the early 1960s, petroleum storage tanks were still in use. In 1957, Cities Services Companies (CSC) merged with Arkansas Fuel Oil Corporation and assumed responsibility for the site. In 1966 and 1967, the site was cleared for development. From 1968 to the present, the site has been fully developed.

Private residences and commercial and light industrial establishments now cover a large portion of the former refinery site. The northwest corner of the site contains a single-family residential development, several apartment complexes, and commercial establishments. The northeastern portion of the site contains the largest plot of undeveloped land within the Old CITGO Refinery site boundaries and several commercial establishments. The southern portion of the site is covered by several large apartment complexes, other residential areas (mainly townhouses and single-family homes), and several commercial establishments, including two hotels.

Area residents have complained about strong odors associated with the site. In 1990, 47 families were evacuated from the Alexis Park Apartments because high concentrations of methane and other organic compounds were detected in indoor air samples. Some Bossier City residents claimed to have encountered evidence of the refinery, including black-stained soil and black, viscous sludges, in their yards and driveways.

Extensive research on the Old CITGO Refinery site has been completed to document site history and operations and to determine the presence of hazardous substances in the subsurface soil. The site has been inspected by the EPA Emergency Response Branch, the Louisiana Department of Environmental Quality (LDEQ), and CSC. Analyses of subsurface soil samples collected on site revealed elevated levels of heavy metals and organic contaminants. In February 1988, EPA referred the site to LDEQ for any action under State authority. The site has been under investigation by OXY-U.S.A., Inc. who acquired CSC. The investigation includes collecting soil, surface water, and groundwater samples and analyzing them for hazardous substances associated with the former refinery facility.

In September 1992, EPA conducted an expanded site inspection. High levels of lead and mercury were detected in surface soil samples collected throughout the site. Contamination was consistently detected along the bayou impoundments located north of Old Minden Road (North Impoundments) and throughout the refinery process area south of Old Minden Road. The North Impoundments were used to treat oil-contaminated wastewater generated during crude oil drilling and storage activities. Other wastewater treatment units, such as hot ponds, spray ponds, and impoundments, were located in the refinery process area. The area is densely populated, and people could be exposed to soils contaminated with lead and mercury.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.