

Texaco, Inc. Shreveport Works Site AI 4399 AOI Phase II Characterization Report Fact Sheet



Shreveport, Louisiana

January 2005

Introduction

The Texaco, Inc. Shreveport Works site consists of approximately two hundred sixty acres and is located within the city limits of Shreveport, Louisiana. The site is bordered by the Shreveport-Barksdale Highway to the south, the Clyde Fant Parkway to the east, and by Old River Bayou to the north and west. The property, currently called Anderson Island, includes residential neighborhoods, a park, and commercial properties.

Texaco operated the Texaco, Inc. Shreveport Works topping plant and tank farm at Anderson Island from approximately 1911 to 1939. The topping plant distilled fuels such as gasoline, kerosene, and diesel from crude oil. The portion of the crude remaining after extracting the fuels was shipped to another facility in Texas by pipeline. Petroleum and petroleum products such as gasoline and diesel fuel were transported to and from the site by rail and pipeline. There were forty-two 37,500 barrel storage tanks at this facility. Texaco dismantled the topping plant in 1940 and sold the property to Mr. Alexander Knight in 1941. Texaco leased thirty acres of the site from Mr. Knight and continued operating the pipeline until 1945. Mr. Knight began residential development of the property in the early 1950's. Residential development was essentially complete by 1980.

The Louisiana Department of Environmental Quality (DEQ) conducted limited sampling events within the Anderson Island area on three separate occasions between October 1997 and August 1998. These sampling events focused on the former facility features most likely to be associated with hydrocarbon releases. DEQ conducted these sampling events because of concerns raised by the residents of Anderson Island regarding past Texaco operations in their community. Soil and sediment samples were tested for a broad range of organic and inorganic compounds at twenty-five on-site locations and two background (off-site) locations. These test results detected petroleum hydrocarbons in a few of the soil samples. Although the levels of total petroleum hydrocarbons found in these early investigations are not a health hazard, DEQ regulations that went into effect in December of 1998 (Risk Evaluation/Corrective Action Program) required further testing to determine the extent of this hydrocarbon material.

DEQ and Texaco Incorporated (now ChevronTexaco) entered into a cooperative agreement to conduct additional testing at Anderson Island. A cooperative agreement is a type of legally enforceable contract often used by DEQ to manage investigations and corrective actions at former industrial facilities. ChevronTexaco, through its contractors, conducted testing required by the DEQ approved Site-Wide Characterization Work Plan and subsequent AOI Phase I & Phase II Characterization Work Plans under direct supervision and oversight by DEQ personnel. These work plans focused on sampling at the locations of former facility features, such as petroleum storage tanks, that may have been potential sources for residual petroleum in soils at the site. A detailed description of this phased investigation may be found in the Site-Wide Characterization Work Plan, the Site-Wide Characterization Report, the AOI Phase I Characterization Work Plan and Report, and the AOI Phase II Characterization Work Plan and Reports (See Document Availability below).

Total Petroleum Hydrocarbons

Crude oil, or petroleum, is a mixture of hundreds of different hydrocarbon compounds. During the refining process, crude oil is separated into smaller groups of hydrocarbon compounds generally through distillation. Several of these different separated hydrocarbon compound groups are then blended together to form individual commercial products such as gasoline, diesel fuel or motor oil. DEQ and ChevronTexaco tested soil, sediment and groundwater for these hydrocarbon compound groups on the site through tests called Total Petroleum Hydrocarbon Fraction analysis and Indicator Compound analysis.

Site Investigation Process

At DEQ, the investigation of a site normally begins with preliminary investigations called Site Assessment Phase 1 and Site Assessment Phase 2 evaluations. During the Site Assessment Phase 1 evaluation, background site information such as maps, aerial photographs, property ownership records, and corporate records are researched and collected. Personnel inspect the site for former facility features, possible sources of contamination, and any obvious visible contamination.

In the Site Assessment Phase 2 evaluation, a limited number of environmental samples are collected at the site and analyzed at a laboratory for a broad spectrum of chemical compounds. The number of samples collected at a site may range from as few as five to as many as twenty locations. These laboratory sample results are evaluated to determine whether further environmental investigation will be required at the site and to identify the laboratory tests required for future samples. DEQ completed the site assessment portion of the investigation and published the result in a combined report in May of 1999.

