

NPL Site Narrative for Palmer Barge Line

PALMER BARGE LINE Port Arthur, Texas

Conditions at Proposal (May 11, 2000): The Palmer Barge Line site encompasses approximately 17 acres and is located on the Southeast Industrial Islet, approximately 4.5 miles east-northeast of the City of Port Arthur, Jefferson County, Texas, and 0.5 miles southwest of the confluence of the Neches River and the Sabine-Neches Canal. It is bordered to the south by the State Marine Superfund site and to the east by Sabine Lake. The site is being proposed to the NPL based on evidence that metals from former barge cleaning and maintenance operations have migrated and/or could migrate from the facility to Sabine Lake, which is an active commercial and recreational fishery and supports a number of sensitive environments.

The property was used as a municipal landfill from 1956 until 1982, when Palmer Barge Line, Inc. purchased it for use as a marine vessel service and maintenance facility. Palmer Barge Line, Inc. filed for bankruptcy in 1996. The current owner leases the property to a salvage business and a parking lot operation. Primary operations at the Palmer Barge Line facility included cleaning, degassing, maintenance, and inspection of barges and other marine equipment. Typical cleaning operations included the removal of sludge and other residual material by pressure steaming the vessel holds, engines, and boilers. Engines were degreased and thick accumulations were cut from the holds, making removal of residual material easier. Degassing activities involved the removal of explosive vapors from the barge hold. A flare was used to burn excess gasses and liquids produced during facility operations. Structures located on site include dozens of various-sized steel above ground storage tanks (ASTs), an oil-water separator, two mixed fuel boilers, two wastewater treatment tanks, several open-top slop tanks, roll-off boxes, and 55-gallon drums.

In 1996, the Texas Natural Resources Conservation Commission (TNRCC), conducted a multi-media investigation of the Palmer Barge Line facility, primarily to determine the status of the facility's compliance with the Federal Clean Air Act. During this inspection, TNRCC found that numerous compounds not represented on Palmer Barge Line's permits had been serviced at the facility without proper notification of TNRCC. TNRCC noted other violations for construction of tanks and other equipment without proper approval. These violations and the presence of large areas of waste oil-contaminated soils, breaches in berms surrounding tanks, and stressed vegetation prompted further investigations in 1998 and 1999. Samples collected from tanks and soils by EPA and TNRCC in 1999 identified the metals aluminum, antimony, arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead, magnesium, mercury, nickel, zinc. The investigations also suggested the presence of pesticides and other organic compounds, including polycyclic aromatic hydrocarbons (PAHs), pentachlorophenol (PCP), and benzene.

The topography of the site is such that surface water runoff drains east across the facility to the barge landing where it enters Sabine Lake. Chemical analysis of sediment samples collected from Sabine Lake in 1999 document that aluminum, barium, chromium, cobalt, iron, lead, magnesium, nickel, and zinc have migrated from the Palmer Barge Line facility into the lake.

Sabine Lake is an estuary that is used as a commercial and recreational fishery. The habitats of four federally-listed endangered species, the bald eagle, black rail, gulf saltmarsh snake, and Texas diamondback terrapin, as well as the state-listed threatened American swallow-tailed kite, are found near

the site. In addition, the Sabine National Wildlife Refuge, Sydney Island and Dooks Island bird rookeries, and 13 miles of wetland frontage are located within 15 miles of the Palmer Barge Line site.

Status (July 2000): EPA is considering various alternatives for this site.

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) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.