

NPL Site Narrative for Brine Service Company

BRINE SERVICE COMPANY Corpus Christi, Texas

Conditions at Proposal (September 13, 2001): The Brine Service Company site is located approximately 6.5 miles west of downtown Corpus Christi, situated along the southern Gulf Coast of Texas. The site is comprised of two adjacent waste disposal pit areas, the south pit area and the north pit area. The south pit area is located on the property formerly owned and operated by Brine Service Company. The south pit area reportedly received oil field wastes/drilling fluids and/or refinery wastes from as early as 1946 through the 1960s. The site was discovered in November 1997 when a pipeline company was advancing an excavation trench through a portion of the former Brine Service Company property to install interconnecting pipelines between two nearby refineries. Subsequent sampling of the pit areas revealed the presence of metals, including mercury, as well as several organic compounds. The site is being proposed to the NPL because hazardous substances associated with the pit areas have migrated to an adjacent drainage ditch and a release of mercury has been detected in downgradient wetlands associated with Tule Lake. Contamination from the site also poses a threat to fisheries associated with Corpus Christi Bay, downstream of Tule Lake.

The two pit areas were originally used as a quarry for sand and caliche. After the pits were excavated, the south pit area received oil field brine and hydrocarbons. According to an interview with the president of the Brine Service Company, facility wastes were disposed in the south pit area during operations in the mid 1950s. There is no documentation as to the subsequent use of the north pit area; however, the north pit area is directly downgradient of the south pit area and may have received runoff or overflow from the south pit area. Land use surrounding the Brine Service Company site is commercial/industrial including three refineries. Three refineries are located within 1-mile of the site. Several pipelines traverse the site.

Surface water drainage from the pit areas enters a drainage ditch located along the east side of the property. The ditch travels north approximately 1/2 mile and empties into wetlands bordering Tule Lake. Tule Lake is a brackish shallow water wetland area and a habitat for several State Listed Threatened Species. Tule Lake flows into Corpus Christi Inner Harbor, which in turn flows into Corpus Christi Bay. Corpus Christi Bay is an estuarine subtidal area and has been nominated to the National Estuary Program. The Bay also is used for recreational and commercial fishing.

The following hazardous substances were encountered during the 1997 pipeline trench excavations at the site: barium, cadmium, chromium, lead, mercury, fluorene, 2-methyl naphthalene, naphthalene, phenanthrene, benzene, ethylbenzene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes, 2,4-dimethylphenol, acenaphthene, 2-methylphenol (o-cresol), 3&4 methylphenol (m&p cresol), and phenol. Total benzene levels were documented as high as 79,000 µg/kg. Subsequent sampling in February 2000, conducted by the Texas Natural Resource Conservation Commission (TNRCC), confirmed the presence of metals and organic compounds in both pit areas and documented elevated concentrations of mercury in the nearby wetland areas of Tule Lake.

Status (September 2002): 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.