# Brine Service Company Superfund Site Corpus Christi, Nueces County, Texas

EPA Region 6 EPA ID#: TX0000605264 Site ID: 0605264 Contact: Katrina Higgins-Coltrain 214.665.8143 State Congressional District: 27 Fact Sheet Updated: August 2010



## Current Status -

The U.S. Environmental Protection Agency (EPA) completed enforcement negotiations with the Potentially Responsible Parties (PRPs). The EPA signed the Administrative Order on Consent, on October 21, 2009, and an amendment on November 17, 2009. This enforcement document is an agreement between EPA and the PRPs for the performance and financing of the Remedial Investigation and Feasibility Study (RI/FS) at the Brine Service Company Superfund Site (hereinafter the "Site") by the PRPs.

The purpose of the RI/FS is to determine the nature and extent of contamination and to gather sufficient information about the Site to support an informed risk management decision regarding which remedy is the most appropriate for the Site. Several conference calls and one site meeting (November 2009) between the participating agencies and the PRPs have been conducted in support of the RI/FS Work Plan.

The Draft RI/FS Work Plan was submitted to the EPA in December 2009, and a two-day conference to discuss the plans was held February 22 and 23, 2010. The RIFS Work Plans were revised and resubmitted on April 5, 2010. Additional comments were submitted to the PRP Group, and the reports resubmitted May 2010. The PRP Group provided further clarification for Agency review through a technical memorandum dated July 7, 2010, which is current under revision. Contingent on these revisions, final reports are expected by the end of July 2010, with field activities expected to start late-summer 2010.

### Benefits -

The investigation and cleanup of the Site will ensure the protection of human health and the environment. Specific cleanup benefits will be identified during the RI/FS currently being planned for the Site.

### National Priorities List History -

Final Listing Date: September 5, 2002

The National Priorities List (NPL) is a list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation to assess the nature and extent of public health and environmental risks associated with a release of hazardous substances.

### Site Description -

Location: The Site is located approximately 6.5 miles west from downtown Corpus Christi, TX, along the north side of IH-37 and east-northeast of the intersection at Goldston Road (see the "Site Map" section of this summary). Corpus Christi is situated along the

southern Gulf Coast of Texas. The Site is located in the Nueces-Rio Grande Coastal Basin and lies approximately 25 feet above sea level.

- Population: The population of the City of Corpus Christi is approximately 277,454.
- Setting: The Site is comprised of former waste disposal pits (north and south pits) or areas located on property formerly owned and operated by Brine Service Company. A portion of the pit area reportedly received oil field wastes, such as drilling fluids, and/or refinery wastes from as early as the year 1946 through the 1960's. 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 area revealed the presence of metals, including barium, cadmium, chromium, lead, and mercury, as well as several organic compounds.

### Photos: Site 2007

Hydrology: Surface water drainage from the Site enters a drainage ditch located along the eastern side of the property. The ditch travels north approximately ½ mile and empties into wetlands bordering Tule Lake. Tule Lake is a brackish shallow water wetland area and is a Texas Parks and Wildlife sanctuary containing gulls, pelicans, and other aquatic birds. Tule Lake is also 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 into the National Estuary Bay Program. The bay is used for recreational and commercial fishing. Land use surrounding the Site is commercial/industrial. Several petroleum refineries are located nearby.



## Site Map

## Wastes and Volumes -

The following hazardous substances were encountered during the 1997 pipeline trench excavations at the Site: barium, cadmium, chromium, lead, mercury, fluorene, 2-methylnaphthalene, 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 micrograms per kilogram. Toxicity Characteristic Leaching Procedure benzene levels ranged from 250 micrograms/liter ( $\mu$ g/L) to 1,700  $\mu$ g/L. Total petroleum hydrocarbon levels were detected as high as 52,000 milligrams/kilogram.

Subsequent sampling in February 2000, conducted by the Texas Natural Resource Conservation Commission (now the Texas Commission on Environmental Quality), confirmed the presence of metals and organic compounds in the north and south pit areas.

Other types and volumes of wastes currently present at the Site have not been determined. This information will be obtained during the RI/FS currently being planned for the Site.

## Health Considerations —

Human Health and Ecological Risk Assessments will be performed during the RI/FS currently being planned for the Site. These risk assessments are an integral part of the RI/FS.

A Human Health Risk Assessment estimates the current and possible future risks if no action were taken to clean up a site. The EPA's Superfund risk assessors determine how threatening a hazardous waste site is to human health and the environment. They seek to determine a safe level for each potentially dangerous contaminant present (e.g., a level at which ill health effects are unlikely and the probability of cancer is very small). Living near a Superfund site does not automatically place a person at risk, that depends on the chemicals present and the ways people are exposed to them.

An Ecological Risk Assessment is defined as a process that evaluates the likelihood that adverse ecological effects are occurring or may occur as a result of exposure to one or more stressors. A stressor is any physical, chemical, or biological entity that can induce an adverse ecological response. Adverse responses can range from sublethal chronic effects in individual organisms to a loss of ecosystem function.

## Record of Decision —

The final remedy (cleanup alternative) for a site is published in a Record of Decision (ROD). The ROD is the official documentation of how the EPA considered the remedial alternatives and why the EPA selected the final remedy. Before a ROD can be finalized, the EPA must provide a Proposed Plan for public review and comment. This plan summarizes the remedial alternatives presented in the analysis of the Remedial Investigation and Feasibility Study (RI/FS) and identifies the preferred alternative, the rationale for that preferred alternative, and documents that support the EPA's decision.

A ROD has not been signed for the Site. A Proposed Plan will be presented to the public during the latter part of the RI/FS currently being planned for the Site. The RI/FS is expected to be completed approximately 1½ years from the start date.

## Community Involvement -

Community Involvement Plan:

The Community Involvement Plan (CIP) specifies the community involvement activities that the EPA expects to undertake during the remedial activities planned for the Site. A CIP, based on

community interviews and other relevant information about the Site, has been prepared and is available at the Site Repository. The purpose of the Site Repository is to provide the public a location near their community to review and copy background and current information about the Site. The Site's repository is located at:

Corpus Christi Public Library 805 Comanche St. Corpus Christi, TX 78401

Anyone who wishes to be placed on the mailing list to receive current information about the Site is encouraged to call 1-800-533-3508.

#### **Open Houses:**

Open houses will be scheduled during the early phases of the Remedial Investigation and Feasibility Study (RI/FS) currently being planned for the Site. Fact sheets will be prepared as necessary during the planning and implementation of the RI/FS. These fact sheets will be filed at the Site's repository and distributed to people on the mailing list. Anyone who wishes to be placed on the mailing list to receive current information about the Site is encouraged to call 1-800-533-3508.

#### Proposed Plan:

A Proposed Plan has not been issued for the Site. Before a ROD can be finalized, the EPA must provide a Proposed Plan for public review and comment. This plan summarizes the remedial alternatives presented in the analysis of the Remedial Investigation and Feasibility Study (RI/FS) and identifies the preferred alternative, the rationale for that preferred alternative, and documents that support the EPA's decision. A Proposed Plan is expected to be issued approximately one month after completion of the RI/FS for the Site.

### Public Meeting:

A formal public meeting will be scheduled after issuance of the Proposed Plan for the Site so that the public can provide input into the EPA's proposed final decision for the Site. A Proposed Plan is expected to be issued approximately one month after completion of the RI/FS for the Site.

#### Technical Assistance Grant:

A Technical Assistance Grant (TAG) is for a local citizens' group to secure the services of a technical advisor to increase citizen understanding of information that will be developed about the Site during the Superfund process. To be eligible for a grant, a group must incorporate. In addition, the applicant must meet a 20 percent matching requirement, which may be in cash or donated services. If you are interested in applying for a TAG, please call Ms. Beverly Negri (TAG Coordinator) at (214) 665-8157 or toll-free at 1-800-533-3508.

An "Availability Notice" was published in the Corpus Christi Caller Times on September 24, 2001, and September 18, 2002. A Letter of Intent (LOI) was received on October 2, 2002, from the Coastal Bend Bays Foundation (CBBF).

The EPA published a notice in the Corpus Christi Caller Times on October 16, 2002, that the CBBF submitted a LOI to apply for the TAG. A final application was received on February 3, 2003, from the CBBF. A TAG was awarded to the CBBF in May 2003 and expired in 2006.

### Site Contacts -

## U.S. Environmental Protection Agency

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