

MALONE SERVICE COMPANY
Texas City, Texas

EPA Region 6

EPA ID# TXD980864789
Site ID: 0602922



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State Congressional District: 14
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Current Status

The PRPs completed the Remedial Investigation document, which documents nature and extent of contaminants; and completed the treatability study, which documents that solidification and landfill of the source material (sludge) can be an effective remedy for site contaminants. EPA and the PRPs have developed the Final Feasibility Study document (which EPA approved on December 22, 2008), which presents and compares several remedial alternatives which are appropriate to address site contaminants. EPA is presently developing the Proposed Plan, which discusses remedial alternatives reviewed and presents the preferred alternative (the cleanup), which will address site contaminants. EPA is also developing a Fact Sheet, which will give a brief description of the site and announce the Public Meeting place and date.

Benefits

The Remedial Investigation and Human Health and Ecological baseline risk assessments are complete. Following the completion of the Feasibility Study, the Proposed Plan will be developed and will provide the Agency's proposed remedial action for the site. The remedial action decided upon will be presented in a Record of Decision (ROD) following public meetings and public comment. The ROD will present the cleanup measures determined to be protective of human health and the environment.

Site Description

- **Location:** The Malone Services Company (MSC) Site is located in Galveston County, Texas City, Texas, at 5300 Campbell Bayou Road. The site is located in an industrial and petrochemical area, on the shores of Swan Lake and Galveston Bay, approximately 1.6 miles southeast of the intersection of Loop 197 and State Highway 3.
- **Population:** The Site is located in a marsh/wetlands area, and approximately 1.5 miles from the nearest residential area. An estimated 10,000 people live and/or work within a three-mile radius of the site.
- **Setting:** The MSC was a reclamation, storage and disposal facility for waste oils and chemicals that included acid and caustic compounds, solvents, and gasoline and crude oil tank bottoms.
 - The MSC site covers approximately 150 acres. Approximately 100 acres (northeastern portion of the Site) of the 150-acre site were developed for the storage, processing and disposal of industrial hazardous wastes. The developed acreage contains numerous waste handling areas; which include storage tanks, 2 API separators, a ± 5 acre settling pond (Earthen Impoundment), a closed ± 0.5 acre waste collection pond (Oil Pit), and two (2) deep subsurface injection wells. The remaining undeveloped 50 acres (northwestern portion of the Site) contain a ± 7 acre storm water collection pond.
 - The entire facility is encircled by a 14-foot high flood control levee. Wetlands, Galveston Bay and Swan Lake border the northeast and east sides of the site. Industrial and waste disposal facilities are located outside the northwestern and western boundaries of the

Site. The southwestern, southern and southeastern boundaries of the facility border on marsh land/wetlands.

- **Hydrology:** Within the Site boundary, two shallow channel sands merge into one channel sand to form the primary aquifer of concern below the site. Due to its shallow nature and its high chloride and Total Dissolved Solids (TDS) content, this aquifer is not a drinking water source. The channel sands trend northwest to southeast, and merge midpoint within the facility. Ground water flow appears to be northwest to southeast, into Galveston Bay.
 - The Earthen Impoundment, the Oil Pit and the stormwater pond were excavated through the shallow channel sand aquifer and into the underlying clay layer, and therefore, the Impoundment and Pit supply/supplied contaminants to the shallow ground water; however, ground water contamination is immediate to the source areas, and sampling has indicated that contaminated ground water has not migrated offsite.
 - In addition to the stormwater pond, which collects the majority of runoff within the northwestern portion of the facility, several areas on the western and southwestern portions of the Site collect the remaining surface water runoff. Following testing, this stormwater is either discharged into Galveston Bay or deep well injected; to date, all stormwater surface runoff has been discharged to Galveston Bay. All rainwater that collects in the hazardous waste units is deep well injected.
 - The Chicot Aquifer, which is a primary drinking water aquifer at depth, underlies the site from approximately 100 feet to 1100 feet below ground level.

Wastes and Volumes

- The principal contaminants of concern at this site are the myriad of organic and inorganic chemical wastes in the form of liquids, sludges and solids present in the above ground storage tanks, the API separators, the settling pond, and the surface soils of some of the secondary containment areas on the site.
- Wastes received at the facility included acids and caustics from industrial cleaning and surface preparations; contaminated residues and solvents removed from processing and storage units during cleaning operations; spent drilling fluids, including drilling muds and brines, from well workover and exploration activities; acids containing metals from etching and plating operations; inorganic slurries from sump cleaning; gasoline and crude oil tank bottoms; contaminated earth and water from chemical spill cleanup operations; general industrial plant wastes; phenolic tars; and waste oils.
- The groundwater pathway appears to be the only ongoing active release of hazardous substances occurring at the Site; however, ground water contamination is immediate to the source area, and no ground water contamination has migrated offsite. The settling pond (Earthen Impoundment/Sludge Pit) is located within a sand channel. The limits of the pond on the north and south appear to coincide with the approximate limits of the sand channel; the east and west ends are exposed to the sand channel. The operator had indicated the east and west ends of the pond had been sealed with clay, apparently to prevent contaminants from entering the ground water. However, ground water and pond constituent characterization indicate that the sand channel has been impacted by the ponds, but it appears, to a minor degree.
- Ground water samples collected during a 1997 Texas Natural Resource Conservation Commission (TNRCC)(now the Texas Commission on Environmental Quality (TCEQ) inspection indicated that hazardous substances originally found in the impoundment and API separator in the 1980's field sampling had been released to the underlying aquifer.

Chemical analysis of Galveston Bay sediments (adjacent to the Site) determined the presence of chromium and lead; it appears these contaminants are related to the Site. The RI and risk assessment samples indicated that the offsite marsh had low contaminant levels, and that only natural siltation would be an appropriate remedy for the offsite sediments.

- Volumes of materials to be remediated have been determined through completion of the Remedial Investigation (RI). A Treatability Study was completed and determined that Solidification of the source material (sludge) could be an appropriate remedy; this remedy will be one of the remedial alternatives documented in the Feasibility Study (FS).

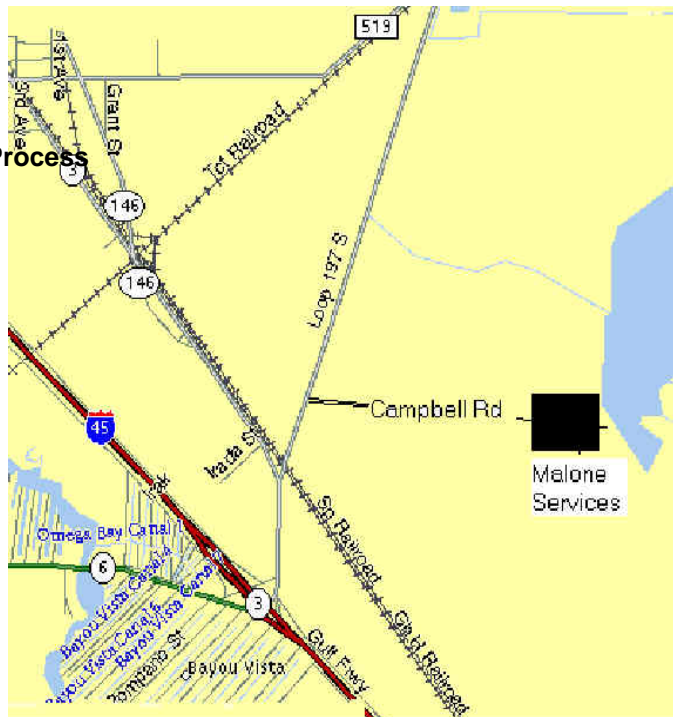
Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 50
 Proposed Date: 8/24/00
 Final Date: 6/14/01
 NPL Update

Site Map and Diagram

The Remediation Process



The Remediation Process

Site History:

- The Site consists of buildings, approximately 83 holding/storage/blending tanks, two API separators, one hazardous waste pond (and one which was recently closed), a stormwater pond, and a rainwater runoff collection and discharge area.

- The facility operated from 1964 until 1997. MSC was originally permitted as a waste oil reclamation facility, but later added hazardous waste underground injection/disposal wells. Wastes were received by the facility from a variety of industries. Wastes from the reclamation process were disposed down the onsite deep injection wells.
- The original operation, which began in 1964, consisted of two earthen unlined pits, which received incoming wastes. The larger pit, which served as a settling pond, was used for wastes with high solids and /or water content. The oil fraction would rise to the surface of the large pit where it was skimmed off and pumped to a smaller oil pit (which is closed). Oils in the oil pit were then pumped to one of several tanks for treatment. The oil was then resold as waste oil for energy recovery.
- API separators were installed in 1979 and 1987 to replace the settling pond and oil pit; however the pond and pit were never cleaned/removed, hazardous liquid wastes and solids still remain in the open large pit and closed small oil pit. Oils separated in the two API units were pumped to holding/treatment tanks; waste water was pumped to the injection wells for disposal and the solids were sent to an offsite hazardous waste landfill for disposal.
- Surface drainage directs rainwater runoff on the developed acreage to one collection point within the Site; runoff on the undeveloped acreage is collected in the southwest stormwater pond. In the past, this collected runoff from within the Site was analyzed and discharged to Galveston Bay or injected dependent on analytical results. Presently, this runoff is managed as it was in the past.
- Ground water sampling results indicate that ground water has been impacted by hazardous wastes in the area of the inactive five acre impoundment and the 100 Unit Separator; as well as areas with subsurface soil contamination. However, the groundwater is classified by EPA and the TCEQ as Class 3, which is non-potable, and therefore, not a drinking water source.
- EPA Removal conducted removal actions at the Site from 1999 to 2000.
- The Site was listed to the NPL on June 14, 2001.
- Texas Natural Resource Conservation Commission contractors conducted periodic inspections of stormwater controls at the site and maintained stormwater capacity in ponds and separators at the site. EPA Removal assumed this responsibility in 2000. Stormwater runoff is directed to one collection point within the Site, analyzed, and dependent on analytical results, discharged to Galveston Bay or injected into the onsite deep injection/disposal well. The Malone Cooperating Parties (MCP – the PRPs) have assumed Site storm water management activities from EPA Region 6.
- EPA issued General Notice Letters to major generators (those who contributed 0.6% or greater of total waste delivered to the Site) and the current owner. Several of the Potentially Responsible Parties (PRPs) have formed a steering committee (the Malone Cooperating Parties (MCP)) and have signed the Administrative Order on Consent (AOC) to conduct the Remedial Investigation and the Feasibility Study (RI/FS).
- EPA Region 6 approved the Remedial Investigation Feasibility Study Work Plan for the Site on June 29, 2005. Mobilization to the site to conduct the investigation to determine risk and nature and extent of contamination was conducted in mid July. Field work to collect ground/surface water, soils, sediment and sludge samples is on-going and is scheduled to be completed the end of September. No Public Informational Meetings will be held until sufficient information is available to answer possible community concerns, which would most probably be in 2009.
- EPA and the Potential Responsible Parties (PRP) completed the Remedial investigation to determine nature and extent of contaminants at the site in March 2006. The Final RI document was approved by EPA on June 14, 2006.
- EPA and the PRP completed the Baseline Human Health Risk assessment.
- The Final Screening Level Ecological Risk Assessment (SLERA)/Baseline Ecological Risk Assessment (BERA) Work Plan (for ecological sampling field work) document was completed by the MCP. The BERA Work Plan portion of the document was approved to allow the MCP's primary contractor to mobilize to the field to conduct the BERA field work; the field work began on July 17, 2006 and was completed in September 2006.
- The Final BERA document was reviewed and approved by EPA.
- The MCP completed an acceptable treatability Study (approved by EPA March 6, 2008), which

determined that solidification-stabilization of the wastes and placement in an onsite RCRA Subtitle "C" equivalent cell/landfill would be an effective remedy.

- EPA approved the Final Feasibility Study document on December 22, 2008. The document was developed to evaluate several remedial alternatives (the cleanup) to address the contamination at this Site.
- Ready-For-Reuse - a court-approved settlement, between the present site owner and the Malone Cooperating Parties (MCP - PRPs) enables the MCP to impose on the property an institutional control prohibiting residential, commercial and industrial development. The settlement further requires that the land eventually be transferred to an environmental non-profit organization or, if such a transfer cannot be completed, requires that the land be used in the future only to complete the response action and for purposes not inconsistent with final use as a natural preservation or conservation area.
- Human exposure is presently under control due to site access measures; however, remedial action is required to address site contaminants for long term protection. Ground water analytical data indicate that contaminated Class 3 ground water has not migrated offsite.

Health Considerations:

- Site contaminants have been found in soil, and ground water below the site. Constituents related to the site have been found in Galveston Bay sediments; however, at levels which allow for natural siltation as the remedy. Site surface water runoff is discharged to Galveston Bay following sampling.

Record of Decision

EPA is in the Proposed Plan Stage,
No Record of Decision has been
signed for this Site.

Community Involvement

The Texas City administration is regularly informed of the Site status and EPA's continuing Site assessment process; meetings have been held with interested community groups. EPA has defined the nature and extent of contamination at the site through the remedial investigation, and has approved the Feasibility Study (FS) document, which presents several remedial alternatives for the site. Following completion of the Proposed Plan, which will document the preferred remedial action/cleanup, the Proposed Plan will be presented to the community in a public meeting.

Technical Assistance Grant

- ! Availability Notice: August 30, 2000, June 25, 2001
- ! Letters of Intent (LOI) Received: May 9, 2003
Lalise Mason
Scenic Galveston, Inc.
20 Colony Park Circle
Galveston, TX 77551
713-664-1870
- ! LOI Newspaper Notice: May 9, 2003, Texas City Sun & Galveston County Daily
- ! First Application Received: July 3, 2003
- ! Final Application Received: Sent letter to applicant asking for revised technical advisor SOW.

EPA contractor work plan available approximately September 2004.

! Grant Award: n/a

Contacts

Project Manager (EPA): Charles David Abshire, 214-665-7188, Mail Code: 6SF-AP

State Contact: (TCEQ): Fay Duke (PM Superfund Cleanup Section) 512-239-2443

Community Involvement Coordinator (EPA): Donn Walters, 214-665-6483, Mail Code: 6SF-PO

Attorney (EPA): Anne Foster, 214.665.2169; I-jung Chiang, 214-665-2160, Mail Code: 6SF-DL

State Coordinator (EPA): TBD, 214-665-3139, Mail Code: 6SF-AP

R6 Public Liaison (EPA): Donn R. Walters, 214-665-6483

On Scene Coordinator (EPA): Warren Zehner, 281-983-2229, Mail Code: 6SF-R2

EPA Region 6 Toll Free Number: 1-800-533-3508

Prime Contractor: URS

Enforcement

The enforcement process is ongoing.