

## NOAA Hazardous Waste Site Report

Motco Corp. (VI-6)  
Lamarque, Texas  
April 13, 1984

### Location and Nature of Site:

Motco is an abandoned waste dump located on eleven acres in the "Y" of Highway 45 and State Highway 3, at Lamarque, Texas (Figure 1). The site is in the marsh of the flat coastal plain, about 0.75 miles from Galveston Bay.

Seven pits and nine storage tanks are on the site. In 1980, the U.S. Environmental Protection Agency and the U.S. Coast Guard performed a removal action. Rusting drums were removed from the site and the dike system was upgraded to control surface water flow through the site. In 1981 and 1983 heavy rains flooded the site and caused pit overflows and dike damage. A Superfund action was taken in late 1983 to lower the standing water levels of the site. Further remedial action is under consideration.

Numerous attempts have been made at the site to recover tar and metals in the pit for resale. These have been of limited success and have been hampered by economic and physical problems at the site. For instance, Petro-Processors, Inc. lost all reclaiming equipment on the site when Hurricane Carla flooded the marsh in 1961. The last owner, Motco Corp. of Minneapolis, declared bankruptcy in 1976, after its operating permit was revoked by the State of Texas for repeated discharge violations.

As with many old and abandoned waste sites, the exact contents can only be determined by analysis of samples. The site has been found to contain vinyl chloride "bottoms", styrene tars, chlorinated hydrocarbons, polynuclear aromatic compounds, acids, metallic catalysts, lead, and mercury. Due to frequent flooding, many of the more soluble compounds normally associated with waste sites in this geographic region may have already been washed into Galveston Bay. Contamination is so extensive that surface water has been found to have a pH of 3.5, even with a long history of periodic flooding.

### Proximity of Chemical Hazard to Marine Resources:

According to the U.S. Geological Survey topographic map for Virginia Point, Texas (1954), the Motco site is 0.5 miles from Highland Bayou to the southwest, and one mile from Galveston Bay to the east. On average, the site is five feet above tidal datum, with portions of the site inside the protective dikes well below sea level. This general area is within the annual flood plain, and is subject to severe flooding by storms and hurricanes.

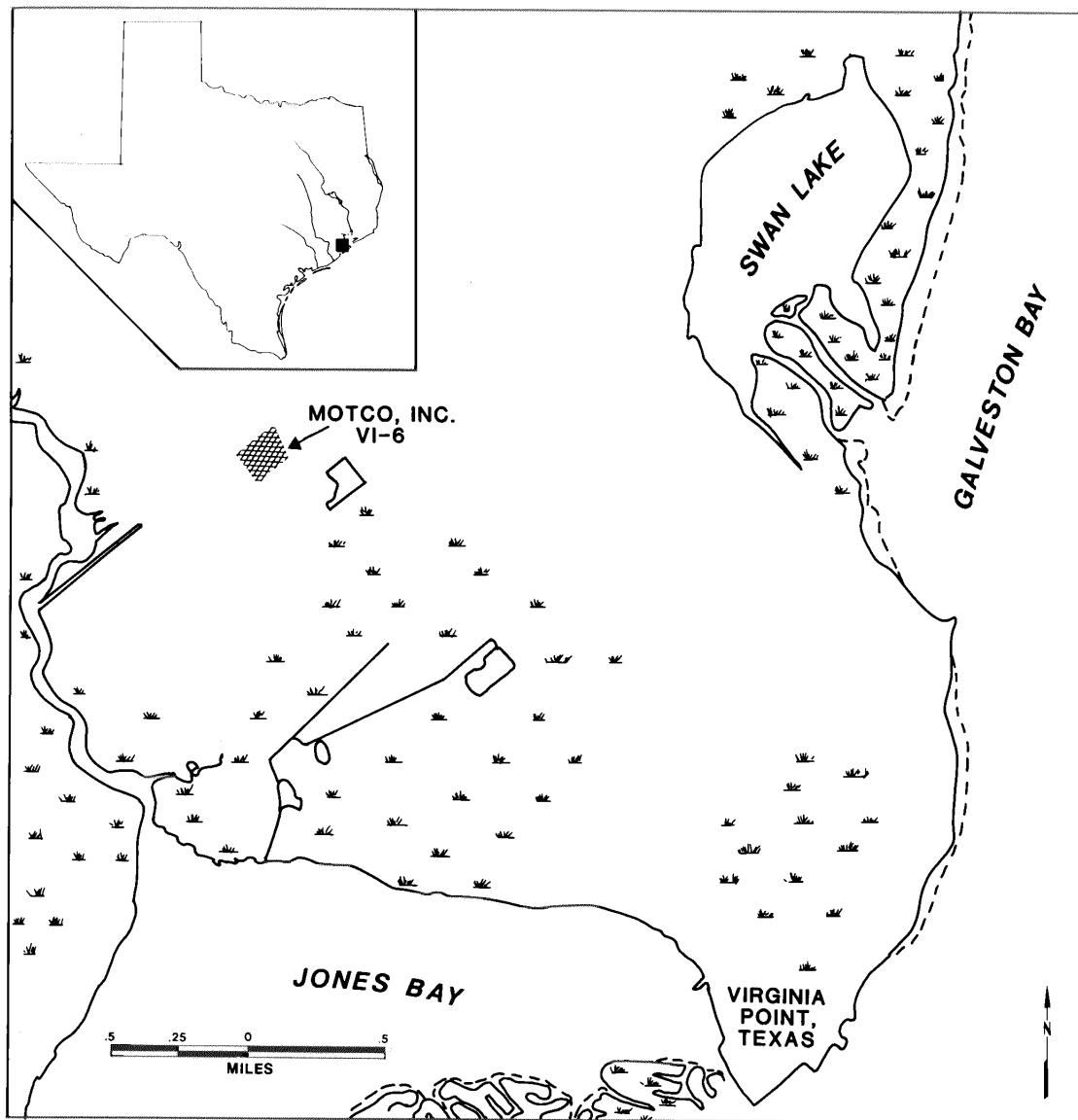


FIGURE 1. Site location.

The Texas Water Quality Control Board documented several storm-related discharges, and finally revoked Motco's operating permit in 1976. Releases are also listed for May and September 1980, June and August 1981, and February 1983, all as a result of heavy rains or storms.

Transport to the adjacent marine waters of Galveston Bay has been confirmed on more than one occasion by local, state, and federal agencies. Methods have been visual observation of discolored waste water leaving the site, pH measurements in the adjacent bay, and some limited water quality analysis by the Texas Department of Water Resources.

#### Resources at Risk:

Marine resource damage has been documented in association with many of these discharges. The most recent of these was a localized kill of blue crab (Callinectes sapper) which happened during the EPA removal action of August 1983 when rain waters topped one of the waste pits into the marshlands. Dissolved oxygen depletion is the probable cause of the kill, although low pH may also have been a contributing factor.

Moderate- to high-sensitivity environments exist in the immediate area of the dump site (1). Diving and wading waterfowl, shellfish, and finned fish all inhabit this area.

The commercial and sportfish species in the greater Galveston Bay are jointly managed and studied by the National Marine Fisheries Service and the Texas Department of Parks and Wildlife. The most commercially valuable are the three major species of shrimp (brown, pink, and white) in both the adult and larval forms. Blue crab, red and black drum, sea trout, croaker, whiting, and menhaden all inhabit the bay and depend on the salt marsh for all or a portion of their life cycles. The larval forms of pelagic fishes such as the king and spanish mackerel are carried into the bay by Gulf currents where they will complete one or more developmental stages before returning to the Gulf.

The common harbor porpoise and Atlantic sea turtle are infrequently reported in the bay area. Numerous shore and marine birds find seasonal or full-time homes in the salt marsh environment of Galveston Bay. The area is noted for excellent duck-hunting in season.

#### Summary of Site-Related Actions:

The Motco site is under study for remedial action. It has been the site of at least one containment action in the recent past, and will be addressed again if past work does not withstand the coming storm season. A flocculation operation was being performed at the site in mid-March 1984 in one of the waste pits. An inquiry as to the exact nature of this operation is pending at the Dallas office of the U.S. Environmental Protection Agency.

NOAA Reviewer: Todd Baxter, SSC - Gulf Coast  
(504)286-7266

EPA Contact: Steve Bartley  
(214)767-9717

References:

1. Research Planning Institute. Environmental Sensitivity Index Atlas of Galveston Bay.