

ASARCO – EL PASO
SUMMARY OF THE GROUNDWATER PLUME

(February 26, 2009)

Two separate releases have contributed to the groundwater plume at the facility. One source of contamination is attributed to two diesel releases from Leaking Petroleum Storage Tanks (LPST) and the metals release is from the plant smelter operations. The diesel and metal plumes are co-mingled. The groundwater plume is migrating westward towards the Rio Grande River.

A. Diesel Releases from LPSTs

In February 1990, hydrocarbon was observed to be seeping into the American Canal at several locations. The LPST No. 094594 was assigned to the release. ASARCO conducted the investigation, removed contaminated soil, recovered approximately 22,000 gallons of diesel and treated approximately 7,500,000 gallons of diesel-affected groundwater. The release was closed on November 15, 2000.

In March 1990, ASARCO observed visible staining adjacent to the underground piping of an 18,000-gallon diesel tank and dispenser pump. An estimated 62,291 gallons of diesel was released. The LPST No. 095897 was assigned to the second release. The tank and all associated piping were dismantled and removed. All impacted soils have been excavated. Based on the latest report, the diesel product is limited to three monitor wells with diesel product ranging from sheen to a thickness of 0.85 feet. A system is currently in place to recover the diesel product. Dissolved-phase concentrations are stable with maximum concentrations of 0.0108 mg/L benzene. Diesel recovery to the maximum extent practicable and protection of potential receptors (i.e. American Canal) are required prior to receiving closure under the 30 TAC §334.

B. Metals Release from the Smelter Operations

In accordance with the 1996 Agreed Order, ASARCO submitted the first Remedial Investigation (RI) Report on October 9, 1998. Subsequent RI Phase II, III & IV reports were submitted in July 2000, November 2001 and September 2003, respectively. The RI Report indicates the groundwater was impacted by plant operations. Since the process pond water and groundwater are interconnected, the process pond water is most likely the main source for metals in the groundwater. All process ponds have been closed.

The agency requested the facility to sample the groundwater for the following parameters: arsenic, cadmium, chromium, copper, iron, lead, selenium, zinc, pH, specific conductivity and total dissolved solids. After the completion of the groundwater remedial investigation, arsenic, cadmium, chromium, copper, lead and selenium were detected and exceeded federally established drinking water standards. The primary Chemicals of Concern (COC) in the groundwater are