

Anaconda Aluminum Co. – Milgo Electronics
3630 Northwest 76th Street
Hialeah, Florida
County: Miami – Dade
District: Southeast
Site Lead: EPA
Placed on National Priorities List: August 30, 1990
Delisted: July 9, 1998
ERIC ID # 3852
HWC # 080

Site Description and History

The Anaconda Aluminum Co. – Milgo Electronics Corp. site is located in a highly industrialized area of Hialeah, Florida in Section 09, Township 53S, Range 41E at 25° 50' 35.0000" N, 80° 15' 23.5100" W. The Ace Parker State-funded cleanup site is about 600 feet east of the site through a mobile home park. Both of these sites are within the cone of influence of the Preston/Hialeah well field and the flow rate of groundwater under the site is considered very high. The site includes two small manufacturing facilities located across the street from each other. The entire study area is approximately 22 acres and is covered almost entirely by buildings and asphalt.

Anaconda Aluminum was an aluminum anodizing facility that began operations in 1957. Aluminum was etched with an aluminum-laden caustic base and then a thin protective oxide layer was produced with an acid. Chromic acid was used until 1967; then sulfuric acid was used in the process. Sodium hydroxide, detergents and dyes were also used during operations. Wastewater and sludges were neutralized with sulfuric acid or caustic soda. Metals were then precipitated out with air. Solids were settled out and the fluid was discharged to a percolation pit. The solids were disposed periodically at the Dade County landfill. The discharged fluid contained aluminum, sodium, ammonium ions, and aluminum and sodium salts. The facility was closed in 1982 under an approved plan that included filling in the percolation pit. Dade Metals Corporation currently owns the former Anaconda Property.

Milgo Electronics was an electroplating, painting, and manufacturing facility that was in operation from 1961 to 1984. The electroplating process involves pretreating the parts with acid and sodium cyanide, then submerging the parts in a solution of chromic acid, nickel or copper salts and applying a current. The metals were recovered from the spent solutions by pH adjustment/precipitation, and settling. Solids were periodically disposed in a landfill while wastewater was discharged to a drainfield. The plated parts were treated in a closed system designed to reduce any residual hexavalent chromium to trivalent chromium and precipitate the metal. The facility's drainfield effluent contained iron, chromium, zinc and lead according to a 1973 test result. When the business closed in 1984, the tanks and process vessels were disposed at appropriate facilities according to an approved plan. Painting businesses using some of the Milgo equipment have occupied the building since 1984. Racal-Datacom Inc. currently owns the former Milgo property and Allied Industrial Coatings operates a painting business there.

Threat

Sediment and soil analyses indicated metal contamination including aluminum, arsenic, chromium, lead and zinc. Groundwater analyses indicated chromium, lead, 1, 2-dichloroethene (DCE), and vinyl chloride contamination. These contaminants can produce a variety of health threats if people come in direct contact with the contaminated media. A removal action was performed by the PRPs in 1992 – 1993. The current analyses and subsurface nature of the contamination indicate that this site does not pose an immediate threat to the population. The site was delisted in July 1998.

Response Strategy and Status

Although this site actually consists of two pieces of property with two Consent Decrees, the Remedial Investigation/Feasibility Study (RI/FS) and Baseline Risk Assessment (BRA) has been combined for cost and time saving purposes.

Several site investigations were conducted before the formal RI. The first investigation was conducted in 1985 by the EPA Environmental Services Division as part of a prototype program. The second investigation was conducted in 1988 by the NUS Corporation for the purpose of ranking the site on the NPL. In September 1992, a RCRA compliance audit was conducted on the Allied operations. In 1992, Racal-Datacom hired Blasland, Bouck, and Lee, Inc., and Dade Metals hired Brown and Caldwell to investigate the need for any removal actions.

A removal action was conducted at the Milgo property in late 1992 and early 1993 under an Administrative Order by Consent with the EPA. The treatment structures and 84 cubic yards of drainfield soil were removed from the site and disposed at an appropriate facility.

The formal RI field work was conducted in April and May 1993. The final RI Report was submitted in February 1994. The results of this RI indicated that chromium, DCE and vinyl chloride were the only contaminants that were above background levels and drinking water standards. Some uncertainty was involved with the nature and source of the DCE and vinyl chloride contamination and DEP withheld approval of the RI Report until the issue could be investigated further. It was agreed that the chromium contamination is limited.

The Draft Baseline Risk Assessment (BRA) was submitted by the EPA in December 1993. This document has been approved.

The EPA submitted a Proposed Plan for the site in March 1994 that calls for No Further Action. Several confirmation samples were obtained in May 1994 for the purpose of evaluating the consistency of the DCE and vinyl chloride contamination. The initial results indicated that the concentrations of these contaminants were below detection limits.

The final Record of Decision (ROD) was signed by EPA in November 1994 and a letter of concurrence from the DEP was sent to EPA in January 1995. The ROD states that the selected remedial strategy for this site will be "No Action with Monitoring". If the monitoring results

indicate a threat to human health, groundwater remediation will be re-evaluated. Initial results indicate very low levels of DCE and vinyl chloride contamination.

Groundwater monitoring of selected wells was initiated in April 1994 and continued until April 1995. The final quarter of sampling results indicated extremely low levels of vinyl chloride in one monitor well. EPA in concurrence with DEP has recommended that the site be delisted in 1996. Delistment was approved in September 1996 by DEP. The site was delisted from the NPL on July 9, 1998.