

MD-119 Baltimore City

From 1977-1982, MRI Corporation stored lead sulfide sludge in unlined "black lagoons" for recovery and sale; in addition, chromium sludge from former operations existed on site prior to 1977.

1982 PA by EPA identified nickel, antimony, lead, and chromium as contaminants in ground and surface waters.

1988 SI by MDE identified cadmium and lead in groundwater, and antimony, chromium, lead, and PAHs in soil samples.

EPA assigned NFRAP status in June 1990.

MRI CORPORATION Baltimore, Maryland

(MD-119)

Site Description

The MRI Corporation site is located at 1900 Chesapeake Avenue, on approximately 3 acres of fenced property in Fairfield, an industrial area of southeast Baltimore City. M&T Chemicals, a manufacturer of antimony oxide and blended chrome alloys, borders the site to the east, a Chevron Refinery lies across Chesapeake Avenue south of the site, and the B&O Railroad Company defines the northern border. An asphalt paving company parks vehicles on the western edge of the site on Vera Street.

Before the site was sold in 1982, company offices and manufacturing facilities took up the southern half of the site. Lead sulfide sludge was stored in unlined pits north of the manufacturing buildings. The current owner razed the buildings and covered the site with an asphalt parking lot. The property and surrounding area is flat lying, and much of the area surrounding the site is paved. Groundwater and surface water likely flow east towards the Patapsco River, located approximately 1500 feet northeast of the site.

Site History

The site property was formerly owned by American Can Company under the name of M&T Chemicals, Inc. It was split from M&T in 1977, when Elf Aquitaine of France acquired M&T and was named MRI Corporation under American Can Company. MRI Corporation was involved in reclaiming tin from scrap metal, which generated two potentially hazardous waste streams, a lead sulfide sludge and a spent caustic solution. The sulfide sludge, containing a significant amount of tin, was placed in unlined dewatering lagoons, "black lagoons", for recovery and sale to tin smelting operations. The alkaline waste solution was placed in storage tanks for later sale. The MRI Corporation ceased its operations in 1982, when the property was sold to Construction and Development Management, Inc. The site was paved and is being used to hold automobiles for distribution after they are off-loaded from ships.

M&T Chemicals has manufactured antimony oxide and blended chrome alloys on the site since the 1960s. This operation replaced a metals recovery operation that was begun in the late 1940s. Waste generated from the M&T Chemicals operation, including hexavalent chromium sludge, trivalent chromium oxide sludge, and wash water, existed on both properties at the time of the division.

Environmental Investigations

In 1982, the U.S. Environmental Protection Agency (EPA) Annapolis Field Office performed a Preliminary Assessment (PA) of the MRI Corporation site. Poned surface water samples (pH 10.0-11.0) contained high levels (>100 ug/l) of nickel, antimony, and lead; groundwater samples (pH 6.2) contained antimony and chromium at 2,500 and 6,100 ug/l, respectively.

Based on these results, a Site Inspection (SI) was performed by the Maryland Department of the Environment (MDE) in November 1988; three groundwater samples from two on-site monitoring wells and nine soil samples were collected. Results from sample analyses indicated the presence of contaminants, particularly heavy metals, in both soil and groundwater samples. In groundwater samples, cadmium (9.1 ug/l) and lead (62.1-67.3 ug/l) were above the EPA's proposed maximum contaminant levels for drinking water. In soil samples, antimony (<22.800 mg/ka), chromium (<2.820 mg/ka), lead (<1.890 mg/ka).

and polynuclear aromatic hydrocarbons (PAHs; 110-1,300 ug/kg) were found at elevated concentrations.

Current Status

No remedial action is currently planned for the MRI Corporation site by EPA. EPA assigned the site No Further Remedial Action Planned (NFRAP) status in June 1990. Future investigations or remediation will be addressed by the State Superfund Division.

Reference

A Site Inspection of MRI Corporation Site, Baltimore, Maryland, prepared by Maryland Department of the Environment for the U.S. Environmental Protection