

## **MD-021 Baltimore City**

Until 1977, the Koppers Baltimore Plant Landfill site is reported to have received sludge and solid waste generated from lumber-preserving operations. In addition, the property has been used as a dumping area for dredge spoils.

1992 SI by MDE identified lumber-related compounds including 1,1,1-trichloroethane, benzene, naphthalene, dibenzofuran, anthracene, arsenic, chromium, and copper in surface water, sediment, and/or soil samples.

1994 ESI by MDE identified several contaminants, of which copper (24,700 mg/kg) was the only lumber-related compound in sediment samples.

EPA assigned NFRAP status in February 1995.

## **KOPPERS BALTIMORE PLANT LANDFILL Baltimore, Maryland**

**(MD-021)**

### ***Site Description***

The Koppers Baltimore Plant Landfill site, located at 3100 Childs Street in south Baltimore City, Maryland, occupies approximately 15 acres within the 168-acre parcel of land owned by the Maryland Port Administration (MPA). The Patapsco River borders the property on the north, and the southern boundary of the property is defined by Frank Childs Avenue. A small sand and gravel quarry owned by Arundel Corporation borders on the west, and Toyota Company and the Patapsco River border the site on the east.

The property includes two dredge spoil berm areas and approximately 2 acres of wetlands. In addition, there are several piles of scrap preserved wood and rusted above-ground storage tanks. Approximately 20 acres is paved and leased to Toyota Corporation for storage of new motor vehicles. The remainder is vacant and consists mainly of grass, with some trees, and two ponded areas. The landfill area is fenced, but is considered accessible. Surface water runoff from the property can drain to the west, north, or east to enter the Patapsco River.

### ***Site History***

Arundel Corporation purchased the current site property between 1915-1919. An unknown amount of the eastern portion was first leased to the Weyerhaeuser Corporation for use as a lumber storage yard, and later leased, in 1944, to the American Lumber Corporation for a lumber-treating operation. The operation consisted of adding copper chromium arsenate and creosote to wood to preserve it. In 1970, the operations were purchased by the Koppers Corporation, who continued to operate the lumber-treatment facility until 1977. The western portion of the property, which includes the landfill site, was mined for sand and gravel by the Arundel Corporation for an unknown period of time; after which, the area was subcontracted for use as a unpermitted landfill for municipal and industrial waste. The 1994 Expanded Site Inspection (ESI) states that the Koppers Corporation allegedly paid the Arundel Corporation to dispose of sludge and solid waste from their lumber-treatment operations into the landfill. The ESI further estimated that the landfill stopped accepting waste and was covered in 1977, but the amounts or additional types of waste disposed in the landfill are unknown. In 1978, MPA purchased 168 acres of the site property, and in late 1989, drastically changed the topography by grading and leveling the property, in preparation for paving. Over the years the property has been used as a dumping area for dredge spoils from the Baltimore Inner Harbor and the Patapsco River.

### ***Environmental Investigations***

A 1986 site assessment conducted by Geraghty and Miller, Inc., for Hobelmann Port Services included sampling of soil and groundwater samples; results indicated the existence of polyaromatic hydrocarbons and phenols, constituents of creosote, and copper.

As a result, in 1992 the Maryland Department of the Environment (MDE) performed a Level III Site Inspection (SI) Prioritization, involving the collection of surface water, sediment, and soil samples. Compounds associated with lumber-preserving processes that were identified include 1,1,1-trichloroethane, benzene, naphthalene, dibenzofuran, anthracene, arsenic, chromium, and copper. Aqueous samples contained 1,1,1-trichloroethane (2-9 ug/l), manganese (1,190 ug/l), nickel (35.6

ug/L), and vanadium (10.9 ug/L). Corresponding sediment samples contained acetone (11 ug/kg), benzene (4 ug/kg), dibenzofuran (48 ug/kg), 4,4'-DDT (22 ug/kg), 2-methylnaphthalene (53-95 ug/kg), copper (193 mg/kg), and vanadium (281 mg/kg). All of the soil samples collected revealed contamination of various organic and inorganic substances including naphthalene (36-420 g/kg), dibenz(a,h)anthracene (160-240 g/kg), chromium (101-212 mg/kg), copper (87.6-364 mg/kg), and arsenic (12.4-19.7 mg/kg).

To further define the areas of contamination, in 1994 the MDE conducted a Phase I ESI. Contaminants detected in sediment samples were DDD (130 ug/kg), cyanide (2.7 mg/kg), beryllium (3.4 mg/kg), copper (24,700 mg/kg), lead (528 mg/kg), mercury (4.0 mg/kg), selenium (8.0 mg/kg), and zinc (1,470 mg/kg). Copper was the only contaminant identified associated with lumber-preserving processes. The presence of other contaminants at the site may be attributed to the dredge spoils located on the property, or the predominately industrial location.

### ***Current Status***

As of this date, there has been no Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; 1980) remedial action taken at the Koppers Baltimore Plant Landfill site. EPA assigned the site No Further Remedial Action Planned (NFRAP) status in February 1995.

### ***References***

Phase I Expanded Site Inspection for Koppers Baltimore Plant Landfill, Baltimore, Maryland, prepared by Maryland Department of the Environment, September 1994.

Level III Site Inspection Prioritization of the Koppers Baltimore Plant, Baltimore, Maryland, by the Maryland Department of the Environment, December, 1992.