Maryland Department of the Environment

FACTS ABOUT:
LEADING POINT COPR SITE

Site Location

The Leading Point Chrome Ore Processing Residue (COPR) site is located on Thoms Cove on a parcel of land off Quarantine Road, in the southeastern portion of Baltimore City, Maryland. Leading Point consists of an 18-acre piece of land situated in an industrial setting just west of the Key Bridge crossing Baltimore Harbor. The property is located on the United States Geological Survey (USGS) Curtis Bay quadrangles at approximately 39°12.8450' north latitude and 076°33.0480' west longitude and has a Maryland grid coordinate of 501000N and 928000E. The property is currently owned by the State of Maryland, Maryland Port Administration (MPA).

Site History

The Leading Point Site is located on property belonging to the MPA. A quarantine station was established by the Public Health Service at Leading Point in 1921. This facility operated through 1961 when it was decommissioned and abandoned. Historically the remainder of Leading Point Site has been a marginal wetland between a rail spur and the Patapsco shoreline. The site is situated in an area that has been used for commercial/industrial purposes since the 1800s.

Between April 27, 1972 and July 1, 1978 MPA lands located in and around Baltimore Harbor and the Patapsco River were filled using chromium ore processing residue. Leading Point was part of a Baltimore Harbor project that called for certain shoreline areas to be bulk-headed and filled with dredge spoil material from maintenance of Baltimore Harbor and its approaches. The cove is bounded by Curtis Bay to the west, the Patapsco River to the northeast and the I-695 southern approach to the Francis Scott Key Bridge on the east.

Environmental Investigation and Action

There are no records of other Phase I or II environmental studies having been done for the Leading Point Site, however there is an extensive volume of data for the area immediately adjacent to the Site. MES has been monitoring groundwater in and around the Hawkins Point Chrome disposal cells since the late 1970s. Data from this study has been used to establish baselines for area investigations.

MDE personnel conducted sampling in two phases at the Leading Point Site. The first phase of sampling began on October 1, 2008 and concluded on October 6, 2008. Soil, groundwater, sediment and surface water were collected during this phase of the investigation. Sampling continued in August 2009 with the collection of additional soil samples from two dredge spoil disposal ponds on Leading Point.

Current Status

There is metals contamination in the disposal cells at the Leading Point Site; possibly related to contaminated dredge spoil materials from the Baltimore Harbor. However, since dredge spoil at Leading Point was deposited between 1974 and 1985, and COPR was a potential component of wetlands fill from 1972 to 1978, it is likely that a significant portion of the spoil deposited at Leading Point was deposited after the COPR disposal era. Hexavalent chromium (Cr+6) was identified in samples collected from the suspect disposal areas and in surrounding sediments for all but two samples. Samples collected at S2, S5, S8 and S9 contained Cr+6 at levels above area background but below regulatory guidelines. Samples SD-7 and PSS-6 contained Cr+6 levels slightly above the EPA RBC of 5.6 mg/kg. Any bulk COPR is logically confined to the lower strata within the containment cells. COPR contamination is likely not available as a contact threat. Leading Point is situated in an area underlain by thick clay deposits; migration of Cr+6 is unlikely to be a significant issue at this site. Bulk disposal of COPR/clean inorganic fill has not been verified at the Leading Point Site. Further investigation of the site has not been recommended.