NATIONAL PRIORITIES LIST (NPL)

****Proposed NPL Site****

September 2021

BEAR CREEK SEDIMENTS | Sparrows Point, Maryland
Baltimore County

Site Location:

The Bear Creek Sediments site consists of a minimum of 60 acres of contaminated sediments in the waters of Bear Creek, near its confluence with the Patapsco River along the northwestern shore of the Sparrows Point peninsula six miles southeast of downtown Baltimore in Baltimore County, Maryland.

Site History:

Bear Creek is a tidal surface water body adjacent to the 3,100-acre Sparrows Point peninsula, which was the site of steelmaking and ship building industries. The Bethlehem Steel Corporation (BSC) was the primary owner and operator for much of the Sparrows Point operational history between 1887 and 2013. More than 100 years of steelmaking left behind a legacy of contamination on both land and in the waters surrounding the peninsula. Sediments in Bear Creek were contaminated primarily by the migration of substances associated with slag (a byproduct of steel making which was used as fill to create additional landmass) and the effluent discharges from process wastewater and stormwater to the Tin Mill Canal (TMC). The TMC is a nearly 2-mile canal carved out of slag fill that transects Sparrows Point and discharges to Bear Creek.

Site Contamination/Contaminants:

Hazardous substances detected in the sediments of Bear Creek and attributable to the historical activities at Sparrows Point include polycyclic aromatic hydrocarbons (PAHs) such as benzo(a)pyrene; metals such as arsenic, cadmium, copper, lead, nickel, and zinc; and polychlorinated biphenyls (PCBs). Oil and grease have also been observed in the sediments of Bear Creek in such high percentages that benthic invertebrate organisms cannot survive.

Potential Impacts on Surrounding Community/Environment:

People are exposed to contamination as they use the waters of Bear Creek for recreational activity and fishing/crabbing. The Maryland Department of the Environment (MDE) has issued a fish consumption advisory for ten species of fish and the blue crab caught in the Patapsco River-Baltimore Harbor Watershed due to PCBs.

Response Activities (to date):

Land sources of contamination are being addressed by the current owner of the facility under MDE and EPA oversight under other cleanup programs and are not included as part of this site. The TMC, which is a major source of contamination to Bear Creek, has undergone extensive removal of contamination and capping to ensure contaminants no longer have the potential to migrate off-site. There have been no response activities associated with the offshore sediments in Bear Creek.

Need for NPL Listing:

The site needs to be placed on the NPL because the Bear Creek sediments offshore of Sparrows Point are contaminated with hazardous substances. Other federal and state cleanup programs were evaluated but are not viable at this time. The EPA received a letter of support for placing this site on the NPL from the state of Maryland.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at https://www.atsdr.cdc.gov/toxfaqs/index.asp or by telephone at 1-800-CDC-INFO or 1-800-232-4636.