



Facts About...

MASONVILLE COVE

Site Location and Description

The Masonville Cove site consists of approximately 52-acres of land on the southern bank of the Patapsco River in the City of Baltimore, Maryland. The site is bounded to the south by Frankfurst Avenue and adjoins the Masonville Cove Environmental Education Center property, and industrial and manufacturing land uses.

The Masonville Cove site is currently owned by the Maryland Port Authority (MPA). While the site has remained largely undeveloped throughout its history, it was the location of significant illicit dumping and unauthorized fill activities. The site is not currently serviced by public water supply or sanitary sewer. Infrastructure at the site includes storm drains, outfalls, and concrete culverts.

Site History

The Masonville Cove site has been largely unimproved throughout its history. Prior to the MPA's assumption of site ownership in 1978, the site was the property of The Arundel Corporation and the Arundel Sand and Gravel Company. Anecdotal evidence suggests that unauthorized landfilling had been performed at the site as far back as the early 20th century. Significant amounts of debris from the Baltimore Fire of 1904, such as cast iron columns, had been hauled and disposed of at the Masonville Cove site. Starting in the 1950s, periodic mining activities were performed at the site. Unauthorized dumping activities continued at the site until waste characterization and remediation activities were initiated by the MPA in 2007. Materials dumped at the site included, but were not necessarily limited to, dredged material, building debris, and assorted household/nuisance trash.

Environmental Investigations and Actions

The Masonville Cove property was identified as a potential area for mitigation during investigation into the potential environmental impact of an adjoining dredge material containment facility, which included environmental studies and historical research by private environmental consultants, starting in the early 2000s. Studies performed in 2003 and 2005 included water and sediment quality assessments; identification/qualification of aquatic and terrestrial resources; and identification of rare, threatened, and endangered species.

A Phase II environmental site assessment (ESA) was performed on the Masonville Cove property in March 2008 that included soil sampling for priority pollutant list (PPL) metals, polycyclic aromatic hydrocarbons (PAHs), pesticides/PCBs, volatile organic hydrocarbons (VOCs), semi-volatile organic hydrocarbons (SVOCs), and particle size. Soils at the site were determined to have been impacted with PPL metals, PCBs, and SVOCs. Arsenic was found to be persistent and pervasive throughout the site and was identified in the Phase II ESA as the primary contaminant of concern.

Supplemental Phase II ESAs were issued by the MPA's consultants in August and December 2009. These reports identified additional areas of contamination, including assorted PPL metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, and zinc), PAHs



(benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and PCBs (Aroclor-1254 and Aroclor-1260) in surface soil (1-2' below ground surface); and PPL metals (antimony, arsenic, cadmium, chromium, copper, hexavalent chromium, lead, nickel, and zinc), PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and dibenzo(a,h)anthracene), and the PCB Aroclor-1260 in subsurface soils (2-20' below ground surface) that exceeded site-specific attainment goals and/or applicable MDE Residential Cleanup Standards. Based on the findings of the Phase II and Supplemental Phase II ESAs, the site was divided into targeted remediation areas.

Status

Based on the findings of the various environmental investigations performed at the site, the MPA, their consultants, and the MDE are currently developing/finalizing a remediation strategy to address the contamination at the site. The future intended use of the site includes recreation, education, and environmental conservation land uses, primarily associated with the adjacent Masonville Cove Environmental Education Center property. The leading contender amongst the remediation strategies under consideration is implementation of containment via an engineered environmental cap.

Contact

For additional information, please contact the Land Restoration Program at (410) 537-3440.

Last Update: February 2, 2010