

Taken from NYSDEC's website on September 6, 2006:
<http://www.dec.state.ny.us/cfm/xtapps/derfoil/haz/details.cfm>

Site Record

Administrative Information

Site Name: U. S. Dredging Shipyard Site

Site Code: C224043

EPA ID Number:

Location

DEC Region: 2

Address: One Beard Street

City: Brooklyn **Zip:** 11231-

County: Kings

Latitude: 40:40:18 **Longitude:** 74:00:40

Site Type:

Estimated Size: 48.06 Acres

Institutional And Engineering Controls

Control Name

No Controls Currently at the Site

Site Owner(s)

Current Owner Name: UNITED STATES DREDGING CORP

Current Owner(s) Address: ONE BEARD STREET
BROOKLYN, NY 11231

Site Description:

The U.S. Dredging site is 48 acre industrial property in a residential and industrial area along Beard Street in the Red Hook area of Brooklyn. About 25 acres of the site are underwater in the Erie Basin. Until early 2005, a ship repair facility and a variety of small industrial and commercial operations occupied the nineteen on-site buildings. Since the 1860s shipyards and related ship maintenance and repair operations have occupied the site. Historically, shipyards have utilized a variety of hazardous materials, including petroleum products, solvents, PCBs, and heavy metals such as mercury, arsenic, lead, and

copper. Most of the upland portion of the site was created by filling in the basin at different points in the site's history. The fill materials used at the site are unknown, but may have included coal and incinerator ash, demolition debris, and industrial wastes, which commonly were used as fill throughout the City in past decades. Site investigations found metals and PAHs contamination in most of the soil samples collected from throughout the site. Much of the contamination can be attributed to historic fill that was used to fill in this former water body / marshland. But, elevated concentrations of lead, mercury, copper and arsenic are due to site activities. Areas of VOC and PCB contamination were found in relatively limited areas.

Material Disposed of at Site and Quantity:

Type of Waste	Quantity of Waste
ACETONE	UNKNOWN
LEAD	UNKNOWN
LEAD	UNKNOWN
MERCURY	UNKNOWN
METHYLENE CHLORIDE	UNKNOWN
NAPHTHALENE	UNKNOWN
COPPER	UNKNOWN
ARSENIC	UNKNOWN
PCB-AROCLOR 1254	UNKNOWN
PCB-AROCLOR 1260	UNKNOWN
PCB-AROCLOR 1260	UNKNOWN
BENZ(A)ANTHRACENE	UNKNOWN
BENZO(B)FLUORANTHENE	UNKNOWN
BENZO(A)PYRENE	UNKNOWN
DIBENZ[A,H]ANTHRACENE	UNKNOWN
BENZO[K]FLUORANTHENE	UNKNOWN

Assessment of Environmental Problems:

Site investigations show that metals and PAH contamination is ubiquitous to all soils at the site. Much of the soil contamination is due to the contaminated fill used at the site beginning in the 1860s. The sediment in the Erie basin is similarly contaminated. From the 1860s to the present shipyards and related ship maintenance and repair operations have occupied the Site. Historically, shipyards have utilized a variety of hazardous materials, including petroleum products, solvents, polychlorinated biphenyls (PCBs), and heavy metals (used in marine paints) such as mercury, arsenic, lead, and copper. Large portions of the site were filled in at different points in the Site's history. The fill materials used at the Site are unknown, but may have included coal and incinerator ash, demolition debris, and industrial wastes. During the site investigations, ninety-nine soil samples

were collected from 80 locations, •thirteen groundwater monitoring wells were constructed on-site and sampled twice, •thirty-six sediment samples were collected from the Erie Basin, •five composite samples were collected from three waste piles, •twenty-three samples of sludge or soil were collected from drainage structures, sumps and manholes, •two samples of stained wood flooring were collected, •five samples of stained concrete flooring were collected, •wipe samples were collected from the floors of the seven electrical substations, •thirteen soil gas monitoring wells were installed to collect soil gas samples •three wipe samples and one bulk dust sample were collected from ducts associated with a former dust collection system, and •fifty-eight soil gas sampling points were constructed and sampled for organic vapors analyses and speciation. PAHs and heavy metals were detected in most of the soil samples at concentrations well above TAGM values and regional background. Most of the PAHs and much of the metals contamination is heterogeneously present through the entire site and is attributed to the historic fill. Site activities were the cause the elevated concentrations of arsenic, copper, lead, and mercury found in some on-site locations that are well above the amounts typically found in urban fill. There were TCLP failures for lead at three locations that will be remediated. Some of the samples also exhibited elevated concentrations of VOCs and/or PCBs. The VOC and PCB contamination found in on-site soils is a result site activities. Two rounds of groundwater sampling found that none of the PAHs, VOCs, nor PCBs contamination found in the soil are impacting groundwater. When the groundwater was sampled using a low-flow technique to minimize suspended solids during the second round, the metals concentrations were found to be below groundwater standards in all but three instances. Organic vapors, primarily methane, were detected in 35 of the soil gas sampling locations. This indicates a probable need for soil gas mitigation systems. NYSDOH will require a reevaluation of soil gas and indoor air once the site is redeveloped. The sediment samples showed elevated concentrations of metals and PAHs similar to that found in upland soils. The site does not present a significant environmental threat.

Assessment of Health Problems:

Soil at this site is contaminated with volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and metals. Soils with the highest levels of contamination will be removed and disposed of offsite. The site will be covered by buildings, pavement and several feet of clean material and landscaping. Access to the site is currently restricted by a fence. Groundwater at this site is not believed to be impacted, however, the area is served by public water. The potential for exposures related to soil vapor intrusion is still under investigation and will be addressed during site redevelopment.

If you have questions regarding the information in this database, please contact the Department at (518) 402-9543 for further assistance.