

NPL Site Narrative for Portsmouth Naval Shipyard

PORTSMOUTH NAVAL SHIPYARD Kittery, Maine

Portsmouth Naval Shipyard (PNS) is located on Seavey Island in the Piscataqua River in Kittery, York County, Maine. The 278-acre Seavey Island is composed of three smaller islands (formerly Seavey, Jamaica, and Dennett's Islands) connected by 90 acres of fill. Filling of the tidal flats between the original islands took place gradually as space needs for PNS increased. The PNS property also includes the undeveloped Clark's Island, which is connected by a bridge to Seavey Island.

PNS, established in 1690, became a Navy shipyard in 1800. During its operational history, the shipyard was used for construction of ships and submarines and is currently used to overhaul nuclear propulsion fleet ballistic missile submarines and attack submarines. PNS consists of three dry docks, 6,500 linear feet of berthing, and 376 buildings and other structures. Hazardous wastes have been stored, disposed of, spilled, and/or treated at more than 30 areas on the site.

From 1945 to 1975, untreated acidic and alkaline wastes, waste battery acid and lead sludge, waste water and spent baths from an electroplating operation, and other wastes from various industrial shops were discharged into the Piscataqua River via industrial waste outfalls. From 1945 until approximately 1978, 25 acres of tidal flats between Jamaica and Seavey Islands were filled with wastes including chromium-, lead-, and cadmium-plating sludge; asbestos insulation; trichloroethylene; methylene chloride; toluene; methyl ethyl ketone; drums of waste paint and solvents; mercury-contaminated materials; sandblasting grit containing various metal wastes; and dredged sediments from the Piscataqua River.

Dredged sediment samples collected in the late 1970s near the industrial outfalls were found to contain elevated concentrations of metals, PCBs, and other contaminants. Although Portsmouth Harbor and the lower Piscataqua River are heavily industrialized, the Navy has indicated that the probable source of the sediment contamination is the industrial outfalls at PNS. In addition, hazardous substances attributable to PNS are present at elevated levels in wetlands bordering Seavey Island.

Ground water supplies drinking water to over 10,000 people within 4 miles of the site. Salmon Falls, the Cocheco and Piscataqua Rivers, the Great Bay estuary, and coastal tidal waters within 15 miles downstream of PNS are used for commercial and recreational fishing. In addition, extensive wetlands communities exist along surface water bodies downstream of the PNS site.

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 [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.