NPL Site Narrative for Naval Weapons Station - Yorktown

NAVAL WEAPONS STATION - YORKTOWN
Yorktown, Virginia

Conditions at Proposal (February 7, 1992): The Naval Weapons Station-Yorktown covers 10,500 acres primarily in central York County on the York River in Yorktown, Virginia. Since the facility was established in 1918, its primary mission has been to maintain, produce, and store ordnance. The station also contains facilities for administration, personnel housing, and operational support. The on-base population includes 3,200 military and civilian personnel and 47 housing units. Surrounding the facility are the York River, the Colonial National Historical Park, the Whiteman Swamp, and the Naval Supply Center-Cheatham Annex. The facility has used trinitrotoluene (TNT), cyclotrimethylene trinitramine (RDX), cyclotetramethylene trinitramine (HMX), and various metals and organics in its past and current operations.

Navy studies conducted during 1983-89 identified 21 sources of hazardous materials, including the six described below.

Turkey Road Landfill (Site 2) covers 5 acres in wetlands of Felgates Creek. Mercury and zinc carbon batteries, missile hardware, inert mines and bombs, construction rubble, and electrical shop hardware were reportedly disposed in the landfill. Ground water, surface water and sediments contain phenols and/or arsenic.

Burning Pad Residue Landfill (Site 4) covers a few acres and was used for disposal of batteries from weapons, burning pad residues (possibly containing aluminum, RDX, TNT and 2,4-dinitrotoluene), fly ash from coal-fired boilers, mine casings, electrical equipment, and transformers. Ground water, surface water, and sediments contain several volatile organic compounds, explosive contaminants, and metals.

Explosive Contaminated Wastewater Impoundment (Site 6) covers 3 acres and includes a drainage way. The wastewater discharged to the unlined impoundment included solvents (trichloroethene, trichloroethane, other chlorinated hydrocarbons, and possibly cyclohexanone), and residues of TNT and RDX. Surface water and sediment downstream contain several solvents and explosive contaminants.

Plant 3 - Explosive Contaminated Wastewater Discharge Area (Site 7) covers 5 acres and was a discharge point for wastewater containing TNT, RDX, HMX, trichloroethene, and cyclohexanone. Explosive contaminants were detected in surface water and sediment samples downstream.

Plant 1 - Explosive Contaminated Wastewater Discharge Area (Site 9) is an unlined drainage way (500 to 600 feet) used in the past for explosive-contaminated wastewaters. Explosive contaminants were detected in surface soil samples obtained from the discharge area and in surface water and sediment samples obtained downstream. Explosives have been found in Lee Pond, a fishery, downstream of the site.

Conveyor Belt Soils Area at Building 10 (Site 19) consists of soils directly below and adjacent to a conveyor belt used for transporting explosives. Surface soils under the conveyor belt are contaminated with TNT.

Surface water runoff from the six sources flows to the York River. The York River drainage basin in the area of the site includes wetlands, endangered species, and fisheries. The York River converges with the Chesapeake Bay approximately 12 miles downstream.

Status (October 1992): The Navy has found an additional source of hazardous materials, the Battery Drum and Disposal Area, where cadmium, lead, and zinc have been detected.

EPA is preparing a draft Federal Facilities Agreement under CERCLA Section 120 to cover future activities at the 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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.