

NPL Site Narrative for Parris Island Marine Corps Recruit Depot

PARRIS ISLAND MARINE CORPS RECRUIT DEPOT Parris Island, South Carolina

Conditions at Proposal (August 23, 1994): The USMC Marine Corps Recruit Depot (MCRD) is located on Parris Island and several smaller islands located approximately 4 miles south of the City of Beaufort, South Carolina. The primary activity at MCRD is the training of Marine Corps recruits. The facility covers more than 8,000 acres, including more than 4,000 acres of salt marsh and tidal streams.

Numerous potentially hazardous waste sites have been identified at the facility. The Incinerator Landfill and the Borrow Pit Landfill are located on Horse Island. The unlined Causeway Landfill was constructed across Ribbon Creek, a tidal stream and marsh between Parris Island and Horse Island. Wastes known to be disposed in landfills at MCRD include empty pesticide containers, oil contaminated with polychlorinated biphenyls (PCBs), and mercury amalgam. In addition, from 1950 until 1978, rinsewaters from pesticide application containers and equipment were disposed in a dirt or grassy area (Pesticide Rinsate Disposal Area) located between Quonset huts N282 and N277.

MCRD conducted an Initial Assessment Study (IAS) in 1986. Of the 16 areas evaluated during the IAS, 6 were recommended for further confirmation studies.

In February and March 1988, MCRD conducted sampling activities at the facility as part of the Remedial Investigation Verification Step. Mercury, lead, and other inorganic analytes were detected in surface water and sediment samples collected from the streams and marshland located adjacent to the Causeway Landfill.

In 1991, EPA conducted an Expanded Site Inspection at the Causeway Landfill. Numerous organic analytes, including PCB-1254, were detected in tissue samples from oysters collected from the tidal waters located adjacent to the Causeway Landfill. The average concentrations of several organic analytes in oyster tissue samples collected were higher for samples from an impoundment on the northeast side of the Causeway Landfill than for samples collected from the southwest side.

A release was documented based on evidence that hazardous substances were deposited directly into Ribbon Creek and adjacent tidal marshes. The presence of hazardous constituents in surface water, sediment, and tissue samples collected from Ribbon Creek, adjacent to the Causeway Landfill, demonstrate adverse effects associated with the release to surface water. Surface water runoff from MCRD enters salt marshes and streams which surround Parris Island. Several bodies of water located within 15 miles downstream of MCRD, including the Causeway Landfill impoundment and the Broad River, are used for fishing. Extensive estuarine wetlands and nesting areas for the loggerhead turtle are present within 15 miles downstream of MCRD. All residents within 4 miles of the source areas normally obtain drinking water from the Beaufort-Jasper Water and Sewer Authority (BJWSA). BJWSA obtains water from a surface water intake located on the Savannah River which is not affected by runoff from the facility.

Status (December 1994): Federal Facility Agreement (FFA) Negotiation start is planned for the third quarter of fiscal year 1995. EPA, SC-DHEC, the Marine Corps, and the Navy are in the process of forming an Installation Restoration Team and have initiated scoping the Remedial Investigation, developing a Site Management Plan, and initializing funding requests from the Defense Environmental Restoration Account (DERA) for anticipated environmental clean up work. A Restoration Advisory Board Implementation plan is being developed to get community involvement early in the Superfund process at MCRD Parris Island. A Preliminary Natural Resource Survey Study has been initiated to assist in scoping environmental concerns for the Remedial Investigation.

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.