

Naval Weapons Station Earle

New Jersey

EPA ID#: NJ0170022172

EPA REGION 2 Congressional District(s): 04

Monmouth

Colts Neck

NPL LISTING HISTORY

Proposed Date: 10/1/1984

Final Date: 8/30/1990

Site Description

Naval Weapons Station Earle (NWSE) covers 11,134 acres in Colts Neck. Since the early 1940s, the U.S. Navy has renovated, stored and maintained munitions at the station. These operations involve preserving and maintaining ammunition, missile components, and explosives. Twenty-seven (27) areas of concern at NWSE were identified for potential cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and three (3) areas (sites 2, 18 and 21) are being permitted under the Resource Conservation and Recovery Act (RCRA). Wastes generated from weapons maintenance activities include: grit and paint chips from sandblasting; paint scrapings; solvent and paint sludges; lead bullets from small arms ranges; and metals including lead, zinc, and chromium. NWSE lies over an important drinking water aquifer. Approximately 1,900 residents live within a 3-mile radius of the station, and there are 500 homes on the base. An estimated 320 private and municipal wells serve 1,200 people within a 3-mile radius, and groundwater also is used for irrigation. Local surface water is used for recreation and crop irrigation. The headwaters and drainage basins of three major Coastal Plain rivers (the Swimming, the Manasquan, and the Shark), are present on the Main Base.

Site Responsibility: This site is being addressed through Federal actions.

Threat and Contaminants

Groundwater, sediments, and soils contain elevated levels lead, chromium, and volatile organic contaminants at some areas of the base. People who come into direct contact with or ingest contaminants over a sustained period of time potentially could suffer adverse health effects. Since the facility is an active munitions storage site, public access is restricted, although hazardous areas may not be off-limits to base personnel.

Cleanup Approach

NWSE is being addressed through the performance of a base-wide Remedial Investigation focusing on contamination at individual sites as well as the additive effects of contamination on each watershed at the facility. Cleanup activities are fast tracked at those areas of more immediate concern. Sites have been grouped together for remediation in a phased approach.

Response Action Status

No Further Action: A Site Investigation was conducted at Site 8 and it was determined, based on result samples, that no further action was necessary.

Continuing investigation: At Site 9, extensive remedial activity does not appear to be necessary and would disrupt the natural ecological succession occurring on the site. Discussions with the Navy and NJDEP are ongoing and additional characterization of the stream may be warranted.

Removal Actions: The Navy has completed removal actions at sites 20, 22, 23, 24, 25, and 27. This cleanup work generally consisted of the excavation and off-site disposal of contaminated soil. At site 20, the work was completed in 1995. Work at the other Sites was completed in 1996. In total, approximately 1,189 tons of soil was removed and 2 tons of lead (bullets and residue) was removed from NWSE. Additionally, off-site disposal of contaminated soils from Site 47 was conducted in 2000, and the removal of mine actuators from Site 48 occurred in 2004. No further action was required for both sites 47 and 48 after the removal actions.

Remedial Investigations: From 1990 through 1995, the Navy conducted a Remedial Investigation (RI) at twenty-seven (27) separate areas of environmental concern. The investigations consisted of several rounds of groundwater, soil and sediment sampling. The objective was to determine the nature and the extent of contamination in these areas. The decisions to conduct the above-mentioned removal actions were based on these findings. Additionally, EPA and the Navy agreed, based upon the RI data, that seven (7) sites (3, 6, 12, 13, 16/F, 17, and 26) required additional sampling in order to develop feasibility study alternatives. The additional sampling work was conducted between October 1996 and January 1997.

Feasibility Study: EPA received the final Feasibility Study for Site 7 (OU-10) in July, 2008.

Proposed Plan: EPA has received and commented on the draft Proposed Plan for Site 7 (OU-10), the final Proposed Plan is expected at the end of November, 2008.

Site Facts: NWSE is participating in the Installation Restoration program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and cleanup of hazardous contaminants at military and other DoD facilities. Under a CERCLA Section 120 Interagency Agreement with EPA, the Navy has agreed to deadlines, timetables, and EPA review of decisions involving cleanup technologies.

Cleanup Progress

Based on the information found in the Remedial Investigation phase, the Navy fast-tracked cleanup activities at various sites. At sites 20, 22, 23, 24, 25, 27 contaminated soil was excavated and removed; all such work was completed by December, 1996. Sites 4, 5, 19, and 26 were targeted for the first Records of Decision at NWSE. Records of Decision for sites 4, 5, and 19 were signed on September 25, 1997. The Record of Decision for site 26 was signed on September 29, 1998. The design of the air sparging system for site 26 has been completed and implementation of a full scale system began in January, 2001. The groundwater monitoring program for site 26 was initiated in March, 2001. A "No Further Action" ROD was signed on September 28, 1999, for sites 14, 20, 22, 23, 24, 25, 27 and 29.

The Record of Decision for Site 13 was signed in September, 2004. The remedy is an engineered low-permeability cover system that meets RCRA criteria for municipal solid waste landfills. The Record of Decision for Sites 1 & 11 were signed in January, 2005. The remedy is institution of land use controls and implementation of a groundwater Classification Exception Area (CEA) to prohibit human exposure to groundwater. The Record of Decision for Sites 3 and 10 was signed on August 15, 2006. The remedy is landfill caps for both sites. Construction on the sites began in September, 2002, and was completed in July, 2003. The Record of Decision for Site 26 (PCE plume) was signed in August, 2007, the remedy relies on long-term monitoring, land use controls and the current OU-3 remediation system (air sparging with soil vapor extraction). The Record of Decision for Sites 6,12,15 and 17 was signed on September 28, 2007. The remedy relies on land use controls and long-term groundwater monitoring for Sites 6 and 17, No Further Action for Site 12, and land use controls and long-term soil monitoring for Site 15.

The final design plans and specifications for the landfill caps at sites 4 and 5 were submitted in December, 1997. Site clearing work commenced in February, 1998 and the cap construction was completed in September, 1999. The work plan for the excavation and remediation at site 19 was submitted in December, 1997. The work commenced in January 1998 and was completed in March, 1998. The groundwater monitoring program started in July, 1999 and is ongoing.

Site Repositories

US Environmental Protection Agency Region II - Administrative Records Room 290 Broadway, 18th Floor New York, NY 10007

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