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INSTALLATION RESTORATION PROGRAM

Site 11
Removal Action
Former School of Music Plating Shop

NAVAL AMPHIBIOUS BASE, LITTLE CREEK

INTRODUCTION

The Installation Restoration Program (IRP) is an ongoing Department of Defense program conducted at military bases nationwide to identify and address potential human health and environmental impacts as the result of past waste disposal practices. This fact sheet is one in a series, informing interested citizens about the environmental investigations and cleanup actions being conducted under the IRP at NAB Little Creek.

This fact sheet outlines the Department of the Navy's plan to conduct a Removal Action at the former School of Music Plating Shop (Site 11). The site does not pose an immediate threat to human health or the environment.

SITE 11 PROFILE

The location of the former School of Music Plating Shop (Site 11) is shown on the site figure (reverse page). The School of Music Plating Shop was located in Building 3651. This building is located in the eastern portion of the base, near the intersection of 7th Street and E Street.

During its period of operation (1964 to 1974), the plating shop reportedly used a variety of heavy metal plating baths, cyanide, lacquer, and lacquer stripper. The site consists of an in-ground, concrete tank and its associated piping. The tank was used to treat the plating solutions used on the musical instruments. The tank is approximately 10 feet east of the southeast corner of Building 3651. The surrounding areas, apart from the buildings and paved areas, are generally level and covered with grass.

The neutralization tank for the former plating shop has a diameter of 5 feet and a depth of 9 feet.

Approximately 2.5 cubic yards of crushed limestone was placed in the tank to neutralize the acidic plating solutions. Neutralized plating solutions were discharged from the tank into a storm sewer via a drain from the northeast side of the tank. All plating solutions had to pass through the limestone before they could enter the discharge pipe connecting with the storm sewer.

ENVIRONMENTAL STUDIES

Site 11 is one of eight sites at NAB Little Creek that are being investigated under the IRP to determine the impact of past waste disposal practices on human health and the environment. The following studies that include Site 11 have been conducted:

- Initial Assessment Study (IAS), December 1984
- Round One Verification Step (RVS), October 1986
- Interim Remedial Investigation (IRI), December 1991
- Draft Final Remedial Investigation and Feasibility Study (RI/FS), May 1994
- Draft Final Engineering Evaluation/Cost Analysis (EE/CA), August 1993

The Navy determined that the high concentrations of heavy metals (i.e., chromium, cadmium, and lead) in the neutralization tank represent risk to human health and the environment. The Engineering Evaluation/Cost Analysis report was prepared to evaluate the alternatives for mitigating the potential risk.

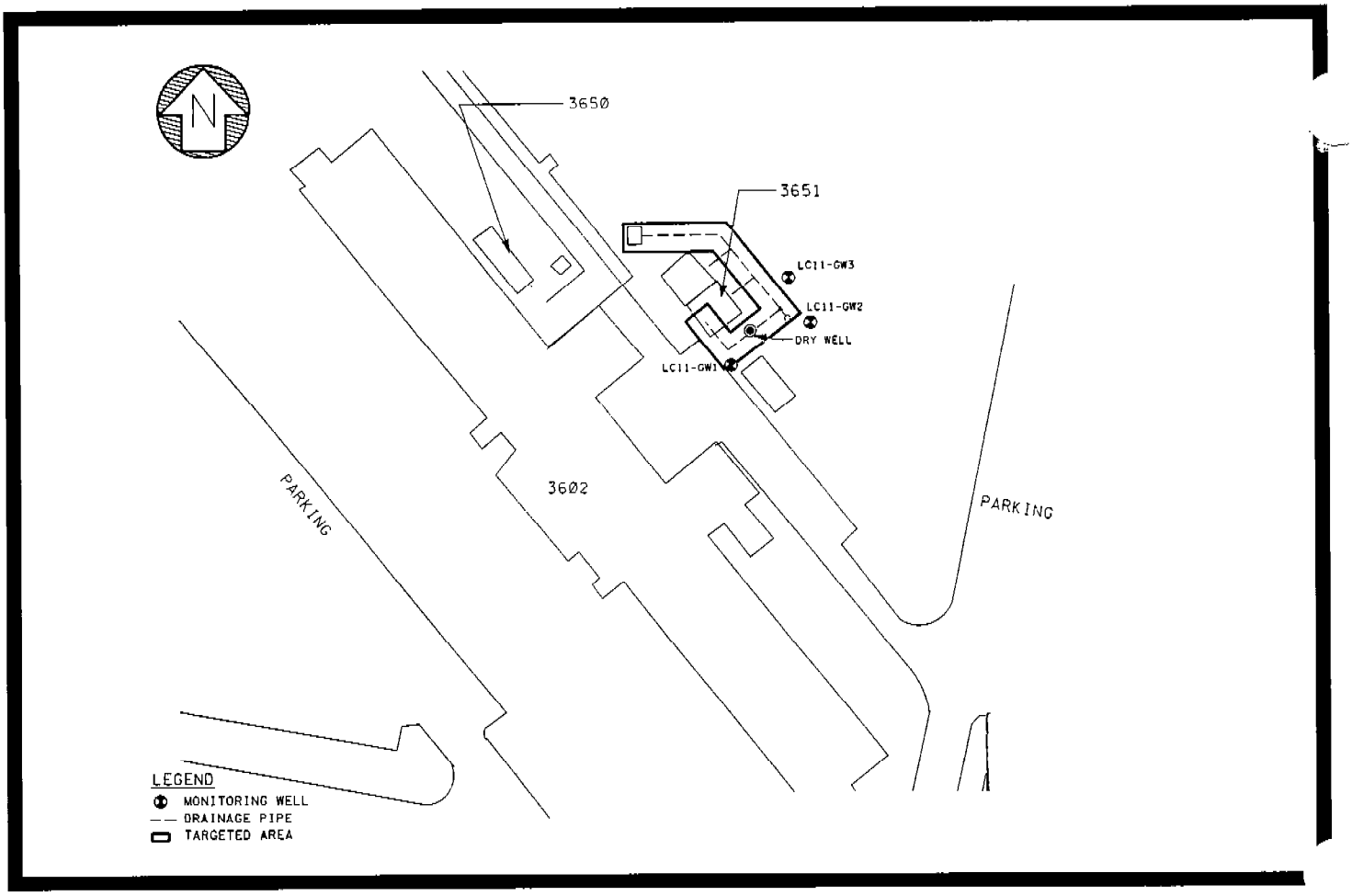
The following alternatives were considered in the Engineering Evaluation/Cost Analysis:

Alternative 1: Institutional Controls

Institutional controls are non-engineering solutions to prevent public access to the site or movement of contamination. Applicable restrictions at Site 11 would include restricting intrusive activities near the tank or drainage pipe. This alternative also may include periodic monitoring and analysis of surface soil and groundwater samples to determine when or if additional action may be necessary.

Alternative 2: Removal of the Tank Contents

This alternative includes the removal of the neutralization tank contents. The tank would be rinsed and flushed to remove any residual contamination. The tank would then be filled with soil and abandoned in place. The pipeline would not be flushed or cleaned out as part of this alternative.



Site 11 - Target Area of Removal Action (not to scale)

Alternative 3: Removal of Tank and Associated Piping

This alternative involves the removal and disposal of the neutralization tank contents as well as the tank and associated piping. The tank, pipe assembly, and surrounding soils will be removed and disposed of as a hazardous waste.

Each alternative was evaluated based on its effectiveness, implementability, and cost to successfully achieve the cleanup goals. The primary factor in evaluating each alternative was its effectiveness in minimizing the risk to public health and the environment. Alternative 3 was selected as the preferred cleanup method. The liquid contents of the tank will be pumped out first. The solid contents of the tank will be removed using earth moving equipment if necessary. The soil around the tank and the drainpipe will be excavated so the tank and pipe can be removed.

The U.S. Environmental Protection Agency and Virginia Department of Environmental Quality have been involved with reviewing and approving the removal action. The EE/CA and the other previous study reports are available for review at the following locations.

Information Repositories

- Bayside Area Library
  956 Independence Blvd.
  Virginia Beach, VA 23455
  804/460-8406
- Central Library
  4100 Virginia Beach Blvd.
  Virginia Beach, VA 23452
  804/431-3000
- Little Creek Library
  7853 Tarpon Place
  Norfolk, VA 23518
  804/441-1751
- NAB Little Creek Library
  Building 3004, 8th Street
  Norfolk, VA 23521
  804/464-7691

Contact For More Information

Mr. Richard N. Stryker
NAB Little Creek
Base Civil Engineer (N462)
Norfolk, VA 23521-2616
804/363-4571

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