

# INFORMATION UPDATE

## INSTALLATION RESTORATION PROGRAM

U.S. Department of the Navy  
Naval Submarine Base  
New London  
Office of Public Affairs

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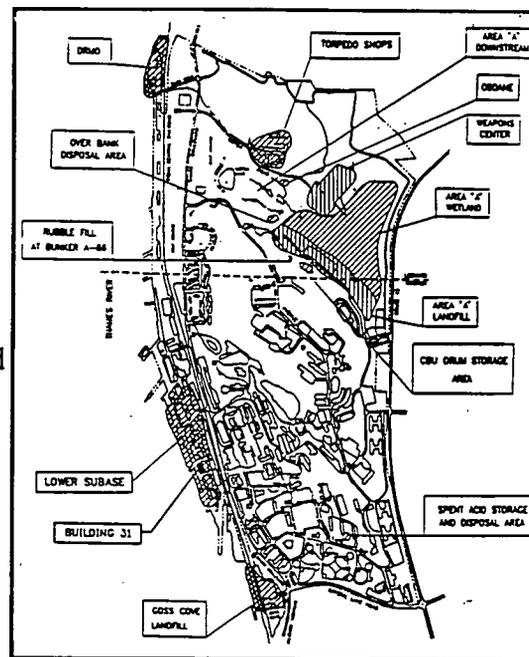
### Proposed Removal Action at Building 31

#### Introduction

The Navy is proposing a removal action for Building 31, which is currently used as a hazardous materials storage building at the Naval Submarine Base New London. While replacing the building's floor slab, the Navy discovered that soil beneath and next to the building is contaminated with lead. Under the Navy's Installation Restoration Program (IRP), contaminated soil will be excavated, mixed with a cement-like material to immobilize the lead and thus protect human health and the environment, and either returned to the excavated area or disposed of off-site. This information update is being distributed to inform citizens of this proposed action and to solicit input from the public.

#### What is Building 31?

Building 31 is located next to Building 78 on the lower SUBASE, approximately 55 feet east of the Thames River. The building is about 140 feet long by 76 feet wide. It was constructed in 1917 and used as a battery overhaul facility. After World War II, Building 31 was used as a hazardous materials storage building for such things as paint thinners, paints, epoxy coatings, oils, adhesives, batteries, detergents, bleach, and many chemicals.



#### Why are Removal Actions Being Proposed?

Removal Actions are taken to minimize or eliminate potential threats to human health or the environment from contaminants identified at a site. Lead has been found in soils at Building 31 at concentrations above the EPA action level of 500 parts per million (ppm), and in groundwater at levels that exceed national drinking water standards of 15 parts per billion (ppb). These concentrations are believed to produce adverse health effects, especially in children.

Fortunately, the risk to people from this contamination is minimal, as the ground water is too brackish to serve as a source of drinking water. There is also little chance of direct contact with the contaminated soil, except for construction or remediation workers. The Navy intends to continue to use Building 31 for the storage of hazardous materials. Institutional controls, such as land use or deed restrictions, will be taken to prevent incompatible future activities at Building 31.

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**What Would These  
Removal Actions  
Consist of?**

The proposed removal action at Building 31 includes:

1) on-site solidification of soil with lead concentrations equal to or greater than 500 ppm. Solidification consists of mixing excavated soil with cement or a similar material to immobilize the lead. The treated soil (about 974 cubic yards) will be put back into the excavated areas if it meets required treatment standards. 2) An estimated 460 cubic yards of contaminated soil will be excavated, transported off-site for solidification, and disposed of at an appropriate landfill. This includes soil in those areas where it is necessary to provide continued access to existing underground utilities. 3) Exterior excavation will be limited to the area within 10 feet of the outside of the building. Excavation will not extend below the top of the groundwater table (approximately 6 feet below ground surface) or the bottom of the interior and exterior column footings (whichever is higher). Depth of excavation between Buildings 31 and 78 will be limited to four feet to protect the structural integrity of both buildings. 4) To verify that cleanup levels have been met, a sampling plan that includes sampling of soils will be designed and submitted to EPA for review before excavation begins. Additional soil sampling may be required to determine if lead contamination extends beyond the current 10 ft. remediation limit.

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**What Other  
Alternatives Were  
Considered?**

Three other removal action alternatives were considered:

- 1) Concrete Cap. This cap would consist of a 4 inch layer of stone covered by a 6 inch layer of reinforced concrete.
- 2) Insitu Jet Grouting and Off-Site Stabilization. This alternative would enclose the contaminated soil in an impermeable box of grout and soil. A reinforced concrete cap would cover the 3 foot thick walls and floor of the box. In areas where access to underground utilities must be maintained, excavation and off-site solidification and disposal of contaminated soil would be performed.
- 3) Excavation and Off-site Solidification and Disposal. This option consists of excavating all the contaminated soil beneath and surrounding the building and transporting it off-site to an approved facility for solidification and eventual disposal at an off-site landfill. Excavated areas would be filled with clean soils.

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**How Can The  
Public Become  
Involved?**

An *Action Memorandum* will soon be available for public review at the information repositories at the Groton Public Library; the Ledyard Public Library; the Naval Submarine Base New London Library; and the EPA Records Center in Boston, MA. The *Action Memorandum* describes the site conditions and background, the potential threats to human health and the environment, and the removal alternatives considered for the project.

A 30 day public comment period will follow the publication of the *Action Memorandum*. Comments received during this period will be summarized and addressed in writing by the Navy and considered in its selection of the final remedial action. Written comments should be addressed to Ms. Deborah Stockdale • Northern Division, Naval Facilities Engineering Command (Code 1823) • 10 Industrial Highway, Mail Stop 82 • Lester, PA 19113-2090

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**For More Information**

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