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PROPOSED PLAN FOR SOIL REMEDY AT BUILDING 223 FORMER HAZARDOUS WASTE
STORAGE AREA NAS KEY WEST FL
9/19/1999
NAS KEY WEST



PROPOSED PLAN



Naval Air Station Key West, Florida

Facility/Unit Type: Building 223 Former Hazardous Waste Storage Area
Contaminants: Arsenic
Media: Soil
Remedy: Land-Use Control

INTRODUCTION

This Proposed Plan is issued by the U.S. Navy, the lead agency for Naval Air Station (NAS) Key West remedial activities, with concurrence by the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP). The proposed remedial activities are conducted under the Department of Defense's Base Realignment and Closure (BRAC) program in accordance with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan (NCP), and the FDEP Brownfields Cleanup Criteria Rule (62-785 F.A.C.). The Building 223 Hazardous Waste Storage Area at Truman Annex is the area of interest and is known as Parcel F, Subzone 3.

This Proposed Plan identifies the proposed remedy for the Building 223 Hazardous Waste Storage Area at NAS Key West, explains the rationale for the preference, solicits public review and comments on the conclusions of the Supplemental Site Inspection (SSI), and provides information as to how the public can be involved in the remedy selection process. The Proposed Plan provides a summary of past environmental work at the Building 223 Hazardous Waste Storage Area. This document provides key highlights of the SSI Report but should not be used as a substitute. Additional details regarding the site and the investigation conducted may be found in the SSI Report that is kept as part of the information repository. Please refer to the cover letter for the repository location.

The public is encouraged to comment on the proposed remedy. The U.S. Navy emphasizes that the proposed remedy is the initial recommendation of the Agency. Changes to the proposed remedy, or a change from the proposed remedy to another remedy, may be made if public comments or additional data indicate that such a change would result in a more appropriate solution.

PROPOSED REMEDY

The proposed remedy is land-use controls because contamination at the site has been sufficiently remediated. Minimal costs are associated with implementing and administering this remedy.

FACILITY BACKGROUND

Building 223 (Equipment Repair Shop) is currently used as storage for Port Services. Little is known about previous activities in the building; however, the name implies that naval support equipment was repaired at the building. The closed hazardous waste storage area is south of Building 223. Building 1287, which is part of this area, is a closed galley that operated during the 1960s. Adjacent to Building 1287 was a motor pool that operated during the 1950s. Metals, fuels, and solvents were considered potential sources of contamination at Building 223 which was used as an equipment repair shop and a plumbing shop, and from the neighboring hazardous waste storage area.

The Site Inspection (SI) sample results for Building 223 Hazardous Waste Storage Area indicated only one inorganic (arsenic) at one location in excess of its NAS Key West Partnering Team selected action level of 2.7 mg/kg, with a concentration of 16.8 mg/kg. The Engineer's Estimate/Cost Analysis (EE/CA) for Alternatives for BRAC Fast Track Soil Removal Parcels and the Action Memorandum for BRAC Fast Track Soil Removal Parcels briefly describe contamination at the Building 223 Hazardous Waste Storage Area, remedial alternatives evaluated for the Interim Remedial Action (IRA), and costs associated with remediation. The SSI Report describes in detail the IRA performed and locations and results of confirmation samples taken at the site.

The IRA at Building 223 Hazardous Waste Storage Area removed approximately 62 cubic yards of

contaminated soil to a depth of 2 feet from the area shown in Figure 1. However, arsenic contamination does remain in excess of its NAS Key West Partnering Team-selected action level (2.7 mg/kg) at two sample locations (at levels of 3.1 and 4.9 mg/kg) (Figure 1). These levels are lower concentrations compared to the 16.8 mg/kg level found prior to the excavation.

The soil removal activities were performed in accordance with the FDEP Brownfields Cleanup Criteria Rule, No Further Action Criteria [62-785.680 F.A.C.] that provided a secondary regulatory driver to the site action levels. The regulation addresses no-further-action remedies with institutional controls and engineering controls (Refer to the Land-Use Control section, below, for definitions) such as alternate cleanup criteria for the soil contaminant concentrations two feet below land surface. These cleanup criteria were implemented during the soil removal activities at the site. The no-further-action regulation also addresses the use of permanent cover and containment material to prevent human exposure and limit water infiltration. The asphalt- and concrete-covered areas found during excavation activities at the Building 223 Former Hazardous Waste Storage Area meet the definition of permanent cover material.

SCOPE OF THE REMEDIAL ACTION

Land-Use Controls

In accordance with U.S. Navy and FDEP policies, the site remedy will include land-use controls. These remedies are often used when contamination poses low, long-term threats to the environment or where full treatment is impracticable. Land-use controls include engineering controls and institutional controls. Engineering controls include signs, guards, landfill caps, provisions for potable water, sheet pile, pumping and treatment of groundwater, monitoring wells and vapor extraction systems. Institutional controls are a variety of legal devices imposed to ensure that the engineering controls stay in place or, where there are no engineering controls, to ensure the restrictions on land use stay in place. Institutional controls include easements, covenants, permits, notices (in deeds, newspapers, etc.) zoning, agreements with regulators, and land-use control maintenance reporting.

Soil excavation at the Building 223 Former Hazardous Waste Storage Area was impeded by concrete foundations and a base road. Each of these impediments provide engineering controls to the remaining soil contaminants, preventing exposure of the soil to the environment. Further, the excavation of all of the remaining low-level contaminated soils was not deemed as practical due to the impact on the existing road and structures.

The land-use controls at the Building 223 Former Hazardous Waste Storage Area will include deed restrictions (institutional control) that will require anyone who disturbs structures identified as a permanent cover and/or containment material, do so in compliance with appropriate laws and regulations. For example, future workers who disturb these areas shall have to comply with occupational Safety and Health Administration (OSHA) regulations (promulgated under Chapter 29 of the Code of Federal Regulations, Section 1910.120) and appropriate Resource Conservation and Recovery Act (RCRA) and CERCLA laws as a result of elevated arsenic concentrations in soils.

Alternative Remedial Action

As required by the Department of the Navy Environmental Policy 99-02; Land-Use Controls, an alternative that provides an unrestricted property use was evaluated for the Building 223 Former Hazardous Waste Storage Area. This alternative would require excavation of soils beneath one road and the storage structure's concrete foundation. Due to the impact on the base road and storage structures and the current level of protection provided by these same structures, this alternative was deemed not practical.

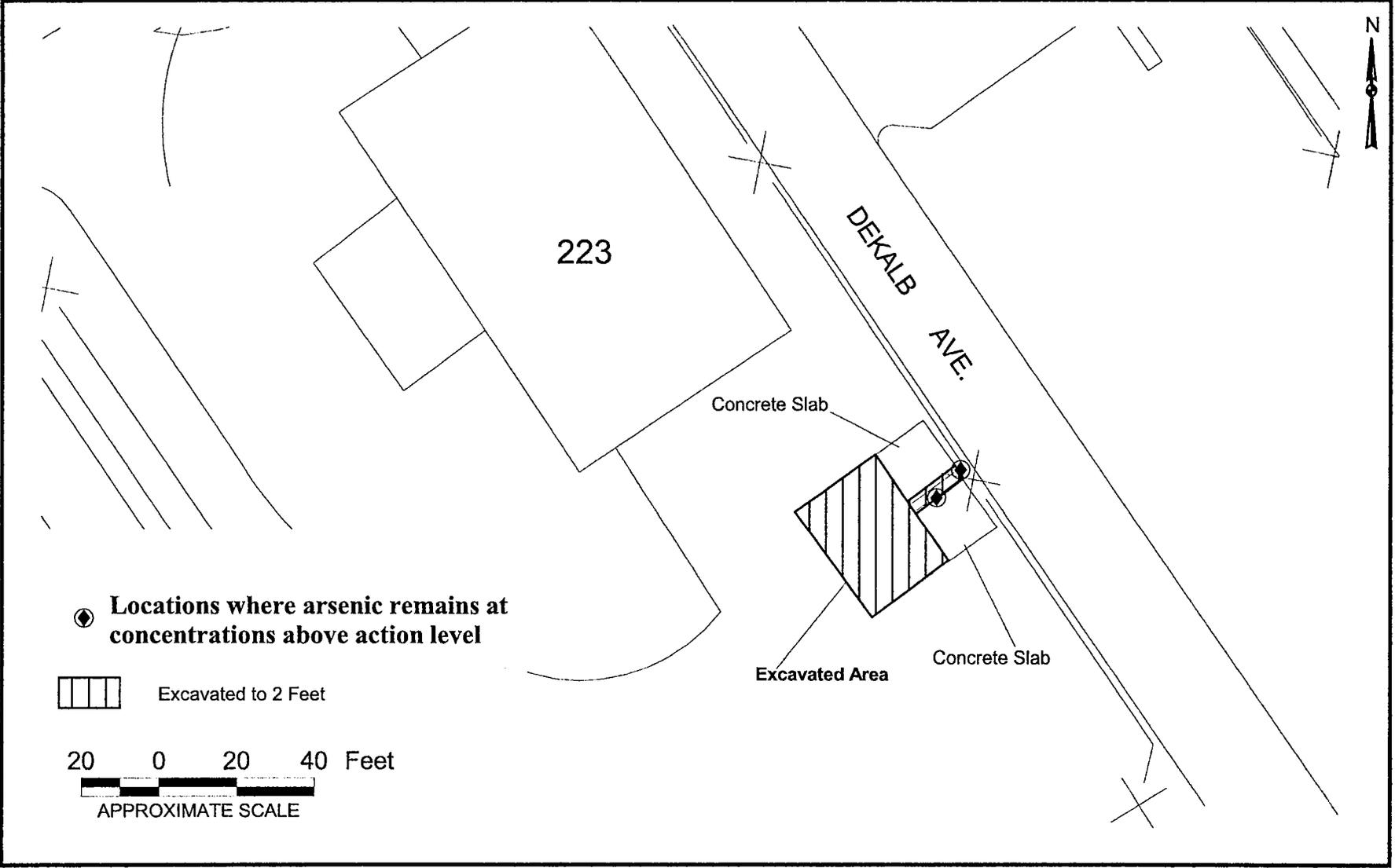
The U.S. Navy recognizes that CERCLA allows various options for implementing remedies based on site conditions. For the Truman Annex Building 223 Hazardous Waste Storage Area at NAS Key West, the SSI Report indicates that the IRA (soil removal) reduced the threat to human health and the environment to acceptable levels in accordance with CERCLA, the NCP, and the FDEP Brownfields Cleanup Criteria Rule. Therefore, there is sufficient justification to propose no remedial action for the site. There are no costs associated with the no-further-action remedy.

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NEXT STEPS

Following a 30-day public comment period, the U.S. Navy will issue a final decision on the proposed remedy. The Decision Document, which will describe the remedy chosen for Building 223 Hazardous Waste Storage Area and other BRAC sites, will include responses to oral comments received during the public comment period. Concurrence from EPA and FDEP will be obtained before implementing the final remedy.



● Locations where arsenic remains at concentrations above action level

▨ Excavated to 2 Feet

20 0 20 40 Feet
APPROXIMATE SCALE