



FACT SHEET

Former Naval Air Station Alameda

Remedial Action at Installation Restoration Site 28

Todd Shipyards

Alameda, California

March 2010

PROJECT CONTACTS

If you have any questions or concerns about environmental activities, please feel free to contact any of the project representatives:

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INTRODUCTION

The Navy has an ongoing cleanup program at sites throughout the former Naval Air Station (NAS) Alameda, also known as Alameda Point, in Alameda, California. This Fact Sheet provides information on one of these cleanup sites, including a description of the actions that will be taken to complete the cleanup.

The Navy is proceeding with the selected cleanup for soil and groundwater at Installation Restoration (IR) Site 28, also known as the Todd Shipyards site. The Navy is performing the cleanup at IR Site 28 in accordance with legal and procedural requirements of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

After completing a thorough Remedial Investigation (RI), the Navy conducted a Feasibility Study (FS) to evaluate potential cleanup alternatives for IR Site 28 and prepared a Record of Decision (ROD) to document the selected cleanup, with regulatory agency and Restoration Advisory Board (RAB) involvement throughout the process. The overall cleanup selected in the approved ROD consists of five activities: 1) excavation and off-site disposal of soil in designated areas containing arsenic, lead, and polycyclic aromatic hydrocarbons (PAHs); 2) excavation and off-site disposal of soil in discrete areas containing copper; 3) in situ treatment of copper in groundwater; 4) soil and groundwater monitoring; and 5) implementation of institutional controls (ICs) to limit human exposure.

SITE HISTORY

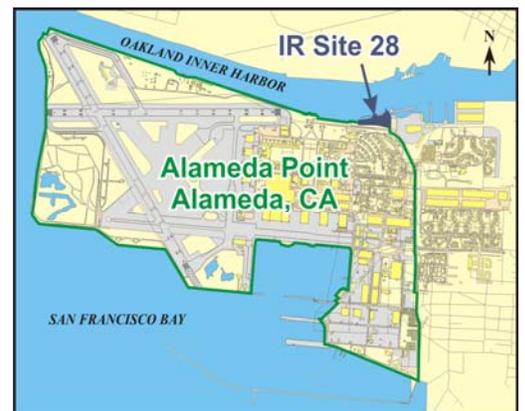
Former NAS Alameda was an active military installation from 1940 to 1997, and primarily provided facilities and support for fleet aviation activities. IR Site 28, which is located outside the security fence delineating the former NAS, is an approximately 2.9-acre parcel located in the northeastern portion of Alameda Point. It is approximately 900 feet long (east-west), increasing in width from roughly 35 feet at the western boundary to nearly 300 feet at the eastern boundary.

Regulatory Agencies Concur on Cleanup Plan

The Navy and its cleanup team partners, the U.S. EPA, Cal/EPA DTSC, and Water Board, concurred on the selected remedy presented in the ROD, which was finalized and signed in September 2007.

The site is bounded to the west by vacant land and to the north by the Oakland Inner Harbor. To the south, a portion of the site borders a fenced community dog park. The remainder of the southern and the eastern boundaries coincide with a paved vehicle parking lot used by riders of the Alameda/Oakland ferry. A series of filling episodes between 1939 and 1965 periodically raised the elevation and changed the shape of the shoreline in the area that includes IR Site 28.

Two generations of Alameda Mole Railroad causeways existed at the present location of IR Site 28 from 1883 until at least 1939. The property was leased to various entities for non-Navy shipbuilding and repair between 1941 and 1970. The property was purchased from the Navy in 1970 by the Todd Shipyards Corporation, which used the land as an extension of its adjoining shipyard property until 1983, when the property was then sold to Alameda Gateway Limited.



IR Site 28 Location

The IR Site 28 portion of the former shipyard reverted to Navy ownership in 1995. Although the property was owned by the Navy, it was not actually used for Navy activities during the history of NAS Alameda. Historical filling and non-Navy shipbuilding activities are responsible for the presence of contaminants in soil and groundwater.

INVESTIGATION RESULTS

The Navy conducted several investigations at IR Site 28 and completed a thorough Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA). The historical investigations revealed the presence of metals and PAHs in soil and metals in groundwater, which are the focus of the cleanup.

Groundwater beneath all of Alameda Point, including IR Site 28, is not currently used for drinking water, irrigation or industrial supply, and there are no complete exposure pathways and no risk to humans from chemicals in groundwater. The HHRA concluded that concentrations of arsenic, lead, and PAHs in shallow soil at the site could pose an unacceptable risk to future site users, and these chemicals were therefore identified for cleanup.

There is no ecological risk to terrestrial receptors associated with chemicals in site soil or groundwater. However, copper in site groundwater could pose a risk to aquatic receptors through discharge of groundwater to the Oakland Inner Harbor. Therefore, copper in groundwater was identified for cleanup.

Contamination in soil and groundwater at IR Site 28 is primarily found in the shoreline area where historical non-Navy shipbuilding and railroad operations occurred. Soil contamination is confined to the shallow subsurface and groundwater contamination is confined to the shallowest aquifer interval beneath the site.

SITE CLEANUP

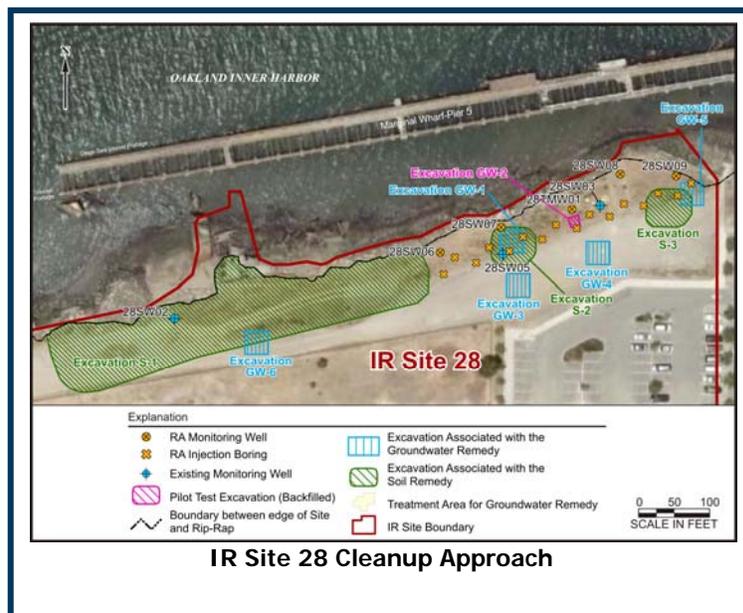
The soil and groundwater cleanup for IR Site 28 was selected to reduce potential risks to human health and the environment posed by the identified contaminants.

The selected cleanup for soil at IR Site 28 includes the removal and disposal of the upper 2 feet of soil in designated areas where arsenic, lead, and/or PAH concentrations exceed Remediation Goals (RGs), backfill of the excavated areas, and implementation of ICs. Soil will be excavated using a backhoe or similar excavation equipment. The excavated soil will be loaded directly into hauling trucks for off-site disposal. After excavation is complete, the excavation areas will be backfilled with clean imported fill material and the surface restored by seeding with grassy vegetation.

The selected cleanup for groundwater at IR Site 28 includes excavation of soil in areas where copper is present, backfill of the excavated areas, installation of groundwater monitoring wells, in situ treatment of groundwater, groundwater monitoring, and implementation of ICs. Soil areas containing copper concentrations above the RG will be excavated to the water table using a backhoe or similar excavation equipment, and the excavated soil will be loaded directly into hauling trucks for off-site disposal. After excavation is complete, the excavation areas will be backfilled with clean imported fill material and the surface restored by seeding with grassy vegetation.

Four additional groundwater monitoring wells will be installed, and will be monitored along with existing site monitoring wells to support the groundwater cleanup. Baseline groundwater monitoring will be conducted, and then in situ groundwater treatment will be completed in the area of copper impacted groundwater. In situ treatment will be conducted by injecting a

non-toxic Metals Immobilization Compound (MIC) into the shallow subsurface to immobilize copper and prevent it from reaching the Oakland Inner Harbor. The MIC material will also be placed directly into one soil excavation area to supplement the cleanup. Groundwater performance monitoring will occur after the MIC treatment to verify successful cleanup, and then long-term groundwater monitoring will be conducted to demonstrate the continued success of the cleanup. In addition to copper, the concentrations of other metals in groundwater, including arsenic, will be monitored to assure there is no negative influence of other metals on the cleanup or undesirable influence of the cleanup on other metals.



ICs will be implemented as a component of the soil and groundwater cleanup approach for IR Site 28 to prevent future human exposure to groundwater or deeper soil that remains in place after the cleanup. ICs will restrict land use, site activities, and the potential reuse of excavated soil or use of groundwater. The effectiveness of the ICs will be reviewed every five years, as required by CERCLA.

TRAFFIC IMPACTS AND PROJECT SCHEDULE

The cleanup at IR Site 28 is not anticipated to significantly affect traffic conditions in the area. No work will occur in any rights of way at Alameda Point, and road closings are not expected. The Navy will coordinate with any affected tenant throughout the duration of the cleanup. The anticipated time to complete the field activities associated with the cleanup at IR Site 28, including the groundwater performance monitoring, is approximately four months (from April 2010 through July 2010). Periodic long-term groundwater monitoring will be implemented following the performance monitoring, with each long-term monitoring event requiring only one to two days to complete.

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Fact Sheet for Remedial Action at Installation Restoration Site 28 Todd Shipyards Former Naval Air Station Alameda

FOR MORE INFORMATION

Documents that detail activities associated with this remedial action, including the Remedial Design and Remedial Action Work Plan (RD/RAWP), are available at the following locations:

Alameda Main Public Library
(Historic Alameda High School)
2220-A Central Avenue
Alameda, California

Alameda Point, Former NAS Alameda
950 West Mall Square, Suite 240
Alameda, California

This fact sheet is prepared in accordance with the NCP, 40 CFR 300.435(c)(3).

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