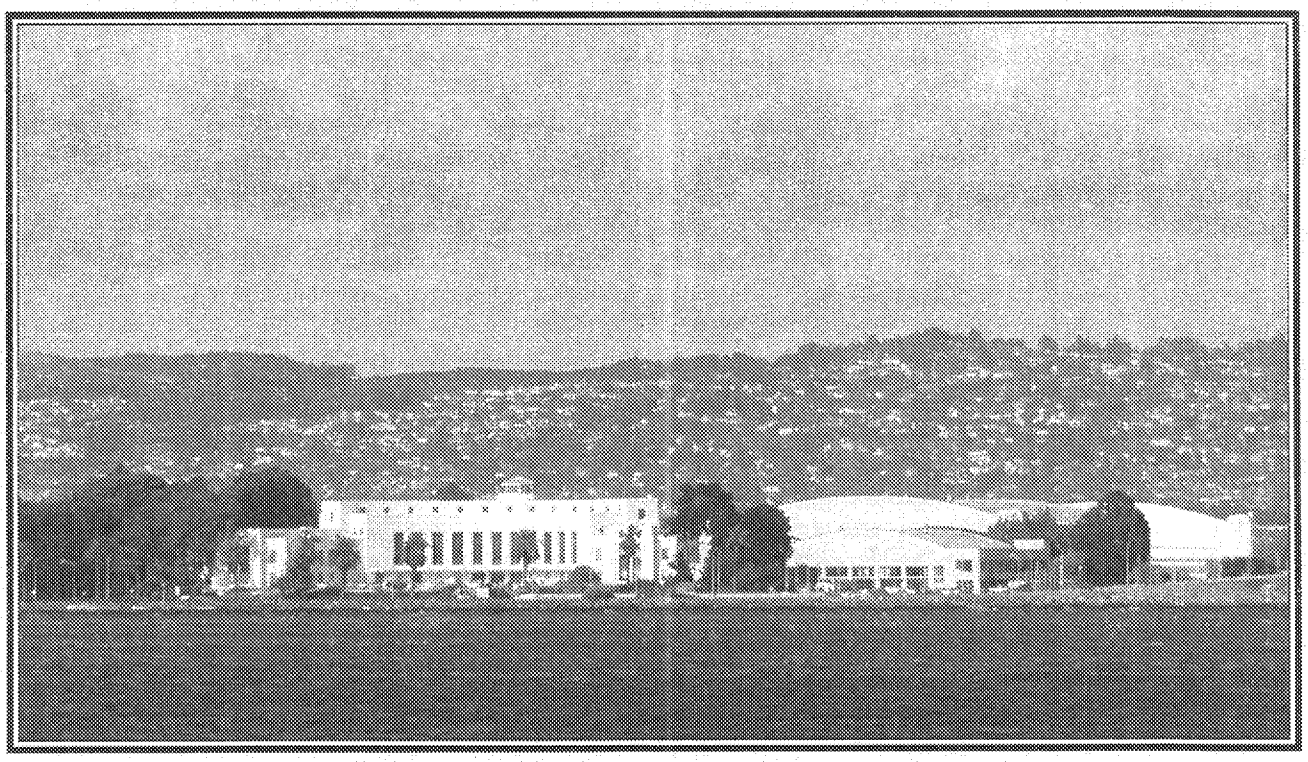
Environmental Cleanup Program
Former Naval Station Treasure Island
Fact Sheet February 2005

General History of the Base

Former Naval Station Treasure Island (NAVSTA TI) is located in the San Francisco Bay (Bay), midway between San Francisco and Oakland, California. The Naval Station consists of two contiguous islands: Treasure Island (TI), which is about 403 acres, and Yerba Buena Island (YBI), which is about 147 acres. TI is a manmade island constructed of materials dredged from the Bay, and YBI is a natural island. TI was built in 1936 and 1937 and was used initially for the Golden Gate International Exposition in 1939. TI was leased to the US Department of the Navy (Navy) in 1941, and the Navy gained title to TI and YBI in 1943.

The Navy operated the Naval Station for various activities including the Naval Technical Training Center; waterfront facilities; troop and family housing; personnel support; a Navy brig; and a Navy and Marine Corps museum. In July 1993, the Base Realignment and Closure (BRAC) Commission recommended closure of Naval Station Treasure Island with relocation of the Naval Reserve Center and the Naval Technical Training Center.

Naval operations ceased on September 30, 1997. The Brac Program Management Office assumes caretaker status until the property is transferred. A portion of Treasure Island was transferred to the U.S. Department of Labor for a Job Corps Center, and the Federal Highway Administration (FHWA) transferred a portion of Yerba Buena Island to the State of California for the San Francisco-Oakland Bay Bridge. The Treasure Island Development Authority (TIDA) has operated the Base since closure under agreement with the Navy, and leases portions of the Base for housing and other activities.



View of Treasure Island from San Francisco

Cleanup Programs
Former Naval Station Treasure Island

A brief summary of environmental cleanup programs is presented below.

Installation Restoration Program Overview

The Department of Defense (DoD) developed the Installation Restoration (IR) Program in 1981 to comply with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and other federal and state environmental regulatory requirements. The IR Program is specific to military facilities and its purpose is twofold: (1) to identify, investigate, and clean up or control releases of hazardous substances, and (2) to reduce the risk to human health and the environment in a cost-effective manner.

NAVSTA TI's IR Program consists of two programs: the CERCLA Program and the Petroleum Program. Environmental investigations and cleanup began on NAVSTA TI in the mid-1980s and continues today. In 1992, the Navy entered into a Federal Facilities Site Remediation Agreement (FFSRA) with the State of California Environmental Protection Agency (Cal EPA). The FFSRA establishes the Navy's and the State's roles and responsibilities and sets a cleanup schedule for each IR site.

The initial facilitywide Preliminary Assessment/Site Investigation (PA/SI) was conducted in 1987 to identify areas on TI and YBI that required further investigation due to possible contamination in soil, sediment, and/or groundwater. To date, the Navy has identified 33 IR sites on TI and YBI including a former fire training area, a landfill, a former dry cleaning facility, an old bunker area, fuel farms, and a service station (See site map). Contamination in these areas is largely the result of releases of petroleum products from fueling operation/storage areas, training, and storage/disposal of hazardous waste materials (See Site Descriptions Table for site descriptions, contaminants of potential concern, and current site status).

CERCLA Program

In response to environmental impacts that resulted from past hazardous waste handling and disposal practices, Congress directed the U.S. Environmental Protection Agency (EPA) to develop a program to manage and control past disposal sites. This program is outlined in the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the 1986 Superfund Amendments and Reauthorization Act (SARA), and is commonly referred to as Superfund. These laws established a phased process for investigating and cleaning up hazardous waste disposal and spill sites nationwide.

CERCLA requires that a remedial action or removal action process be implemented for each site. The site-specific process is selected by evaluating the advantages and disadvantages of each alternative and selecting the one that best protects human health and the environment in a cost-effective manner. The Navy has identified a total of 23 CERCLA sites on TI and YBI. Six sites have been closed, two sites had interim removal actions conducted and these two sites, plus the remaining 15 CERCLA sites, are continuing through the remedial action process.

Petroleum Program

In addition to the CERCLA Program, the IR Program includes the investigation and remediation of sites with petroleum contamination from historic uses such as fueling stations, maintenance areas, a firefighter training area, and an auto hobby shop. Petroleum contamination at NAVSTA TI is primarily from fuel lines and underground storage tanks (USTs). The Petroleum Program has identified 9 petroleum sites along with numerous USTs and fuel lines throughout TI and YBI. The Petroleum Program has achieved closure at four petroleum sites and the remainder are being investigated and/or remediated or are in the closure process. (See Site Descriptions Table for site descriptions, contaminants of potential concern, and current site status).

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Environmental Cleanup Accomplishments
Former Naval Station Treasure Island

A brief summary of recent environmental investigations and cleanup activities conducted at several of the RI sites is presented below.

Investigations and Interim Removal Actions at Site 12 – Old Bunker Area

In 1999, the Navy completed an interim removal action for lead contaminated soil at Site 12 Buildings 1207/1209 on Bayside Drive and at Building 1133 on Mason Court. In 2000, the Navy conducted a pilot investigation which included sampling of debris, soil gas sampling, and additional soil sampling at the Site 12 solid waste disposal areas. Also in 2000, polychlorinated biphenyl (PCB) and polycyclic aromatic hydrocarbon (PAH) contaminated soil was removed from Halyburton, Bigelow, and Flounder Court locations. In 2001, a removal action for PCB and PAH contaminated soil was completed at portions of Buildings 1246, 1248, 1252, 1254 and 1413. During 2002, the Navy evaluated cleanup alternatives in an Engineering Evaluation/Cost Analysis (EE/CA), and held public information sessions and a public meeting. In 2003, a site-wide common area trench investigation was performed to characterize and delineate contamination at Site 12. Results were published in a September 2004 Final Data Summary Report, Site 12 Housing Area, Sitewide Investigation. The report located in the Information Repository at Building 1 on Treasure Island. The remedial investigation (RI) report is currently being prepared.

Site 13 Proposed Plan – Offshore Sediments

A Proposed Plan for Site 13, Offshore Sediments, was prepared and released to the public on April 1, 2004. Results of four offshore sediment investigations were used to conduct an ecological risk assessment, which concluded the offshore sediments at Site 13 do not pose an unacceptable risk to the environment. The Navy therefore is proposing no action be taken at Site 13. A public meeting was held on April 20, 2004 to present the no action alternative and to take comments from the community. The Record of Decision (ROD) is currently being drafted.

Bioremediation at Site 24 – Former Dry Cleaning Facility

A pilot study was implemented in April 2003 to test an innovative, biological method of groundwater cleanup using bacteria already in the soil to naturally degrade volatile organic compounds (VOCs) due to dry cleaning solvents. The pilot study is being conducted at Building 99 within Site 24 on TI. This bioremediation method has proven so successful in reducing the amount of solvents in the source area, the pilot study was expanded in February to include the lower-concentration plume downgradient. The RI Report is currently being drafted.

Groundwater Remediation at Petroleum Sites 14/22, and 25

Beginning in 2002, two full-scale in-situ soil vapor extraction (SVE) systems were constructed at Petroleum Sites 14/22 and 25, following pilot-scale operations. Over 5,000 gallons of petroleum hydrocarbons (in vapor form) have been removed to date. The SVE system at Site 14/22 was dismantled in 2004 and the SVE system at Site 25 will also be dismantled during 2004. Groundwater at both sites continues to be monitored; however, the Navy plans to discontinue groundwater monitoring at these sites in 2004 and pursue regulatory site closure (projected for 2005).

Removal Action at Site 30 – Daycare Center

In 2002, a soil investigation identified various types of wastes including areas of buried burned debris associated with historical practices that contained copper, lead, and dioxins exceeding the site soil screening criteria. Based on these findings, the Navy completed a series of time-critical removal actions. Approximately 650 cubic yards of soil containing burned debris was removed from the areas north and south of 11th Street. The RI Report is currently being drafted.

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Environmental Cleanup Accomplishments (Continued)
Former Naval Station Treasure Island

The Petroleum Program

The Navy has addressed 95 percent of the petroleum contamination at TI and YBI. The remaining 5 percent will be completed in FY05. The following is a brief overview of the Petroleum Program's cleanup activities:

- ✓ Over 13,000 linear feet of fuel distribution pipeline have been removed
- ✓ Over 750 linear feet of fuel distribution pipeline has been closed in place
- ✓ Over 50,000 tons of petroleum-contaminated soil have been excavated and replaced with clean fill
- ✓ 48 UST Closures for known, leaking and non-leaking tanks
- ✓ 7 UST Closures for suspected tanks (may have existed but were removed or previously abandoned)
- ✓ 16 UST Closures for previously-suspected tanks (once thought to have existed, but through research and investigation now believed to have never existed)
- ✓ 11 Fuel Pipeline Site Closures

Site Description Table

SITE DESCRIPTIONS CERCLA SITES	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 1 **Medical Clinic** X-ray and photo processing laboratory on site.	Silver	**Site Closed.**
Site 2 **Decontamination Training Area** Area used for Navy radiation decontamination training from mid-50's to 1969.	Bromine-82 with a half life of 36 hours	**Site Closed.** NFA recommended in PA/SI report.
Site 3 **PCB Equipment Storage Area** Area was used to store and repair transformers.	PCBs	**Site Closed.**
Site 5 **Old Boiler Plant** Provided steam heat to non-residential buildings.	Petroleum, Asbestos, VOCs, Mercury	**Site Closed.** CERCLA constituents merged into Site 24 and petroleum retained in the Petroleum Program by letter dated January 17, 2001.
Site 6 **Fire Training School** Area used for Navy firefighting training for nearly 50 years.	Dioxins, petroleum fuel, and waste	RI report is being prepared.
Site 7 **Pesticide Storage Area** Area was used to store pesticides, herbicides, and paint.	Metals, pesticides, and herbicides	Supplemental SI report submitted for NFA October 18, 2002; closure letter anticipated from DTSC.
Site 8 **Army Point Sludge Disposal Area** Area was used to dispose of sludge from the wastewater treatment plant for approximately 8 years.	Metals and pesticides	RI report for Sites 8, 28, and 29 is being prepared.
Site 9 **Foundry** Area was used as a forge and foundry, paint shop, and welding school.	Solvents, lead, and petroleum products	RI report is being prepared.

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Site Description Table (continued)
Former Naval Station Treasure Island

SITE DESCRIPTIONS (CERCLA SITES)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 10 **Bus Painting Shop** Shop used for bus painting, paint mixing, storage of pest control solutions.	Pesticides and SVOCs	RI report is being prepared.
Site 11 **YBI Landfill** Area was used as a landfill for various debris.	TPH, PAHs, VOCs, and metals	RI report to be prepared in FY 06.
Site 12 **Old Bunker Area** Area housed ammunition bunkers, former equipment storage areas, refuse areas and solid waste incineration areas; military housing construction and earthwork spread contaminants randomly in the subsurface across the site.	PCBs, PAHs, dioxins, arsenic, lead, and debris	Risk assessment work plan and RI scoping are underway. RI report to be prepared.
Site 13 **Stormwater Outfalls/Offshore Sediments** Stormwater system conveys water from surface and building drains to the Bay without treatment, and offshore sediments may be impacted from onshore sites.	Metals, PAHs, PCBs, DDT, and TPH	No Action ROD being prepared.
Site 17 **Tanks 103/104** Two 200,000 gallon aboveground storage tanks contained diesel.	Petroleum, oil, and lubricants	**Site Closed.** CERCLA constituents merged into Site 24 and petroleum retained in the Petroleum Program by letter dated January 17, 2001.
Site 18 **Asbestos-Covered Piping at YBI.** Abandoned steam piping was exposed due to a landslide in the early 1980's.	Asbestos	**Site Closed.** NFA recommended in PA/SI report.
Site 21 **Vessel Waste Oil Recovery Area** Area was used as an oil/water separator facility and for aircraft maintenance.	VOCs and TPH	Treatability study to begin March 2005. RI report is being prepared.
Site 24 **Dry Cleaning Facility** Area was used as a laundry and dry cleaning facility for at least 35 years.	Petroleum, oil, lubricants, and chlorinated solvents	Expansion of treatability study and full-scale treatment of plume began January 2005. RI report is being prepared.
Site 27 **Clipper Cove Skeet Range** Skeet range was operated for 10 years from 1978 to 1987.	Lead shot, lead, and PAHs	PS report is being prepared.
Site 28 **West Side On/Off Ramp** Maintenance of ramps included use of lead based paint.	Lead	RI report for Sites 8, 28, and 29 is being prepared.
Site 29 **East Side On/Off ramp** Maintenance of ramps included use of lead based paint.	Lead	RI report for Sites 8, 28, and 29 is being prepared
Site 30 **Daycare Center** Area was undeveloped until 1985 when daycare facility was constructed. Burned debris was possibly used to backfill utility trenches.	Dioxins, lead, and copper	RI report is being prepared.

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Site Description Table (continued)
Former Naval Station Treasure Island

SITE DESCRIPTIONS CERCLA SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 31 **Former South Storage Yard** Area appears in aerial photos to have been used as a storage yard during the 1970's.	PCBs, PAHs, TPH, lead, copper, DDT, and dioxins	RI report is being prepared.
Site 32 **Former Training and Storage Area** Area was used for hazardous materials storage area, for tear gas training area and storage, and contains a transformer pad.	PCBs, TPH, dioxins, and pesticides	RI report is being prepared.
Site 33 **Water Line Replacement Area** Area where debris was observed in water line trench during extensive historical repairs.	Dioxins and metals	RI report is being prepared.

SITE DESCRIPTIONS PETROLEUM SITES	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 4/19 **Hydraulic Training School/Refuse Transfer Area** Area housed 15 55-gallon drums of waste oil and fenced area used for the transfer, holding, and disposal of refuse for approximately 35 years.	Petroleum, oil, and lubricants	**Site Closed.**
Site 6 **Fire Training School** Area used for Navy firefighting training for nearly 50 years.	Petroleum fuels and VOCs	Petroleum closure report being prepared.
Site 14/22 **New Fuel Farm/Navy Exchange Service Station** Area was the primary storage and distribution area for fuels for more than 50 years.	Petroleum, oil, lubricants, and VOCs	Closure report requesting NFA to be prepared.
Site 15 **Old Fuel farm** Original fuel storage and distribution facility, much of which was moved to New Fuel Farm by 1945.	Petroleum, oil, and lubricants	**Site Closed.**
Site 16 **Clipper Cove Tank Farm** Area stored aviation gasoline and automotive diesel for more than 20 years.	Petroleum, oil, and lubricants	**Site Closed.**
Site 20 **Auto Hobby Shop/Transportation Center** Area has been used for steam cleaning and degreasing vehicles and for storage of hydraulic fluid and recycled oil.	Petroleum, oil, lubricants, and VOCs	**Site Closed.**
Site 23 **YBI Pipeline Break** The pipeline carried oil from the fueling pier to storage tank 117 located on top of YBI.	Oil	**Site Closed.** NFA recommended in PA/SI Report.

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Site Description Table
Former Naval Station Treasure Island

SITE DESCRIPTIONS PETROLEUM SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 25 **Seaplane Maintenance Area** Three areas used for storing and maintaining vehicles and seaplanes.	Petroleum, oil, and lubricants	SVE groundwater remediation ongoing.
Pipeline Sites Inactive fuel lines.	Petroleum	NFA concurrence letter for selected pipeline sites received from Water Board; closure reports to be prepared for remainder of sites.
UST Sites Underground storage tanks.	Petroleum	Various NFA concurrence and closure letters for selected USTs received from Water Board; closure reports are being prepared for remaining USTs.

Notes:

DDT	dichlorodiphenyltrichloroethane	**PA**	Preliminary Assessment	**SI**	Site investigation
DTSC	Department of Toxic Substances Control	**PCB**	Polychlorinated biphenyls	**SVE**	Soil vapor extraction
FS	Feasibility study	**PCSR**	Post-construction summary report	**SVOC**	Semivolatile organic compounds
NFA	No further action	**RI**	Remedial investigation	**TPH**	Total petroleum hydrocarbons
PAH	Polycyclic aromatic hydrocarbons	**ROD**	Record of Decision	**UST**	Underground storage tank
				VOC	Volatile organic compounds

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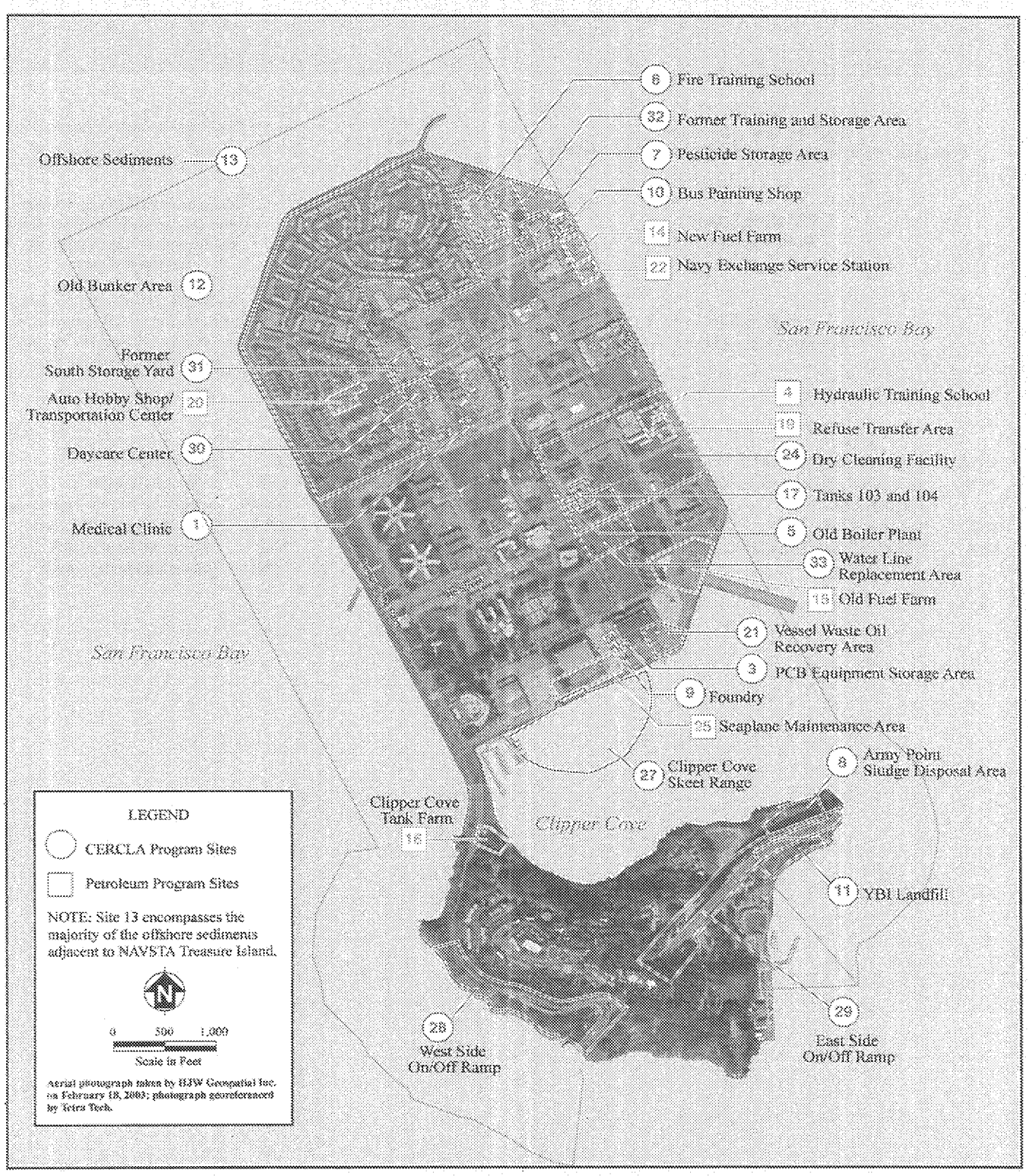
Site Map
Former Naval Station Treasure Island



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Community Involvement
Former Naval Station Treasure Island

The Navy believes it is important to make sure the local community has information about and input into the environmental program at NAVSTA TI. A brief summary of the Navy's community involvement activities is presented below.

RESTORATION ADVISORY BOARD

The NAVSTA TI Restoration Advisory Board (RAB) was created in January 1994. Originally NAVSTA TI had a technical review committee that consisted of the Navy and federal and state regulatory agencies. That technical review committee was converted to the RAB, and members of the community were invited to apply for membership. The RAB was established to allow community members of TI, YBI, and the larger San Francisco area to have input into the investigation and cleanup process. The RAB provides a forum that enables community members, the military, and regulatory agencies to work together to openly discuss and exchange information about the Navy's environmental activities. RAB members meet every other month to review technical documents and discuss activities related to the IR Program. The RAB is an advisory body and RAB members do not make decisions about the cleanup process. However, the concerns and comments expressed through the RAB are carefully considered by the Navy and regulators and help to frame a sound cleanup approach. If you would like to become a RAB member or attend a RAB meeting, see the back of this page for details.

RAB FACTS:
Number of years the RAB has been running:
Over 10 years, beginning July 1994
Number of RAB meetings: 116 as of February 2005

MAILING LIST

The NAVSTA TI mailing list has over 1,100 names, including residents of TI and YBI, businesses on TI, elected officials, community groups, and media contacts.

NEWSLETTER

The Navy publishes a semiannual newsletter, the Island Times, to provide up-to-date information on investigation and cleanup activities at TI and YBI. Copies of the newsletter can be found on the Navy's NAVSTA TI website. The Navy has published nine newsletters from summer 2001 through winter 2004.

WEBSITE

The Navy's NAVSTA TI website can be found at:
http://www.efdsw.navfac.navy.mil/Environmental/TreasureIsland.htm
The website contains information such as fact sheets; flyers and notices; copies of the base newsletters; documents; information on the RAB including applications and meeting minutes, and a general history of the base.

COMMUNITY RELATIONS PLAN

The Navy updated the Community Relations Plan for NAVSTA TI in June 2002 and outlines all public involvement regulatory requirements for the IR Program. The Community Relations Plan includes the following information:

- Describes the TI/YBI community as well as the San Francisco community,
- Highlights past community outreach conducted at NAVSTA TI,
- Identifies the current level of community interest or concern about environmental issues at NAVSTA TI, and
- Outlines planned public participation activities.

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Community Participation Information
Former Naval Station Treasure Island

If you would like more information on the Naval Station (NAVSTA) Treasure Island (TI) Installation Restoration (IR) Program or the Restoration Advisory Board (RAB), or if you would like to be added to our mailing list, please contact:

Mr. James B. Sullivan
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BRAC Program Management Office
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Ms. La Rae Landers
Navy Lead Remedial Project Manager
BRAC Program Management Office
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Ms. Jill Votaw
Environmental Public Affairs Officer
BRAC Program Management Office
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San Diego, CA 92101
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jill.votaw@navy.mil

PARTNERS IN THE CLEANUP

The Base Realignment and Closure (BRAC) Cleanup Team (BCT) is comprised of the Department of the Navy, U.S. Environmental Protection Agency (EPA), California EPA Department of Toxic Substances Control (DTSC), and the California EPA Regional Water Quality Control Board (Water Board). The primary goals of the BCT are to protect human health and the environment, coordinate environmental investigations, and expedite the environmental cleanup at NAVSTA TI.

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drist@dtsc.ca.gov

Mr. Alan Friedman
Remedial Project Manager
California EPA Regional Water Quality Control Board
1515 Clay St. Suite 1400
Oakland, CA 94612
(510) 622-2347
afriedman@waterboards.ca.gov

JOIN THE RESTORATION ADVISORY BOARD

The RAB is composed of members of the community who work with the Navy and regulatory agencies to provide input on the environmental restoration of former NAVSTA TI. The RAB provides a forum to give interested community members the opportunity to revew progress, participate in a dialog with BCT members, and review and comment on ducuments prepard for the Environmental Cleanup Program. Meetings are held on alternate months to discuss the IR Program's progress. It is a great opportunity to find out what is going on and to have your voice heard. RAB meetings are held from 7:00 p.m. to 9:00 p.m. on the third Tuesday of every alternate month and are open to everyone. Stop by! For more information, see the website at:

http://www.efdsw.navfac.navy.mil/Environmental/RAB.htm

INFORMATION REPOSITORY AND ADMINISTRATIVE RECORD

Two local Information Repositories have been established to facilitate community access to key technical documents. The repositories contain program-related documents, including technical reports, fact sheets, newsletters, RAB meeting minutes, the Community Relations Plan, and an annotated index. The administrative record contains all information that has been or will be used to make cleanup decisions and includes comments by the public and regulatory agencies, as well as Navy responses. The documents are available for public review at the Information Repositories and the Administrative Records Office located at:

Navy Southwest Detachment
410 Palm Avenue, Building 1, Room 161Treasure Island, San Francisco, California
Phone: (415) 743-4704
Monday – Friday: 9:30 a.m. to 4:30 p.m.

San Francisco Public Library, Government Publications Section
100 Larkin Street, San Francisco, California
(415) 557-4400 Call for hours

Ms. Diane Silva
CERCLA Administrative Records Coordinator
Administrative Records Office
Naval Facilities Engineering Command, Southwest Division
1220 Pacific Highway, San Diego, California 92132
Phone: (619) 532-3676
Monday – Friday: 7:30 a.m. to 3:30 p.m.

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November 2011

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Volume 6

GENERAL HISTORY OF THE BASE

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Naval operations ceased on September 30, 1997. The Navy BRAC Program Management Office assumes caretaker status until the property is transferred. The Treasure Island Development Authority (TIDA) has operated the base since closure under agreement with the Navy, and leases portions of the Base for housing and other activities.

PROPERTY TRANSFER

The goal of the Navy's cleanup program is protection of human health and the environment. Cleanup will also allow the transfer of property to TIDA for civilian reuse. A portion of TI was transferred to the U.S. Department of Labor for a Jobs Corps Center, and a portion of YBI was transferred to the U.S. Coast Guard for their continued operations. The Federal Highway Administration (FHWA) also transferred a portion of YBI to the State of California for the San Francisco-Oakland Bay Bridge.

Additionally, the Navy has been conducting environmental cleanup of the remaining property so that it can be transferred to TIDA for future development. The cleanup is being done to ensure that the property is safe for future reuse. In 2006, the Navy completed a Finding of Suitability to Transfer, or FOST, for approximately 840 acres of property; of that 330 acres are upland (dry land), and about 510 acres are submerged (offshore) land on TI and YBI . The initial transfer of property to TIDA is planned for 2012. The Navy will continue to conduct environmental investigation and cleanup at NAVSTA TI and will keep the community updated on the progress.

Cleanup Programs
Former Naval Station Treasure Island

www.bracpmo.navy.mil

A brief summary of environmental cleanup programs is presented below.

INSTALLATION RESTORATION PROGRAM OVERVIEW

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The initial facility-wide Preliminary Assessment/Site Investigation (PA/SI) was conducted in 1987 to identify areas on TI and YBI that required further investigation due to possible contamination in soil, sediment, and/or groundwater. The Navy has identified 33 IR sites on TI and YBI including a former fire training area, a landfill, a former dry cleaning facility, an old bunker area, fuel farms, and a service station (See site map on page 7). Contamination in these areas is largely the result of releases of petroleum products from fueling operation/ storage areas, training, and storage/disposal of hazardous waste materials (See Site Description Table for site descriptions, contaminants of potential concern, and current site status).

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PETROLEUM PROGRAM

In addition to the CERCLA Program, the IR Program includes the investigation and remediation of sites with petroleum contamination from historic uses such as fueling stations, maintenance areas, and an auto hobby shop. Petroleum contamination at NAVSTA TI is primarily from fuel lines and underground storage tanks (USTs). The Petroleum Program has identified 9 petroleum sites along with numerous USTs and fuel lines throughout TI and YBI. The Petroleum Program has achieved closure at eight of the nine petroleum sites. The Navy is currently working with the Regional Water Quality Control Board to achieve closure at Site 25.

RISK ASSESSMENT AND SAFETY OF THE PUBLIC

Human health and ecological risk assessments are performed during the cleanup program to assess the potential impacts from site chemicals (chemicals in soil, sediment, and groundwater) to human health and the environment. Human-health risk assessments evaluate the potential for people to become exposed to chemicals (exposure assessment) and for those chemicals to pose a health concern (cancer and noncancer health risks). The purpose of the ecological risk assessment is to evaluate whether chemicals released to soil, sediment and groundwater pose a hazard to potential ecological receptors such as fish and birds. The risk assessments

(continued on page 4)

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CERCLA Cleanup Steps
Former Naval Station Treasure Island

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Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is a law containing requirements for environmental investigation and cleanup. The seven CERCLA steps are presented below.

PRELIMINARY ASSESSMENT/ SITE INSPECTION (PA/SI)
An initial review of the site, including review of historic records and visual inspections. Sampling and analysis of soil, surface water, and/or groundwater may occur to evaluate whether further investigations are needed.

↓

REMEDIAL INVESTIGATION (RI)
A closer look including collecting samples to assess risk to human health and the environment.

↓

FEASIBILITY STUDY (FS)
Data collected during the RI are used to evaluate cleanup alternatives that have been screened for effectiveness, implementability, and cost.

↓

PROPOSED PLAN (PP)
A fact sheet that describes cleanup alternatives and explains the preferred alternative. This step requires a public meeting be held to provide information to the public and allow the public to comment on the preferred alternative.

↓

RECORD OF DECISION (ROD)
The selected cleanup remedy is documented and publicized in this document. A summary and responses to all comments on the Proposed Plan are included in this document.

↓

REMEDIAL DESIGN (RD)
A design for the selected cleanup remedy is prepared. A fact sheet is sent to the public before the Navy begins work on the cleanup.

↓

REMEDIAL ACTION (RA)
The cleanup remedy is carried out and the public is kept informed.

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Site Description Table
Former Naval Station Treasure Island

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(continued from page 2) are typically performed during the Remedial Investigation phase of the CERCLA process or Corrective Action Planning phase, and document the hazards to human health and the environment from the site. They also provide information necessary for making risk-management decisions concerning the necessity for remedial or removal alternatives.

NAVSTA TI remains a safe place to live, work, and visit. During the cleanup, temporary measures are in place to protect the public, such as fences, signs, and restrictions on digging, gardening, and landscaping. In addition, the Navy conducts additional testing, and cleanup if necessary, in areas accessible to the public to ensure safety.

Site Description Table

SITE DESCRIPTIONS CERCLA SITES	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 1 **Medical Clinic** X-ray and photo processing laboratory was on site	**Silver**	**Site Closed** March 20, 2002
Site 2 **Decontamination Training Area** Area used for Navy radiation decontamination training from mid-50s to 1969	**Radionuclides**	**Site Closed** NFA recommended in 1988 PA/SI report
Site 3 **PCB Equipment Storage Area** Area was used to store and repair transformers	**PCBs**	**Site Closed** March 20, 2002
Site 5 **Old Boiler Plant** Provided steam heat to non-residential buildings	**Petroleum, asbestos, VOCs, and mercury**	**Site Closed** CERCLA constituents merged into Site 24 and petroleum retained in the Petroleum Program by letter dated January 17, 2001
Site 6 **Fire Training School** Area used for Navy firefighting training for nearly 50 years	**Dioxins and furans, TPH, PAHs, and VOCs**	RI/FS Report is being prepared. Additional investigation of removed UST (240 series) is planned. Annual groundwater monitoring continues
Site 7 **Pesticide Storage Area** Area was used to store pesticides, herbicides, and paint	**Metals, pesticides, and herbicides**	**Site Closed** November 1, 2005
Site 8 **Army Point Sludge Disposal Area** Area was used to dispose of sludge from the wastewater treatment plant for approximately 8 years	**SVOCs and metals**	Interim RI Report was submitted March 2009. Navy is discussing site closeout with Caltrans. Once bridge construction activities are complete, an RI addendum will need to be prepared for the site
Site 9 **Foundry** Used as a forge and foundry, a paint shop, and welding training school.	**Iron and PAHs**	**Site Closed** No Action ROD signed October 2, 2007

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SITE DESCRIPTIONS CERCLA SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 10 **Bus Painting Shop** Shop used for bus painting, paint mixing, storage of pest control solutions	**Iron and PAHs**	**Site Closed** No Action ROD signed October 2, 2007
Site 11 **YBI Landfill** Area was used as a landfill for various debris	**TPH, PAHs, VOCs, and metals**	Interim RI report was submitted January 27, 2010. Navy is discussing site closeout with Caltrans. Once bridge construction activities are complete, an RI addendum will need to be prepared for the site
Site 12 **Old Bunker Area** Area housed ammunition bunkers, former equipment storage area, refuse areas and solid waste disposal and incineration areas. Military housing construction and earthwork spread contaminants randomly in the subsurface across the site	**PCBs, PAHs, dioxins, TPH, metals, radium-226, and debris**	NTCRA in SWDAs is in progress. NTCRA Work Plan for Bigelow Court is being prepared. Draft RI Report was issued summer 2011
Site 13 **Stormwater Outfalls / Offshore Sediments** Stormwater system conveys water from surface and building drains to the Bay without treatment, and offshore sediments may be impacted from onshore sites	**Metals, PAHs, PCBs, DDT, and TPH**	**Site Closed** No Action ROD signed April 7, 2005
Site 17 **Tanks 103 / 104** Two 200,000-gallon aboveground storage tanks contained diesel	**Petroleum, oil, and lubricants**	**Site Closed** CERCLA constituents merged into Site 24 and petroleum retained in the Petroleum Program by letter dated January 17, 2001
Site 18 **Asbestos-Covered Piping at YBI** Abandoned steam piping was exposed due to a landslide in the early 1980's	**Asbestos**	**Site Closed** NFA recommended in PA/SI report
Site 21 **Vessel Waste Oil Recovery Area** Area was used an oil/water separator facility and for aircraft maintenance	**VOCs and TPH**	Groundwater treatability study is complete. Groundwater monitoring continues. Soil gas investigation is underway. PP issued October 2011
Site 24 **Dry Cleaning Facility** Area was used as a laundry and dry cleaning facility for at least 35 years	**Petroleum, oil, lubricants, and chlorinated solvents**	Expanded treatability study (in situ bioremediation) is in progress. Preliminary soil gas investigation is underway
Site 27 **Clipper Cove Skeet Range** Skeet range was operated for 10 years from 1979 to 1989	**Lead shot, lead, and PAHs**	PP was issued in June 2011. A ROD/RAP is being prepared
Site 28 **West Side On / Off Ramps** Maintenance of ramps included use of lead based paint	**Lead**	**Site Closed** NFA ROD was signed November 22, 2010
Site 29 **East Side On / Off Ramps** Maintenance of ramps included use of lead based paint	**Lead and SVOCs**	Interim RI report was submitted March 2009. Navy is discussing site closeout with Caltrans. Once bridge construction activities are complete, an RI addendum will need to be prepared for the site.
Site 30 **Daycare Center** Area was undeveloped until 1985 when daycare facility was constructed. Burned debris was possibly used to backfill utility trenches.	**Dioxins and metals**	ROD signed August 5, 2009. LUC inspection and reporting is ongoing

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SITE DESCRIPTIONS CERCLA SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 31 **Former South Storage Yard** Area appears in aerial photos to have been used as a storage yard during the 1970s	**Lead, dioxins, benzo(a)pyrene, and radium-226**	ROD signed August 5, 2009. Remedial action ongoing.
Site 32 **Former Training and Storage Area** Area used for hazardous materials storage for tear gas training and storage, and contains a transformer pad	**PCBs, TPH, dioxins, pesticides, and arsenic**	Post construction summary report for soil removal was finalized in July 2011. One year of groundwater monitoring is underway. PP was issued September 2011
Site 33 **Water Line Replacement Area** Area where debris was observed in water line trench	**Arsenic and lead**	ESD to incorporate Site 33 into the Site 31 ROD was finalized in May 2011. Remedial action work plan is being prepared

The Navy has addressed 98 percent of the petroleum contamination at TI and YBI and is currently awaiting site closure for Site 25. The remaining areas will be completed once the San Francisco-Oakland Bay Bridge project allows access to the sites.

The following is a brief overview of the Petroleum Program's cleanup activities:

- ✓ Over 13,000 linear feet of fuel distribution pipeline have been removed
- ✓ Over 750 linear feet of fuel distribution pipeline has been closed in place
- ✓ Over 50,000 tons of petroleum-contaminated soil have been excavated and replaced with clean fill
- ✓ 55 UST Closures for known, leaking and non-leaking tanks
- ✓ 11 UST Closures for suspected tanks (may have existed, but were removed or previously abandoned)
- ✓ 16 UST Closures for previously-suspected tanks (once thought to have existed, but after research and investigation, it is now believed to have never existed)
- ✓ 11 Fuel Pipeline Site Closures

SITE DESCRIPTIONS PETROLEUM SITES	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 4/19 **Hydraulic Training School / Refuse Transfer Area** Housed 15, 55-gallon drums of waste oil and fenced area used for the transfer, holding, and disposal of refuse for approximately 35 years	**Petroleum, oil, and lubricants**	**Site Closed** NFA concurrence received December 17, 2003
Site 14/22 **New Fuel Farm / Navy Exchange Service Station** Primary storage and distribution area for fuels for more than 50 years	**Petroleum, oil, lubricants, and VOCs**	**Site Closed** NFA concurrence received July 18, 2005
Site 15 **Old Fuel Farm** Original fuel storage and distribution facility, much of which was moved to New Fuel Farm by 1945	**Petroleum, oil, and lubricants**	**Site Closed** NFA concurrence received September 28, 2004

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SITE DESCRIPTIONS PETROLEUM SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
Site 16 **Clipper Cove Tank Farm** Area stored aviation gasoline and automotive diesel for more than 20 years	**Petroleum, oil, and lubricants**	**Site Closed** NFA concurrence received June 17, 2004
Site 20 **Auto Hobby Shop / Transportation Center** Area has been used for steam cleaning and degreasing vehicles and for storage of hydraulic fluids and recycled oil	**Petroleum, oil, lubricants, and VOCs**	**Site Closed** NFA concurrence received June 17, 2004
Site 23 **YBI Pipeline Break** The pipeline carried oil from the fueling pier to storage tank 117 located on top of YBI	**Oil**	**Site Closed** NFA recommended in PA/SI Report
Site 25 **Seaplane Maintenance Area** Three areas used for storing and maintaining vehicles and seaplanes	**Petroleum, oil, and lubricants**	Requested site closure on March 7, 2011; awaiting Water Board concurrence
Pipeline Sites Inactive fuel lines	**Petroleum**	NFA concurrence letter for selected pipeline sites received from Water Board. YF3 awaits completion of Caltrans activities
UST Sites **Underground Storage Tanks** Formerly known as Site 26	**Petroleum**	Various NFA concurrence and closure letters for selected USTs received from Water Board

Notes:

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
DDT Dichlorodiphenyltrichloroethane
ESD Explanation of Significant Differences
FS Feasibility Study
LUC Land Use Control
NFA No Further Action
NTCRA Non-Time-Critical Removal Action
PA Preliminary Assessment
PAH Polycyclic Aromatic Hydrocarbons
PCB Polychlorinated Biphenyls
PP Proposed Plan
RAP Remedial Action Plan
RI Remedial Investigation
ROD Record of Decision
SI Site Investigation
SVOC Semi-Volatile Organic Compounds
SWDA Solid Waste Disposal Area
TPH Total Petroleum Hydrocarbons
UST Underground Storage Tank
VOC Volatile Organic Compounds
YBI Yerba Buena Island

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Site Map
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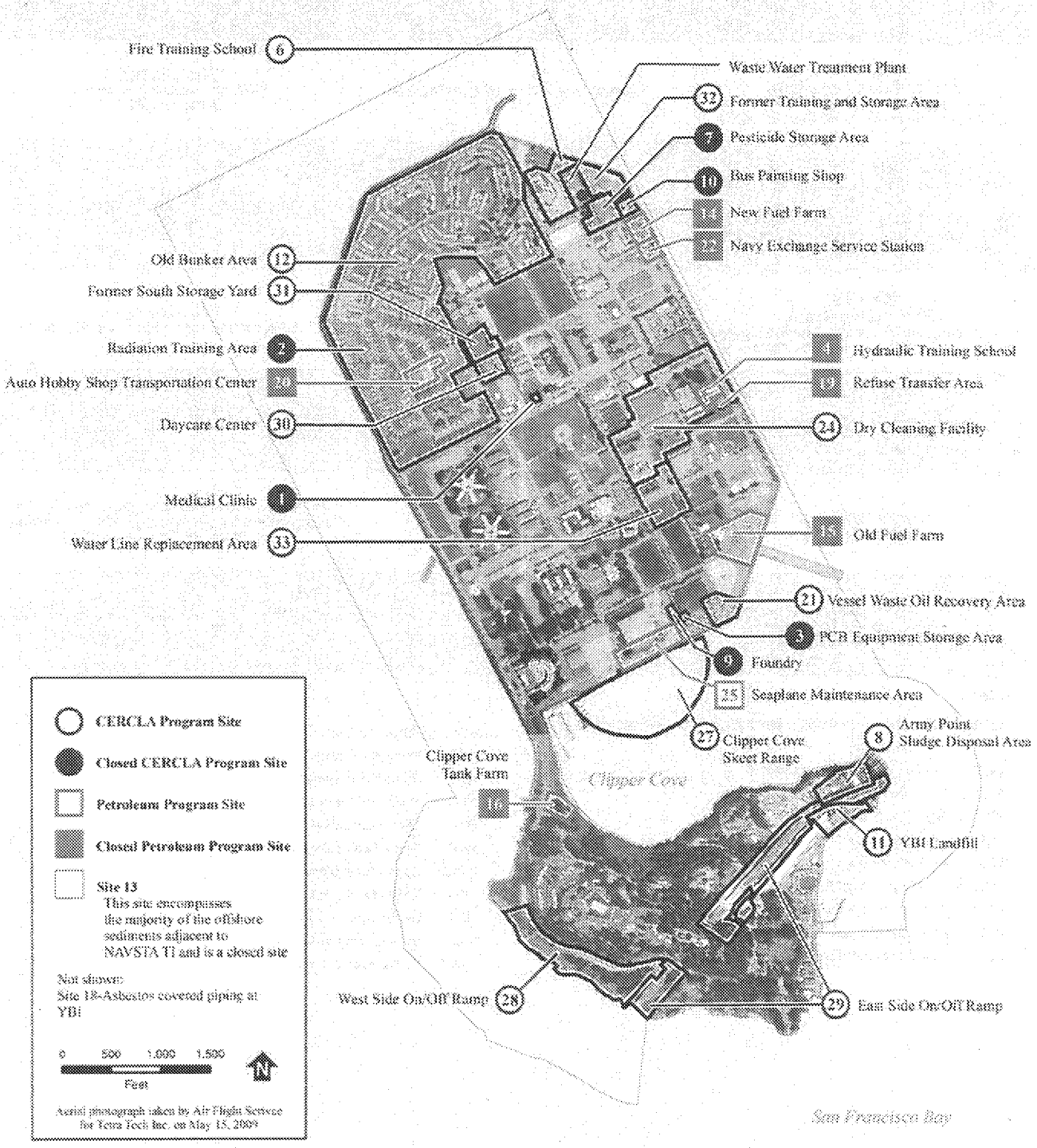

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Community Involvement
Former Naval Station Treasure Island

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The Navy believes it is important to make sure the local community receives the information needed to provide input to the environmental program at NAVSTA TI. A brief summary of the Navy's community involvement activities is presented below.

RESTORATION ADVISORY BOARD

The NAVSTA TI Restoration Advisory Board (RAB) was created in July 1994. Originally NAVSTA TI had a technical review committee that consisted of the Navy and federal and state regulatory agencies. That technical review committee was converted to the RAB, and members of the community were invited to apply for membership. The RAB was established to allow community members of TI, YBI, and the larger San Francisco area to have input into the investigation and cleanup process. The RAB provides a forum that enables community members, the military, and regulatory agencies to work together to openly discuss and exchange information about the Navy's environmental cleanup activities. RAB members meet regularly to review technical documents and discuss activities related to the Environmental Cleanup Program.

JOIN THE RAB

The RAB is an advisory body and members do not make decisions about the cleanup process. However, the concerns and comments expressed through the RAB are carefully considered by the Navy and regulators and help to frame a sound cleanup approach. It is a great opportunity to find out what is going on and to have your voice heard. Meetings are held regularly from 7:00 p.m. to 8:30 p.m. on Treasure Island, and are open to everyone. Check the website for the next meeting date.

RAB FACTS:

***Number of years the RAB has been running*: Over 17 years, beginning July 1994**

***Number of RAB meetings*: 156 as of October 2011**

NEWSLETTER

The Navy publishes a semiannual newsletter, the *Island Times*, to provide up-to-date information on investigation and cleanup activities at TI and YBI. Copies of the newsletter can be found on the Navy's NAVSTA TI website. The Navy has published 17 newsletters from summer 2001 through summer 2011.

MAILING LIST

The NAVSTA TI mailing list has over 1,100 names, including residents or TI and YBI, businesses on TI, elected officials, community groups, and media contacts. In addition, the Navy maintains an email list. Contact the Navy to be added to either or both lists.

WEBSITE

www.bracpmo.navy.mil

The website contains information such as fact sheets; notices; newsletters; documents; information on the RAB including applications and meeting minutes, and a general history of the base.

COMMUNITY RELATIONS PLAN

The Navy maintains a Community Relations Plan for NAVSTA TI that outlines all public involvement regulatory requirements for the IR Program. It can be found in the information repositories, listed on page 9. The Community Relations Plan includes the following information:

- Describes the TI/YBI community as well as the San Francisco community,
- Highlights past community outreach conducted at NAVSTA TI, and
- Identifies the current level of community interest or concern about environmental issues at NAVSTA TI, and outlines planned public participation activities.

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Important Contacts
Former Naval Station Treasure Island

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If you would like more information on the Naval Station Treasure Island (NAVSTA TI) Installation Restoration (IR) Program or the Restoration Advisory Board (RAB), or if you would like to be added to our mailing list, please contact:

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david.j.clark2@navy.mil

Partners In The Cleanup

The Base Realignment and Closure (BRAC) Cleanup Team (BCT) is comprised of the Department of the Navy, U.S. Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (Water Board). The primary goals of the BCT are to protect human health and the environment, coordinate environmental investigations, and expedite the environmental cleanup at NAVSTA TI.

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Information Repository and Administrative Record

Two local Information Repositories have been established to facilitate community access to key technical documents. The repositories contain program-related documents, including technical reports, fact sheets, newsletters, RAB meeting minutes, the 2008 Community Relations Plan Update and an annotated index.

The administrative record contains all information that has been or will be used to make cleanup decisions and includes comments by the public and regulatory agencies, as well as Navy responses. The documents are available for public review at the Information Repositories and the Administrative Records Office located at:

Department of the Navy,
Navy BRAC PMO Office
1 Avenue of the Palms,
Building 1, Room 161,
Treasure Island,
San Francisco, California
Phone: (415) 743-4729
Monday - Friday: 9:30 a.m. to 4:30 p.m.

San Francisco Public Library
5th Floor, Government Publications
100 Larkin Street, San Francisco,
California
Phone: (415) 557-4400 Call for Hours

Ms. Diane Silva
CERCLA Administrative
Records Coordinator
Administrative Records Office,
Code: ENV.DS
Naval Facilities Engineering Command,
Southwest Division
1220 Pacific Highway,
San Diego, California 92132
Phone: (619) 532-3676
Monday - Friday: 7:30 a.m. to 3:30 p.m.

Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710
Phone: (510) 540-3800
Call for appointment

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