



Environmental Cleanup Program Former Naval Station Treasure Island Fact Sheet

November 2011

www.bracpmo.navy.mil

Volume 6

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 a portion of Yerba Buena Island (YBI), which is about 147 acres. There is also a Coast Guard Station on YBI. TI is a man-made island constructed of materials dredged from the Bay, and YBI is a natural island. TI was built in 1936/1937 and was used initially for the Golden Gate International Exposition in 1939. The City of San Francisco leased TI to the Department of the Navy (Navy) in 1941, and the Navy gained title to TI 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 NAVSTA TI

with relocation of the Naval Reserve Center and the Naval Technical Training Center.

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

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 Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (Water Board). The FFSRA establishes the Navy's and the State's roles and responsibilities and sets a cleanup schedule for each IR site. The cleanup schedule is updated annually in the Site Management Plan.

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).

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 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. Eleven sites have been closed, and the remaining 12 CERCLA sites are continuing through the remedial action process. **see diagram of CERCLA process on page 3*

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

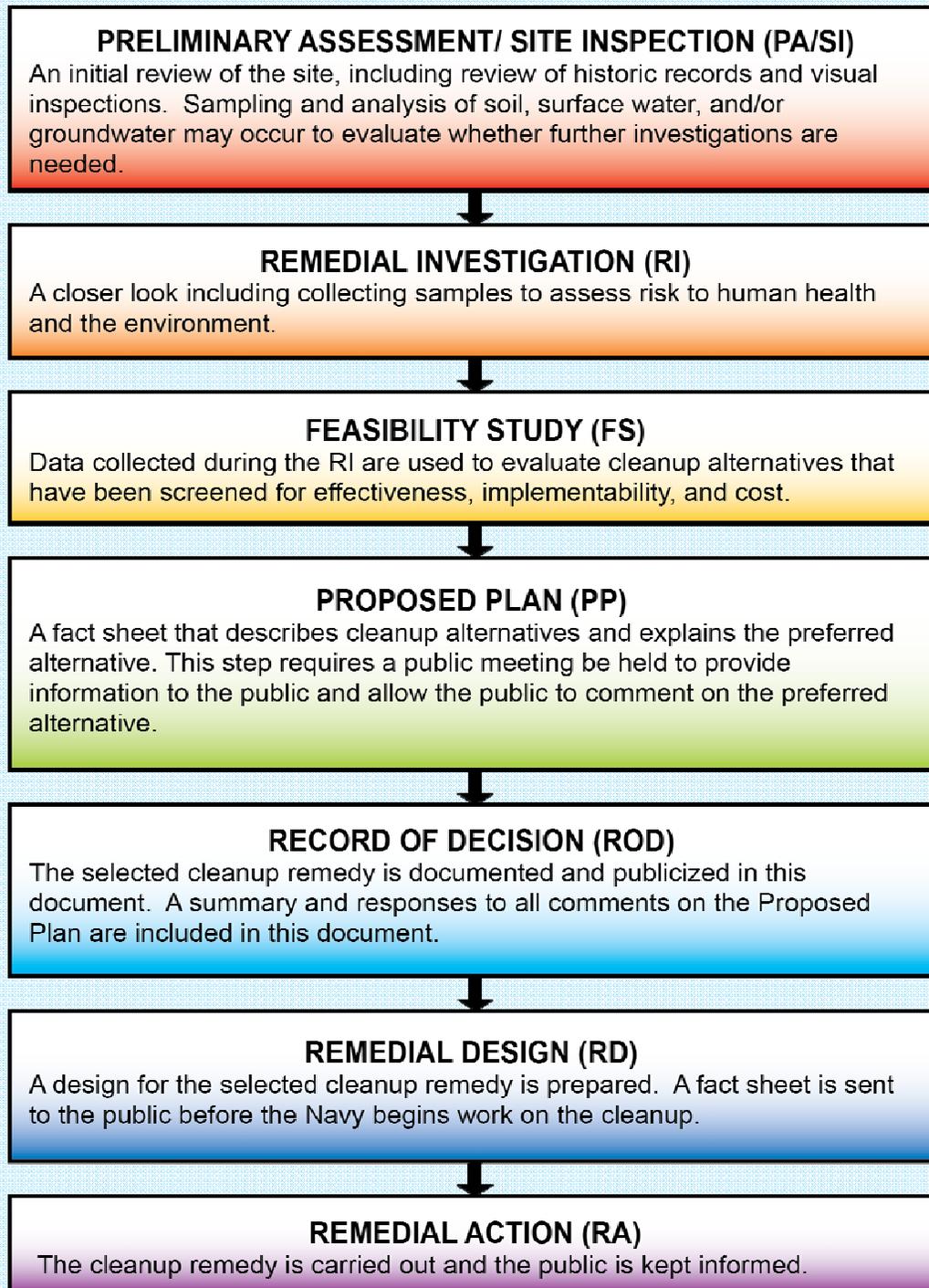
(continued on page 4)



CERCLA Cleanup Steps Former Naval Station Treasure Island

www.bracpmo.navy.mil

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.





Site Description Table Former Naval Station Treasure Island

www.bracpmo.navy.mil

(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



Site Description Table Former Naval Station Treasure Island

www.bracpmo.navy.mil

SITE DESCRIPTIONS CERCLA SITES (continued)	CONTAMINANTS OF POTENTIAL CONCERN	CURRENT SITE STATUS
<p>Site 10 Bus Painting Shop Shop used for bus painting, paint mixing, storage of pest control solutions</p>	<p>Iron and PAHs</p>	<p>Site Closed No Action ROD signed October 2, 2007</p>
<p>Site 11 YBI Landfill Area was used as a landfill for various debris</p>	<p>TPH, PAHs, VOCs, and metals</p>	<p>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</p>
<p>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</p>	<p>PCBs, PAHs, dioxins, TPH, metals, radium-226, and debris</p>	<p>NTCRA in SWDAs is in progress. NTCRA Work Plan for Bigelow Court is being prepared. Draft RI Report was issued summer 2011</p>
<p>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</p>	<p>Metals, PAHs, PCBs, DDT, and TPH</p>	<p>Site Closed No Action ROD signed April 7, 2005</p>
<p>Site 17 Tanks 103 / 104 Two 200,000-gallon aboveground storage tanks contained diesel</p>	<p>Petroleum, oil, and lubricants</p>	<p>Site Closed CERCLA constituents merged into Site 24 and petroleum retained in the Petroleum Program by letter dated January 17, 2001</p>
<p>Site 18 Asbestos-Covered Piping at YBI Abandoned steam piping was exposed due to a landslide in the early 1980's</p>	<p>Asbestos</p>	<p>Site Closed NFA recommended in PA/SI report</p>
<p>Site 21 Vessel Waste Oil Recovery Area Area was used an oil/water separator facility and for aircraft maintenance</p>	<p>VOCs and TPH</p>	<p>Groundwater treatability study is complete. Groundwater monitoring continues. Soil gas investigation is underway. PP issued October 2011</p>
<p>Site 24 Dry Cleaning Facility Area was used as a laundry and dry cleaning facility for at least 35 years</p>	<p>Petroleum, oil, lubricants, and chlorinated solvents</p>	<p>Expanded treatability study (in situ bioremediation) is in progress. Preliminary soil gas investigation is underway</p>
<p>Site 27 Clipper Cove Skeet Range Skeet range was operated for 10 years from 1979 to 1989</p>	<p>Lead shot, lead, and PAHs</p>	<p>PP was issued in June 2011. A ROD/RAP is being prepared</p>
<p>Site 28 West Side On / Off Ramps Maintenance of ramps included use of lead based paint</p>	<p>Lead</p>	<p>Site Closed NFA ROD was signed November 22, 2010</p>
<p>Site 29 East Side On / Off Ramps Maintenance of ramps included use of lead based paint</p>	<p>Lead and SVOCs</p>	<p>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.</p>
<p>Site 30 Daycare Center Area was undeveloped until 1985 when daycare facility was constructed. Burned debris was possibly used to backfill utility trenches.</p>	<p>Dioxins and metals</p>	<p>ROD signed August 5, 2009. LUC inspection and reporting is ongoing</p>



Site Description Table Former Naval Station Treasure Island

www.bracpmo.navy.mil

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

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
<p>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</p>	<p>Petroleum, oil, and lubricants</p>	<p>Site Closed NFA concurrence received December 17, 2003</p>
<p>Site 14/22 New Fuel Farm / Navy Exchange Service Station Primary storage and distribution area for fuels for more than 50 years</p>	<p>Petroleum, oil, lubricants, and VOCs</p>	<p>Site Closed NFA concurrence received July 18, 2005</p>
<p>Site 15 Old Fuel Farm Original fuel storage and distribution facility, much of which was moved to New Fuel Farm by 1945</p>	<p>Petroleum, oil, and lubricants</p>	<p>Site Closed NFA concurrence received September 28, 2004</p>



Site Description Table Former Naval Station Treasure Island

www.bracpmo.navy.mil

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

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



Site Map Former Naval Station Treasure Island

www.bracpmo.navy.mil





Community Involvement Former Naval Station Treasure Island

www.bracpmo.navy.mil

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 of 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.



Important Contacts Former Naval Station Treasure Island

www.bracpmo.navy.mil

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:

Mr. James B. Sullivan

Navy BRAC Environmental Coordinator
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310
(619) 532-0966
james.b.sullivan2@navy.mil

Mr. David Clark

Navy Lead Remedial Project Manager
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310
(619) 532-0973
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.

Ms. Remedios Sunga

Project Manager
California EPA Department
of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
(510) 540-3840
rsunga@dtsc.ca.gov

Ms. Myriam Zech

Project Manager
California EPA Regional
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-5684
mzech@waterboards.ca.gov

Ms. Melinda Dragone

Project Manager
U.S. EPA
75 Hawthorne St,
SFD-8-3
San Francisco, CA 94105
(415) 947-4184
garvey.melinda@epa.gov

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

NAVSTA TI MAILING COUPON

If you would like to be added to the TI/YBI mailing list and receive copies of future newsletters and fact sheets, please fill out the coupon below and mail it to:

James B. Sullivan
Navy BRAC Program Management Office West
1 Avenue of the Palms
Building 1, Room 161
Treasure Island, San Francisco, CA 94130-1807

Name _____

Address _____

City _____ State _____ Zip _____

E-mail Address _____

ADD MY NAME TO THE MAILING LIST

DELETE MY NAME FROM THE MAILING LIST



James B. Sullivan
Navy BRAC Program Management Office West
1 Avenue of the Palms
Building 1, Room 161
Treasure Island
San Francisco, CA 94130-1807