Revised Draft

FINDING OF SUITABILITY TO TRANSFER FOR PROPERTY ON TREASURE ISLAND

Naval Station Treasure Island
San Francisco, California

July 11, 2005

Prepared for:
Base Realignment and Closure
Program Management Office West
San Diego, California

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Contract Number N68711-03-D-5104
Contract Task Order 034
Revised Draft

FINDING OF SUITABILITY TO TRANSFER FOR PROPERTY ON
TREASURE ISLAND
Naval Station Treasure Island
San Francisco, California

Contract Task Order 034
DS.B034.14211

PREPARED FOR:

DEPARTMENT OF THE NAVY

REVIEW AND APPROVAL

Project Manager: [Signature]
Dennis Kelly, SulTech

Date: July 11, 2005
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## ACRONYMS AND ABBREVIATIONS

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<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tr>
<td>µg/cm²</td>
<td>Micrograms per square centimeter</td>
</tr>
<tr>
<td>ACM</td>
<td>Asbestos-containing material</td>
</tr>
<tr>
<td>AST</td>
<td>Aboveground storage tank</td>
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<tr>
<td>ATG</td>
<td>Allied Technology Group, Inc.</td>
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<tr>
<td>BCT</td>
<td>Base Realignment and Closure Cleanup Team</td>
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<tr>
<td>bgs</td>
<td>Below ground surface</td>
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<td>Base Realignment and Closure</td>
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<td>Base Realignment and Closure Program Management Office West</td>
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<td>California Environmental Protection Agency</td>
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<td>CAP</td>
<td>Corrective action plan</td>
</tr>
<tr>
<td>CCR</td>
<td>California Code of Regulations</td>
</tr>
<tr>
<td>CCSF</td>
<td>City and County of San Francisco</td>
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<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>DoD</td>
<td>U.S. Department of Defense</td>
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<td>DTSC</td>
<td>California Department of Toxic Substances Control</td>
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<td>EBS</td>
<td>Environmental baseline survey</td>
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<td>ECP</td>
<td>Environmental-condition-of-property</td>
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<td>EFA WEST</td>
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<td>Friable, accessible, and damaged</td>
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<td>Federal Facility Site Remediation Agreement</td>
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<td>FOST</td>
<td>Finding of suitability to transfer</td>
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<td>FS</td>
<td>Feasibility study</td>
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<td>Installation Restoration Program</td>
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<td>LBP</td>
<td>Lead-based paint</td>
</tr>
<tr>
<td>mg/kg</td>
<td>Milligrams per kilogram</td>
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<td>MINS</td>
<td>Mare Island Naval Shipyard</td>
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<td>ACRONYMS AND ABBREVIATIONS (Continued)</td>
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<td>U.S. Department of the Navy</td>
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<tr>
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<td>No further action</td>
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<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<tr>
<td>OWS</td>
<td>Oil-water separator</td>
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<tr>
<td>PAH</td>
<td>Polycyclic aromatic hydrocarbon</td>
</tr>
<tr>
<td>PCB</td>
<td>Polychlorinated biphenyl</td>
</tr>
<tr>
<td>pCi/L</td>
<td>Picocurie per liter of air</td>
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<td>PMO</td>
<td>Program Management Office</td>
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<tr>
<td>ppm</td>
<td>Part per million</td>
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<td>PRC</td>
<td>PRC Environmental Management, Inc.</td>
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<td>PUC</td>
<td>San Francisco Public Utilities Commission</td>
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<td>Navy Public Works Center</td>
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<tr>
<td>Radian</td>
<td>Radian International LLC</td>
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<td>RASO</td>
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<tr>
<td>RCRA</td>
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<td>Remedial investigation</td>
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<td>Spill prevention control and countermeasures</td>
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<td>SULLIVAN</td>
<td>Sullivan Consulting Group</td>
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<td>SWDIV</td>
<td>U.S. Department of the Navy, Naval Facilities Engineering Command, Southwest Division</td>
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<td>Tetra Tech</td>
<td>Tetra Tech EM Inc.</td>
</tr>
<tr>
<td>TI</td>
<td>Treasure Island</td>
</tr>
<tr>
<td>TIDA</td>
<td>Treasure Island Development Authority</td>
</tr>
<tr>
<td>TPH</td>
<td>Total petroleum hydrocarbon</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>U&amp;A</td>
<td>Uribe and Associates</td>
</tr>
<tr>
<td>USC</td>
<td>United States Code</td>
</tr>
<tr>
<td>USFWS</td>
<td>U.S. Fish and Wildlife Service</td>
</tr>
<tr>
<td>UST</td>
<td>Underground storage tank</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile organic compound</td>
</tr>
<tr>
<td>Water Board</td>
<td>San Francisco Bay Regional Water Quality Control Board</td>
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<tr>
<td>WESTDIV</td>
<td>Naval Facilities Engineering Command, Western Division</td>
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<td>YBI</td>
<td>Yerba Buena Island</td>
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1.0 PURPOSE

The purpose of this finding of suitability to transfer (FOST) is to document certain parcels of real property comprising part of Naval Station Treasure Island (NAVSTA TI) are environmentally suitable for transfer by deed under Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in a manner that is protective of human health and the environment. This FOST has been prepared in compliance with U.S. Department of Defense (DoD) guidance for the environmental review process to reach a FOST (DoD 1994a).

This document was prepared under the Indefinite Quantity Contract for Architectural-Engineering Services to Provide CERCLA/RCRA/UST Studies No. N68711-03-D-5104, Contract Task Order 034. Under this contract, SulTech (a joint venture of Sullivan Consulting Group [SULLIVAN] and Tetra Tech EM Inc. [Tetra Tech]) provides technical support to the U.S. Department of the Navy, Base Realignment and Closure (BRAC) Program Management Office (PMO) West (BRAC PMO West) for the former NAVSTA TI in San Francisco, California.

1.1 INTRODUCTION

NAVSTA TI was included on the 1993 BRAC III list for closure, and was operationally closed in 1997. NAVSTA TI is located in the San Francisco Bay (Figure 1), at mid-span of the San Francisco-Oakland Bay Bridge. NAVSTA TI property to be disposed of consists of 366 acres of dry land on Treasure Island (TI), an artificial island; and approximately 547 acres of surrounding submerged lands. This FOST covers approximately 173 acres of dry land on TI, identified as transfer parcels on Figure 2. The FOST transfer parcels are referred to hereinafter as “FOST areas.”

The only ongoing environmental issues within the FOST areas are petroleum and polychlorinated biphenyl (PCB) contamination in groundwater and soil. Under CERCLA, the federal government must warrant all remedial action necessary to protect human health and the environment have been completed with respect to CERCLA hazardous substances prior to transfer of properties by deed. The definition of CERCLA hazardous substances does not include petroleum products or derivatives, and as a result, the remediation and regulatory closeout of petroleum-contaminated sites can be conducted in parallel with and subsequent to property transfer. Similarly while PCBs are considered a CERCLA hazardous substance, the existing PCB spill sites within the FOST parcels will be addressed pursuant to Toxic Substances Control Act (TSCA). To expedite property transfer and redevelopment activities, the FOST areas will be transferred before the corrective actions for petroleum and PCB contamination and regulatory closures are completed. This FOST addresses potential human health and environmental risks that may exist from exposure to petroleum contamination and PCBs at the FOST areas (1) under current conditions and (2) while the PCB and petroleum corrective action is ongoing.

A release of hazardous substances did occur within the FOST areas. CERCLA hazardous substances were detected at levels that did not require a response action. Conveyance conditions and notifications necessary to prevent risk to human health or the environment are presented in Section 8.0.
1.2 ORGANIZATION OF THE FINDING OF SUITABILITY TO TRANSFER

The FOST report is organized into the following sections:

- **Section 1.0, Purpose:** Discusses the purpose of the FOST, the organization of the FOST report and the sources of information analyzed.

- **Section 2.0, Property Description:** Discusses the geographic extent of the FOST areas.

- **Section 3.0, Regulatory Coordination:** Discusses the regulatory history of the FOST areas.

- **Section 4.0, National Environmental Policy Act Considerations:** Discusses the disposal and reuse of the FOST areas with regard to requirements of the National Environmental Policy Act (NEPA) of 1969.

- **Section 5.0, Environmental-Condition-of-Property Area Type:** Classifies the FOST areas into environmental-condition-of-property (ECP) area types.

- **Section 6.0, Environmental Factors:** Discusses environmental factors, resources, and conditions that require deed notification or restrictions, and those that do not require deed notification or restrictions.

- **Section 7.0, Proposed Reuse:** Describes the reuse plan for the FOST areas that was identified by the Navy in the “Final Environmental Impact Statement” (Navy 2003m) and reviewed during the preparation of this FOST.

- **Section 8.0, Conveyance Conditions and Notifications:** Describes the notices and restrictions for transfer of FOST areas.

- **Section 9.0, Finding of Suitability to Transfer:** Presents the signed statement that the identified FOST areas are suitable for transfer.

1.3 DOCUMENTS REVIEWED AND REFERENCED

This FOST is based on a comprehensive review of information contained in the following documents, presented in chronological order:


• California Department of Fish and Game. 1992f. “Fish, Shrimp and Crab Catch Data Collected in Delta Outflow, San Francisco Study.” Prepared by K. Hieb, Bay Delta Special Water Projects Division, California Department of Fish and Game. December.


• DoD. 1994c. “Procedures to Determine Environmental Suitability for Leasing Property Available as a Result of a Base Closure or Realignment.”

• DoD. 1994d. “Asbestos, Lead-Based Paint (LBP), and Radon Policies at Base Realignment and Closure Cleanup (BRAC) Properties.”


• PWC. 1995c. “PWCFB Inventory List #2 of 19 Switches and 171 Transformers of Primary High Voltage Electrical Distribution System. List of Oil Filled Electrical Equipment for NAVSTA TI.” May 1.
• Base Realignment and Closure Cleanup Team (BCT). 1995d. “NAVSTA TI Remedial Project Managers (RPM) and BCT Meeting Minutes.” May 1.


• Subsurface Consultants, Inc. 1995i. “Geotechnical Investigation Closure of Inactive Fuel Pipelines NAVSTA TI.” June 20.

• ERM-West. 1995j. “Parcel-Specific EBS for Parcels T005 and T006 at NAVSTA TI.” August 3.

• Mare Island Naval Shipyard (MINS). 1995k. “Final Asbestos Survey Report, NAVSTA TI.” December.

• DoD. 1996a. “Fast Track Cleanup at Closing Installations.”


• PRC. 1996c. “Phase II ERA Final Work Plan and Field Sampling Plan, NAVSTA TI.” April 1.


• ERM-West. 1996i. “Site-Specific EBS - Parcels T007, T008, T010, T014 and T116 at NAVSTA TI.” June 21.


• DoD. 1996m. BRAC Cleanup Plan Guidebook. Fall 1996.


• PRC and Gaia. 1996o. “Site-Specific EBS for Parcels T081, T082, T083, T109, T110, and T111 to Support the Lease of the Proposed Police Training Academy at NAVSTA TI, California.” December 18.


• U.S. Department of Housing and Urban Development. 1997b. “Guidelines for the Evaluation and Control of Lead-Based Paint (LBP) Hazards in Housing.”


Tetra Tech EM Inc. (Tetra Tech) and U&A. 1997o. “Final Site-Specific EBS for Reuse Zone 3, NAVSTA TI, San Francisco, California.” September.


• Radian. 1998m. “Addendum to the Storm Water Pollution Prevention Plan.” October 29.


• Tetra Tech and U&A. 1998o. “Final Site-Specific EBS Reuse Zone 4, NAVSTA TI, San Francisco, California.” November.


• BCT. 1998q. “Meeting Minutes, RI and Feasibility Study (FS), Remedial Project Managers (RPM) and BCT, November 2, 1998.” November.

• AGS, Inc. 1998r. “Draft Final RI Report for USTs 29 and 143 at NAVSTA TI.” December.


• Tetra Tech and U&A. 1999b. “Final Site-Specific EBS Reuse Zone 5, NAVSTA TI, San Francisco, California.” March.


• SSPORTS. 1999g. “Asbestos Remediation Report for Residential Housing Units at TI and YBI.” August.


• Tetra Tech. 2001e. “Final Action Memorandum, Site 1.” June 12.


• Tetra Tech. 2001h. “Supplemental Site Installation Restoration (IR) Site 01, Former Medical Clinic, Final.” October 24.


• DTSC. 2002e. Letter Regarding Approval of No Further Action (NFA) for Site 1 (Former Medical Clinic in Building 257), NAVSTA TI, San Francisco, California. From Anthony J. Landis, P.E., Chief, Northern California Operations, Office of Military Facilities. To Mr. Scott D. Anderson, RPM, BRAC PMO West. March 20.


• BCT. 2002h. “NAVSTA TI RPM and BCT Meeting Minutes.” May 7.


• BCT.  2003a. “NAVSTA TI RPM and BCT Meeting Minutes, January 7.”


• Tetra Tech.  2003g. “Final Sampling and Analysis Plan, EBS Data Gaps Investigation.” April.


• Water Board.  2004c.  Letter Regarding Case Closure Letter for DoD USTs at NAVSTA TI including: UST 201 and UST 270.  From Bruce H. Wolfe, Executive Officer, Water Board.  To Ellen Casados, RPM, SWDIV.  February 10.


• Sullivan Consulting Group (SULLIVAN) and Tetra Tech.  2004i.  “Final Sampling and Analysis Plan PCB Sampling and Analysis Plan.”  May 1.


• Tetra Tech.  2004o.  Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI.  Interview with La Rae Landers, BRAC PMO West, Lead RPM, NAVSTA TI.  Conducted by Campbell Merrifield, Tetra Tech.  June 25.


• Tetra Tech.  2004r.  Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI.  Interview with Michael Mentink, Treasure Island Caretaker’s Site Office.  Conducted by Patrick Callahan, Tetra Tech.  August 9.


• Water Board.  2004v.  Letter Regarding Concurrence on Request for NFA, Site 15, NAVSTA TI, San Francisco.  From Alan D. Friedman, Water Resource Control Engineer.  To Ellen Casados, RPM, SWDIV.  September [date illegible].


• Tetra Tech. 2004y. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Scott Anderson, U.S. Department of the Navy, Southwest Division Naval Facilities BRAC PMO West, RPM, NAVSTA TI. Conducted by Campbell Merrifield, Tetra Tech. September 14.

• Tetra Tech. 2004z. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with James Sullivan, BRAC PMO West, BRAC Environmental Coordinator, NAVSTA TI. Conducted by Campbell Merrifield, Tetra Tech. September 14.


• Tetra Tech. 2004cc. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Virginia St. Jean, San Francisco Certified Unified Program Agency Representative, NAVSTA TI, Conducted by Campbell Merrifield, Tetra Tech. September 30.

• Tetra Tech. 2004dd. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Steve Chan, Job Corps. Conducted by Campbell Merrifield, Tetra Tech. October 1.

• Tetra Tech. 2004ee. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Reginald Hairston, John Stewart Company. Conducted by Campbell Merrifield, Tetra Tech. October 1.

• Tetra Tech. 2004ff. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Sherry Williams, Treasure Island Homeless Development Initiative. Conducted by Campbell Merrifield, Tetra Tech. October 1.

• Tetra Tech. 2004gg. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Mark McDonald, TIDA, Environmental Affairs. Conducted by Campbell Merrifield, Tetra Tech. October 4.


• Tetra Tech. 2004jj. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Steven Edde, ITSI. Conducted by Campbell Merrifield, Tetra Tech. October 17.


• BCT. 2004ll. NAVSTA TI RPM and BCT Meeting Minutes, and Attachment 5: Lead-Based Paint in Soil at Residential and Non-Residential Buildings; NAVSTA TI. November 2.

• SulTech. 2004mm. Personal Communication Regarding Known or Suspected Releases of Petroleum Products or Hazardous Substances on NAVSTA TI. Interview with Charles Smith, Caltrans. Conducted by Campbell Merrifield, Tetra Tech. November 30.


• Navy. 2005d. Letter Regarding Results of Historical Radiological Assessment for the FOST Areas, Former NAVSTA TI. From Jim Whitcomb, RPM for NAVSTA TI. To NAVSTA TI BCT. March 1.


• Navy. 2005i. Letter Regarding Site 30/31 Boundary Redesignations. From La Rae Landers, Lead RPM, NAVSTA TI. To BCT. April 4.
2.0 PROPERTY DESCRIPTION

NAVSTA TI is located in the San Francisco Bay (Figure 1), at mid-span of the San Francisco-Oakland Bay Bridge. The property available for transfer under this FOST consists of three noncontiguous areas on TI, labeled for the purposes of this property transfer as TI Southwest Transfer Parcels A and B, TI Southeast Transfer Parcel, and TI Core Transfer Parcel, as shown on Figure 2. These areas are referred to herein as “FOST areas.”

The TI Southwest Transfer parcel, originally a single parcel, has been split into two parcels, A and B, and encompasses a total of 71.79 acres. TI Southwest Transfer parcel A includes portions or all of the following EBS parcels: T001 through T003, T006, T023 through T028. TI Southwest Transfer parcel B includes portions or all of the following EBS parcels: T029, T030, T033 through T035, T037 through T039, and T118 (Pier 23). The TI Southwest Transfer Parcels A and B are referred to collectively hereinafter as the TI Southwest Transfer Parcel. The southern part of the parcel has been used as an entrance thoroughfare for NAVSTA TI from 1943 to the present. The southern shoreline has been used primarily for reserve training. The northwestern area of the parcel was used for exposition halls, barracks, a dispensary, retail shops, fire station storage, tennis and basketball courts, and open space. The northern area of the parcel was used for open space, 1939 World’s Fair parking and storage structures, barracks, transformer housing, and offices.

The TI Southeast Transfer parcel encompasses 17.39 acres and includes portions or all of the following EBS parcels: T010, T015 through T018, and T119. Historically, the parcel was used for fuel storage, fuel dispensing, vehicle and equipment storage, and open space and parking.
The TI Core Transfer parcel encompasses 83.64 acres and includes portions or all of the following EBS parcels: T040 through T042, T048, T049, T051 through T056, T059, T061 through T064, T068, T070 through T074, T076 through T093, T106, and T120. Historically, the parcel has been used for a laboratory and radio school, classrooms, and barracks. This parcel has also been used for entertainment facilities, including a movie theater, sports courts, a bowling alley, a skating rink, an indoor swimming pool, an amusement center, and a baseball field.

The FOST areas comprise approximately 172.82 acres, and 57 buildings are present within the FOST areas. Former and projected future land uses of individual buildings within EBS parcels are discussed in the supplemental EBS (SulTech 2005g), which summarizes the status of the buildings on each parcel. Utilities in the FOST areas include sanitary sewer lines; storm drain lines; and electric, water, and natural gas lines.

3.0 REGULATORY COORDINATION

NAVSTA TI is not on the U.S. Environmental Protection Agency’s (EPA) National Priorities List, and therefore it is not subject to a federal facility agreement. A similar agreement, called a Federal Facility Site Remediation Agreement (FFSRA), was executed between the Navy and the California Environmental Protection Agency (Cal EPA) including the Cal EPA Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (Water Board) on September 29, 1992 (DTSC 1992e). This legal agreement defines the Navy’s obligations for corrective action and response action under the Resource Conservation and Recovery Act (RCRA) and CERCLA for 33 sites identified in the Navy’s Installation Restoration Program (IRP) at NAVSTA TI. Since 1993, the BRAC Cleanup Team (BCT) has coordinated environmental cleanup and closure activities at NAVSTA TI, as well as the preparation of the basewide EBS and supplemental EBS. The BCT consists of representatives from the Navy, EPA Region 9, the Water Board, and DTSC.

Figure 3 shows the current investigation sites at NAVSTA TI. No active CERCLA investigation sites are located within the FOST areas. Petroleum sites within the FOST areas are managed under the Petroleum Program and are described in Section 6.1.3.

In January 2003, the BCT was notified of the initiation of this FOST. A draft FOST was provided to the regulatory agencies for their review on August 22, 2003. During the review process, the regulatory agencies raised concerns and requested additional information on polychlorinated biphenyls (PCBs) in electrical equipment fluids, in the FOST areas. Independent of the PCB investigation, the Navy initiated additional investigations into historical activities at NAVSTA Ti involving the potential use of radiological material. The issuance of this FOST was delayed to conduct additional investigations of the potential for PCBs and complete the historical radiological assessment in the FOST areas. This revised draft FOST and the associated revised draft final supplemental EBS (SulTech 2005g) incorporates the results of those investigations.
4.0 NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATIONS

In accordance with the requirements of NEPA, the Navy prepared an environmental impact statement (EIS) to evaluate the proposed disposal and reuse of NAVSTA TI (Navy 2003m). A NEPA record of decision will be signed prior to transfer.

5.0 ENVIRONMENTAL-CONDITION-OF-PROPERTY AREA TYPE

Environmental conditions at NAVSTA TI with respect to the presence of hazardous substances and petroleum products have been characterized in numerous documents in the course of environmental management activities at the base. Section 1.3 lists these documents. Among the NAVSTA TI environmental documents, the findings of the 1995 basewide EBS report (ERM-West 1995e), as amended by the 2005 supplemental EBS (SulTech 2005g), assisted the Navy in identifying properties that are suitable for transfer.

The DoD BRAC Cleanup Plan Guidebook (DoD 1996m) provides guidelines on classifying base property into one of seven environmental-condition-of-property (ECP) area types to facilitate and support reuse and transfer. The ECP area type designation of a property reflects its suitability for transfer, with ECP Area Types 1 through 4 being suitable for transfer by deed. At NAVSTA TI, ECP area type designations are assigned to individual parcels of land known as EBS parcels. The 1995 basewide EBS (ERM-West 1995e) initially established the boundaries and numbering scheme for the NAVSTA TI EBS parcels. Since 1995, the original number of parcels has been modified to include submerged lands that will be disposed of by the Navy, and to eliminate parcels that originally were associated with piers that subsequently were demolished. Figure 2 shows the EBS parcel numbers and boundaries, along with their ECP area type designations, for TI.

The seven ECP area types, as defined in the BRAC Cleanup Plan Guidebook (DoD 1996m), are as follows:

- **Area Type 1.** Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- **Area Type 2.** Areas where only release or disposal of petroleum products has occurred.
- **Area Type 3.** Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- **Area Type 4.** Areas where release, disposal, and/or migration of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
• **Area Type 5.** Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken.

• **Area Type 6.** Areas where release, disposal, and/or migration of hazardous substances have occurred, but required actions have not yet been implemented.

• **Area Type 7.** Areas that are not evaluated or require additional evaluation.

All EBS parcels identified in this FOST are wholly or partially contained within the FOST areas and the portion of the EBS parcel in the FOST area have been classified as ECP Area Types 1, 2, 3, or 4 as discussed in the supplemental EBS (SulTech 2005g). The ECP area type for each EBS parcel is presented in Table 1 and shown on Figure 2.

### 6.0 ENVIRONMENTAL FACTORS

The documents listed in Section 1.3 were evaluated to identify environmental factors, conditions, and resources present in the FOST areas to be transferred that may warrant constraints. Section 6.1 discusses environmental factors and resources that require deed notifications or restrictions. Section 6.2 discusses environmental factors that do not constitute a threat to human health or the environment and, as a result, do not require deed restrictions or notifications.

#### 6.1 ENVIRONMENTAL FACTORS THAT WARRANT CONSTRAINTS AND/OR REQUIRE NOTIFICATION

The following subsections identify environmental factors that may warrant constraints or require notifications.

##### 6.1.1 Asbestos-Containing Material

Both EPA and the Occupational Safety and Health Administration regulate asbestos. Asbestos is identified in Section 112 of the Clean Air Act as a hazardous air pollutant (Title 42 of the *United States Code* [USC] Section 7412). In regulations adopted pursuant to the Clean Air Act, EPA has established standards for the renovation and demolition of asbestos-containing material (ACM) (Title 40 of the *Code of Federal Regulations* [CFR] Part 61). Protection measures for asbestos workers, such as permissible exposure levels and monitoring requirements, are set forth in the Occupational Safety and Health Act, 29 CFR Part 1910.1001.

DoD policy for ACM is to (1) manage ACM in a manner protective of human health and the environment and (2) comply with all applicable federal, state, and local laws and regulations governing hazards from ACM (DoD 1994d). Therefore, unless it is determined by competent authority that ACM at the property poses a threat to human health at the time of transfer, all property containing ACM will be conveyed, leased, or otherwise conveyed “as is” through the BRAC process.
ACM is abated before property transfer only if it is of a type and condition that is not in compliance with applicable laws, regulations, and standards, or if it poses a threat to human health at the time the property is transferred. This abatement may be accomplished by the active service organization, by the service disposal agent, or by the transferee under a negotiated requirement of the contract for sale or lease. The abatement discussed above will not be required when (1) the buildings are scheduled for demolition by the transferee, (2) the transfer document prohibits occupation of the buildings before demolition, and (3) the transferee assumes responsibility for the management of any ACM in accordance with applicable laws (DoD 1994d).

As a general matter, the Navy will perform asbestos surveys when a building, structure, or facility is scheduled for reuse or its status is unknown. The Navy is not required to conduct a survey in buildings that are designated for demolition. For buildings, structures, or facilities that will be reused, ACM will be abated before property disposal (or as a condition of transfer) only if it is of a type and condition that is not in compliance with applicable laws, regulations, and standards, or if it poses a threat to human health at the time of transfer of the property (that is, if it is friable, accessible, and damaged [FAD] ACM). This abatement will be performed by the Navy or by the transferee under a negotiated requirement of the property transfer. Occupancy or use of buildings, structures, or facilities with FAD ACM will be restricted until abatement has been completed.

Buildings, structures, or facilities that are to be demolished may be occupied on an interim basis only if the transferee conducts the necessary ACM surveys and abatements in accordance with all local, state and federal requirements. The transferee will assume responsibility for management of any ACM, including surveys, removal, and management of ACM before or during demolition, in accordance with applicable laws.

Table 2 provides available information collected from surveys on the existence, extent, and condition of ACM at buildings, structure, or facilities within the TI transfer parcels. The information presented in Table 2 identifies if asbestos is present in the building, and if it was identified as friable. The documents reviewed are either survey reports that identified the presence of asbestos or reported abatement activities undertaken at buildings where friable asbestos was identified. A more comprehensive discussion of ACM in buildings within the TI transfer parcel is provided in the supplemental EBS (SulTech 2005g).

FAD ACM was identified in 26 buildings in the FOST areas, and all such FAD ACM identified during the surveys has been abated (ATG 1998b, 1998d, 1998i; SSPORTS 1999h, Mendelian Construction Inc. 2002i). During the 2004 visual site inspections for the supplemental EBS, no FAD ACM was observed in buildings within the FOST areas. The deed will contain a notice identifying the restrictions pertaining to ACM remaining on the FOST areas.

In connection with its use and occupancy of the property, including, but not limited to (1) removal of ACM discovered during demolition or renovation of buildings, structures, or facilities and (2) demolition of any buildings, structures, or facilities containing or presumed to contain asbestos or ACM, the transferee shall manage the asbestos or ACM in accordance with all applicable federal, state, and local laws and other requirements relating to asbestos and ACM.
Notices and restrictions related to asbestos are identified in Sections 8.1.2 and 8.2.7.

### 6.1.2 Underground Storage Tanks

The Navy has investigated underground storage tanks (UST) in the FOST areas at NAVSTA TI. As USTs are closed and corrective actions completed, closure reports are prepared for the former USTs, and then submitted for review and regulatory closure or concurrence that no further action (NFA) is required (Tetra Tech 2003x, Shaw 2004t). For this FOST, reports of UST investigations and closure activities at NAVSTA TI were reviewed. Historical drawings, correspondence, and other related documents were also reviewed to provide a summary of closure activities and are summarized on Table 3.

There are additional USTs in the FOST areas that have not received regulatory closure and require restrictions. Those restrictions will be addressed through the petroleum Corrective Action Plan (CAP) Program, described in Section 6.1.3.

### 6.1.3 Petroleum Program

Although the Navy intends to obtain regulatory closure for all petroleum program sites within the FOST footprint, FOST areas may be transferred before the Navy obtains regulatory closure for some petroleum sites. Transfer while petroleum remediation is ongoing is allowable under CERCLA because Section 101(14) excludes crude oil and fractions of crude oil, including the hazardous substances such as benzene that are constituents of those petroleum substances, from the definition of a CERCLA hazardous substance. CERCLA otherwise requires completion of response actions before transfer for substances included in the definition of hazardous substances (unless an early transfer is approved). Although the property may be transferred in advance of the Navy obtaining regulatory closure of these petroleum sites, the Navy will remain ultimately obligated to complete the regulatory closeout of petroleum sites. As petroleum and petroleum-related constituents are not included in the definition of hazardous substances under CERCLA (42 USC 9601[14]), the petroleum constituents are being remediated under the 1994 California UST regulation (Title 23 California Code of Regulations [CCR], Division 3, Chapter 16, Article 11 Section 2720), which addresses releases to soil and groundwater from former USTs. The Navy may fulfill the petroleum obligation by completing regulatory closeout activities under Navy direction or by requiring the transferee to complete such activities on behalf of the Navy as part of a negotiated transfer agreement.

The FOST areas include portions of petroleum CAP Sites 14/22, 15, and 25, as shown on Figure 3 (Tetra Tech 2002k). Remediation efforts are ongoing at Sites 14/22 and 25. CAP Site 15 received regulatory concurrence for NFA for petroleum in contamination in shallow soils on September 5, 2003 (Water Board 2003u) and December 2, 2003 (Water Board 2003gg); concurrence on NFA for deep soils and groundwater was received from the Water Board in September 2004 (Water Board 2004v). Elevated concentrations of petroleum hydrocarbons remain in place in deep soil at Sites 14/22, 15, and 25. Although the results of the risk evaluation indicate that this soil does not pose a significant risk to human or ecological receptors, future excavation or utility maintenance activities may potentially expose workers to petroleum-contaminated soil at greater depths (Shaw 2004aa). A notification and restriction will
be placed on Sites 14/22, 15, and 25 to protect workers at the site from residual petroleum in the soils and ensure any excavations are conducted safely and in accordance with regulatory requirements. See Sections 8.1.5 and 8.2.5.

The petroleum pipeline CAP sites in the FOST areas include portions or all of Sites D1A, D1B, D1C, D2A, D2B, D4A, D4B, D5, and F2B (Tetra Tech 2003cc); the Causeway Pipeline (IT Corporation 2003c); and the Building 530 Pipeline (Shaw 2003j). Figure 3 shows the locations and boundaries of these sites, which have been investigated under the petroleum and petroleum pipeline programs. Several of the pipeline sites have received concurrence for NFA, including the Causeway Pipeline on March 11, 2003 (Water Board 2003f); the Building 530 Pipeline (where petroleum contamination has been left in place in the soil) on July 9, 2003 (Water Board 2003p); and pipelines D1A, D1C, D2A, D2B, D4A, D4B, and D5 on February 10, 2004 (Water Board 2004b). Residual petroleum hydrocarbon contamination left in place at Sites D1B, D5, and F2A/F2B requires a deed notification and restriction. See Sections 8.1.5 and 8.2.5.

Subsequent to the NFA concurrence at CAP Sites D1A, D1B, F2A/F2B, and the Causeway Pipeline, additional investigations were recommended because of reported polycyclic aromatic hydrocarbon (PAH) detections. Further investigations at D1A did not detect PAHs at concentrations above soil screening criteria, and the Navy has again recommended the site for closure (Shaw 2004c), and concurrence was received from DTSC on March 11, 2005 (DTSC 2005h). PAH concentrations at D1B and F2A/F2B were also less than the soil screening criteria, and the Navy is preparing closure reports for those sites as well. Additional sampling at the Causeway Pipeline did not detect PAHs in soil samples at concentrations above the soil screening criteria. PAHs were detected in a fragment of skeet from the site.

The status of these sites is discussed in the 2005 supplemental EBS (SulTech 2005g); corrective action and regulatory closure are ongoing at Sites 14/22, 25, D1B, and F2A/F2B; however, these sites require deed restrictions to allow access, protect monitoring wells, protect treatment systems, and restrict disturbance of the soil and groundwater within the site boundaries. Section 8.2.5 discusses these restrictions.

Groundwater and storm and sanitary sewers potentially provide pathways for contaminant migration where releases have occurred. At NAVSTA TI, the potential for contamination to migrate from petroleum CAP and pipeline sites through groundwater and storm and sanitary sewers was evaluated in association with the CAP Program (Tetra Tech 2002k, 2003cc). Sampling for remediation and monitoring efforts indicated storm and sanitary sewers are not preferential pathways for migration of petroleum within the FOST area. No restrictions are considered necessary with respect to the storm and sanitary sewer systems. Section 8.2.6 discusses restrictions on use and disturbance of groundwater.

6.1.4  Lead-Based Paint

Prior to transferring the property, the DoD is required to document survey results by disclosing known lead-based paint (LBP) and/or LBP hazards in the basewide EBS and referencing the evaluation results in the FOST and transfer agreement or transfer documents for residential buildings/structures/facilities.
LBP hazards are defined in the Federal Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of Public Law 102-550), as codified in 42 USC Section 4822, as “any condition that causes exposure to lead...that would result in adverse health effects.” Lead exposure is especially harmful to young children and pregnant women. Neither Title X nor DoD policy require LBP inspections or assessments for structures not defined as residential property, target housing, or child-occupied facilities. Title X defines target housing as any housing constructed before 1978, except any housing for the elderly or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing for the elderly or persons with disabilities) or any zero-bedroom dwelling. The FOST areas do not contain structures defined as residential property, target housing, or child-occupied facilities; accordingly, no LBP inspections were conducted in anticipation of transfer.

The following sections summarize the history of the Navy’s management of LBP on the FOST areas, as well as specific notifications and restrictions regarding the presence of LBP in some of the buildings, structures, or facilities situated within the FOST areas.

6.1.4.1 Residential Housing

No residential housing is located within the FOST areas.

6.1.4.2 Nonresidential Buildings

In order to address the risk of adverse health effects to children from LBP exposure, legislation and national policy regarding LBP have focused on residences and on buildings, structures, or facilities where children may be present on a regular basis. Nonresidential buildings, structures, or facilities (such as warehouses and office buildings) are typically occupied by adults, with minimal exposure to children. Nonresidential buildings, structures, or facilities constructed prior to 1978 may not be used for residential use or child-occupied buildings, structures, or facilities unless the transferee performs any necessary evaluation(s) and abatements in accordance with all federal, state and local laws and other applicable requirements. The DoD will not conduct LBP evaluations at nonresidential buildings, structures, or facilities prior to transfer.

Because many nonresidential buildings on NAVSTA TI were constructed before 1978, LBP may be present on interior and exterior surfaces of these buildings. Navy policy does not require LBP surveys for commercial or industrial buildings unless the buildings will be reused for residential purposes. In the event such properties will be reused as residential properties, the transferee will be required to conduct renovation consistent with the regulatory requirements for abatement of LBP hazards. Table 4 includes all nonresidential structures within the FOST area boundaries that were constructed before 1978, and will be provided to the transferee with the transfer documents. A notice, described in Section 8.1.3, will be included in the deed to advise the public of the potential existence of LBP on these buildings within the FOST areas. Restrictions related to LBP are presented in Section 8.2.4.

Demolition of non-target housing buildings, structures, or facilities containing or presumed to contain LBP must be performed in accordance with applicable local, state, and federal requirements.
6.1.5 Groundwater

Active, inactive, and abandoned monitoring and remediation well locations within the FOST areas are shown on Figure 4. The deed will contain a restriction, described in Section 8.2.6, to prevent disturbance of these active and inactive monitoring and extraction wells. Potential beneficial uses of groundwater in the San Francisco Bay Region are outlined in the Water Board’s “San Francisco Bay Basin Water Quality Control Plan.” More recently, the Water Board staff have determined the quality and the hydrogeologic conditions of the groundwater beneath TI are such that this water is not a potential source of drinking water pursuant to State Water Resources Control Board Resolution 88-63 and Water Board Resolution No. 89-39 (Water Board 2001c). Drinking water is supplied to NAVSTA TI by the San Francisco Public Utilities Commission (PUC), and the PUC’s Hetch Hetchy Water and Power.

6.1.6 Polychlorinated Biphenyls

Pursuant to the TSCA, 15 USC 2605(e), EPA has adopted regulations (40 CFR 761) that pertain to the use, marking, storage, and disposal of polychlorinated biphenyls (PCB) and certain PCB-containing equipment. PCBs are also potentially subject to regulation as a hazardous waste under state law (22 CCR 66261.24[a][2]). Restrictions on the disposal of PCB wastes are set forth in 22 CCR 66268.110.

All Navy shore activities that generated, treated, stored, or disposed of PCBs were required to inventory or validate all PCBs and PCB items annually, in accordance with Navy procedures and federal and state regulations. Navy guidelines (Navy 1994g) specify that all transformers containing 500 parts per million (ppm) or more of PCBs must have been eliminated by October 1998, and all transformers containing 50 ppm or more of PCBs must have been eliminated by October 2003.

In the 1980s, a remedial program was initiated by the Navy for devices such as high-voltage primary transformers containing dielectric fluid and possibly PCBs. By the mid-1980s, 21 transformers containing PCBs were removed from TI. In 1995, the Navy Public Works Center (PWC) in San Francisco completed a survey of the remaining 190 high-voltage electric transformers and circuit breakers (devices). The dielectric fluid from these devices was sampled and analyzed for PCBs (PWC 1994f, 1995c). As a result of this survey, by 1996, six transformers were removed from TI (PWC 1997f). Also in 1995, the EBS documented the presence, former presence, or potential presence of devices with dielectric fluid that potentially contained PCBs (ERM-West, 1995e). A subsequent site walk by SSPORTS produced a list of "transformers and oil-filled switches sighted at Treasure Island" (SSPORTS 1997). The list recorded serial numbers and Navy numbers, described the location of each device, and referenced individual entries of the PWC inventory list, where possible.

Table 5 identifies the current and former electrical equipment present in the FOST areas documented in these surveys. The 1995 EBS (ERM-West 1995e) also documented spills and stains potentially related to PCBs. Electrical equipment remaining on the FOST areas contains PCBs at concentrations less than 50 ppm.
Additional sampling and analysis of current and former transformer locations within the FOST areas for PCBs was undertaken in 2004 as shown on Figure 3. As a result, nine areas were identified within the FOST area boundaries with elevated PCB levels. Six of the nine sites are inside buildings and are not likely to result in a release to the environment (SULLIVAN and Tetra Tech 2004kk). Because the four of the sites, all indoors and identified as TX-138, TX-139, TX-140, TX-146, and TX-2045, have not received regulatory closure and the analytical results do not meet criteria for either high or low occupancy, both a notice and restriction are required. One location is outdoors, TX-120, and the analytical results meet the criteria for low occupancy, but not high occupancy. Due to the levels in soil, remediation of this site either before or after transfer is anticipated to occur in accordance with the TSCA self-implementing cleanup guidelines. The analytical results for the other four sites located both in and out of doors, TX-114A&B, TX-127, TX-139 and TX-147, meet the criteria for low occupancy, but not high occupancy. These sites require a land use restriction to limit use to low occupancy within the meaning of TSCA.

The notices and restrictions necessary for the nine areas are presented in Section 8.1.6 and Section 8.2.8. The necessary remedial activities to ensure the four areas that exceed the high occupancy criteria within locked vaults or vacant and secured buildings provide a safe work environment for employees will be performed before or after transfer.

6.2 ENVIRONMENTAL FACTORS THAT WARRANT NO CONSTRAINTS

This section discusses properties with environmental factors that do not constitute a threat to human health or the environment and, as a result, do not require deed restrictions or notifications.

6.2.1 Radon

Radon is a colorless and odorless radioactive gas produced by radioactive decay of naturally occurring uranium to radium, which is present in high concentrations in rocks containing uranium, granite, shale, phosphate, and pitchblende. Radon that enters the atmosphere is diluted to insignificant concentrations; however, radon that is present in soil can enter buildings and accumulate to concentrations that may increase risks of cancer in persons who inhale the radon.

Radon is measured in picocuries per liter of air (pCi/L). In the United States, the average indoor level is estimated to be 1.3 pCi/L, and about 0.4 pCi/L of radon is usually found in the outside air. No laws require testing or remediation for radon, but EPA has made testing and abatement recommendations for both housing and schools. As part of the “Indoor Radon Abatement” provisions in TSCA, the head of each federal department or agency that owns a federal building is required to conduct a study to determine the extent of radon contamination in such buildings (15 USC Section 2669).

A Navy radon assessment and mitigation program began with a screening phase in 1989. The Navy radon assessment and mitigation program consists of (1) an initial screening phase to identify housing projects, school and daycare facilities, barracks, hospitals, and brigs with elevated radon levels; (2) a detailed assessment to collect samples from buildings in which elevated levels of radon gas were found during the initial screening; and (3) a mitigation phase to
perform corrective actions in buildings with elevated radon levels. The Navy conducted radon screening for six representative locations at NAVSTA TI in 1991. Screening locations and results were presented in the 1995 EBS, and no screening was conducted within the FOST areas (ERM-West 1995e). The screening that was conducted at several locations on TI resulted in detections ranging from below the detection limit (0.5 pCi/L) at four locations to 0.6 pCi/L. No radon was detected at concentrations exceeding the EPA radon action level of 4 pCi/L, and therefore, NFA was required.

6.2.2 Radiological Contaminants

During the 1995 EBS, the Navy reviewed on-site records and searched for additional information on known and potential uses of radiological contaminants at the base. Based on a 1995 survey and subsequent historical radiological assessment conducted by the Navy’s Radiological Affairs Support Office (RASO) in 2004 and 2005, no structures or areas within the FOST areas were identified as being used for radiological activities and requiring further action (Navy 2005d).

6.2.3 Storm Sewers

All surface water at NAVSTA TI is drained into the surrounding bay by means of natural drainage pathways or through the storm sewer system. The storm sewer system provides a pathway to the bay for potential contamination originating from operations on NAVSTA TI. Additionally, in areas of poor piping condition, it is possible that surrounding soil and groundwater contamination could leach or leak into the storm sewer system, potentially causing contaminants to be transported into the San Francisco Bay. Sediments in the storm sewer system at NAVSTA TI were identified as potentially contaminated with metals, pesticides, PAH, and petroleum hydrocarbons. Storm sewers have been investigated in association with Site 13, the storm water outfalls and sediment in San Francisco Bay.

During the Phase I ecological risk assessment (ERA) at NAVSTA TI, conducted in 1993, chemicals of potential ecological concern were identified using data collected during the storm water investigation for drainage areas served by each storm water outfall. Based on the results of the storm water investigation, additional data were collected to further characterize the sources, extent, and potential toxicity of chemicals in off-shore sediments. Sampling focused on tracking contaminants from onshore sources to off-shore sediments through storm water outfalls. Both on-shore sediment present in catch basins and off-shore outfalls during storm events were sampled. The 1997 off-shore sampling for the Phase II remedial investigation (RI) was more comprehensive and included chemical analysis of sediments and pore water, invertebrate bioassays, and tissue residue analysis. Because the Phase II investigation was conducted after the NAVSTA TI storm drain system was cleaned in 1996, Phase II data were considered to be more representative of the current conditions of the off-shore sediments, and thus were given more weight in the ERA than Phase I data. Additionally, the approximate locations sampled in Phase I were resampled in Phase II. Based on the information and data evaluated in the off-shore RI, the chemical levels present in the sediments do not pose a level of risk to ecological receptors and requires no action. No further investigation or remedial action was recommended for Site 13 offshore areas (Tetra Tech 2001j). A No Action Record of Decision was signed by the Navy and regulatory agencies on April 7, 2005 (Navy 2005j).
6.2.4 Installation Restoration Program

Work under the IRP was initiated at NAVSTA TI in the 1980s and continues at present. Thirty-three IRP sites have been identified basewide; 26 sites were identified during the preliminary assessment/site inspection conducted in 1988 (Dames and Moore 1988), 3 sites were identified prior to the subsequent Phase II RI, and 4 sites were identified between 2002 and 2004. Of these 33 sites, 5 sites (Sites 1, 14/22, 15, and 25) are located within the FOST areas shown on Figure 3.

Of the five IRP sites within the FOST area, one has been closed requiring NFA (Site 1) (DTSC 2002e), and the remaining four sites (Sites 14/22, 15, and 25) were moved out of the CERCLA Program and into NAVSTA TI’s Petroleum Program because site investigations determined only petroleum constituents were detected at these sites. See Section 6.1.3 for further discussion regarding these sites. As petroleum and petroleum-related constituents are not included in the definition of hazardous substances under CERCLA (42 USC 9601[14]), the petroleum constituents are being remediated under the 1994 California UST regulation (22 CCR 11, 2720), which address releases to soil and groundwater from former USTs, aboveground storage tanks (AST), and pipelines.

6.2.5 Aboveground Storage Tanks

The Navy followed closure procedures for inactivated ASTs that include (1) emptying and cleaning ASTs and associated pipelines, and (2) recording conditions of the sites. Inspections for spills and stains surrounding the 30 ASTs located within the FOST areas were conducted as part of the 1995 EBS (ERM-West 1995e). Any release associated with an AST that required investigation, as determined in consultation with the BCT, is included under the IRP as a CERCLA or petroleum site.

Table 3 presents an inventory of ASTs within the FOST areas along with information regarding tank size, contents, status, and associated site when available. The known locations of the ASTs within the FOST areas are shown on Figure 3; former tanks, or former tanks associated with former buildings that cannot be specifically placed, are sometimes identified as a part of a parcel instead of a specific location. Additional tanks may not be shown on figures because historic information does not provide enough detail for placement on current figures.

Potential releases from ASTs are being investigated or have been investigated as part of an associated IRP site where applicable. Six ASTs remain active under lease agreements. They include tank 691 (reported as AST 672 in the CAP report [Tetra Tech 2002k]), 672 (reported as the brig tank in the CAP report [Tetra Tech 2002k]), and 540 at parcel T091; and three tanks (FF1-FF3, alternatively referred to as PP1-PP3 or 618A-C) used for liquid petroleum gas for the fire training school.
6.2.6 Petroleum Program

The FOST property includes petroleum sites that do not require notices or restrictions because they have either been closed or have been recommended for closure with NFA. These sites include pipeline sites and UST sites.

Pipeline sites located within the FOST property that do not require notices or restrictions and have received concurrence from the Water Board for NFA are sites D1C, D2A, D2B, D4A, D4B, and D5 (Water Board 2004b), as well as the Building 530 pipeline and the Causeway Pipeline. The sites are either partially or wholly contained within the FOST areas. The pipelines are shown on Figure 3.

In addition to the pipeline sites, a number of UST sites within the FOST areas do not require notices or restrictions since the tanks have been removed or closed in place.

Table 3 presents an inventory of known and suspected USTs located within the FOST areas, as well as their tank identification numbers, recorded contents, and current regulatory closure status. All of the USTs were likely used to store petroleum products. Figure 3 shows the locations of all USTs in the FOST areas on TI.

Within the TI FOST area boundaries, 36 suspected USTs and one Navy-owned oil-water separator (OWS) were identified. Investigations for this FOST classified the suspected tanks into one of three categories: (1) tanks that have been located, (2) suspected tanks believed to have been removed or abandoned, and (3) previously suspected tanks that are believed to have never existed (Tetra Tech 2003x, Shaw 2004t). The classifications of the suspected USTs within the FOST areas are discussed below.

1. **Tanks that have been located.** This category includes 19 UST sites. Nineteen of these sites have been approved for closure or NFA by the Water Board in the years noted: 1B through 1D, 1F, 2A, 2D, 330C, and 330D in 1996 (Water Board 1996l); 257, in 1997 (Water Board 1997p); 1A, 1E, and 2C in 2002 (Water Board 2002d); 201 in 2004 (Water Board 2004c, 2004bb). In addition, the City and County of San Francisco (CCSF) closed UST 1G (469) in 2000 (CCSF 2000f). Five USTs (85, 330A, 330B, 330E, and 330F) associated with operations at IRP sites were confirmed to be present and located and have since been removed or closed in place. The Navy will request NFA status from the Water Board for these tanks in the upcoming closure documents for Sites 14/22, and 25.

2. **Tanks believed to have been removed or abandoned.** This category includes 12 USTs that are suspected to have existed, but were removed previously or may have been abandoned: 2B, 15, 140, and 143-A through 143-I. The Navy received concurrence from the Water Board that NFA was required for USTs 15 and 140 in 2004 (Water Board 2004c, 2004m, respectively). NFA for the remaining USTs (2B and 143A - 143I) will be requested in the Site 25 closure report.
3. **Previously suspected tanks that never existed.** Four USTs were identified as nonexistent after site investigation work including magnetic surveys, probes, and soft digs did not indicate the presence of USTs. The Water Board concurred in 2003 that NFA was necessary at the following sites: 450, 452, 453, and FF8 (Water Board 2003gg). In addition to the four USTs, the suspected OWS (T005) that was thought to have existed in Parcel T005 was identified as nonexistent (ERM-West 1996e).

Tanks that require notifications or restrictions are discussed in Section 6.1.2.

**6.2.7 Other Locations of Concern**

Other locations of concern were identified that are not within the CERCLA or Petroleum Programs. Other locations of concern involve issues such as stains and spills, potential historical adverse land use, and potential lead contamination not resulting from LBP.

**6.2.7.1 Parcel T086**

A buried 55-gallon drum was located in parcel T086 and removed, along with the affected soil, in February 2002. The contents of the drum were identified as liquid petroleum product. Further investigations in 2003 identified no additional sources of petroleum contamination at the site, and no impacts to soil or groundwater (Shaw 2003i). The Navy recommended the site for NFA and the Water Board concurred (Water Board 2003q).

**6.2.7.2 Parcel T091**

A tenant of TIDA leased parcel T091 and operated AST 540. Metal contamination was discovered in soil and petroleum contamination was discovered near AST 540 as a result of tenant activities. Upon termination of the lease, the tenant sought regulatory approval of the response actions taken in response to the release. Contaminants of concern at the parcel were identified as TPH and lead. Based on investigations following removal actions at the site, the DTSC concurred NFA was appropriate (DTSC 2005l).

**6.2.8 Adjacent Properties**

The IRP and petroleum sites located on adjacent properties that could potentially affect the FOST areas are discussed in this section. These sites are in the process of being investigated and corrective actions are being taken as appropriate. The schedule for completion of these investigations and corrective actions is contained within the FFSRA and Environmental Closeout Strategy and Schedules (DTSC 1992e, and SulTech 2004q) and completion of actions for these sites is expected by 2010. To assess potential sources on adjacent properties, the following documents were reviewed:
• “Basewide EBS Report for NAVSTA TI” (ERM-West 1995e).

• “Revised Draft Final Supplemental EBS, NAVSTA TI, San Francisco, California” (SulTech 2005g).


• “Groundwater Monitoring Report, May 2003 to January 2004, Final, Revision 3” (Shaw 2004g).


• “Final Post-Construction Summary Report, Site 06 Fire Training School Remedial Excavation Naval Station Treasure Island Petroleum Remedial Excavation Program Treasure Island San Francisco, California” (Shaw 2004f).

• “Final Corrective Action Plan, Sites 06, 14/22, 15 and 25; NAVSTA TI” (Tetra Tech 2002k).


• “Final RI Report for Installation Restoration Sites 09 and 10, NAVSTA TI” (SulTech 2005e).

• “Additional Characterization of Total Petroleum Hydrocarbons, Site 12 – Old Bunker Area, Soil and Groundwater Sampling Results, Final Technical Memorandum” (Tetra Tech 1999c).
Based on the document review, the sites discussed below and shown on Figure 3 that are adjacent to FOST areas are not potential sources of contamination to the FOST areas and are not further discussed in this FOST. For each of the sites discussed below, fugitive dust transported by natural causes has been eliminated as a potential hazard to the FOST area due to the lack of surface soil contamination in exposed bare soils. In addition, any soils that may become airborne during remedial activities will be addressed in remedial planning documents.

**Site 03 – PCB Equipment Storage Area.** This site is located on the southeastern edge of TI between the southwest and southeast transfer parcels. The chemicals of potential concern at the site were PCBs. The site received closure from the DTSC in March 2002 (DTSC 2002f).

**Site 06 – Former Fire Training School.** This site is located on the northern edge of the island, adjacent to the TI Core Transfer Parcel. The chemicals of potential concern in soil are petroleum and geochemical-related compounds (including arsenic and other trace metals) and dioxins. Chemicals of potential concern in groundwater, petroleum and geochemical-related compounds. The site is listed as both a CERCLA site and Petroleum CAP site, and a petroleum closure report is being drafted, as well as an RI report. Dioxins are generally insoluble in water and would not be expected to be mobile in groundwater. In addition, Site 06 is located downgradient from the TI Core Transfer Parcel and the contaminant location is separated from the FOST areas by more than 100 feet. All investigations at the site are complete and it is currently undergoing closure for petroleum and CERCLA. Site 06 is not expected to affect the soil or groundwater located within the FOST areas.

**Site 07 – Pesticide Storage Area.** This site is located in the northeastern portion of TI adjacent to the TI Core Transfer Parcel. No elevated concentrations of chemicals above the field screening criteria have been detected in soil or groundwater samples from Site 07 (Tetra Tech 2002g, 2002p); therefore, soil or groundwater from this site does not have the potential to affect the FOST areas. A supplemental site inspection report submitted on October 18, 2002, recommended NFA, and a closure letter is anticipated from the DTSC.
Site 09 – Foundry. This site is located about 250 feet from the southern shore of TI at Building 41, adjacent to the TI Southwest Transfer Parcel. Chemicals of potential concern in soil include solvents, lead, and petroleum products; an RI report has been finalized (SulTech 2005e). Elevated concentrations of chemicals in groundwater associated with the potential contaminant release sources at Site 09 have not been consistently detected (SulTech 2005f). Groundwater generally flows southeast toward the shoreline at Site 09, parallel to the FOST area boundary. The site boundary includes a buffer and is covered by pavement. The RI concluded the site does not pose a risk to human health or the environment, and therefore does not have the potential to affect the FOST area.

Site 10 – Bus Painting Shop. This site is located along the shoreline in the northeastern portion of TI at Building 335, adjacent to the TI Core Transfer Parcel. Chemicals of potential concern in soil include pesticides and semivolatile organic compounds; an RI report has been finalized (SulTech 2005e). No chemicals have been detected in the groundwater above the field screening criteria at Site 10 (SulTech 2005e). In August 2004, a Navy contractor encountered a 2-inch-thick layer of heavy (very viscous) petroleum and dioxins in the surface soil along the eastern side of the boundary for Site 10 and near the rip-rapped shoreline. The soil was excavated to a depth of 1 foot below grade under petroleum “nuisance” criteria and sampled for dioxins, total petroleum hydrocarbons (TPH), volatile organic compounds (VOC), and PAHs. Nuisance soil is defined as either odorous or visibly impacted soil present from 0-2 feet bgs in unpaved areas. Sampling confirmed the complete removal of the petroleum layer and dioxin in the excavated area. The Navy requested NFA concurrence from the Water Board for the petroleum portion only (Navy 2004ii). The Navy plans to address the dioxin in surface soil under the CERCLA Program. The site boundary includes a buffer; therefore, no dust hazards would likely be associated with Site 10. Site 10 is located downgradient from the TI Core Transfer Parcel; therefore, no mechanism is apparent to transport soil contaminants from this site to the FOST area.

Site 12 – Old Bunker Area. This site is located on the northwestern portion of TI and occupies about 94 acres of the island. The site is adjacent to the TI Southwest and TI Core Transfer Parcels. Soil removal actions have been conducted at Site 12 to remove hazardous materials. An RI and Risk Assessment Work Plan is being drafted for Site 12. Metals, PCBs, dioxins, chlorinated VOCs, PAHs, and petroleum hydrocarbons have been detected at elevated levels in groundwater and soil samples from Site 12 (Tetra Tech 2003aa); however, groundwater generally flows toward the shoreline, away from or parallel to the FOST area boundaries. Furthermore, the bunkers, storage yards, and solid waste disposal areas of greatest concern at Site 12 are located more than 0.25 mile from the boundary of the TI Core Transfer Parcel, so migration of contaminants outside of the site is highly unlikely. Potential dust hazards associated with remedial activities at the site will be addressed in future work plans. No mechanism is apparent to transport contaminated soil outside of the Site 12 boundary. No mechanism is apparent to transport soil or groundwater contaminants from this site to the FOST areas.

Site 21 – Vessel Waste Oil Recovery Area. This site is located on the southeast portion of TI, directly adjacent to San Francisco Bay and Clipper Cove, near the TI Southeast Transfer Parcel. Elevated concentrations of solvents have been detected in groundwater at Site 21 (Tetra Tech 2002a, 2003aa, and SulTech 2005a). Groundwater at Site 21 flows toward the southeast, away from the FOST area; therefore, no mechanism is apparent to transport groundwater contaminants from this site to the FOST area.
Site 24 – Dry Cleaning Facility. This site is located in the eastern portion of TI, adjacent to TI Southwest and Core Transfer Parcels. Elevated concentrations of solvents and petroleum hydrocarbons have been detected in groundwater and soil at Site 24 (Tetra Tech 2002m, 2003aa). In 2001, IRP Sites 05 and 17 were closed and merged with Site 24. Groundwater at Site 24 generally flows toward the northeast, not toward the FOST areas, so it is not an apparent transport mechanism. Furthermore, the Site 24 boundary includes a buffer zone around contaminated areas such that migration of contaminants outside of the Site 24 boundary is unlikely. Potential dust hazards associated with remedial activities at the site will be addressed in future work plans if soil excavation is necessary. The depth of contamination is such that no mechanism is apparent to transport soil contaminants from this site to the FOST areas. Migration of contaminants from Site 24 to the FOST areas is unlikely.

Site 27 – Clipper Cove Skeet Range. This site is located in Clipper Cove between TI and YBI, adjacent to the marina and the TI Southwest Transfer Parcel, and has both upland and offshore portions. The site boundary was modified in 2004 to include upland portions in the site boundary. The chemicals of potential concern include lead shot in the sediments. The upland portion of the site is mostly paved. Based on the 2001 RI Report, the Navy concluded there were no unacceptable risks for human health and the environment (Tetra Tech 2001).

Site 30 – Daycare Center. This site is located northwest of the TI Core Transfer Parcel. The chemicals of concern are copper, lead, and dioxins in soil associated with a disposal area. The BCT concurred with a boundary adjustment in 2005 (Navy 2005i). Soil contaminated with dioxins, and lead was investigated. In 2002 the Navy performed a time-critical removal action to remove accessible soil. The Navy also installed a 6-inch concrete cap adjacent to the daycare center to cover the 1,400-square-foot area around and between the locations contaminated with elevated concentrations of dioxins in the subsurface soil (Shaw 2003o). Since Site 30 was found to contain soil contamination only and exposed soil was removed or capped, Site 30 is not expected to affect soil or groundwater in the transfer parcel. An RI report is being prepared. This site is paved, and no mechanism is apparent to transport contaminated soil outside the Site 30 boundary. Potential dust hazards associated with remedial activities at the site will be addressed in work plans. Migration of contaminants from Site 30 to the FOST areas is unlikely.

Site 31 – Former South Storage Yard. This site is located north of Site 30 and adjacent to the TI Core Transfer Parcel. The BCT concurred with a boundary adjustment in 2005 (Navy 2005i). An initial investigation identified elevated concentrations of lead, PCBs, and DDT above screening levels in soil and below screening levels in asphalt. Additional investigations of soil identified concentrations of TPH as diesel and motor oil, PAHs, and dioxins at the site. The asphalt currently serves as a protective barrier for contaminated soil. An RI is being prepared. Potential dust hazards associated with remedial activities at the site will be addressed in future work plans. Migration of contaminants from Site 31 to the FOST areas is unlikely.

Site 32 – Former Training and Storage Area. This site is located in EBS Parcel T111, approximately 200 feet North of the TI Core Transfer Parcel. Chemicals of potential concern in soil include PCBs, TPH as diesel and motor oil, dioxins, and pesticides. Contaminants of potential concern were not detected in groundwater at the site at concentrations above screening criteria. An RI report is being prepared. Since Site 32 was found to contain soil contamination only, Site 32 is not expected to affect soil or groundwater in the FOST area. The site is paved,
and no mechanism is apparent to transport contaminated soil outside of the Site 32 boundary. Potential dust hazards associated with remedial activities at the site will be addressed in the work plans for those activities. Migration of contaminants from Site 32 to the FOST area is unlikely.

**Site 33 – Former Water Line Replacement Area.** The site is located adjacent to the TI Southwest and TI Southeast Transfer Parcels. Initial investigations reported dioxins and metals as chemicals of potential concern in soil, but they were not detected in subsequent soil sampling (Shaw 2004l). Portions of the site are paved. An RI report is being prepared. The site boundary includes a buffer zone around contaminated areas such that migration of contaminants outside of the Site 33 boundary is unlikely. Potential dust hazards associated with remedial activities at the site will be addressed in the work plans for those activities. No mechanism is apparent to transport soil contaminants from this site to the FOST areas. Groundwater investigation of the site perimeter is planned as part of the completing the RI. However due to the chemicals of concern, groundwater is not anticipated to be a concern at this site. Migration of contaminants from Site 33 to the FOST areas is unlikely.

### 7.0 PROPOSED REUSE

The proposed reuses for the FOST parcels are based on the preferred land-use alternative for NAVSTA TI set forth in the final EIS (Navy 2003m). The Navy evaluated the potential environmental impacts of several future land-use scenarios at NAVSTA TI and selected as the preferred alternative the reuse alternative that represented full implementation of the development scenario. The planned reuses of areas within the FOST parcels under the preferred alternative are shown on Figure 5, and include the following:

- The proposed reuse of the TI Southwest Transfer Parcel includes open space and recreation along the shoreline; hotels; film production; and a conference center.
- The proposed reuse of the TI Southeast Transfer Parcel includes publicly oriented uses and a theme park.
- The proposed reuse of the TI Core Transfer Parcel includes a mix of uses such as open space and recreation along the shoreline; institutional and community (new police and fire stations); sports fields; a theme park; and other public-oriented uses.

### 8.0 CONVEYANCE CONDITIONS AND NOTIFICATIONS

The FOST areas will be transferred in accordance with federal real property disposal laws. The proposed deed for transfer of the FOST areas will contain applicable CERCLA 120(h) notices, covenants, and warranties, as well as the additional notifications and restrictions indicated below.

The terms Grantor and Grantee, used below, refer to the Navy and the property recipient(s), respectively.
8.1 NOTICES

Notices to be provided in conjunction with property transfer of the FOST areas, either by deed or as part of this FOST, are provided in the following subsections.

8.1.1 Notice of Hazardous Substances

As required by CERCLA Section 120(h)(1) and codified at 40 CFR Part 373.1, notification of hazardous substance storage or releases is required for transfer of federal property at which any hazardous substance was stored for one year or more, or was known to have been released or disposed of. Notification must include the types and quantities of such hazardous substances, the time at which such storage occurred, and the types, quantities, and time periods associated with any releases or disposal of hazardous substances. Such information must be made available on the basis of a complete search of agency files.

The notice required by 40 CFR 373.1 on past storage of hazardous substances applies only when one or more hazardous substances have been stored in quantities greater than or equal to the larger of (1) 1,000 kilograms, or (2) the CERCLA reportable quantity for each hazardous substance, which is listed at 40 CFR 302.4. Hazardous substances that are also listed under 40 CFR 261.30 as “acutely hazardous wastes,” and that are stored for 1 year or more, are subject to the notice requirement when stored in quantities greater than or equal to 1 kilogram. Under this notification requirement, hazardous substances do not include petroleum products.

Table 6 lists the hazardous substances in the FOST areas that require notification under CERCLA 120(h).

8.1.2 Asbestos-Containing Material

Available information on the existence, extent, and condition of ACM at building/structures/facilities within the parcels proposed for transfer is provided in Table 2. This information was collected from the ACM surveys conducted between 1995 and 2004 at NAVSTA TI.

The deed will contain a notice that the Grantee is hereby informed and does acknowledge hazardous materials in the form of asbestos or ACM have been found and are otherwise presumed to exist in buildings and structures in the FOST areas. The supplemental EBS and FOST disclose the presence of known asbestos or ACM in such buildings in the FOST areas.

In connection with its use and occupancy of the property, including, but not limited to (1) removal of ACM discovered during demolition or renovation of buildings/structures/facilities, and (2) demolition of any buildings/structures/facilities containing or presumed to contain asbestos or ACM, the transferee shall manage asbestos and/or ACM in accordance with all applicable federal, state, and local laws and other requirements relating to asbestos or ACM.
The deed may contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as demolition of the buildings in the FOST areas containing ACM has been completed. The deed may also contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as the appropriate government regulatory agencies have confirmed in writing to the Grantee that ACM has been removed from the buildings and any necessary soil remediation has been conducted in accordance with all applicable federal, state, and local laws and regulations. This Notice of Release will be deemed to remove all notices and restrictions relating to ACM for the FOST areas. The Grantor will have no obligation under this subparagraph for the demolition of buildings or the removal of ACM or soil remediation related to such demolition or removal action.

8.1.3 Lead-Based Paint

The need for notification of potential LBP at nonresidential buildings, structures, or facilities within the parcels proposed for transfer is based on the age of construction (that is, whether the building or structure was constructed before the Consumer Product Safety Commission’s 1978 ban on LBP for residential use). The parcels proposed for transfer contain buildings, structures or facilities that were built prior to 1978 and may contain LBP. The age of many of the structures on the property suitable for transfer suggests the likelihood lead-based paint may be present on some of these structures. This in turn creates the possibility, through the action of normal weathering and maintenance, there may be lead from lead-based paint in the soil surrounding these structures. Table 4 provides a list of all non-demolished buildings, structures or facilities within the parcels proposed for transfer and their corresponding dates of construction, along with information regarding the status of any known or assumed LBP.

Demolition of nonresidential buildings, structures or facilities built prior to 1978 creates the potential for lead to be released to soil as a result of such activities. With respect to any such nonresidential buildings, structures or facilities which the transferee intends to demolish and redevelop for residential use after transfer, the transferee may, under applicable law or regulation, be required by DTSC or other regulatory agencies to evaluate the soil adjacent to such nonresidential buildings, structures or facilities for soil-lead hazards, and to abate any such hazards that may be present, after demolition and prior to occupancy of any newly constructed residential structures.

The deed will contain a notice stating nonresidential buildings, structures, or facilities on the property that were built before 1978 are presumed to contain LBP because of their age. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. The Grantor will have no obligation under this subparagraph for the demolition of buildings or the removal of LBP or soil remediation related to such demolition or removal action.

Table 4 lists the buildings constructed before 1978.

8.1.4 Drinking Water

The deed will contain a notice that lead was detected above the EPA action level of 15 micrograms per liter in the drinking water of the rear bathroom in Building 229. The building
is located in EBS Parcel T054, in the TI Core Transfer Parcel, and has been historically a mixed-use facility accommodating a youth center, a pizza parlor, and offices.

8.1.5 Residual Petroleum Contamination

The deed will contain a notice stating that residual petroleum contamination has been left in place at the following petroleum sites: CAP Sites 14/22 and 25, Inactive Fuel Line Sites D1B, F2A/F2B, and D5:

- Elevated concentrations of petroleum hydrocarbons in soil remain in-place 5 feet bgs and deeper at Site 14/22 and Site 25.
- Elevated concentrations of petroleum hydrocarbons in soil remain in-place 5 feet bgs and deeper at Site D1B; 5.5 feet bgs and deeper at Site F2B, and 6 feet bgs and deeper at Site D5.

8.1.6 Polychlorinated Biphenyls

The deed will contain a notice that PCB-containing electrical equipment exists inside Buildings 1 and 450 in the TI Southwest Transfer Parcel, in excess of TSCA low-occupancy and high occupancy requirements, electrical equipment exists inside Buildings 1 and 453 in the TI Southwest Transfer Parcel, in excess of TSCA high occupancy requirements and three outdoor transformers, TX-120 in parcel T10 within the TI Southeast Transfer Parcel, TX-127 in parcel T081 and TX-147 in parcel T091 within the TI Core Parcel, contain PCBs in excess of TSCA high-occupancy requirements.

8.2 Covenants, Warranties, and Restrictions

Covenants, warranties, and restrictions to be included in the transfer deed are described in the following subsections.

8.2.1 All Remedial Action Has Been Taken

The deed will include a covenant by the United States, made pursuant to the provisions of CERCLA 120(h)(3)(A)(ii)(I), warranting that all remedial action necessary to protect human health and the environment with respect to any hazardous substance remaining on the property has been taken before the date of transfer.

8.2.2 Additional Remediation Obligation

The deed will include a covenant by the United States, made pursuant to the provisions of CERCLA 120(h)(3)(A)(ii)(II), warranting that any remedial action found to be necessary after the date of such transfer shall be conducted by the United States.
8.2.3 Right of Access

The deed will contain a covenant by the Grantee granting to the United States right of access to the property, pursuant to the provisions of CERCLA 120(h)(3)(A)(iii), in any case in which any remedial or corrective action is found to be necessary after the date of such transfer.

8.2.4 Lead-Based Paint

The deed will contain a restriction that in its use and occupancy of the property, including but not limited to, demolition of buildings, structures or facilities and identification and/or evaluation of any LBP hazards, the transferee shall be responsible for managing LBP and LBP hazards in accordance with applicable federal, state, and local laws and other requirements relating to LBP and LBP hazards.

8.2.5 Petroleum Restrictions

Remediation and regulatory closeout are continuing to address petroleum contamination in groundwater and soil within some of the FOST areas. Since the FOST areas may be transferred before regulatory closure is attained, restrictions are necessary to address potential human health and environmental risks that may exist from exposure to residual petroleum contamination at the FOST areas (1) under current conditions and (2) while the petroleum corrective action is ongoing. These areas are identified on Figure 6.

The deed will contain a covenant by the Grantee on behalf of itself, its successors and assigns, that, during the period from property transfer until regulatory closure and until the restriction is no longer necessary, no activities that will disturb the soil at 6 inches or more below current ground surface (such as excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within the following petroleum program sites: 14/22, 25, F2A/F2B, and D1B, as shown on Figure 6.

The deed will contain a restriction indicating that petroleum contamination has been left in place in soil (7 feet or more bgs) at Site 15 as shown on Figure 6. The deed will contain a covenant by the Grantee on behalf of itself, its successors and assigns, that no activities which will disturb the deep soil at or below 7 feet below current ground surface (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within CAP Site 15, without a Water Board approved soil management plan.

8.2.6 Groundwater Use Restriction

The deed will contain a covenant prohibiting the Grantee from disturbing existing groundwater monitoring and extraction wells, air sparging wells, and soil-vapor extraction wells located within the FOST areas shown on Figure 4, unless specifically approved by the Navy. No groundwater production wells may be installed in the FOST areas for residential, municipal, agricultural, or industrial use without the written approval of DTSC and the Water Board.
8.2.7  Asbestos Restriction

The deed will contain a restriction that the Grantee covenants, on behalf of itself, its successors and assigns, as a covenant running with the land, that it will prohibit occupancy and use of buildings and structures, or portions thereof, containing known asbestos hazards before abatement of such hazards. In connection with its use and occupancy of the FOST areas, including, but not limited to, demolition of buildings and structures containing asbestos or ACM, it will comply with all applicable federal, state, and local laws relating to asbestos and ACM.

8.2.8  Polychlorinated Biphenyl Restriction

PCBs have been detected at elevated levels in four locations within Buildings 1, 450, and 453. The following table presents the location of the equipment, the transformer identification number, and the maximum concentration reported. The deed will contain a covenant restricting all access to the areas identified in the table below except to qualified personnel with proper protective equipment appropriate to the PCB levels in each vault.

<table>
<thead>
<tr>
<th>EBS Parcel</th>
<th>FOST Parcel</th>
<th>Equipment ID Number</th>
<th>Building and Room</th>
<th>Maximum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>T003</td>
<td>TI Southwest Parcel-B</td>
<td>TX-140</td>
<td>Building 1, Room 37-A</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>T003</td>
<td>TI Southwest Parcel-B</td>
<td>TX-2045</td>
<td>Building 1, Room 37-A</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>T023</td>
<td>TI Southwest Parcel-B</td>
<td>TX-146</td>
<td>Building 450</td>
<td>530 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11 µg/cm²</td>
</tr>
<tr>
<td>T034</td>
<td>TI Southwest Parcel-B</td>
<td>TX-138</td>
<td>Building 453 Vault</td>
<td>320 mg/kg</td>
</tr>
</tbody>
</table>

Notes:
mg/kg  Milligrams per kilogram
µg/cm²  Microgram per square centimeter

The deed will also contain a restriction for an additional transformer location, at Parcel T10 in the TI Southeast Transfer Parcel, which exceeded high occupancy criteria, requires a restriction until removal actions are completed. The site is identified as transformer TX-120, as shown on Figure 6. The deed will contain a restriction that, during the period from property transfer until regulatory closure and until the restriction is no longer necessary, no activities that will disturb the soil (such as excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within the area designated on Figure 6. In addition, for all PCB areas identified on Figure 6, land use within shall be restricted to low occupancy uses as defined at 40 CFR 761.3.

The deed may contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as PCB remediation in the FOST areas has been completed. This Notice of Release will be deemed to remove all notices and restrictions relating to PCBs for the FOST areas.
## 8.3 SUMMARY OF NOTIFICATIONS AND RESTRICTIONS

The notifications and restrictions contained in this section are based on findings summarized above in Sections 6.0, 8.1, and 8.2. The following table lists the required notices and restrictions and the section of this FOST to which they correspond.

<table>
<thead>
<tr>
<th>Section Number</th>
<th>Notice or Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Notices</strong></td>
<td></td>
</tr>
<tr>
<td>8.1.1, Notice of Hazardous Substance</td>
<td>As required by CERCLA Section 120(h)(1) and codified at 40 CFR Part 373.1, notification of hazardous substance storage or releases is required for transfer of federal property at which any hazardous substance was stored for one year or more, or was known to have been released or disposed of. Notification must include the types and quantities of such hazardous substances, the time at which such storage occurred, and the types, quantities, and time periods associated with any releases or disposal of hazardous substances. Such information must be made available on the basis of a complete search of agency files. The notice required by 40 CFR 373.1 on past storage of hazardous substances applies only when one or more hazardous substances have been stored in quantities greater than or equal to the larger of (1) 1,000 kilograms, or (2) the CERCLA reportable quantity for each hazardous substance, which is listed at 40 CFR 302.4. Hazardous substances that are also listed under 40 CFR 261.30 as “acutely hazardous wastes,” and that are stored for 1 year or more, are subject to the notice requirement when stored in quantities greater than or equal to 1 kilogram. Under this notification requirement, hazardous substances do not include petroleum products. Table 6 lists the hazardous substances in the FOST areas that require notification under CERCLA 120(h).</td>
</tr>
<tr>
<td>8.1.2 Asbestos-Containing Material</td>
<td>Available information on the existence, extent, and condition of ACM at building/structures/facilities within the parcels proposed for transfer is provided in Table 2. This information was collected from the ACM surveys conducted between 1995 and 2004 at NAVSTA TI. The deed will contain a notice that the Grantee is hereby informed and does acknowledge hazardous materials in the form of asbestos or ACM have been found and are otherwise presumed to exist in buildings and structures in the FOST areas. The supplemental EBS and FOST disclose the presence of known asbestos or ACM hazards in such buildings in the FOST areas. In connection with its use and occupancy of the property, including, but not limited to (1) removal of ACM discovered during demolition or renovation of buildings/structures/facilities, and (2) demolition of any buildings/structures/facilities containing or presumed to contain asbestos or ACM, the transferee shall manage asbestos and/or ACM in accordance with all applicable federal, state, and local laws and other requirements relating to asbestos or ACM.</td>
</tr>
<tr>
<td>Section Number</td>
<td>Notice or Restriction</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td><strong>8.1.2</strong> Asbestos-Containing Material (Continued)</td>
<td>The deed may contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as demolition of the buildings in the FOST areas containing ACM has been completed. The deed may also contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as the appropriate government regulatory agencies have confirmed in writing to the Grantee that ACM has been removed from the buildings and any necessary soil remediation has been conducted in accordance with all applicable federal, state, and local laws and regulations. This Notice of Release will be deemed to remove all notices and restrictions relating to ACM for the FOST areas. The Grantor will have no obligation under this subparagraph for the demolition of buildings or the removal of ACM or soil remediation related to such demolition or removal action.</td>
</tr>
<tr>
<td><strong>8.1.3</strong> Lead-Based Paint</td>
<td>The need for notification of potential LBP at nonresidential buildings, structures, or facilities within the parcels proposed for transfer is based on the age of construction (that is, whether the building or structure was constructed before the Consumer Product Safety Commission’s 1978 ban on LBP for residential use). The parcels proposed for transfer contain buildings, structures or facilities that were built prior to 1978 and may contain LBP. The age of many of the structures on the property suitable for transfer suggests the likelihood lead-based paint may be present on some of these structures. This in turn creates the possibility, through the action of normal weathering and maintenance, there may be lead from lead-based paint in the soil surrounding these structures. Table 4 provides a list of all non-demolished buildings, structures or facilities within the parcels proposed for transfer and their corresponding dates of construction, along with information regarding the status of any known or assumed LBP. Demolition of nonresidential buildings, structures or facilities built prior to 1978 creates the potential for lead to be released to soil as a result of such activities. With respect to any such nonresidential buildings, structures or facilities which the transferee intends to demolish and redevelop for residential use after transfer, the transferee may, under applicable law or regulation, be required by DTSC or other regulatory agencies to evaluate the soil adjacent to such nonresidential buildings, structures or facilities for soil-lead hazards, and to abate any such hazards that may be present, after demolition and prior to occupancy of any newly constructed residential structures. The deed will contain a notice stating nonresidential buildings, structures, or facilities on the property that were built before 1978 are presumed to contain LBP because of their age. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. The Grantor will have no obligation under this subparagraph for the demolition of buildings or the removal of LBP or soil remediation related to such demolition or removal action.</td>
</tr>
<tr>
<td><strong>8.1.4</strong> Drinking Water</td>
<td>The deed will contain a notice that lead was detected above the EPA action level of 15 micrograms per liter in the drinking water of the rear bathroom in Building 229. The building is located in EBS Parcel T054, in the TI Core Transfer Parcel, and has been historically a mixed-use facility accommodating a youth center, a pizza parlor, and offices.</td>
</tr>
</tbody>
</table>
| **8.1.5:** Residual Petroleum Contamination | The deed will contain a notice stating that residual petroleum contamination has been left in place at the following petroleum sites: CAP Sites 14/22 and 25, Inactive Fuel Line Sites D1B, F2A/F2B, and D5:  
  - Elevated concentrations of petroleum hydrocarbons in soil remain in-place 5 feet bgs and deeper at Site 14/22 and Site 25.  
  - Elevated concentrations of petroleum hydrocarbons in soil remain in-place 5 feet bgs and deeper at Site D1B; 5.5 feet bgs and deeper at Site F2B, and 6 feet bgs and deeper at Site D5. |
<table>
<thead>
<tr>
<th>Section Number</th>
<th>Notice or Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.1.6:</strong> Polychlorinated Biphenyls</td>
<td>The deed will contain a notice that PCB-containing electrical equipment exists inside Buildings 1, and 450 in the TI Southwest Transfer Parcel, in excess of TSCA low-occupancy and high occupancy requirements, electrical equipment exists inside Buildings 1, and 453 in the TI Southwest Transfer Parcel, in excess of TSCA high occupancy requirements and three outdoor transformers, TX-120 in parcel T10 within the TI Southeast Transfer Parcel, TX-127 in parcel T081 and TX-147 in parcel T091 within the TI Core Parcel, contain PCBs in excess of TSCA high-occupancy requirements.</td>
</tr>
<tr>
<td><strong>8.2.1</strong> All Remedial Action Has Been Taken</td>
<td>The deed will include a covenant by the United States, made pursuant to the provisions of CERCLA 120(h)(3)(A)(ii)(I), warranting that all remedial action necessary to protect human health and the environment with respect to any hazardous substance remaining on the property has been taken before the date of transfer.</td>
</tr>
<tr>
<td><strong>8.2.2</strong> Additional Remediation Obligation</td>
<td>The deed will include a covenant by the United States, made pursuant to the provisions of CERCLA 120(h)(3)(A)(ii)(II), warranting that any remedial action found to be necessary after the date of such transfer shall be conducted by the United States.</td>
</tr>
<tr>
<td><strong>8.2.3</strong> Right of Access</td>
<td>The deed will contain a covenant by the Grantee granting to the United States right of access to the property, pursuant to the provisions of CERCLA 120(h)(3)(A)(iii), in any case in which any remedial or corrective action is found to be necessary after the date of such transfer.</td>
</tr>
<tr>
<td><strong>8.2.4</strong> Lead-Based Paint</td>
<td>The deed will contain a restriction that in its use and occupancy of the property, including but not limited to, demolition of buildings, structures or facilities and identification and/or evaluation of any LBP hazards, the transferee shall be responsible for managing LBP and LBP hazards in accordance with applicable federal, state, and local laws and other requirements relating to LBP and LBP hazards.</td>
</tr>
</tbody>
</table>
| **8.2.5** Petroleum Restrictions | Remediation and regulatory closeout are continuing to address petroleum contamination in groundwater and soil within some of the FOST areas. Since the FOST areas may be transferred before regulatory closure is attained, restrictions are necessary to address potential human health and environmental risks that may exist from exposure to residual petroleum contamination at the FOST areas (1) under current conditions and (2) while the petroleum corrective action is ongoing. These areas are identified on Figure 6.

The deed will contain a covenant by the Grantee on behalf of itself, its successors and assigns, that, during the period from property transfer until regulatory closure and until the restriction is no longer necessary, no activities that will disturb the soil at 6 inches or more below current ground surface (such as excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within the following petroleum program sites: 14/22, 25, F2A/F2B, and D1B, as shown on Figure 6.

The deed will contain a restriction indicating that petroleum contamination has been left in place in soil (7 feet or more bgs) at Site 15. The deed will contain a covenant by the Grantee on behalf of itself, its successors and assigns, that no activities which will disturb the deep soil at or below 7 feet below current ground surface (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within CAP Site 15, without a Water Board approved soil management plan. |
8.2.6 Groundwater Use Restriction

The deed will contain a covenant prohibiting the Grantee from disturbing existing groundwater monitoring and extraction wells, air sparging wells, and soil-vapor extraction wells located within the FOST areas shown on Figure 4, unless specifically approved by the Navy. No groundwater production wells may be installed in the FOST areas for residential, municipal, agricultural, or industrial use without the written approval of DTSC and the Water Board.

8.2.7 Asbestos Restriction

The deed will contain a restriction that the Grantee covenants, on behalf of itself, its successors and assigns, as a covenant running with the land, that it will prohibit occupancy and use of buildings and structures, or portions thereof, containing known asbestos hazards before abatement of such hazards. In connection with its use and occupancy of the FOST areas, including, but not limited to, demolition of buildings and structures containing asbestos or ACM, it will comply with all applicable federal, state, and local laws relating to asbestos and ACM.

8.2.8 Polychlorinated Biphenyl Restriction

PCBs have been detected at elevated levels in four locations within Buildings 1, 450, and 453. The following table presents the location of the equipment, the transformer identification number, and the maximum concentration reported. The deed will contain a covenant restricting all access to the areas identified in the table below except to qualified personnel with proper protective equipment appropriate to the PCB levels in each vault.

<table>
<thead>
<tr>
<th>EBS Parcel</th>
<th>FOST Parcel</th>
<th>Equipment ID Number</th>
<th>Building and Room</th>
<th>Maximum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>T003</td>
<td>TI Southwest Parcel-B</td>
<td>TX-140</td>
<td>Building 1, Room 37-A</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>T003</td>
<td>TI Southwest Parcel-B</td>
<td>TX-2045</td>
<td>Building 1, Room 37-A</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>T023</td>
<td>TI Southwest Parcel-B</td>
<td>TX-146</td>
<td>Building 450</td>
<td>530 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11 µg/cm²</td>
</tr>
<tr>
<td>T034</td>
<td>TI Southwest Parcel-B</td>
<td>TX-138</td>
<td>Building 453 Vault</td>
<td>320 mg/kg</td>
</tr>
</tbody>
</table>

Notes:

- mg/kg Milligrams per kilogram
- µg/cm² Microgram per square centimeter

The deed will also contain a restriction for an additional transformer location, at Parcel T10 in the TI Southeast Transfer Parcel, which exceeded high occupancy criteria, requires a restriction until removal actions are completed. The site is identified as transformer TX-120, as shown on Figure 6. The deed will contain a restriction that, during the period from property transfer until regulatory closure and until the restriction is no longer necessary, no activities that will disturb the soil (such as excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted within the area designated on Figure 6. In addition, for all PCB areas identified on Figure 6, land use within shall be restricted to low occupancy uses as defined at 40 CFR 761.3.

The deed may contain a notice that the Grantor will provide a Notice of Release, in recordable form, to the Grantee at such time as PCB remediation in the FOST areas has been completed. This Notice of Release will be deemed to remove all notices and restrictions relating to PCBs for the FOST areas.
9.0 FINDING OF SUITABILITY TO TRANSFER

Based on the foregoing information, analysis, and environmental conditions, I find the subject FOST areas are environmentally suitable for transfer by deed for the intended purpose, subject to compliance with the covenants, conditions, and restrictions set forth in this FOST.

I have concluded the requirements of CERCLA Section 120(h)(3) have been met for the FOST areas and the FOST areas can be used with acceptable risk to human health and the environment, and without interference with the environmental restoration process, taking into account the potential risk of future liability.

Wayne Arny
Acting Secretary of The Navy
Installation and Environment

Date