



Draft

2015 Site Management Plan

Naval Station Treasure Island San Francisco, California

August 3, 2015

Prepared for:

**Base Realignment and Closure
Program Management Office West
Naval Facilities Engineering Command
San Diego, California**

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Draft

**2015 Site Management Plan
Naval Station Treasure Island
San Francisco, California**

Contract Number N62473-11-D-2205

**Prepared for:
DEPARTMENT OF THE NAVY**

REVIEW AND APPROVAL

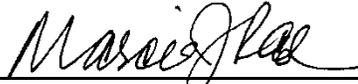
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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing material
AST	Aboveground storage tank
ATG	Allied Technology Group, Inc.
Bay	San Francisco Bay
Bay Bridge	San Francisco-Oakland Bay Bridge
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
Cal/EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Corrective action plan
CDPH	California Department of Public Health
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of concern
CRP	Community relations plan
d	Business day
DDT	Dichlorodiphenyltrichloroethane
DTSC	Department of Toxic Substances Control
EBS	Environmental baseline survey
ed	Elapsed day
EE/CA	Engineering evaluation/cost analysis
EPA	U.S. Environmental Protection Agency
ERM West	Environmental Resources Management West, Inc.
ESD	Explanation of Significant Differences
FFS	Focused feasibility study
FFSRA	Federal Facility Site Remediation Agreement
FHWA	Federal Highway Administration
FOSL	Finding of suitability to lease
FOST	Finding of suitability to transfer
FS	Feasibility study
FSS	Final status survey
GPR	Ground-penetrating radar
HHRA	Human health risk assessment
HRA	Historical radiological assessment
HRASTM	Historical radiological assessment supplemental technical memorandum
HUD	U.S. Department of Housing and Urban Development
IC	Institutional control
IR	Installation Restoration

ACRONYMS AND ABBREVIATIONS (CONTINUED)

LBP	Lead-based paint
LLRO	Low-level radiological object
LLRW	Low-level radiological waste
LUC	Land use control
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
N/A	Not applicable
NAVSTA TI	Naval Station Treasure Island
Navy	Department of the Navy
NFA	No further action
NTCRA	Non-time-critical removal action
OWS	Oil-water separator
PA	Preliminary assessment
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCSR	Post-construction summary report
PFOS	Perfluorooctane-sulfonic acid
PP	Proposed plan
RA	Remedial action
RAB	Restoration Advisory Board
RACR	Remedial action completion report
RAD	Radiological
RAP	Remedial action plan
RASO	Radiological Affairs Support Office
RAWP	Removal action work plan
RCA	Radiologically controlled area
RD	Remedial design
RI	Remedial investigation
ROD	Record of decision
RTC	Response to comments
RURR	Recommendation for Unrestricted Radiological Release
SFUSD	San Francisco Unified School District
Shaw	Shaw Environmental, Inc.
SI	Site inspection
SLERA	Screening-level ecological risk assessment
SSPORTS	Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment, Vallejo
SVOC	Semivolatile organic compound
SWDA	Solid waste disposal area
TBD	To be determined

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Tetra Tech	Tetra Tech EM Inc.
TI	Treasure Island
TIDA	Treasure Island Development Authority
TPH	Total petroleum hydrocarbon
TSCA	Toxic Substances Control Act
USC	<i>United States Code</i>
USCG	U.S. Coast Guard
UST	Underground storage tank
VOC	Volatile organic compound
Water Board	Cal/EPA San Francisco Bay Regional Water Quality Control Board
WWII	World War II
WWTP	Wastewater treatment plant
YBI	Yerba Buena Island

1.0 INTRODUCTION

This document is the 2015 version of the Naval Station Treasure Island (NAVSTA TI) Environmental Site Management Plan. The plan provides (1) the annual status of the strategies for the ongoing basewide environmental programs, and (2) an update to the schedules presented in the 1992 Federal Facility Site Remediation Agreement (FFSRA) for NAVSTA TI. The schedules included in this document support the Joint California Execution Plan for NAVSTA TI, and the state's use of the EnviroStor deliverable tracking system, which is updated annually by the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) with input from the Department of the Navy. This plan reflects the Navy's current site-specific strategies and schedules to achieve site closure in a manner that is consistent with state and federal environmental requirements. The applicable environmental requirements are in programs that include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Program, the Petroleum Program, the Polychlorinated Biphenyls (PCB) Program, the Residential Lead-Based Paint (LBP) Program, the Asbestos-Containing Material (ACM) Program, and the Radiological Program. These strategies represent an ongoing closure process of the NAVSTA TI Basewide Environmental Cleanup Program; as a result, the strategies and related schedules are subject to change.

The Department of Defense developed the Installation Restoration (IR) Program in 1981 to comply with CERCLA and other federal and state environmental regulatory requirements. The IR Program is specific to military facilities, and its purpose is twofold: (1) to identify, investigate, and clean up or control releases of hazardous substances; and (2) to reduce the risk to human health and the environment in a cost-effective manner. NAVSTA TI's IR Program consists of two programs: (1) the CERCLA Program, and (2) the Petroleum Program. Under the CERCLA Program, environmental investigations and cleanup began on NAVSTA TI in the mid-1980s and continue today. The initial facility-wide preliminary assessment/site inspection (PA/SI) was conducted in 1987 to identify areas on Treasure Island (TI) and Yerba Buena Island (YBI) that required further investigation. The Navy has identified 33 IR sites (24 CERCLA sites and nine petroleum sites) on TI and YBI over the course of the cleanup program.

Since 1987, the CERCLA program has evolved to the 24 sites summarized below. The current program status for each site is included on [Table 1](#) and in [Appendix A](#).

CERCLA Program Status			
Closed (13 Sites)		Open (11 Sites)	
Status	IR Site	Status	IR Site
No Action	9, 10, 13	Undergoing Investigation or Remediation	6, 12, 24, 31, 32
No Further Action (NFA)	1, 2, 3, 7, 18, 23, 28, 33	Undergoing Post-Record of Decision (ROD) Monitoring	21, 27, 30
Other (merged into Site 24)	5, 17	On Hold Pending Completion of San Francisco-Oakland Bay Bridge (Bay Bridge) Reconstruction Activities by California Department of Transportation (Caltrans)	8, 11, 29

The Petroleum Program includes nine petroleum sites along with numerous underground storage tanks (UST) and fuel lines throughout TI and YBI. Since 1987, many sites have been closed or are currently undergoing evaluation. The following table summarizes the Petroleum Program, though the current program status for each site is included on [Table 1](#) and in [Appendix A](#).

Petroleum Program Status			
Closed (112 Sites)		Open (9 Sites)	
Petroleum Sites (9 Sites)	4/19, 6, 14/22, 15, 16, 20, 25	Petroleum Sites (0 Sites)	--
UST Sites (89 Sites)	26 (Numerous locations)	UST Sites (7 Sites)	USTs 238, 240A, 240B, 248A, 248B, 248C, 248D
Pipeline Sites (14 Sites)	Building 530, Causeway, D1A, D1B, D1C, D2A, D2B, D4A, D4B, D5, F2A, F2B, YF1, YF2	Pipeline Sites (2 Sites)	YF3, U.S. Coast Guard (USCG)

This document is organized into two main sections (including this introduction), followed by tables, figures, and appendices. [Section 2.0](#) provides an overview of the assumptions used to develop the site-specific schedules. These assumptions are driven by Navy contract funding execution plans, projected fiscal year remedial activities, and document production and review periods. The following tables, figures, and appendices are included:

- The current program status for each site is included in [Table 1](#).
- The durations for standard production and review of the primary and secondary documents to be produced are shown on [Table 2](#).
- Completion dates for the forthcoming NAVSTA TI CERCLA steps are summarized by site in [Table 3](#).
- A summary of Petroleum Program closeout status is provided in [Table 4](#).
- All building locations and roadways on TI and YBI are shown in [Figures 1 and 2](#).
- The NAVSTA TI IR Program is illustrated on [Figure 3](#); the figure depicts the various program sites and transfer parcels on TI and YBI.
- The steps for site closure under the CERCLA and Petroleum Programs are illustrated as flowcharts on [Figures 4 and 5](#).
- The specific closure strategy flowchart for Site 12 is presented in [Figure 6](#).
- The locations of USTs on TI and YBI are shown on [Figures 7 and 8](#).
- The status of the PCB program is shown on [Figure 9](#).
- The status of the radiological program is shown on [Figure 10](#).
- Environmental restrictions, transfer parcels, and environmental baseline survey (EBS) parcels are depicted on [Figure 11](#).
- The April 2011 TI/YBI Redevelopment Project Conceptual Land Plan, prepared for the Treasure Island Development Authority, is shown on [Figure 12](#).
- Additional site-specific detail is provided on the information sheets included in [Appendix A](#), and in the environmental schedule provided in [Appendix B](#).

2.0 SCHEDULE ASSUMPTIONS

A list of assumptions for the FFSRA schedule was developed and accepted by the Base Realignment and Closure Cleanup Team (BCT) for NAVSTA TI. The BCT consists of the Navy, DTSC, and the Cal/EPA San Francisco Bay Regional Water Quality Control Board (Water Board). Each of the site-specific schedules is based on these assumptions, which are presented below. The approved production and review periods have been published since July 30, 2004, in the annual “Site Management Plan Naval Station Treasure Island, San Francisco, California,” formerly referred to as the “Environmental Closeout Strategy and Schedules.” [Table 2](#) presents the standard production and review periods for both primary and secondary documents. [Table 3](#) summarizes completion dates, by site, for each step of the CERCLA closure process. These dates reflect the site-specific schedules in [Appendix B](#). [Table 4](#) summarizes the current closure status of sites in the Petroleum Program.

The assumptions below were used in development of the FFSRA schedule for NAVSTA TI. Any modifications in the assumptions could necessitate a significant change in the schedule.

1. The Navy will reissue updates to the FFSRA schedule annually.
2. If the schedule changes for a document or other activity (such as field work) that is the critical path for subsequent activities or documents, then the schedule for these subsequent activities or documents will be accepted by the BCT.
3. Consistent with the FFSRA, primary documents include remedial investigation (RI) reports, engineering evaluations/cost analyses (EE/CA), action memoranda, feasibility studies (FS), proposed plans (PP), records of decision (ROD), remedial action plans (RAP), and remedial designs (RD). Findings of suitability to transfer (FOST) will follow the primary document schedule. All other documents are considered secondary.
4. The compliance program schedules are not required by the FFSRA. These compliance programs include Residential LBP, Petroleum, PCBs, and ACM. The Petroleum, PCB, ACM, and Residential LBP Program schedules are included for planning and are not enforceable by the regulatory agencies.
5. The specific closeout strategy and schedules for Sites 8, 11, and 29, Underground Storage Tank (UST) 238, and inactive fuel line site U.S. Coast Guard (USCG) are affected by ongoing Bay Bridge construction activities by Caltrans in these areas.
6. In accordance with the FFSRA schedule, all parties have agreed to the following sequential process for the review of all primary documents (see revised production and review periods in [Table 2](#)):
 - The Navy will be allowed at least a 90-day (60-business day) period to develop internal draft documents.
 - A 30-day (20-business day) period will be provided for the Navy to review internal draft documents.

- A 14-day (10-business day) period will be included for the Navy to distribute draft documents to the regulatory agencies.
 - A 30-day (20-business day) period will be provided for the regulatory agencies to review draft documents and submit written comments.
 - A 82-day (57-business day) period will be provided for the Navy to prepare preliminary responses to agency review comments received, distribute the responses to regulatory agencies for discussion and concurrence, and revise and distribute the final documents.
 - A 14-day (10-business day) period will be included for the representatives of the regulatory agencies to accept the final documents. Documents automatically become final if no written comments are received within the 14-day comment period.
7. The following assumptions are made for all secondary documents (see revised production and review periods in [Table 2](#)):
- The Navy will be allowed at least a 30-day (20-business day) period to prepare internal draft documents.
 - A 14-day (10-business day) period will be provided for the Navy to review internal draft documents.
 - A 7-day (5-business day) period will be included for the Navy to distribute draft documents to the regulatory agencies.
 - A 30-day (20-business day) period will be included for the regulatory agencies to review draft documents and submit written comments.
 - A 61-day (43-business day) period will be provided for the Navy to prepare preliminary responses to agency review comments received, distribute the responses to regulatory agencies for discussion and concurrence, and revise and distribute the final documents.
 - A 14-day (10-business day) period will be provided for the representatives of the regulatory agencies to accept the final documents. Documents automatically become final if no written comments are received within the 14-day comment period.
8. The Navy will provide the regulatory agencies with a removal action work plan (RAWP) at least 45 days before the response action is initiated for removal actions (such as a non-time-critical removal action [NTCRA]) other than an emergency response action. The RAWP will not be subject to the general requirements for primary and secondary documents noted above. The regulatory agencies will have a 14-day (10-business day) period to review and provide comments or notice of concurrence on the RAWP to the Navy. The Navy will address agency review comments no less than 10 days before the response action is initiated.
9. In general, the following distribution will be followed for all documents, although certain exceptions or additions may apply to specific documents:

- Regulatory agencies (DTSC, the Water Board, the U.S. Environmental Protection Agency [EPA], the City of San Francisco and its contractors, the Restoration Advisory Board [RAB] co-chair, and the RAB technical focus group) will receive copies of primary and secondary documents.
 - Final copies of all primary and secondary documents will be available in the information repositories and are listed in the administrative record.
10. Time for laboratory analysis and data validation is included in the dates specified for field work.
 11. The current site evaluation criteria will not change significantly to delay the documents or field investigations.
 12. Field work durations are estimated based on the planned sampling investigation or the assumed remedy.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
CERCLA Sites					
1	Medical Clinic	On site X-ray and photo processing laboratory.	Silver	Closed	Site closed with regulatory agency NFA concurrence March 20, 2002.
2	Radiation Training Area	Area used for Navy radiation decontamination training from mid-1950s to 1969.	Radionuclides	Closed	NFA recommended in 1988 PA/SI report.
3	PCB Equipment Storage Area	Area was used to store and repair transformers.	PCBs	Closed	Site closed with regulatory agency NFA concurrence March 20, 2002.
5	Old Boiler Plant	Provided steam heat to nonresidential buildings.	Petroleum	Closed	CERCLA contaminants merged into Site 24 by DTSC letter dated January 17, 2001.
6	Fire Training School	Area used for Navy firefighter training for nearly 50 years.	Dioxins and furans, TPH, VOCs, and PAHs	Open	ROD/final RAP was signed on December 24, 2014. The RCA FSS is being conducted. A RD/RAWP is being prepared. Annual groundwater monitoring continues.
7	Pesticide Storage Area	Area was used to store pesticides, herbicides, and paint.	Metals, pesticides, and herbicides	Closed	Site closed with regulatory agency NFA concurrence on November 1, 2005.
8	Army Point Sludge Disposal Area	Area was used to dispose of sludge from the wastewater treatment plant for approximately 8 years.	SVOCs and metals	Open	Interim RI report was submitted March 2009. Navy will discuss resuming work on the site with Caltrans following demolition of the old eastern span, completion of the freeway access ramps, and demobilization from staging/laydown areas. The site will continue with the CERCLA process starting with an RI addendum.
9	Foundry	Area used as a forge and foundry, paint shop, and welding school.	Iron and benzo(a)pyrene, dibenz(a,h)anthracene	Closed	No Action ROD signed on October 2, 2007.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
CERCLA Sites (Continued)					
10	Bus Painting Shop	Shop used for bus painting, paint mixing, and storage of pest control solutions.	Iron and benzo(a)pyrene, dibenz(a,h)anthracene	Closed	No Action ROD signed on October 2, 2007.
11	YBI Landfill	Area was used as a landfill for various debris.	TPH, PAH, VOCs, and metals	Open	Interim RI report was submitted January 27, 2010. Navy will discuss resuming work on the site with Caltrans following demolition of the old eastern span, completion of the freeway access ramps, and demobilization from staging/laydown areas. The site will continue with the CERCLA process starting with an RI addendum.
12	Old Bunker Area	Area housed ammunition bunkers, former equipment storage areas, refuse areas, and solid waste incineration areas. Military housing construction and earthwork spread contaminants randomly in the subsurface across the site.	PCBs, PAH, dioxins, TPH, metals, radium-226, and debris	Open	NTCRA in SWDAs is in progress. In-house radiological scanning was completed for all residential units within Site 12, and a final summary report was issued on February 27, 2015. Radiological surveys for areas outside the SWDAs were completed and a final summary report was submitted in April 2015. The FS addendum was finalized on June 10, 2015. A draft action memorandum was submitted on June 10, 2015 for a removal action at the Gateview Arsenic/TPH area, discrete areas in the southern portion of Site 12, and the Halyburton Court Area.
13	Stormwater Outfalls / Offshore Sediments	Stormwater system conveys water from surface and building drains to San Francisco Bay without treatment.	Metals, PAH, PCBs, DDT, and TPH	Closed	No Action ROD signed on April 7, 2005.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
CERCLA Sites (Continued)					
17	Tanks 103/104	Two 200,000-gallon ASTs contained diesel.	Petroleum, oils, and lubricants	Closed	CERCLA contaminants merged into IR Site 24 by DTSC letter dated January 17, 2001.
18	Possible asbestos contamination on YBI was incorporated into asbestos investigations	Abandoned steam piping was exposed by a landslide in the early 1980s.	Asbestos	Closed	NFA recommended in 1988 PA/SI report.
21	Vessel Waste Oil Recovery Area	Area was used as an oil/water separator facility and for aircraft maintenance.	VOCs, TPH	Open (response complete)	Site 21 was included in the Five-Year Review finalized on December 15, 2014. RACR was finalized on February 24, 2015. LUC inspections and reporting are ongoing. Soil gas monitoring continues.
23	YBI Fuel Line Rupture/ Land Slide	A fuel line ruptured during a small landslide in the 1980s.	Petroleum	Closed	NFA recommended in 1988 PA/SI report.
24	Dry Cleaning Facility	Area was used as a laundry and dry cleaning facility for at least 35 years.	Petroleum, oil, lubricants, and chlorinated solvents	Open	Focused FS addendum finalized on October 3, 2014. PP/draft was finalized in March 2015; a public meeting was held March 11, 2015. A draft ROD/final RAP was submitted on May 6, 2015. Annual groundwater and soil gas monitoring continues.
27	Clipper Cove Skeet Range	Skeet range operated until 1989.	Lead shot	Open (response complete)	RACR finalized on December 12, 2014. Site 27 was included in the Five-Year Review finalized on December 15, 2014. LUC RD addendum was finalized on April 30, 2015. LUC inspections and reporting are ongoing.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
CERCLA Sites (Continued)					
28	West Side On/Off Ramp	Maintenance of ramps included using lead-based paint.	Lead	Closed	NFA ROD was signed November 22, 2010.
29	East Side On/Off Ramp	Maintenance of ramps included using lead-based paint.	Lead and SVOCs	Open	Interim RI report was submitted March 2009. Navy will discuss resuming work on the site with Caltrans following demolition of the old eastern span, completion of the freeway access ramps, and demobilization from staging/laydown areas. The site will continue with the CERCLA process, starting with an RI addendum.
30	Daycare Center	Area was undeveloped until 1985, when Daycare Center was constructed. Burned debris was possibly used to backfill utility trenches.	Dioxins and metals	Open	ROD/final RAP signed August 5, 2009. Site 30 was included in the Five-Year Review finalized on December 15, 2014. Radiological surveys are being conducted, and a draft FSS report will be prepared. LUC inspections and reporting are ongoing.
31	Former South Storage Yard	Area appears in aerial photos to have been used as a storage yard during the 1970s.	Lead, dioxins, PAH, TPH, and radium-226	Open	Draft RACR was submitted on June 26, 2015. Additional radiological investigation and FSS are planned.
32	Former Training and Storage Area	Area was used for hazardous materials storage area, and for tear gas training area and storage. Area currently contains a transformer pad.	PCBs, TPH, dioxins, pesticides, and arsenic	Open	PP/draft RAP was issued September 2011. Radiological survey was conducted for Site 32. A FSS report is being prepared for Site 32A; additional scanning is planned for Site 32B. A draft ROD/final RAP is planned for December 2015.
33	Water Line Replacement Area	Debris was observed in water line trench during extensive historical repairs.	Arsenic and lead	Closed	Site closed with regulatory agency NFA concurrence on October 29, 2014, with signatures in the final RACR.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
Petroleum Sites					
4/19	Hydraulic Training School/Refuse Transfer Area	Area housed 15 55-gallon drums of waste oil, and fenced area used for the transfer, holding, and disposal of refuse for approximately 35 years.	Petroleum, oil, lubricants	Closed	NFA concurrence letter received from Water Board dated December 17, 2003.
6	Fire Training School	Area was used for Navy firefighting training for nearly 50 years.	Dioxins and furans, TPH, VOCs, PAHs	Closed (merged with Site 6 CERCLA)	Closure report requesting NFA submitted December 16, 2005. Water Board did not concur with request for NFA. Site 6 moved to CERCLA Program on September 18, 2003. Groundwater monitoring to be conducted under CERCLA Program. Corrective action for USTs 240A, 240B, 248A, 248B, 248C, 248D is complete. Estimated UST closure in June 2017 following groundwater monitoring.
14/22	New Fuel Farm/Navy Exchange Service Station	Area was the primary storage and distribution area for fuels for more than 50 years.	Petroleum, oil, lubricants, VOCs	Closed	NFA concurrence letter received from Water Board dated July 18, 2005.
15	Old Fuel Farm	Original fuel storage and distribution facility, much of which was moved to New Fuel Farm by 1945.	Petroleum, oil, lubricants	Closed	NFA concurrence letter received from Water Board dated September 2004.
16	Clipper Cove Tank Farm	Area stored aviation gasoline and automotive diesel for more than 20 years.	Petroleum, oil, lubricants	Closed	NFA concurrence letter received from Water Board dated June 17, 2004.
20	Auto Hobby Shop/Transportation Center	Area has been used for steam cleaning and degreasing vehicles and for storage of hydraulic fluid and recycled oil.	Petroleum, oil, lubricants, VOCs	Closed	NFA concurrence letter received from Water Board dated June 17, 2004.

TABLE 1: CERCLA AND PETROLEUM RELATED SITE INFORMATION (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

IR Site Number	Site Name	Historical Use	Contaminants of Potential Concern	Open or Closed Site	Status of CERCLA and Petroleum Phase
Petroleum Sites (Continued)					
25	Seaplane Maintenance Area	Three areas are used for storing and maintaining vehicles and seaplanes.	Petroleum, oil, lubricants	Closed	NFA concurrence letter received from Water Board dated October 28, 2011.
26	UST Sites	USTs.	Petroleum	Open	Various NFA concurrence letters received for 89 out of 96 sites. NFA concurrence will be requested for USTs 240A, 240B, 248A, 248B, 248C, 248D in 2017. UST 238 on YBI awaits completion of Caltrans activities.
Pipeline Sites	Sites USCG and YF3	Inactive fuel pipelines.	Petroleum	Open	NFA concurrence letters for 14 pipeline sites received from Water Board on various dates. Further investigation and site completion are planned for 2 sites (USCG and YF3). USCG on YBI awaits completion of Caltrans activities. A SLERA was finalized for YF3 in March 2015. Additional characterization is planned.

Notes:

AST	Aboveground storage tank	RA	Remedial action
Cal/EPA	California Environmental Protection Agency	RACR	Remedial action completion report
Caltrans	California Department of Transportation	RAP	Remedial action plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	RAWP	Remedial action work plan
DDT	Dichlorodiphenyltrichloroethane	RCA	Radiologically controlled area
DTSC	Department of Toxic Substances Control	RD	Remedial design
FS	Feasibility study	RI	Remedial investigation
FSS	Final status survey	ROD	Record of decision
IR	Installation Restoration	SLERA	Screening-level ecological risk assessment
LUC	Land use control	SVOC	Semivolatile organic compound
Navy	Department of the Navy	SWDA	Solid waste disposal area
NFA	No further action	TPH	Total petroleum hydrocarbon
NTCRA	Non-time-critical removal action	USCG	U.S. Coast Guard
PA/SI	Preliminary assessment/site inspection	UST	Underground storage tank
PAH	Polycyclic aromatic hydrocarbons	VOC	Volatile organic compound
PCB	Polychlorinated biphenyl	Water Board	Cal/EPA San Francisco Bay Regional Water Quality Control Board
PP	Proposed plan	YBI	Yerba Buena Island

TABLE 2: DOCUMENT PRODUCTION AND REVIEW PERIODS
 Site Management Plan, Naval Station Treasure Island, San Francisco, California

FFSRA Guidelines		Revised Production and Review Periods ^{a,b,c}	
Primary Documents^d			
Internal Draft	90 ed	Internal Draft	60 d / 90 ed
Navy Review	15 ed	Navy Review	20 d / 30 ed
Draft	15 ed	Draft	10 d / 14 ed
Agency Review	60 ed	Agency Review	20 d / 30 ed
Internal Draft Final	46 ed	N/A	----
Navy Review	7 ed	N/A	----
Draft Final	7 ed	N/A	----
Agency Review	30 ed	N/A	----
Final	60 ed	Final	57 d / 82 ed ^{e,f}
Total:	330 ed	Total:	167 d / 246 ed
Secondary Documents^g			
Internal Draft	60 ed	Internal Draft	20 d / 30 ed
Navy Review	7 ed	Navy Review	10 d / 14 ed
Draft	7 ed	Draft	5 d / 7 ed
Agency Review	30 ed	Agency Review	20 d / 30 ed
Draft Final	30 ed	N/A	----
Agency Review	30 ed	N/A	----
Final	60 ed	Final	43 d / 61 ed ^{e,f}
Total:	224 ed	Total:	98 d / 142 ed

Notes:

- a The revised document production and review periods were approved by the Base Realignment and Closure Cleanup Team in 2004 ("Environmental Closeout Strategy and Schedules, Naval Station Treasure Island, San Francisco, California," dated July 30, 2004, and published by SulTech). In some cases, standard production and review periods may not be followed.
 - b Remedial action work plans will be submitted for review at least 45 days before the response action is initiated. The regulatory agencies will have a 14-day review period to provide comments or notice of concurrence. The Navy will provide responses to comments (RTCs) no less than 10 days before the response action begins.
 - c Working meetings and scoping meetings may be included in the schedule as placeholders for the Navy and regulatory agencies to discuss a document, receive review comments, or to discuss or resolve issues relating to a document.
 - d Primary documents include work plans, remedial investigation reports, engineering evaluation/cost analyses, action memoranda, feasibility studies, remedial designs, proposed plans, and record of decisions/remedial action plans. Finding of suitability to transfers will also follow the primary document schedule.
 - e The schedule includes drafting the RTCs, review of responses by Navy, agency review of responses, comment resolution, and revising and distributing the final document.
 - f Agencies have a 14-day period to approve or comment on final documents. Documents automatically become final if no written comments are received within the 14-day comment period.
 - g Secondary documents include, but are not limited to, technical memoranda, design strategies, summary reports, sampling and analysis plans, and quality assurance project plans.
- Not applicable
 d Business day (or working day)
 ed Elapsed day (or calendar day, as opposed to a working day)
 N/A Not applicable

TABLE 3: SUMMARY OF FORTHCOMING CERCLA DOCUMENTS AND PHASES
 Site Management Plan, Naval Station Treasure Island, San Francisco, California

CERCLA Primary Documents	Date Complete	CERCLA Primary Documents	Date Complete
Site 6 (CERCLA)		Site 24	
FSS	02/10/16	PP/ROD/RAP	09/03/15
RD/RA	03/17/17	RD/RA	10/26/17
Sites 8 & 29		Site 30	
RI Addendum (if necessary)	01/02/18	FSS	10/10/16
FS (if necessary)	10/25/18		
PP/ROD/RAP	05/09/20		
RD/RA (if necessary)	09/05/21		
Site 11		Site 31	
RI Addendum (if necessary)	01/02/18	RA	10/12/15
FS (if necessary)	08/27/18	FSS	10/10/16
PP/ROD/RAP	03/15/20		
RD/RA (if necessary)	03/16/22		
Site 12		Site 32	
✓ FS Addendum	06/10/15	FSS (32A)	03/08/16
Phase III PCSR/FSS	05/25/16	PP/ROD/RAP	04/19/16
Non-SWDA PP/ROD/RAP	12/06/16	FSS (32B)	12/08/16
Non-SWDA RD/RA	07/12/19		
RAD/SWDA FS Addendum	01/27/17		
RAD/SWDA PP/ROD/RAP	07/02/18		
RAD/SWDA RD/RA	12/15/20		

Notes:

PP/ROD/RAP end date is considered the date the ROD/final RAP is signed.

RD/RA end date is considered the date the remedial action completion report is completed.

- ✓ Complete
- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- FS Feasibility study
- FSS Final status survey
- PCSR Post-construction summary report
- PP Proposed plan
- RA Remedial action
- RAD Radiological
- RAP Remedial action plan
- RD Remedial design
- RI Remedial investigation
- ROD Record of decision
- SWDA Solid waste disposal area

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
UST 1A, 1E, 368A, and 2C	38D9601 38D9602 38D9603 38D9604	UST 1A UST 1E UST 368A UST 2C	UST Closure	Draft UST Closure Report for UST Sites 1A, 1E, and 368A at Naval Station Treasure Island. October 2000. AGS Inc. Draft Summary Report of UST Removals, Naval Station Treasure Island. January 20, 1994. PRC Environmental Management, Inc.	February 25, 2002	Water Board UST case closure letter.
UST 180C, Building 180	38D9605	UST 180C	UST Closure	Final Closure Report Building 180 Request for No Further Action. August 15, 2005. Shaw.	October 11, 2005	Water Board UST case closure letter.
Pipeline D4A UST 201	38D9606	D4A Pipeline	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA ¹ concurrence letter.
		UST 201	UST Closure	Draft Final UST Investigation Report for UST Sites 143, 180C, 201, 227, and 368B at Naval Station Treasure Island. January 2001. AGS Inc. Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 10, 2004	Water Board UST case closure letter.
Building 227	38D9607	UST 227	UST Closure	Final Closure Report, Site 227, Request for No Further Action, Naval Station Treasure Island. August 16, 2004. Shaw.	September 21, 2004	Water Board UST case closure letter.
UST 368B	38D9608	UST 368B	UST Closure	Final Closure Report UST 368B Request for No Further Action, Naval Station Treasure Island. December 2003. Tetra Tech.	December 17, 2003	Water Board UST case closure letter.

¹ USTs with known releases to the environment are closed pursuant to Title 23 of the *California Code of Regulations*. If the UST was used to store heating oil and had a capacity of less than 1,100 gallons or a release has not occurred, the Navy will request NFA and submit a letter to the Water Board for concurrence. The Navy has demonstrated to the Water Board that NFA is required for UST sites that have received NFA concurrence. The Navy has completed all site investigations and RA related to the UST site for UST sites that have received regulatory closure.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Site 6	38D9609	USTs (240A, 240B, 248A, 248B, 248C, and 248D) ASTs (248, 240)	UST Closure, AST NFA, Site NFA	Final Closure Report Site 06 Request for No Further Action, Naval Station Treasure Island. December 16, 2005. Shaw.	TBD	Petroleum Program investigations completed, report requesting NFA concurrence submitted, concurrence with NFA not granted. ² Ongoing groundwater monitoring at the site. Navy prepared the UST 240 PCSR and will be requesting regulatory closure for USTs 240 and 248 in 2016.
Sites 14/22	38D9610	Removed ASTs (4, 5, 6A, 6B, 6C, 6E, 6F, and 6G, and 456) Removed USTs (85, 330A, 330B, 330E, and 330F)	UST Closure AST NFA Site NFA	Final Closure Report Site 14/22 Request for No Further Action, Naval Station Treasure Island. June 13, 2005. Shaw.	July 18, 2005	Water Board NFA concurrence letter. ASTs 6A, through 6G were originally closed as "existing decommissioned" ASTs, but were removed in February 2012.
Site 20	38D9611	See UST 225A-D	Site NFA	Final Closure Report Site 20 Request for No Further Action Naval Station Treasure Island. January 2004. Tetra Tech.	June 17, 2004	Water Board NFA concurrence letter.
USTs 225 A-D	38D9611	USTs 225 A-D (Site 20)	UST Closure	Final Closure Report Site 20 Request for No Further Action Naval Station Treasure Island. January 2004. Tetra Tech.	May 5, 2004	Water Board UST case closure letter.

² Letter dated May 15, 2006, from A. Friedman, Regional Water Board, Water Resource Control Engineer, to Ellen Casados, Navy Remedial Project Manager. Regarding Regional Water Board Staff Comments on Final Closure Report, Site 6, Request for No Further Action, Naval Station Treasure Island, San Francisco.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Pipeline USCG	38D9612	Pipeline USCG	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	TBD	Water Board did not concur with NFA and requested additional investigation in a letter dated February 9, 2004. Investigation is on hold until completion of the Bay Bridge project. USTs associated with this site are tracked on a separate line.
		UST 270	UST Closure	Final UST Investigation Report, for Former UST Tank Site 270 at Naval Station Treasure Island. August 1999. ERM West. Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 10, 2004	Water Board UST case closure letter.
Building 66	38D9613	UST 66	UST Closure	Final Post Construction Summary Report Building 66 Remedial Excavation Naval Station Treasure Island. December 11, 2002. IT Corporation.	October 23, 2002	Water Board UST case closure letter.
USTs 204	38D9614	USTs 204 A, B, C, D (no release)	UST NFA	Final Post Construction Summary Report, UST Sites 204, 237, and 238, Naval Station Treasure Island. May 24, 2004. Shaw.	June 17, 2004	Water Board NFA concurrence letter.
UST 237	38D9614	UST 237 (previously suspected)	UST NFA	Final Post Construction Summary Report, UST Sites 204, 237, and 238, Naval Station Treasure Island. May 24, 2004. Shaw.	June 17, 2004	NFA for UST 237 requested; however, petroleum-contaminated soil (likely from the USCG site) remains in the vicinity. Report recommended additional investigation. Since a tank was not present, a case closure letter is not required.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Site 25	38D9615	USTs (143A through 143I, and 2B)	UST Closure, Site NFA	Final Closure Report Site 25 Request for No Further Action, Naval Station Treasure Island. December 7, 2005. Shaw. Final Addendum to Closure Report Site 25 Request for No Further Action, Naval Station Treasure Island. January 29, 2010. Shaw. Targeted Soil Gas Investigation Results and Vapor Intrusion Pathway Evaluation and Site Closure Request Technical Memorandum, Site 25, Naval Station Treasure Island, March 7, 2011. Shaw.	October 28, 2011	Petroleum Program investigations completed, report requesting NFA concurrence submitted, concurrence with NFA not granted. ³ Additional soil samples were collected in 2009 and a final revised request for NFA concurrence was submitted. At the request of the BCT, additional soil gas sampling was conducted in late 2010 and early 2011. The Water Board concurred with NFA for Site 25 in an October 28, 2011 letter.
Pipeline D1B	38D9616	None	Groundwater and Site NFA	Final Addendum to Closure Report, Site D1B, Request for No Further Action for Shallow Soils, Naval Station Treasure Island. February 28, 2006. Shaw.	May 15, 2006	Water Board NFA concurrence letter.
		None	Shallow Soil NFA	Final Closure Report, Site D1B, Request for No Further Action for Shallow Soils, Naval Station Treasure Island. April 18, 2005. Shaw.	July 20, 2005	Water Board NFA concurrence letter.
Pipeline F2A/F2B	38D9617	USTs (14A and 14B) (suspected removed) ASTs (103 and 104)	UST NFA, AST NFA, Site NFA	Final Closure Report, Sites F2A and F2B, Request for No Further Action, Naval Station Treasure Island. July 15, 2005. Shaw.	August 19, 2005	A case closure letter is not required because tanks are not present. (The Water Board also previously concurred NFA required for USTs and ASTs in a May 9, 2005 letter.)

³ Letter dated May 15, 2006, from A. Friedman, Regional Water Board, Water Resource Control Engineer, to Ellen Casados, Navy Remedial Project Manager. Regarding Regional Water Board Staff Comments on Final Closure Report, Site 25, Request for No Further Action, Naval Station Treasure Island, San Francisco.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Site 15	38D9618	None	AST and Site NFA	Final Closure Report, Site 15, Request for No Further Action, Naval Station Treasure Island. September 15, 2004. Shaw.	September 27, 2004	No USTs are associated with this site.
		None	Shallow Soil NFA	Final Post Construction Summary Report, Site 15 Remedial Excavation, Naval Station Treasure Island. November 19, 2003. Shaw.	December 1, 2003	Water Board NFA concurrence letter.
UST QR08, 230, and 257	38D9701	UST QR08	UST Closure	Underground Storage Tank Removal Summary Report for Tanks 248A, 248B, 257, QTR8, 180D, and 180E Naval Station Treasure Island. March 1997. Navy. Draft Tank Removal Summary Report, Naval Station Treasure Island, California. August 31, 1990. PRC Environmental Management, Inc. (Includes UST 230 TI.)	October 3, 1997	Water Board UST case closure letter.
	38D9702	UST 230 (TI)				
	38D9703	UST 257				
UST 1B, 1C, 1D, 1F, 2A, 2D, 111, 169, 180A, 180B, 300D, and 330C	38D9704	UST 1B	UST Closure	Report on Abandoned Underground Storage Tank Investigation at Naval Station Treasure Island. April 1989. ERM West.	July 22, 1996	Water Board UST case closure letter.
	38D9704	UST 1C				
	38D9704	UST1D				
	38D9705	UST 1F				
	38D9706	UST 2A				
	38D9707	UST 2D				
	38D9708	UST 330C				
	38D9708	UST 330D				
	38D9709	UST 180A				
	38D9709	UST 180B				
	38D9710	UST 111				
38D9711	UST 169					
UST 469 (1G)	UTOO3878	UST 469	City and County of San Francisco UST Closure UST Closure	Draft Final UST Closure Report at Building 369, Naval Station Treasure Island. May 2000. AGS Inc.	July 7, 2000	City and County of San Francisco UST Closure letter.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
UST 238 (YBI)	--	UST 238 (YBI)	UST Closure	--	TBD	Suspected tank in USCG Site. GPR was inconclusive in search for the tank; further investigation on hold until completion of the Bay Bridge project. ⁴
Pipeline Site YF3	--	None	Pipeline NFA	--	TBD	Water Board letter received February 12, 2004, requested additional investigation. The Navy finalized a SLERA on March 19, 2015. Additional data gaps sampling will be conducted.
UST 140, 221, and 230	--	UST 140 (TI) UST 221 (YBI) UST 230 (YBI) (previously suspected)	UST NFA, UST Closure (221)	Final Post Construction Summary Report, UST Sites 140, 221, and 230, Naval Station Treasure Island. May 6, 2004. Shaw.	June 17, 2004	UST 140: previously suspected tank. Unable to locate with further investigation; Water Board concurred with NFA. UST 230: previously suspected tank. Unable to locate with further investigation; Water Board concurred with NFA. UST 221: located and removed; no evidence of leaking observed. Navy requested closure of UST; Water Board concurred with NFA. Therefore no closure letter required.
Site 16	--	10 Former ASTs	Site NFA	Final Closure Report Site 16 Clipper Cove Tank Farm Request for No Further Action, Naval Station Treasure Island. April 27, 2004. Shaw.	June 17, 2004	Water Board NFA concurrence letter.

⁴ Letter dated June 17, 2004, from S. Raker, Regional Water Board Engineering Geologist, to Ellen Casados, Navy Remedial Project Manager. Regarding Concurrence on Request for No Further Action, USTs 204 and 237, Naval Station Treasure Island, San Francisco.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Pipeline YF2	--	None	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	June 17, 2004	Water Board NFA concurrence letter.
Pipeline D1A	--	None	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline D1C	--	None	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline D2A	--	UST 26 (suspected removed)	Pipeline/UST NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline D2B	--	None	Pipeline NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline D4B	--	UST 29 (suspected removed)	Pipeline/UST NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline D5	--	UST 15 (suspected removed)	Pipeline/UST NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Pipeline YF1	--	None	Pipeline NFA	Final Closure Report Site 04/19 Request for No Further Action Naval Station Treasure Island. December 2003. Tetra Tech.	February 9, 2004	Water Board NFA concurrence letter.
Site 4/19	--	None	Site NFA	Final Facilitywide Underground Storage Tank Summary Report, Naval Station Treasure Island. October 2003. Tetra Tech.	December 17, 2003	Water Board NFA concurrence letter.
Facilitywide UST	--	16 previously suspected USTs	UST NFA	Final CAP Inactive Fuel Lines, Naval Station Treasure Island. December 2003. Tetra Tech.	December 2, 2003	Water Board NFA concurrence letter.

TABLE 4: PETROLEUM SITE CLOSURE SUMMARY (CONTINUED)

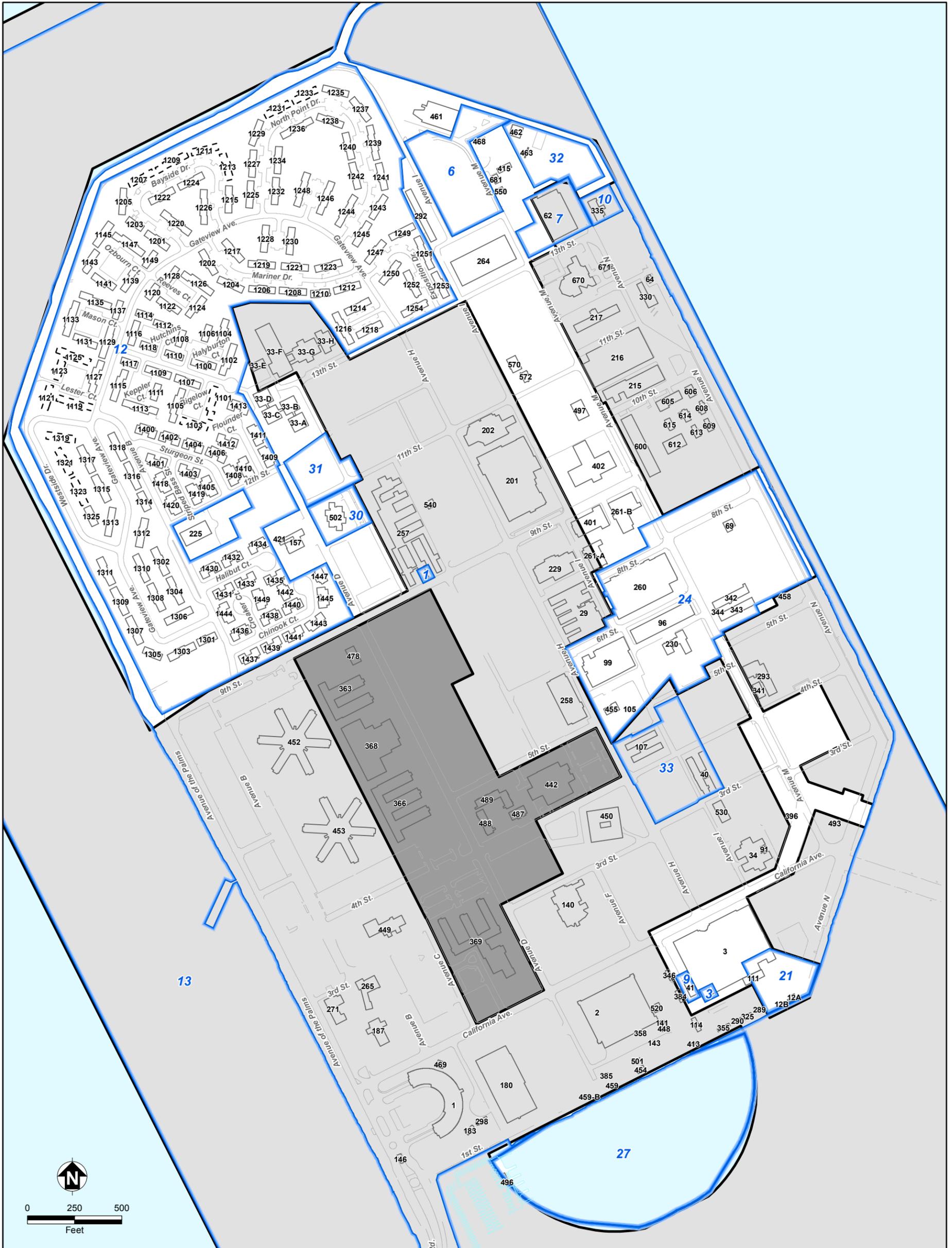
Site Management Plan, Naval Station Treasure Island, San Francisco, California

Petroleum Program Site	Water Board Case Number	Associated USTs/ASTs	Closure Report Requests NFA/Closure	Closure Report	Closure Letter Date	Comments
Home Heating Oil UST 57 and 234	--	UST 57 UST 234	UST NFA	Report on Abandoned Underground Storage Tank Investigation at Naval Station Treasure Island. April 1989. ERM West.	September 5, 2003	Water Board NFA concurrence letter.
Parcel T086	--	None	Site NFA	Final Post Construction Summary Report Parcel T086 Exploratory Trenching Naval Station Treasure Island. June 11, 2003. Shaw.	July 9, 2003	Water Board NFA concurrence letter.
Building 530 Pipeline	--	None	Pipeline NFA	Final Post Construction Summary Report Building 530 Pipeline Removal and Closure Naval Station Treasure Island. June 11, 2003. IT Corporation.	July 9, 2003	Water Board NFA concurrence letter.
Causeway Pipeline	--	None	Pipeline NFA	Final Post Construction Summary Report Causeway Pipeline Removal and Closure Naval Station Treasure Island. January 20, 2003. IT Corporation.	March 11, 2003	Water Board NFA concurrence letter.
Home Heating Oil UST 1-7, 9, 10, 62, and 240	--	UST 1-7, 9, 10, 62, and 240	UST NFA	Summary of the Closure-in-Place of Eleven Underground Home Heating Oil Tanks at Yerba Buena Island, Naval Station Treasure Island. December 31, 1996. Navy.	July 23, 2002	Water Board NFA concurrence letter.
UST 180D and 180E	--	UST 180D and 180E (no release)	UST NFA	Underground Storage Tank Removal Summary Report for Tanks 248A, 248B, 257, QTR8, 180D, and 180E Naval Station Treasure Island. March 1997. Navy.	October 3, 1997	Water Board NFA concurrence letter.

Notes: Gray shading indicates action required. **Bold text** indicates sites that are not closed.

--	Not applicable	RA	Remedial Action
AST	Aboveground storage tank	Shaw	Shaw Environmental Inc.
Bay Bridge	San Francisco-Oakland Bay Bridge	SLERA	Screening-level ecological risk assessment
BCT	Base Realignment and Closure Cleanup Team	TBD	To be determined
CAP	Corrective Action Plan	Tetra Tech	Tetra Tech EM Inc.
ERM West	Environmental Resources Management West, Inc.	USCG	United States Coast Guard
GPR	Ground-penetrating radar	UST	Underground storage tank
NFA	No further action	Water Board	San Francisco Bay Regional Water Quality Control Board
PCSR	Post-construction summary report	YBI	Yerba Buena Island

FIGURES



- CERCLA Program Site
- Building - Demolished
- Building
- Road Edge
- Job Corps Parcel
- TIDA Property

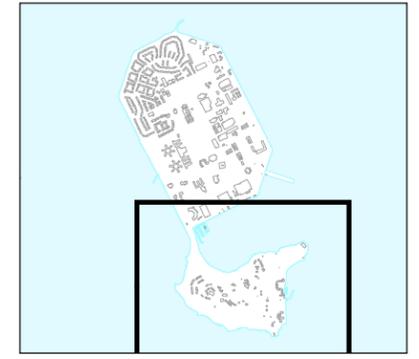
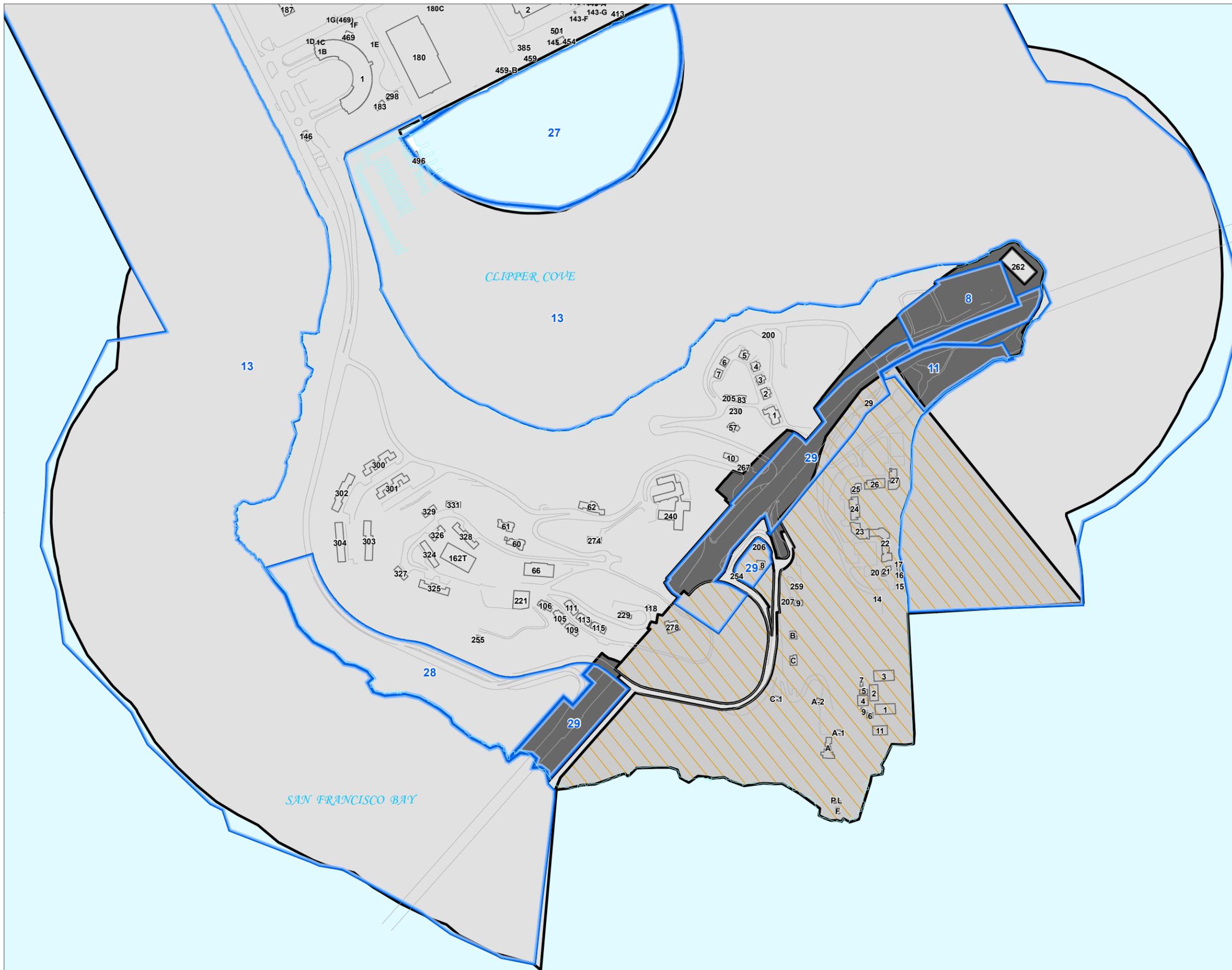
Notes:
 CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 TIDA Treasure Island Development Authority



Naval Station Treasure Island
 Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 1
TREASURE ISLAND BUILDING
LOCATIONS AND ROADWAYS

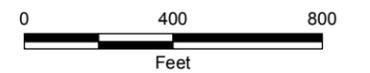
Site Management Plan 2015



Area of Interest

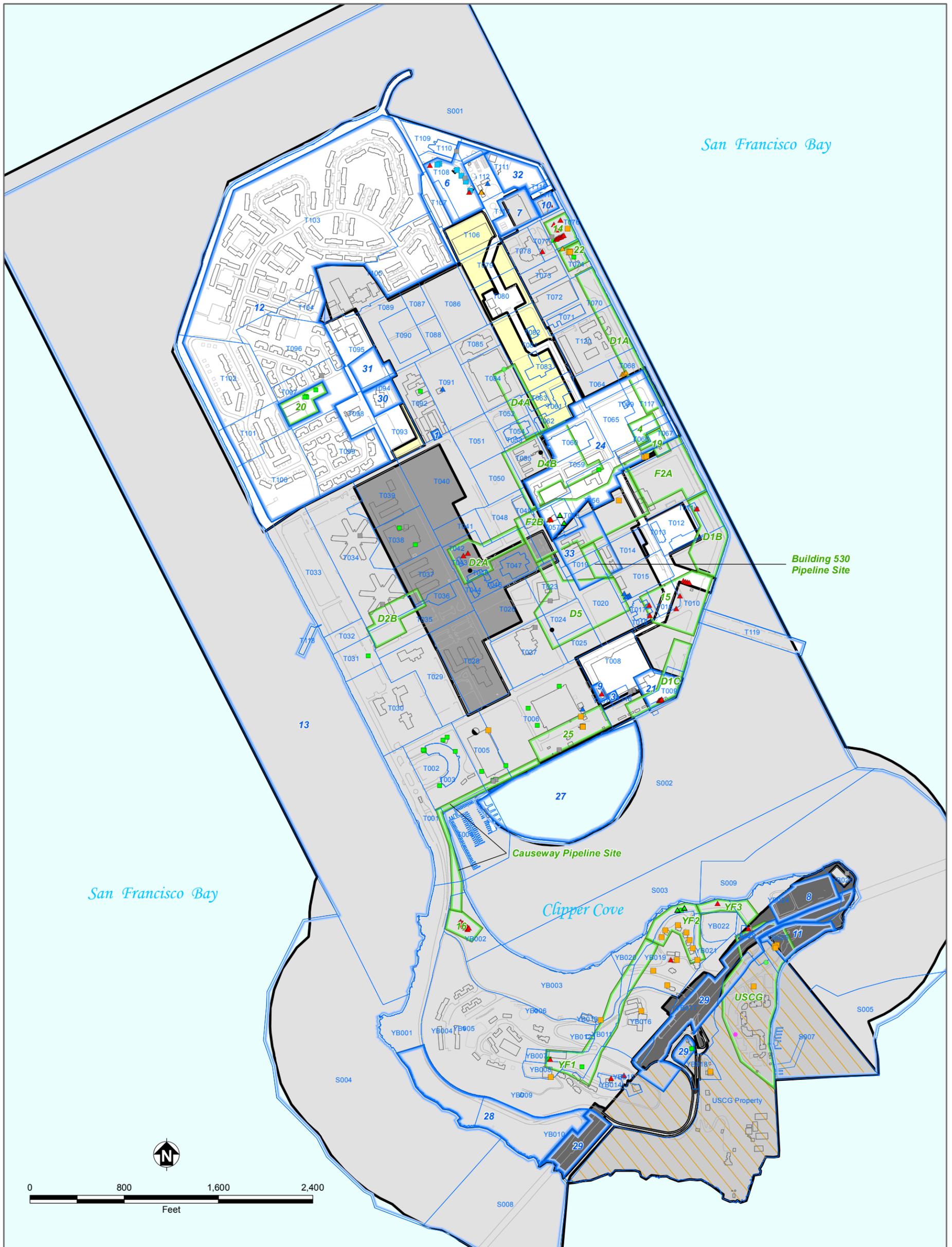
- CERCLA Program Site
- Road Edge
- Building
- TIDA Property
- Caltrans
- U.S. Coast Guard

Notes:
 CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 TIDA Treasure Island Development Authority

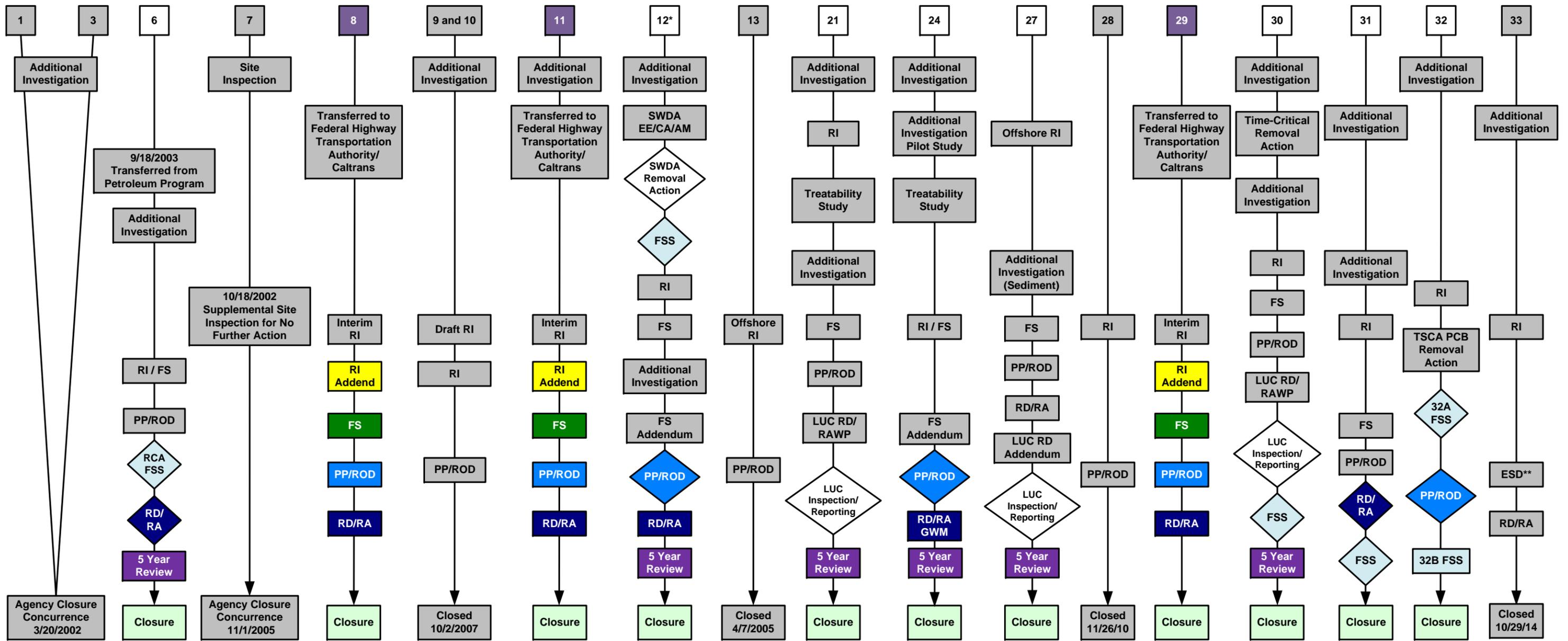


Naval Station Treasure Island
 Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 2
YERBA BUENA ISLAND
BUILDING LOCATIONS
AND ROADWAYS
 Site Management Plan 2015



<p>TRANSFER PARCELS¹:</p> <ul style="list-style-type: none"> TI FOST Property (FOST 1 Amended) FOST 4 Upland Property Job Corps Parcel TIDA Property Caltrans U.S. Coast Guard EBS Parcel <p>INVESTIGATION SITES:</p> <ul style="list-style-type: none"> Petroleum Program Sites CERCLA Program Sites 	<ul style="list-style-type: none"> Building Road Edge <p>UNDERGROUND STORAGE TANKS:</p> <ul style="list-style-type: none"> Closed Closed via Inactive Fuel Lines CAP Further Investigation NFA Concurrence NFA via Inactive Fuel Lines CAP NFA Requested Never Existed <p>ABOVEGROUND STORAGE TANKS:</p> <ul style="list-style-type: none"> Closed-in-Place Active Inactive Removed 	<p>OIL-WATER SEPARATORS:</p> <ul style="list-style-type: none"> Potential Removed <p>Notes: Caltrans CAP CERCLA</p> <p>EBS FOST NFA TI TIDA USCG YBI</p> <p>California Department of Transportation Corrective Action Plan Comprehensive Environmental Response, Compensation, and Liability Act Environmental baseline survey Finding of suitability to transfer No further action Treasure Island Treasure Island Development Authority United States Coast Guard Yerba Buena Island</p> <p>1. Areas on TI are untransferred unless indicated as Job Corps or TIDA Property. All areas on YBI have been transferred.</p> <p>(See Figures 7 and 8 for individual tank identification and location.)</p>		<p>Naval Station Treasure Island Department of the Navy, BRAC PMO West, San Diego, CA</p> <p>FIGURE 3 CERCLA SITES, PETROLEUM SITES, AND TRANSFER PARCELS</p> <p>Site Management Plan 2015</p>
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Legend:

◊ Shape indicates current ongoing activity, activities below this point are anticipated as of this update.

◻ Shading indicates activity completed or site is closed

8 Caltrans property

- RI Indicates RI or RI Addendum
- FSS Indicates FSS in accordance with MARSSIM
- FS Indicates FS or FS Addendum
- PP/ROD Indicates PP/ROD
- RD/RA Indicates RD/RA
- 5 Year Review Indicates Five Year Review
- Closure Indicates Site Closure

Notes:

- AM Action memorandum
- Caltrans California Department of Transportation
- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- EE/CA Engineering evaluation / cost analysis
- ESD Explanation of significant differences
- NFA No further action
- FS Feasibility study
- FSS Final status survey
- GWM Groundwater monitoring
- LUC Land use control
- MARSSIM Multi-Agency Radiation Survey and Site Investigation Manual
- PA/SI Preliminary assessment/site inspection
- PCB Polychlorinated biphenyl
- PP Proposed plan
- RA Remedial action
- RAP Remedial action plan
- RAWP Remedial action work plan
- RCA Radiologically controlled area
- RD Remedial design
- RI Remedial investigation
- ROD Record of decision
- SWDA Solid waste disposal area
- TSCA Toxic Substances Control Act

Flow chart refers to the potential overall site strategy. These strategies represent an ongoing closure process; therefore, they and any related schedules are subject to change. Specific sites may be completed earlier.

* A more detailed flow chart of the CERCLA and Radiological components for the various areas within Site 12 is depicted on Figure 6.

** The ESD was written to modify the Site 31 ROD/RAP to include Site 33 as part of the remedy.

Sites 2, 18, and 23 were recommended for NFA in the PA/SI.

Sites 5 and 17 were merged into Site 24 by letter dated January 17, 2001.

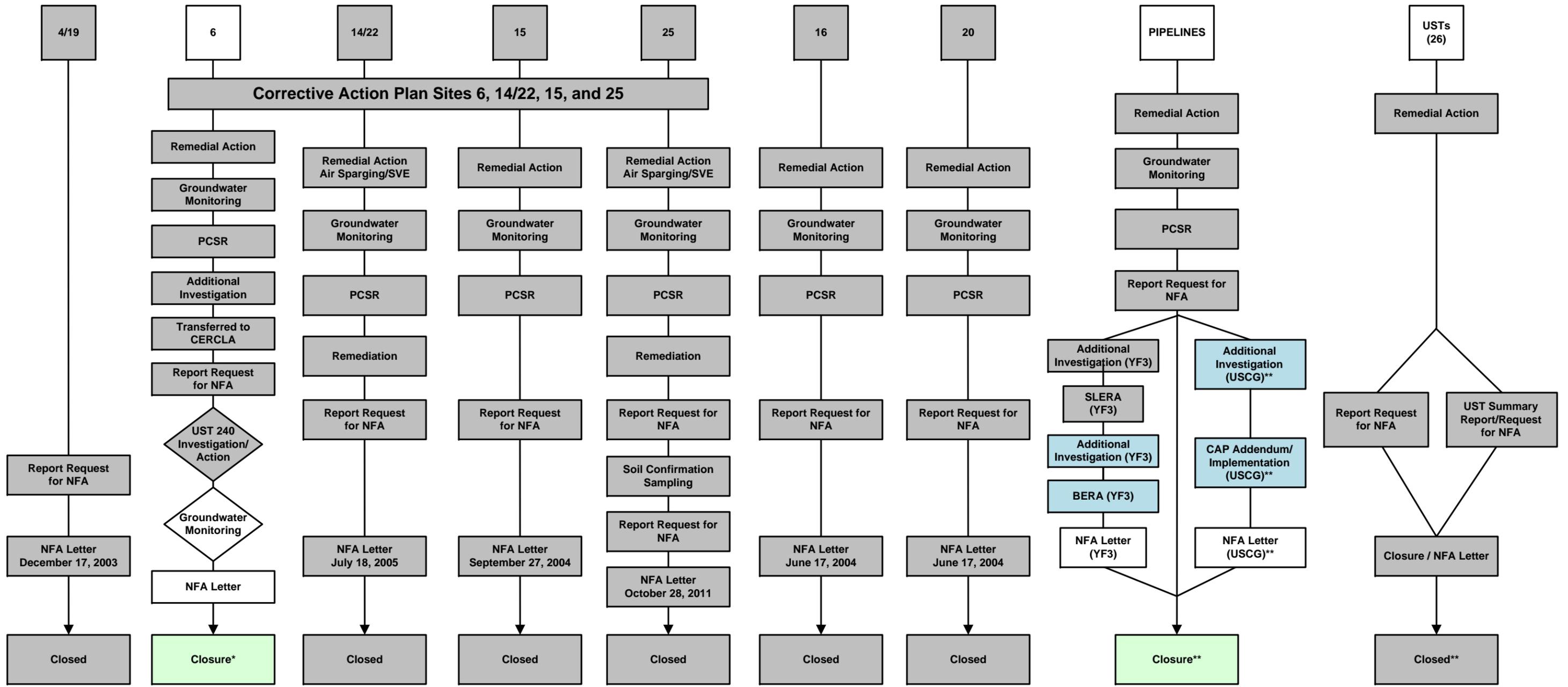
Because of Caltrans activities in the vicinity of Sites 8, 11, and 29, which may result in the removal of known contamination, standard CERCLA schedules are based on Caltrans' quarterly schedule. The Navy finalized the interim RI reports for these sites.



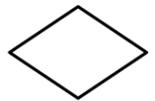
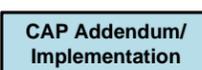
Naval Station Treasure Island
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 4
CERCLA PROGRAM SITE STRATEGY
FLOW CHART

Site Management Plan 2015



Legend:

-  Shape indicates current ongoing activity, activities below this point are anticipated as of this date.
-  Shading indicates activity completed or site is closed
-  CAP Addendum/Implementation Indicates Planned Investigation, Report, or Removal Action
-  NFA Letter Indicates No Further Action Concurrence Letter
-  Closure Indicates Site Closure

- Notes:**
- Caltrans California Department of Transportation
 - CAP Corrective action plan
 - NFA No further action
 - PCSR Post-construction summary report
 - SVE Soil vapor extraction
 - TI Treasure Island
 - USCG United States Coast Guard
 - UST Underground storage tank

Flow chart refers to the potential overall site strategy. These strategies represent an ongoing closure process; therefore, they, and any related schedules, are subject to change. Specific sites may be completed earlier.

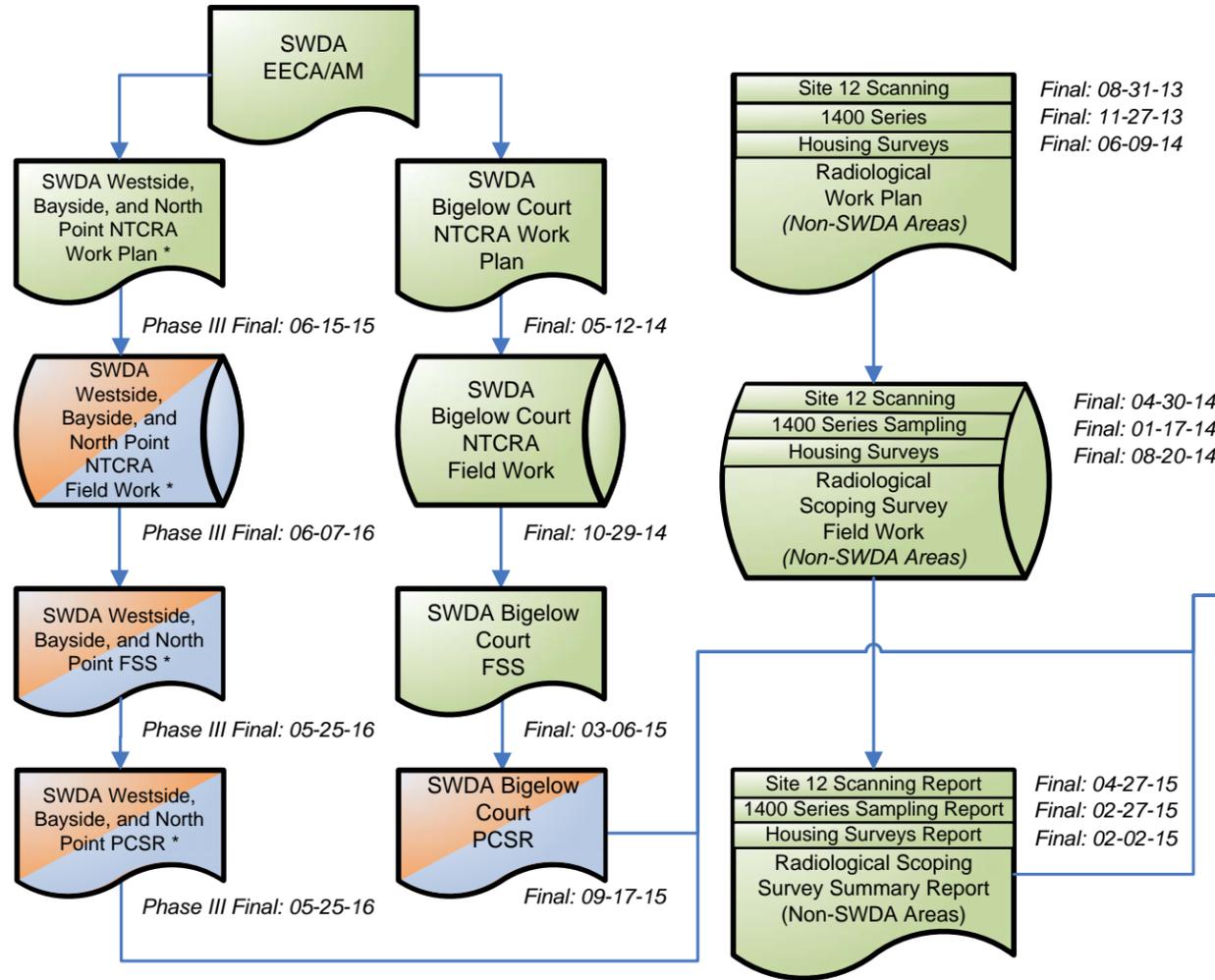
* Work has been completed at six USTs on TI, including 240A, 240B, and 248A through 248D (at Site 6). These tanks were proposed for closure in a site closure report; however, further investigations and cleanup were necessary before closure could be granted. Navy completed a removal action and will monitor groundwater before requesting closure for the tanks in the future.

** Completion of additional investigation is pending Caltrans project completion (specifically UST 238).

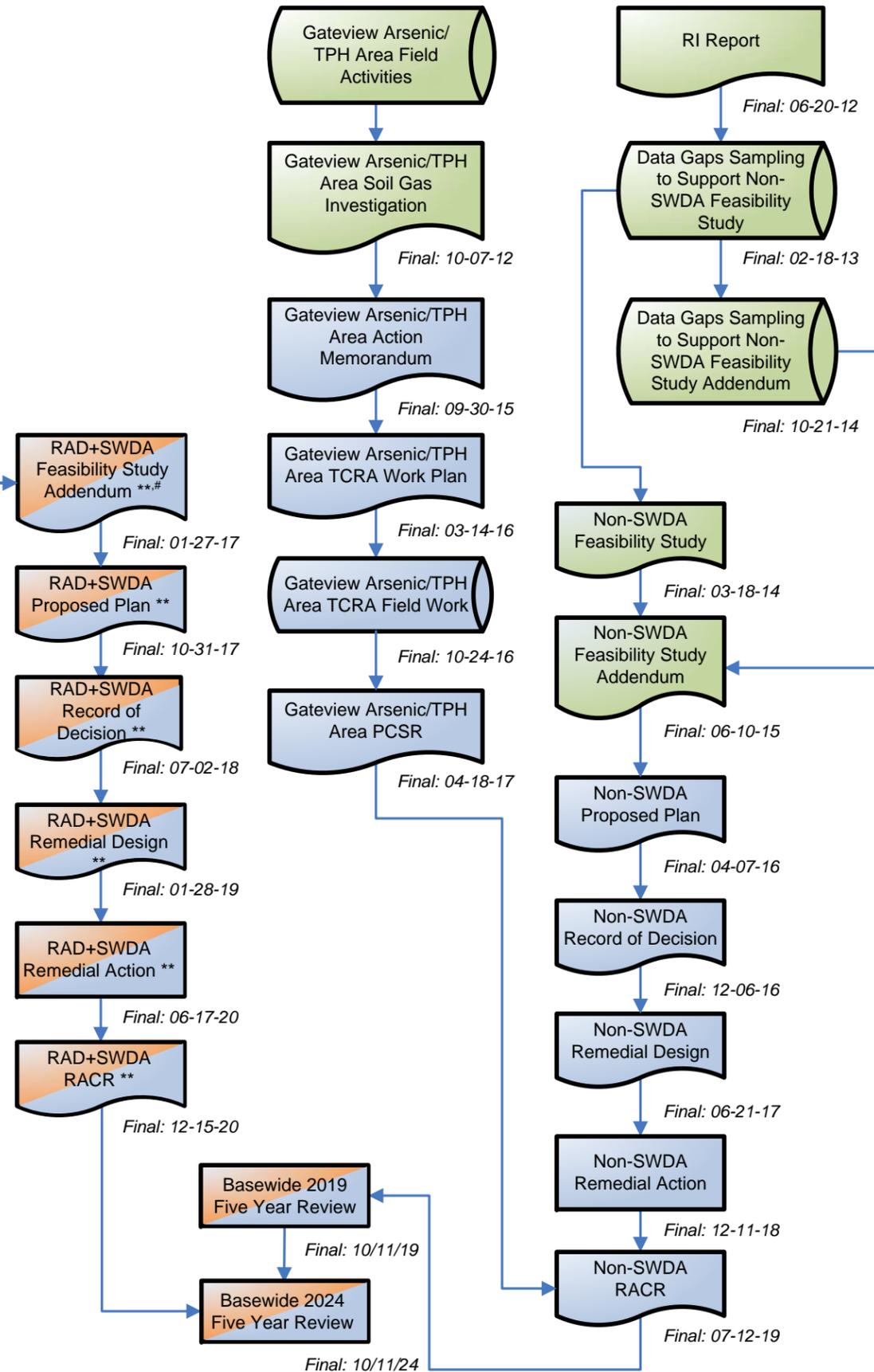


Naval Station Treasure Island
 Department of the Navy, BRAC PMO West, San Diego, CA
FIGURE 5
PETROLEUM PROGRAM SITE
STRATEGY FLOW CHART
 Site Management Plan 2015

RADIOLOGICALLY IMPACTED AREAS



CERCLA CHEMICAL AREAS OF INTEREST



- Notes:**
1. Depicted strategy is based on the current schedule in Appendix B and is subject to change.
 2. NTCRA SWDAs were not included in the RI Report.
 3. The Building 1311/1313 Arsenic/TPH Area was renamed to Gateview Arsenic/TPH Area.

AM	Action memorandum
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EECA	Engineering evaluation and cost analysis
FSS	Final status survey
NTCRA	Non-time critical removal action
PCSR	Post-construction summary report
RACR	Removal action completion report
RAD	Radiological
RI	Remedial investigation
SWDA	Solid waste disposal area
TCRA	Time-critical removal action
TPH	Total petroleum hydrocarbons



* The radiological path forward for SWDA Westside (A&B), Bayside (1207/1209), North Point (1231/1233) includes a radiological work plan, field work, post-NTCRA risk assessment[#], PCSR, and a FSS report. Multiple phases of investigation and field work may be warranted for some SWDA areas.

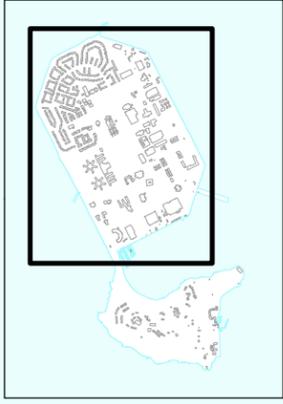
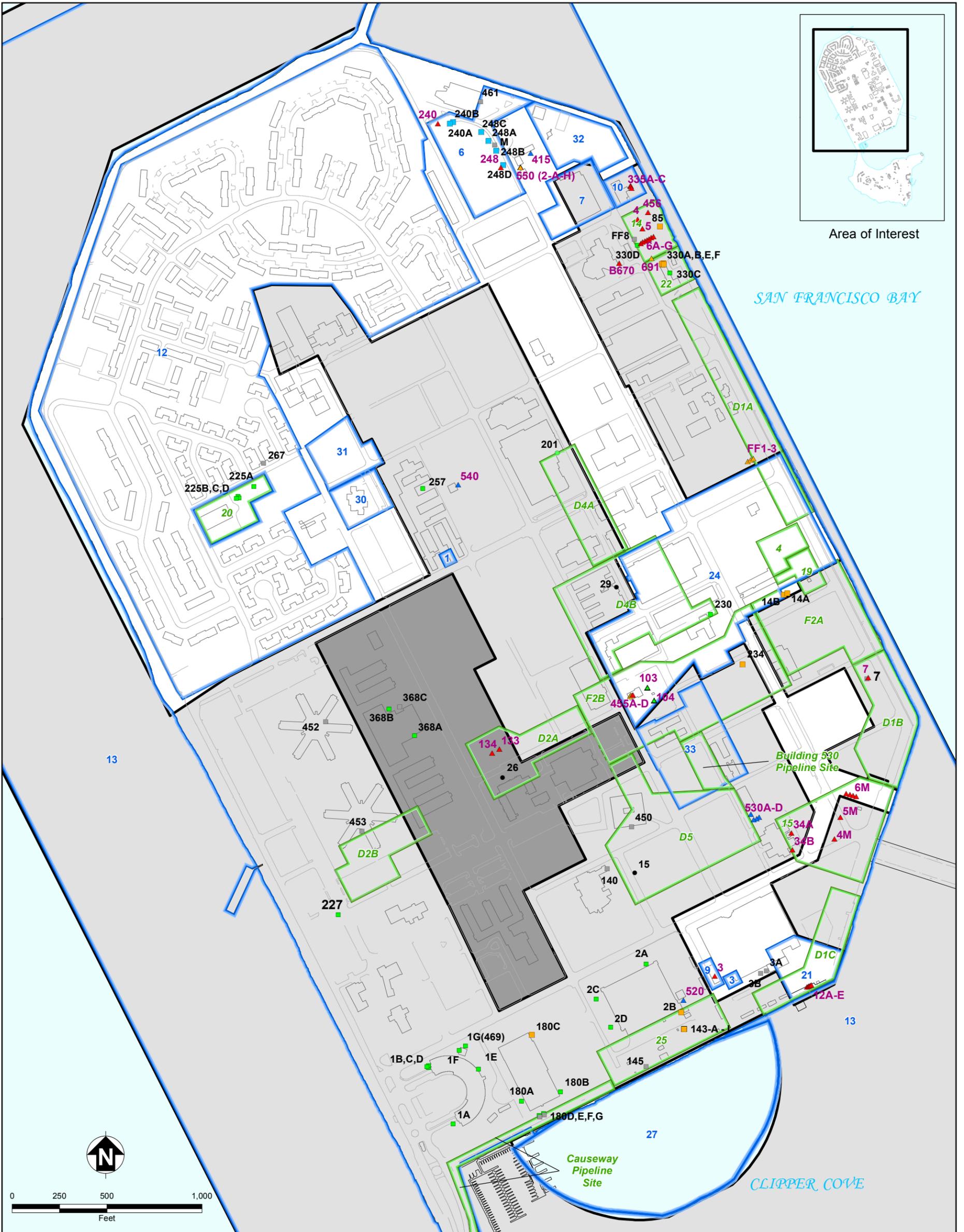
** RAD+SWDA documents will primarily address radiological components; however, CERCLA contaminants are also included within the project boundaries of the SWDAs and will be addressed at the same time.

[#] The post-NTCRA risk assessment for the SWDAs will be included as an appendix to the RAD+SWDA Feasibility Study Addendum.



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FIGURE 6
SITE 12 CLOSURE STRATEGY
FLOW CHART



Area of Interest

SAN FRANCISCO BAY

CLIPPER COVE

ABOVEGROUND STORAGE TANKS
(labeled in purple)

- ▲ Closed-in-Place
- ▲ Active
- ▲ Inactive
- ▲ Removed

UNDERGROUND STORAGE TANKS
(labeled in black)

- Closed
- Closed via Inactive Fuel Lines CAP
- Further Investigation
- NFA Concurrence
- NFA via Inactive Fuel Lines CAP
- NFA Requested
- Never Existed

INVESTIGATION SITES:

- Petroleum Program Sites
- CERCLA Program Sites

- Job Corps Parcel
- TIDA Property
- Road Edge
- Building

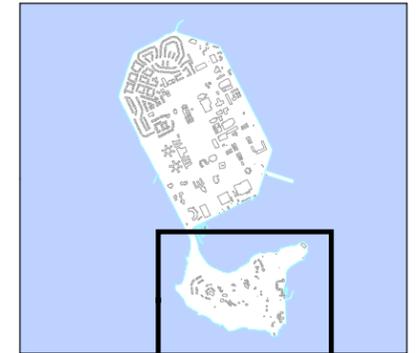
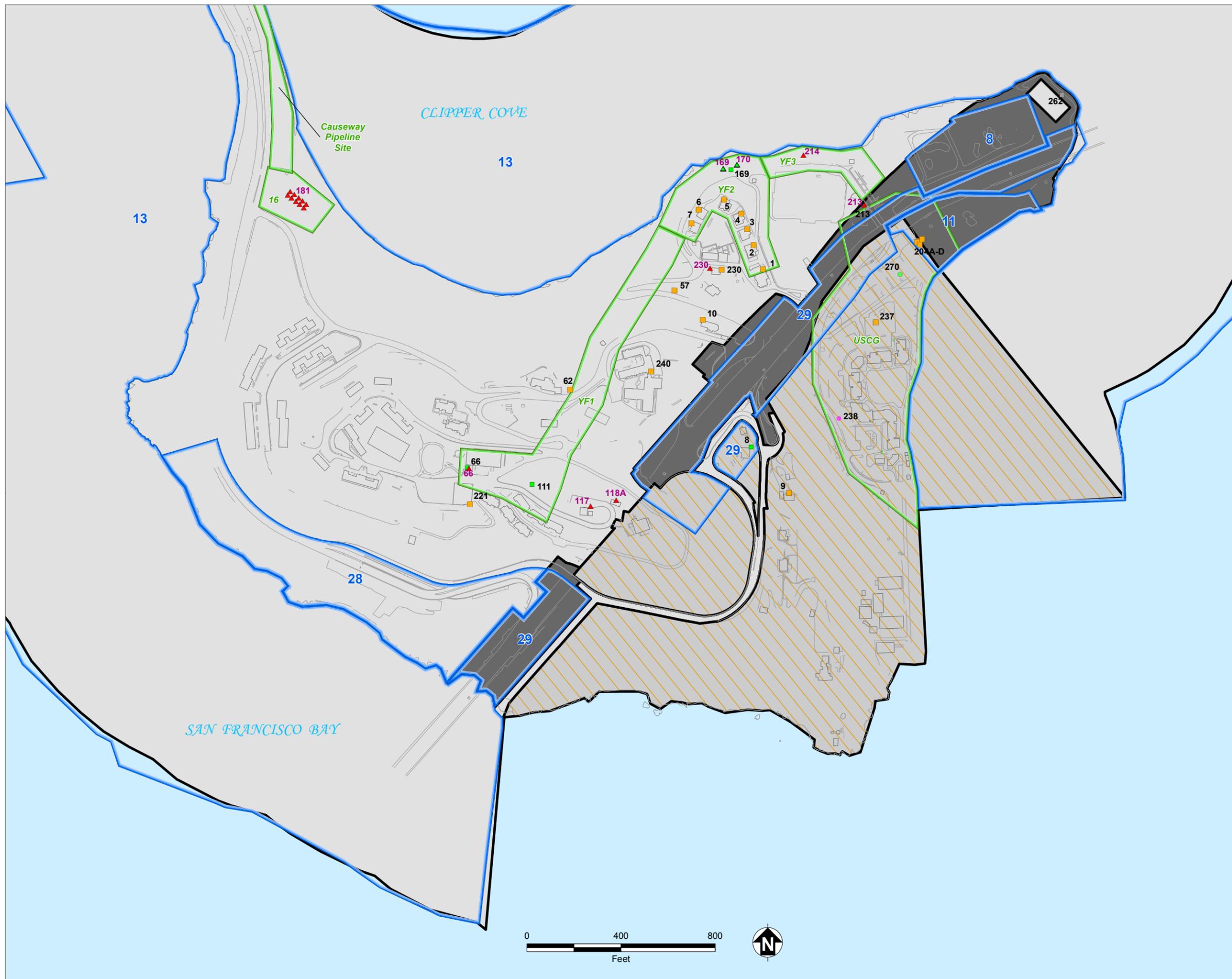
Notes:
 AST Aboveground Storage Tank
 CAP Corrective Action Plan
 CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 NFA No further action
 TIDA Treasure Island Development Authority
 UST Underground Storage Tank

UST and AST point locations are not actual USTs or ASTs drawn to scale or shape for the purpose of this figure. The point locations are used to show relative locations of USTs and ASTs.



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FIGURE 7
UNDERGROUND STORAGE TANK
LOCATIONS
TREASURE ISLAND
 Site Management Plan 2015



Area of Interest

- ABOVEGROUND STORAGE TANKS**
(labeled in purple)
- ▲ Closed-in-Place
 - ▲ Active
 - ▲ Inactive
 - ▲ Removed
- UNDERGROUND STORAGE TANKS**
(labeled in black)
- Closed
 - Closed via Inactive Fuel Lines CAP
 - Further Investigation
 - NFA Concurrence
 - NFA via Inactive Fuel Lines CAP
 - NFA Requested
 - Never Existed
- INVESTIGATION SITES**
- ▭ Petroleum Program Sites
 - ▭ CERCLA Program Sites
 - ▭ Job Corps Parcel
 - ▭ TIDA Property
 - ▭ Caltrans
 - ▭ U.S. Coast Guard
 - ▭ Building
 - ▭ Road Edge
- Notes:**
- AST Aboveground Storage Tank
 - CAP Corrective Action Plan
 - CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 - NFA No Further Action
 - TIDA Treasure Island Development Authority
 - USCG United States Coast Guard
 - UST Underground Storage Tank
 - YBI Yerba Buena Island

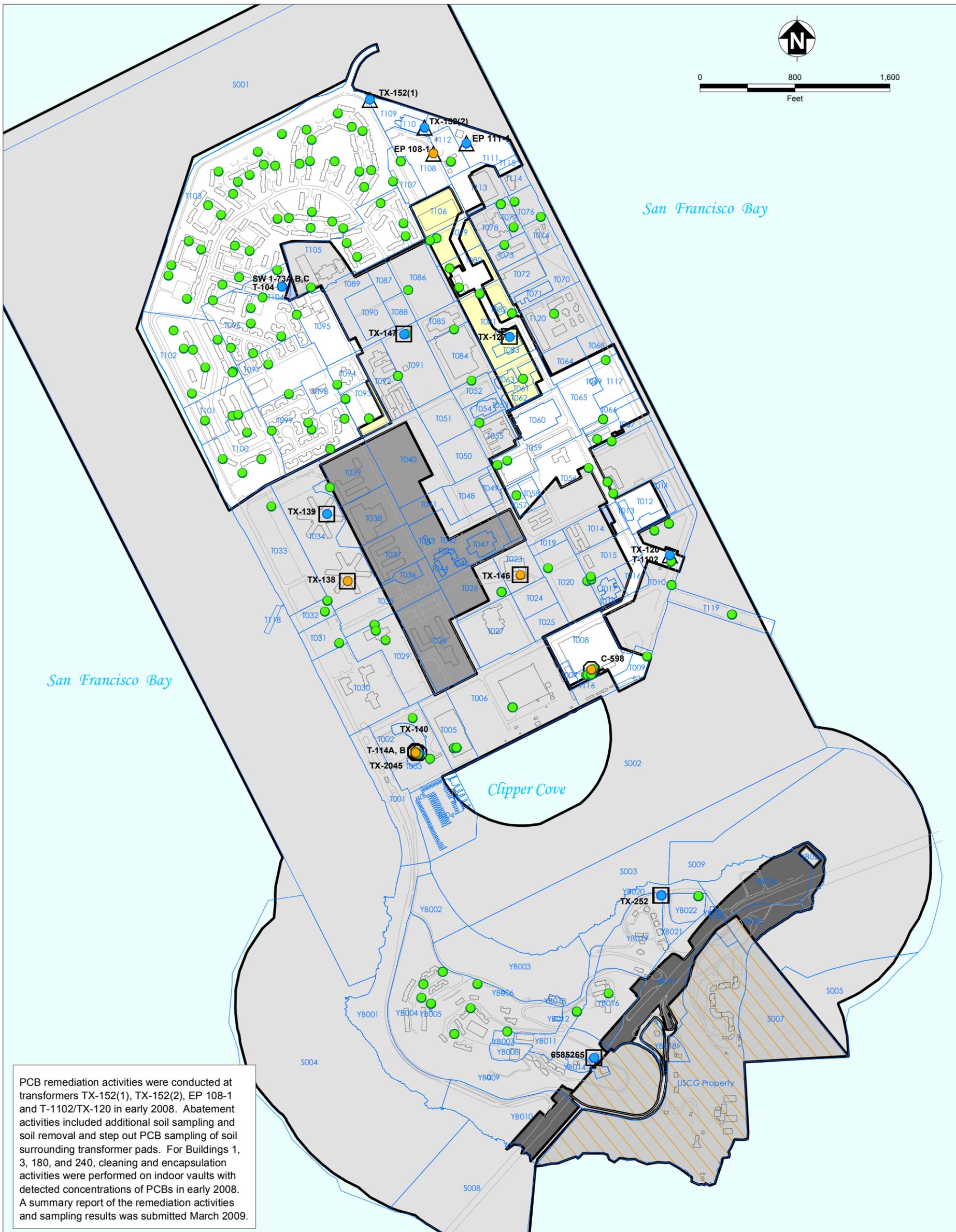
UST and AST point locations are not actual USTs or ASTs drawn to scale or shape for the purpose of this figure. The point locations are used to show relative locations of USTs and ASTs.



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FIGURE 8
UNDERGROUND STORAGE TANK
LOCATIONS
YERBA BUENA ISLAND
Site Management Plan 2015





PCB remediation activities were conducted at transformers TX-152(1), TX-152(2), EP 108-1 and T-1102/TX-120 in early 2008. Abatement activities included additional soil sampling and soil removal and step out PCB sampling of soil surrounding transformer pads. For Buildings 1, 3, 180, and 240, cleaning and encapsulation activities were performed on indoor vaults with detected concentrations of PCBs in early 2008. A summary report of the remediation activities and sampling results was submitted March 2009.

- TI FOST Property (FOST 1 Amended)
- FOST 4 Upland Property
- Job Corps Parcel
- TIDA Property
- Caltrans
- U.S. Coast Guard
- EBS Parcel
- Building

ELECTRICAL EQUIPMENT SAMPLING LOCATIONS

- Above Criteria for Low Occupancy
- Below Criteria for Low Occupancy and Above Criteria for High Occupancy
- Below Criteria for High and Low Occupancy

- Remediated Location, NFA Concurrence Received
- Remediation by Encapsulation, Inspections Required
- PCB Location Above Occupancy Criteria; No Action Has Been Taken and a Land Use Control is Recommended

µg Micrograms
 cm² Centimeters squared
 EBS Environmental baseline survey
 FOST Finding of suitability to transfer
 mg/kg Milligrams per kilogram
 NFA No Further Action
 PCB Polychlorinated biphenyls
 TI Treasure Island
 TIDA Treasure Island Development Authority
 TSCA Toxic Substances Control Act
 USCG United States Coast Guard
 YBI Yerba Buena Island

1. Areas on TI are untransferred unless indicated as Job Corps or TIDA Property. All areas on YBI have been transferred.

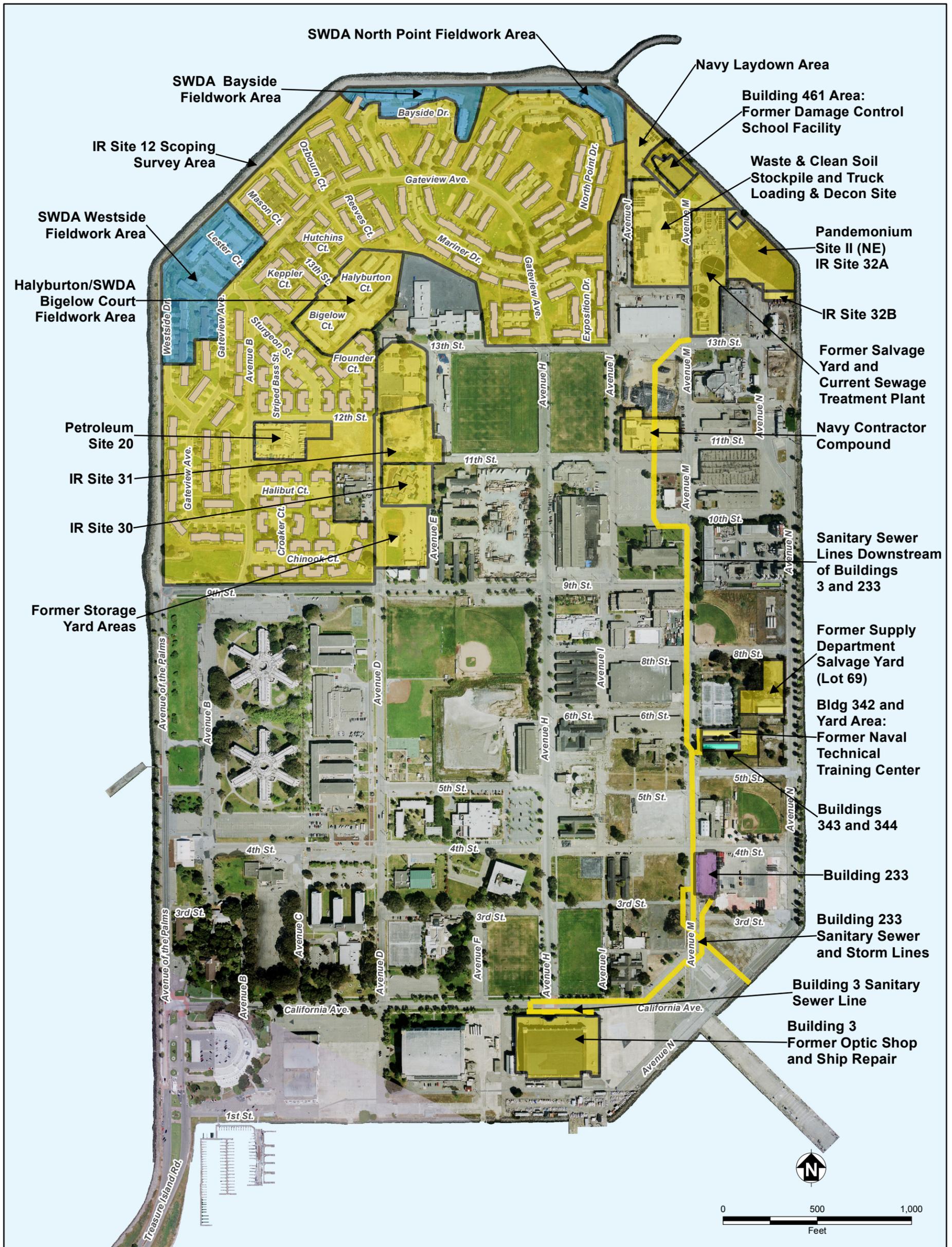
Comparison Criteria
 Low Occupancy Criteria = 25 mg/kg or 100 µg/100 cm²
 High Occupancy Criteria = 1 mg/kg or 10 µg/100 cm²



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**FIGURE 9
PCB PROGRAM STATUS**

Site Management Plan 2015



- Radiological Survey Complete, Free Release Achieved
- Radiological Cleanup Complete, Free Release Pending
- Remediation Planned or In Progress (i.e. NTCRAs)
- Radiological Surveys Complete, In Progress, or Planned or Reporting Pending
- Interior Surveys Completed within Buildings at Site 12

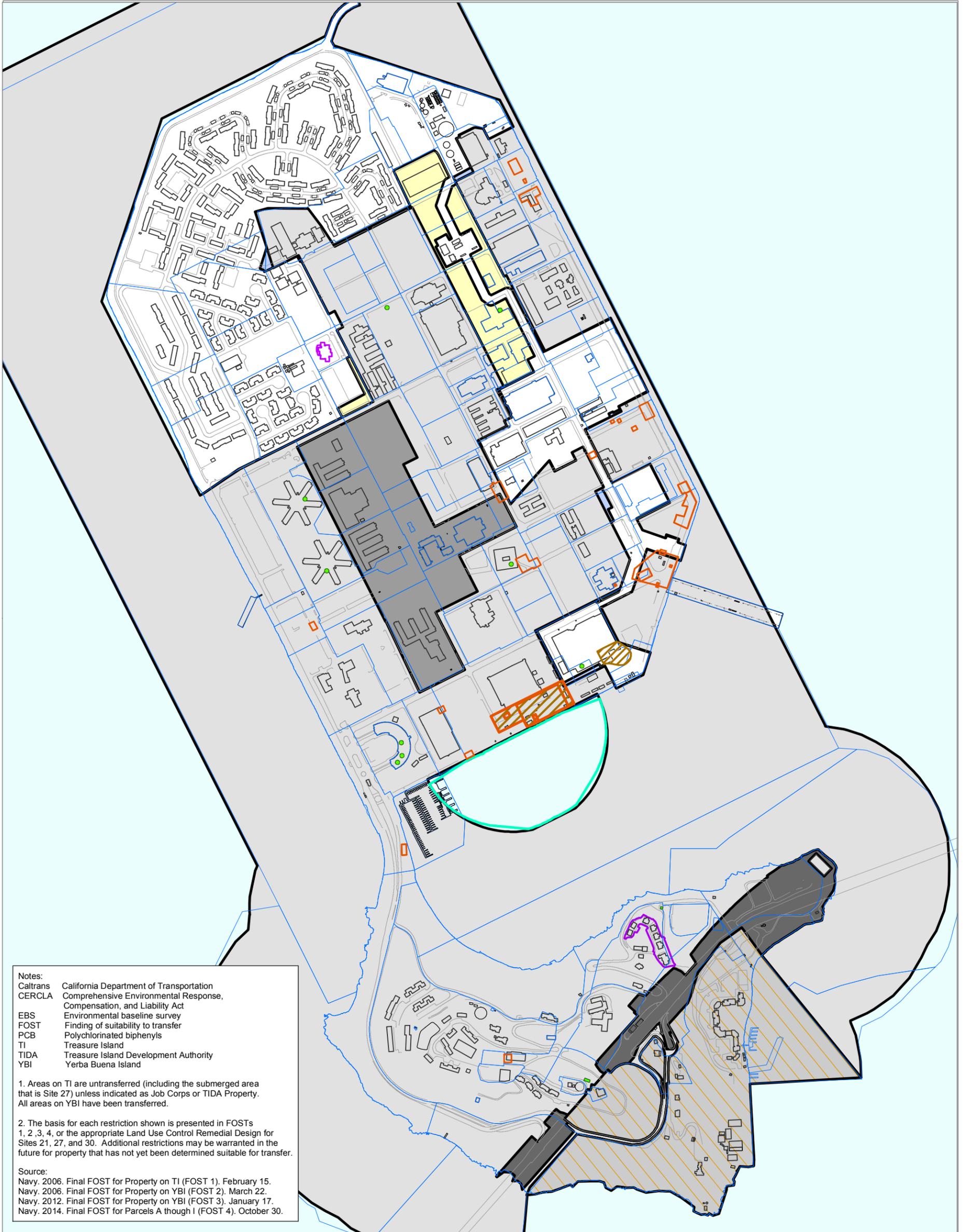
Notes:
 Aerial photo courtesy of Geomatic Technologies Group, 2012.
 NTCRA Non-Time Critical Removal Action
 SWDA Solid Waste Disposal Area



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**FIGURE 10
 RADIOLOGICAL PROGRAM STATUS**

Site Management Plan 2015



Notes:

Caltrans	California Department of Transportation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EBS	Environmental baseline survey
FOST	Finding of suitability to transfer
PCB	Polychlorinated biphenyls
TI	Treasure Island
TIDA	Treasure Island Development Authority
YBI	Yerba Buena Island

1. Areas on TI are untransferred (including the submerged area that is Site 27) unless indicated as Job Corps or TIDA Property. All areas on YBI have been transferred.

2. The basis for each restriction shown is presented in FOSTs 1, 2, 3, 4, or the appropriate Land Use Control Remedial Design for Sites 21, 27, and 30. Additional restrictions may be warranted in the future for property that has not yet been determined suitable for transfer.

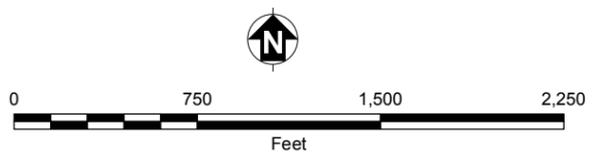
Source:
 Navy. 2006. Final FOST for Property on TI (FOST 1). February 15.
 Navy. 2006. Final FOST for Property on YBI (FOST 2). March 22.
 Navy. 2012. Final FOST for Property on YBI (FOST 3). January 17.
 Navy. 2014. Final FOST for Parcels A through I (FOST 4). October 30.

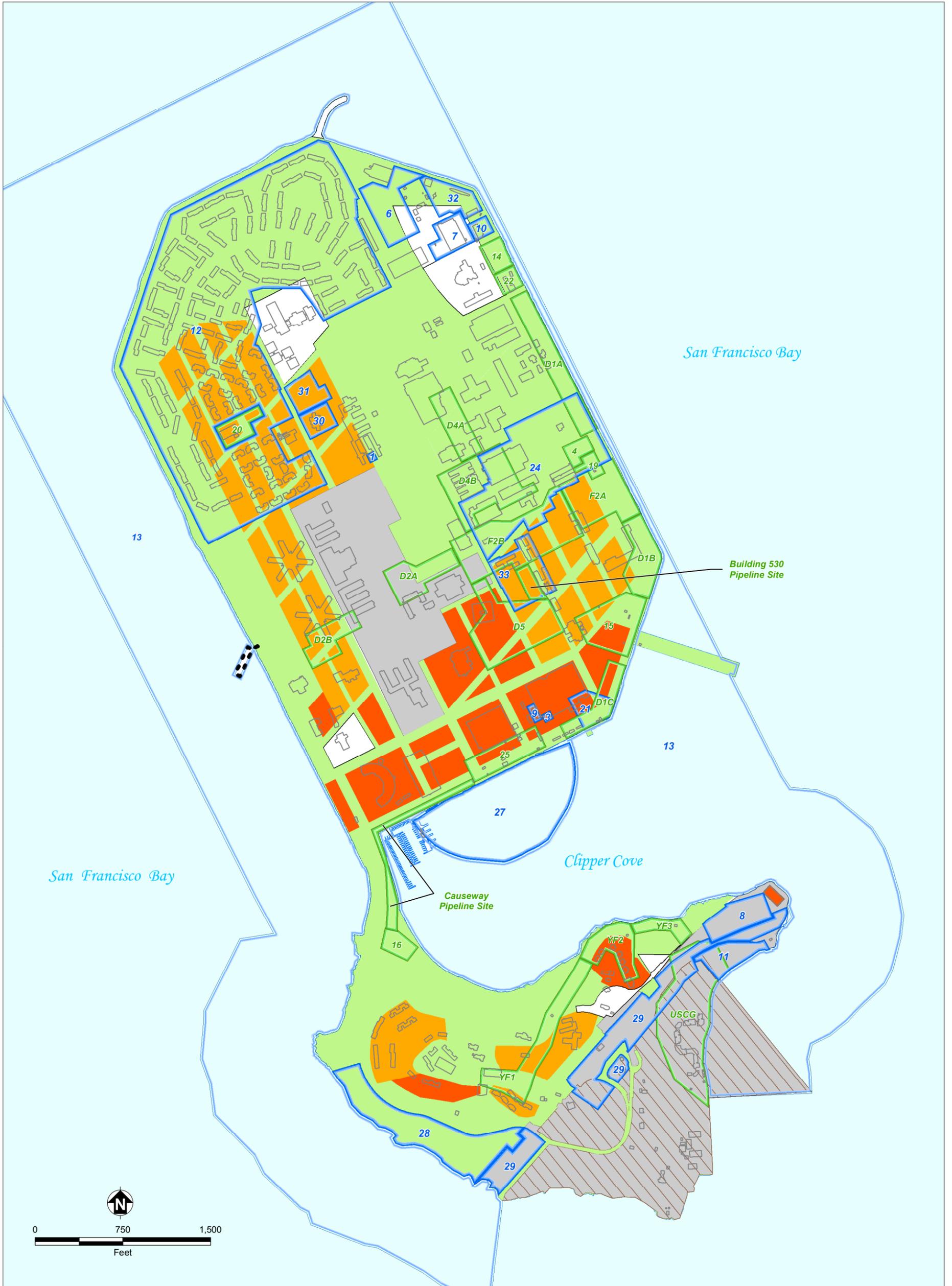
- PCB Site Subject to Restriction
- Area Subject to Notice of Petroleum Left in Place
- Area Requiring Restriction for CERCLA Constituents
- Area Requiring Restriction for Residential Use
- Area Requiring Restriction for Leadshot
- TRANSFER PARCELS¹:**
- TI FOST Property (FOST 1 Amended)
- FOST 4 Upland Property
- Job Corps Parcel
- TIDA Property
- Caltrans
- U.S. Coast Guard
- EBS Parcel
- Building
- Road Edge



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FIGURE 11
ENVIRONMENTAL
RESTRICTION AREAS AND
TRANSFER AND EBS PARCELS
 Site Management Plan 2015





Reuse

	Open-Space
	Residential
	Mixed Use
	Public Services/Civic/Institutional
	Pier to be removed
	Public (Federal Use)

	CERCLA Program Site
	Petroleum Program Site
	U.S. Coast Guard
	Building

Notes:
 CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 USCG United States Coast Guard

Property planned for the tidelands trust is not shown for illustrative clarity.

Source: Final EIR (April 2011)



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FIGURE 12
2011 CONCEPTUAL LAND PLAN,
CERCLA AND PETROLEUM
INVESTIGATION SITES
 Site Management Plan 2015

APPENDIX A
SITE SUMMARY INFORMATION

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[Petroleum Program](#)

[Compliance and Basewide Programs](#)

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CERCLA PROGRAM

SITE 1 – MEDICAL CLINIC

Site 1, the Medical Clinic, was located near the middle of Treasure Island (TI) and was used for medical support services for personnel at Naval Station Treasure Island (NAVSTA TI). The Medical Clinic occupied the center wing of Building 257. The X-ray department of the Medical Clinic operated until the early 1970s. The wooden floor of Building 257 is elevated approximately 3 feet above the ground surface by concrete footings. A continuous concrete slab was poured beneath the building and was probably constructed as a mat foundation for the concrete footings. The slab was covered by approximately 3 to 12 inches of soil. During operation of the clinic, developer and corrosive fixer solutions leaked from the X-ray equipment, through the wooden floor, and seeped into the soil under the building.

During the 1995 Phase II remedial investigation (RI), a 4-foot area of high acidity below the floor was identified during field screening, which indicated the lateral extent of contamination by silver in soils. The soils were removed and disposed of off site in a Class 1 landfill. During this and subsequent site inspections, it was determined that contamination was limited to soil above the concrete slab and was not released into the environment. The Department of the Navy received site closure concurrence from the Department of Toxic Substances Control (DTSC) on March 20, 2002, and no further documentation for supplemental site inspection (SI) report was required.

Transfer Category	Transferred to the Treasure Island Development Authority (TIDA) on May 29, 2015
Regulatory Classification	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
Acreage	0.14
Source of Concern	X-ray photo processing laboratory
Contaminants of Concern	Silver
Interim Actions	None
Current Status	Received site closure concurrence from the DTSC on March 20, 2002. No further documentation for supplemental SI report is required.
Underground Storage Tanks (UST)/Aboveground Storage Tanks (AST)	None
Site Closeout	Closed

SITE 3 – PCB EQUIPMENT STORAGE AREA

Site 3, the Polychlorinated Biphenyls (PCB) Equipment Storage Area, was adjacent to the south side of Building 3, about 150 feet from the shore in the southeastern corner of TI. The area is paved with about 6 inches of asphalt and was used to store and, in some instances, repair transformers used at NAVSTA TI to supply electricity to the various facilities. Some of the transformer units are known to have contained transformer fluids that contained PCBs.

Transformer fluids that contained PCBs have spilled as recently as the mid-1980s. No PCBs were present in subsurface soils collected during the Phase I RI in 1992; only low concentrations of PCBs were detected during wipe sampling of the walls and floor of the storage area for the 1987 preliminary assessment/site inspection (PA/SI). The Navy received site closure concurrence from DTSC on March 20, 2002. No further documentation for the supplemental SI report was required.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	0.15
Source of Concern	Storage and repair area for PCB equipment
Contaminants of Concern	PCBs
Interim Actions	None
Current Status	Received site closure concurrence from DTSC on March 20, 2002. No further documentation for supplemental SI report is required.
USTs/ASTs	None
Site Closeout	Closed

SITE 6 – FIRE TRAINING SCHOOL

Site 6, the former Navy firefighting training school, was used for nearly 50 years (1944 to 1992) for various firefighting training activities. The training school formerly included 23 buildings, six underground storage tanks (USTs), and a central training yard that consisted of burn areas lined with asphalt and concrete. Fires fueled with diesel and gasoline, magnesium, and wood were set in various mockups in the training yard and were extinguished with a mixture of water, biodegradable soap, and industrial talc. Approximately 19,000 gallons of gasoline and 32,000 gallons of diesel fuels were used each year for the firefighting training. Wastewater and unburned gasoline and diesel were collected in a concrete collector trench (installed in about 1949) situated around the perimeter of the training school yard. Wastewater and unburned gasoline and diesel that collected in the trench passed through on-site oil-water separators (OWS). Wastewater generated and treated at the site was discharged to the NAVSTA TI wastewater treatment plant (WWTP), constructed in 1968, and waste diesel and gasoline fuels were disposed of at an off-base location. Before 1973, the wastewater that flowed to the concrete collector trench was discharged to San Francisco Bay without treatment. Approximately 14,000 gallons of petroleum residue was generated per year at the training school.

All buildings have been removed from the site. Four 1,500-gallon USTs (240A, 240B, 248A, and 248B) that contained gasoline and diesel for firefighting training were present in the northern and eastern portions of the training yard. USTs 240A and 240B were removed in 1992, and USTs 248A and 248B were removed in 1995. Two 1,000-gallon USTs (248C and 248D) previously used to store waste fuel were removed in 2002. One known aboveground storage tank (AST) (248), located near UST 248D, was removed prior to 1995. UST M, a previously suspected UST for coolant, was reported in Shaw Environmental, Inc.'s (Shaw) "Final Facilitywide Underground Storage Tank Summary Report Update," dated August 25, 2004, as never having been installed, based on document reviews and discussions with Navy personnel. Petroleum remedial activities were conducted at Site 6 between May and December 2002. Remedial activities included excavation of USTs and excavation of petroleum-contaminated soils near the USTs, pipelines, and OWS components throughout the site. Remediation also included evaluation and excavation of free product near USTs 240A and 240B. In October 2002, during petroleum remedial excavation activities at the UST 248 area, burn surfaces were identified near the former Building 464 foundation. Results from shallow soil samples collected in this area included dioxins and furans above the soil screening levels. The excavation was subsequently expanded to include removal of burn debris and soot-discolored areas. Results from confirmation samples included dioxins and furans above the screening levels, causing Site 6 to be transferred to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program on September 18, 2003.

Further investigation and delineation of dioxins and furans detected in soil were conducted under the CERCLA Program as part of the environmental baseline survey (EBS) data gaps investigation in 2003. Based on investigation results, the Base Realignment and Closure (BRAC) Cleanup Team (BCT) agreed to a boundary revision for the CERCLA site at the BCT meeting on June 7, 2005. The boundary revision included a portion of Parcel T112 to the east and north of the WWTP area where dioxins were detected in shallow soil samples. On January 24, 2007, a second boundary revision was submitted separating Site 6 (CERCLA Program) and Site 6A (the site of former USTs 240A and 240B, managed under the Petroleum

Program). DTSC did not concur with the request to modify the boundary based on a lack of sufficient evidence that the Site 6A area was not affected by CERCLA related contaminants.

Other investigations included a soil gas sampling program completed in October 2004 to evaluate volatile organic compounds (VOC) in soil gas near former USTs 240A and 240B. Groundwater at Site 6 continues to be monitored semi-annually under the Basewide Petroleum Sites Groundwater Monitoring Program.

Between 2007 and 2008, a portion of Site 6 was used as a temporary excavated soil staging area. Material stored was primarily from radiologically controlled area (RCA) for the Site 12 non-time critical removal action (NTCRA). Before it was used for staging and loading activities, a baseline radiological survey was conducted. While staging and loading activities were ongoing, engineering controls were developed, air monitoring equipment was installed, and a surveillance program for health and safety was in place. In addition to engineering controls, best management practices, such as keeping soil stockpiles covered to prevent releases, were used. The soil staging and loading area activities included temporary stockpiling and loading of soil into bins at which point they were characterized and shipped off-site to a licensed disposal facility. The waste shipped off-site includes both chemical and low level radiologically impacted soil (radium-226). Since 2008, soils have not been stockpiled at Site 6. However, low-level radiological waste (LLRW) that has been characterized and placed in sealed bins was temporarily stored in the Site 6 RCA while awaiting off-site disposal. In 2014, all remaining LLRW bins awaiting off-site disposal were relocated to a paved area north of Building 461, adjacent to Site 6. The Navy is currently conducting a Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) final status survey (FSS) for Site 6, which was designed to achieve free release for radiological issues. A draft FSS report is anticipated to be issued in November 2015.

In 2010, the Navy completed a CERCLA data gap investigation to further evaluate the nature and extent of chemicals in soil, soil gas, and groundwater. To address the concerns expressed by the California Environmental Protection Agency (Cal/EPA) San Francisco Bay Regional Quality Control Board (Water Board), the Navy completed a removal action near the 240 series USTs that were previously removed. The combined RI/feasibility study (FS) report was finalized in October 2012. The Navy distributed the final proposed plan/draft remedial action plan (PP/draft RAP) on February 28, 2014, and held a public meeting on March 12, 2014. The record of decision (ROD)/final RAP was signed on December 24, 2014. The selected remedy for Site 6 consisted of soil removal, groundwater monitoring, and institutional controls (IC).

Pre-remedial design (RD) data gaps sampling at Site 6 was completed in July 2015. The draft RD/remedial action work plan (RAWP) is planned for distribution in November 2015.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	4.54
Sources of Concern	USTs, firefighting training area, OWSs
Contaminants of Concern	Dioxins and furans, total petroleum hydrocarbons (TPH), VOCs, polycyclic aromatic hydrocarbons (PAH)
Interim Actions	<ul style="list-style-type: none"> • USTs removed in 1992, 1995, and 2002. • Floating product removal action completed in 2002. • Petroleum corrective action of UST 240 series completed in 2013.
Current Status	<ul style="list-style-type: none"> • FSS is being conducted. • Draft RD/RAWP planned for November 2015. • Annual groundwater monitoring continues.
USTs/ASTs	<ul style="list-style-type: none"> • AST 248 and USTs 240A, 240B, 248A, 248B, 248C, and 248D: all are removed and will undergo groundwater monitoring prior to requesting no further action (NFA) concurrence. • Previously suspected UST M received concurrence on NFA December 2, 2003.
Estimated Site Closeout	CERCLA Closeout: March 2017

SITE 7 – PESTICIDE STORAGE AREA

Site 7 was located north of 13th Street, between Avenue M and the Bay, in the northeast corner of TI. At Site 7, Building 62, the pesticide storage building, was used to store and handle a variety of liquid substances, including pesticides, chlorinated herbicides, paint, and other unidentified fluids.

The Phase I RI report (1992), the Phase IIB RI report (1997), and a supplemental SI (2002) included an investigation of the soils outside and beneath the building. A subsequent request for closure was submitted as a letter report to the DTSC on October 3, 2005, and concurrence with NFA was granted November 1, 2005.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and remainder will be included in an upcoming FOST
Regulatory Classification	CERCLA
Acreage	2.22
Source of Concern	Pesticide storage; WWTP sludge
Contaminants of Concern	Metals, pesticides, and herbicides
Interim Actions	None
Current Status	<ul style="list-style-type: none">• Supplemental SI report was submitted for NFA October 18, 2002.• Letter report requesting closure following a discussion of the adjacent Site 32 results submitted October 3, 2005.• Received site closure concurrence from DTSC on November 1, 2005.
USTs/ASTs	None
Site Closeout	Closed

SITE 8 – ARMY POINT SLUDGE DISPOSAL AREA

Site 8, the Army Point Sludge Disposal Area, was used for approximately 8 years, between 1968 and 1976, for disposal of sludge from the WWTP on TI. Prior to 1968, the site contained buildings used as barracks for enlisted personnel. Waste sludge was transported from the WWTP and was spread on the ground between the foundations of former buildings at Site 8 to dewater the sludge. The same type of waste sludge was disposed of at Site 7. The final disposition of the sludge is not known; the dried sludge may have been allowed to decay in place or may have been removed. Given the shallow depth of sandstone and shale bedrock at the site, on-site burial is unlikely.

An SI was completed in 1990 because the site was identified in the PA to assess subsurface soils potentially contaminated by chemicals in the waste sludge deposited in the eastern portion of the site. Based on the conclusions in the SI report, further investigation of the site was warranted to characterize the lateral and vertical extent of contamination. In 1997, the draft RI report included results of additional investigations conducted during Phase I and Phase IIB of the RIs completed in 1992 and 1995. The RI report noted potential beryllium and lead contamination at the site; however, concentrations of beryllium and lead were within the target risk range or below the point of departure. Pesticides/PCBs and semivolatile organic compounds (SVOC) were determined to not be contaminants of concern.

In June 2001, independent of the Navy's Installation Restoration (IR) Program, California Department of Transportation (Caltrans) collected soil samples at 13 discrete surface soil locations on Yerba Buena Island (YBI) as part of the San Francisco–Oakland Bay Bridge (Bay Bridge) construction project. Results of Caltrans' soil sampling conducted within the Site 8 boundaries indicated that concentrations of lead ranged from less than 50 to 170 milligrams per kilogram. Based on the Caltrans sampling report, the Navy concluded that existing data were sufficient to characterize the lateral and vertical distribution of lead in soils at Site 8. In December 2001, the Navy completed a validation study to confirm results of the screening-level ecological risk assessment (SLERA) included in the 1997 RI report for the peregrine falcon (*Falco peregrinus*). The study concluded that no unacceptable risk was posed to the falcon at Sites 8, 11, 28, and 29. The surface soil on the site may be contaminated by lead and other metals as a result of vehicle emissions, as well as bridge and ramp painting and maintenance. In 2002, additional lead investigations were conducted to (1) fully delineate the extent and magnitude of lead in surface soils at Sites 8, 11, and 29; (2) collect additional soils data for comparison to the validation study results; and (3) provide additional data, if needed, for the human health risk assessment (HHRA) presented in the 1997 RI report for Sites 8, 11, and 29.

The Navy owned the property comprising the ramps and areas beneath the bridge until 2001, when the Federal Highway Administration (FHWA) transferred the bridge right-of-way and ramps from the Navy to Caltrans. Caltrans is using this area during construction of the new eastern span of the Bay Bridge. Two footings for the Bay Bridge were installed within the boundaries of Site 8; the area of site surface soils disturbed by Caltrans construction was estimated by visual inspection in April 2005. The actual footing areas were excavated to a depth of 80 feet.

Two boundary changes have occurred at Site 8: the first, presented in October 2004 to the BCT, eliminated the northwest corner of Site 8 to allow for transfer of the property as part of the YBI parcel, independent of regulatory closure of Site 8. The second, made in June 2005, eliminated overlap between CERCLA Site 8 and Site 29. Field inspections of Site 8 were performed in April and October of 2006 to verify removal of contaminated soil by Caltrans and to document ongoing construction.

The Navy finalized the interim RI report for Sites 8 and 29 in March 2009. The schedule in [Appendix B](#) is based on Caltrans' quarterly schedule, which indicates bridge activities will be complete in 2017. Once Bay Bridge activities are complete, an RI addendum will be prepared for the site to continue with the CERCLA process.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	On Caltrans-owned property
Regulatory Classification	CERCLA
Acreage	3.12
Source of Concern	WWTP sludge disposal area; lead-based paint (LBP) from the Bay Bridge
Contaminants of Concern	SVOCs and metals
Interim Actions	None
Current Status	<ul style="list-style-type: none"> • Interim RI report (for Sites 8 and 29) was submitted in March 2009. • Bridge construction is scheduled to be complete in 2017.
USTs/ASTs	None
Estimated Site Closeout	October 2021

SITE 9 – FOUNDRY

Site 9 was adjacent to the southern corner of Building 3, about 150 feet from the shore, in the southeastern corner of TI. The site, which contains Building 41 (the Foundry), was used for multiple operations since the early 1940s. The indices of TI buildings from 1943 and 1947 list Building 41 as a forge and foundry; metals are the most likely contaminant sources from the foundry. Building 41 was listed as a paint shop from at least 1952 to 1981.

The RI report was finalized in March 2005. The RI concluded the Navy should pursue closure of Site 9 through a no action ROD. A PP outlining the no action ROD was submitted for public comment September 29, 2006, and a public meeting was held October 17, 2006. The public comment period closed October 31, 2006. The no action ROD was signed on October 2, 2007.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreege	0.28
Source of Concern	Potential spills or disposal of hazardous materials; potential discharge of wastes to the floor drain and sump in Building 41; potential release of hazardous constituents from oily waste contained in concrete-lined trenches from a former hydraulic lift system inside Building 41.
Contaminants of Concern	Iron, benzo(a)pyrene, dibenz(a,h)anthracene
Interim Actions	None
Current Status	No action ROD signed on October 2, 2007.
USTs/ASTs	AST 3 removed
Site Closeout	Closed

SITE 10 – BUS PAINTING SHOP

Site 10 includes Building 335, the Bus Painting Shop, and was located in the northeastern section of TI, north of 13th Street and between Avenue N and the Bay. Building 335 was constructed during the mid-1940s and operated as a bus painting shop through the 1950s. The building may have also been used for paint mixing for an unspecified period. Handling practices reported at similar facilities on NAVSTA TI indicate that waste paints, thinners, and solvents may have been released onto the ground near Building 335. Building 335 was also reportedly used for storing, mixing, and handling pest control solutions (pesticides and chlorinated herbicides) during an unspecified time period.

Petroleum Program investigations at Site 14/22 revealed dioxin-contaminated surface soil along the eastern boundary of Site 10 associated with a shallow burn layer. An exploratory investigation of the dioxins in soils was conducted in the fall of 2005, and contaminated soils were removed. The analytical results were reviewed with the BCT and, based on concurrence from DTSC, the trench was backfilled with clean soil. The removal of the dioxin in soils was documented in the 2006 PP for Site 10.

The RI report was finalized in March 2005. The RI concluded the Navy should pursue closure of Site 10 through a no action ROD. A PP outlining the no action ROD was submitted for public comment September 29, 2006, and a public meeting was held October 17, 2006. The public comment period closed October 31, 2006. A no action ROD was signed October 2, 2007.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	CERCLA
Acreage	0.68
Source of Concern	Maintenance yard; pesticide storage; paint mixing
Contaminants of Concern	Iron, benzo(a)pyrene, dibenz(a,h)anthracene
Interim Actions	Dioxin-contaminated soils removed 2005.
Current Status	No action ROD signed October 2, 2007.
USTs/ASTs	ASTs 335A, 335B, 335C removed
Site Closeout	Closed

SITE 11 – YBI LANDFILL

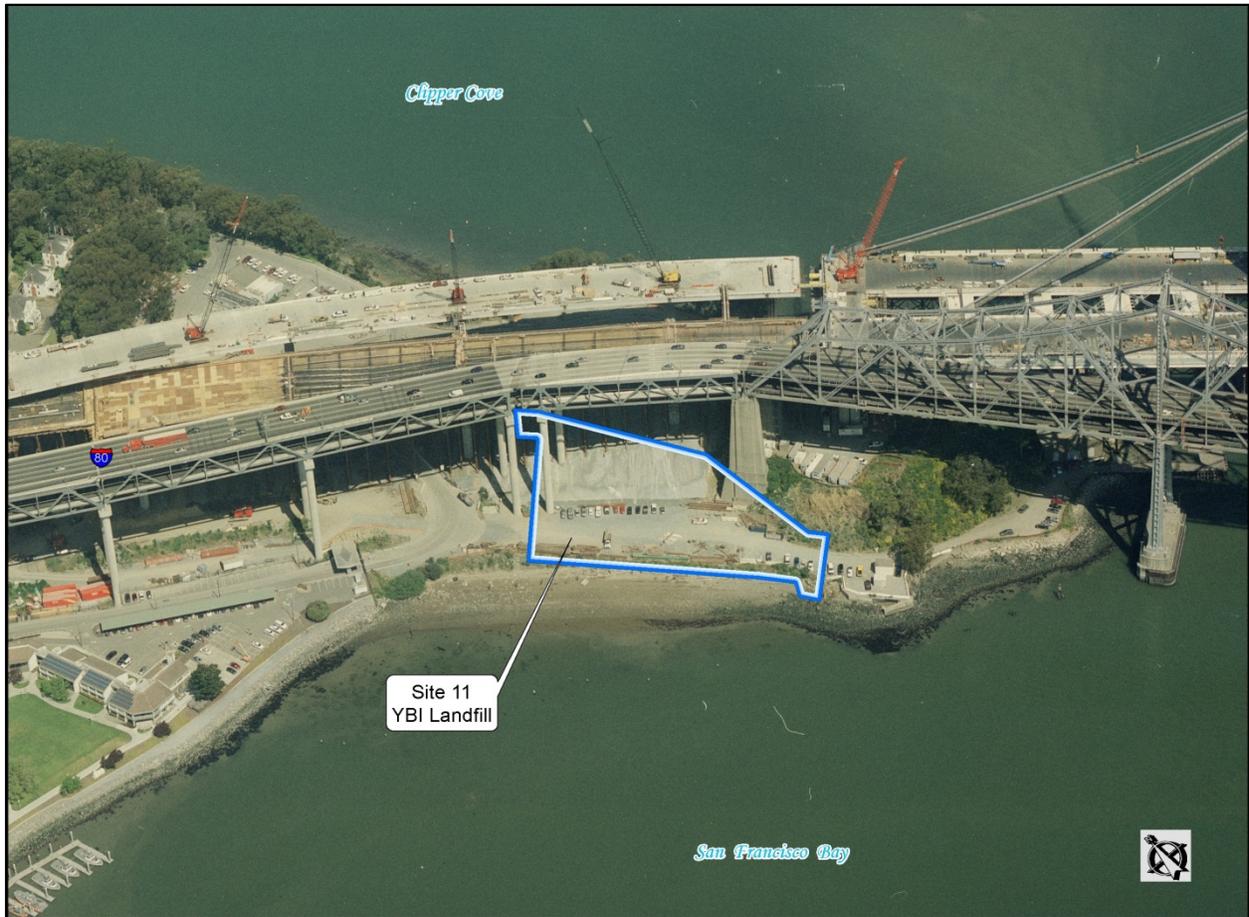
Site 11, the YBI Landfill, is an approximately 200-foot by 600-foot former marsh area on the southern side of the eastern tip of YBI. This site was identified as a disposal area in a 1935 topographic map. The exact dates of sanctioned landfill operation have not been established. The types and amounts of waste disposed of at the site are not well documented. During a site visit in April 1994, buried concrete debris was observed in an eroded section of land near the beach at the easternmost extent of the landfill area. This buried debris is evidence that landfilling had occurred in that area. The material disposed of at the site is solid wastes from operations at YBI and TI, although the exact nature of the material is unknown. Miscellaneous household waste was noted in test pits completed during the Phase I RI and historical photographs show general debris (wood and rubber) in the area. During evaluation of the extent of the landfill, construction debris was found in numerous trenches and test pits completed in 2002. Petroleum-contaminated sand was found in the landfill underlying a burn layer. Groundwater contamination has been detected at the site and appears to originate from the buried materials.

In December 2001, the Navy completed a validation study to confirm results of the SLERA included in the 1997 RI report for the peregrine falcon. The study concluded that no unacceptable risk was posed to the falcon at Sites 8, 11, 28, and 29.

In 2002, additional lead investigations were conducted to (1) fully delineate the extent and magnitude of lead in surface soils at Sites 8, 11, and 29; (2) collect additional soils data for comparison to the validation study results; and (3) provide additional data, if needed, for the HHRA in the 1997 RI report for Sites 8, 11, and 29.

Additional sources of contamination at the landfill include five USTs (270 and 204A through 204D) and a fuel pipeline. UST 270, which was not within the landfill area, has been removed. The other four USTs, 204A through 204D, were located in the south-central portion of the site and were removed in September 2003. The Water Board concurred that NFA was required with respect to the USTs in a letter dated June 17, 2004. The U.S. Coast Guard (USCG) Petroleum Program Site extends into the Site 11 boundary, and the USTs and fuel lines formerly located within the USCG site may be sources of contamination. Further investigations at the USCG site are pending.

The surface soil on the site may be contaminated by lead and other metals as a result of vehicle emissions, as well as bridge and ramp painting and maintenance. In June 2005, the boundary was changed to eliminate the overlap between Site 11 and Site 29. Construction activities associated with the new Bay Bridge have greatly altered the landfill surface, which is currently being used by Caltrans as a laydown area for bridge construction materials. The final interim RI report for Site 11 was submitted January 27, 2010. The schedule in [Appendix B](#) is based on Caltrans' quarterly schedule, which indicates bridge activities will be complete in 2017. An RI addendum will need to be prepared for the site to continue with the CERCLA process.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	On Caltrans-owned property
Regulatory Classification	CERCLA; UST
Acreage	2.46
Source of Concern	Landfill solid waste (unknown type); USTs and fuel pipeline; lead-based paint (LBP) from the Bay Bridge
Contaminants of Concern	TPHs, polycyclic aromatic hydrocarbons (PAHs), VOCs, and metals
Interim Actions	None
Current Status	<ul style="list-style-type: none"> • Interim RI report (Site 11) was submitted January 27, 2010. • Bridge construction is scheduled to be complete in 2017.
USTs/ASTs	USTs 270, 204A through 204D removed
Estimated Site Closeout	<ul style="list-style-type: none"> • CERCLA closeout: April 2022 • USTs 204A through 204D received regulatory concurrence from the Water Board on June 17, 2004 (NFA). • UST 270 received regulatory concurrence from the Water Board February 10, 2004 (closed).

SITE 12 – OLD BUNKER AREA

Site 12, the Old Bunker Area, is located on the northwestern portion of TI and occupies about 93 acres of the island. Site 12 is currently the TI housing area. Site 12 is a flat area, consisting of grassy lawns, paved roads, and residential housing units with back yards. The area was first used for military housing in about 1968. Site 20, a petroleum site, is located within the Site 12 area and encompasses 1.6 acres that is fully encircled by Site 12.

Solid Waste Disposal Areas

Several ammunition bunkers were located within Site 12 before the area was developed as military housing. As early as 1945, nine large ammunition bunkers and 12 smaller bunkers were visible along the northern end of TI. These bunkers were constructed in 1944 as reinforced concrete structures covered by sand, with a chert rock and clay surface. A backfilled blast wall, the same height as the bunkers, existed along the open side of the structures. Observations documented during soil trenching and boring, before the 1965 housing foundations were excavated, indicated that discrete areas between and around the bunkers were the sites where incineration and disposal of solid waste occurred. Items recovered from these discrete disposal areas included loose rubbish, bottles, wire rope, paper, and steel. These areas have been divided into four identified solid waste disposal areas (SWDA): SWDAs Bayside (formerly named 1207/1209), North Point (formerly named 1231/1233), and Westside (formerly named A&B) occur along the shoreline, and the fourth is in the central portion of Site 12, at Bigelow Court.

Hazardous material from portions of the four SWDAs was removed in 1999, 2000, and 2001, but some hazardous material remains in soil in and adjacent to these areas. An engineering evaluation/cost analysis (EE/CA) for a NTCRA at the SWDAs was finalized October 12, 2006, followed by a public meeting October 24, 2006.

An NTCRA began in May 2007 at three SWDAs along the shoreline. The Navy is currently excavating and screening soils for chemical and radiological contaminants. During the NTCRA, low-level radiological objects (LLRO), containing radium-226, have been found within the SWDAs. In addition, LLROs have been found outside of the SWDAs and were likely distributed during grading for housing construction. When all removal action activities are complete, the Navy will conduct a residual risk evaluation for the SWDAs that will be included in an FS addendum. In addition, a FSS of the SWDAs will be performed to support radiological free-release of the SWDAs. The Navy estimates that the NTCRA field activities will be completed in 2016. A total of 13 buildings within Site 12 have been demolished to allow the NTCRA to continue in the area of the SWDAs (Buildings 1119, 1121, 1123, 1125, 1207, 1209, 1211, 1213, 1231, 1233, 1319, 1321, and 1323). Please also see page A-55, for a summary of the [Radiological Program](#) under Compliance and Basewide Program section.

Halyburton Court

Review of historical records and aerial photographs also helped identify an area within the interior of Site 12 as a former storage yard, located near what is currently referred to as Halyburton Court. This former storage yard differs from the SWDAs because waste was not intentionally disposed of in this area. Results from sampling in 2000 indicated soils in the former storage yard area contained PCBs and PAHs at concentrations in excess of the action

levels protective of human health. Based on these results, the Navy performed a removal action in the former storage yard area between 2000 and 2001. An investigation of PCBs in soil, soil gas, and indoor air was conducted during December 2005 and July 2006 because PCBs were left in place beneath the buildings in Halyburton Court. After further evaluation, the Navy concluded the proposed removal action would not significantly reduce the risk at Halyburton Court, and the Halyburton Court EE/CA was cancelled. The human health risk in the area was later evaluated in the Site 12 RI report in 2012. The subsequent 2014 FS and 2015 FS addendum reports proposed areas for soil removal within the area of Halyburton Court to reduce concentrations of PCBs and PAHs. The Navy proposed in a draft action memorandum in June 2015 that a soil removal action be conducted for this area in 2016.

SWDA Bigelow Court

SWDA Bigelow Court, located in the central portion of Site 12, was identified as a SWDA during sampling activities in 2001. A removal action was conducted on the eastern side of Bigelow Court in 2000 as a part of a larger removal action in Halyburton Court. Bigelow Court was included in the 2006 EE/CA, though the removal action was delayed until 2014. Buildings 1101 and 1103, formerly located in SWDA Bigelow Court, were demolished and excavations were completed in August 2014. One LLRO was identified and extracted from beneath the concrete slab of Building 1101; two additional LLROs were removed from the SWDA Bigelow Court excavations. The Navy finalized the FSS report for Bigelow Court on March 6, 2015. A post-construction summary report (PCSR) will be finalized in September 2015.

Investigation of Arsenic in Groundwater at Gateview Arsenic/TPH Area

Investigations at Site 12 identified elevated concentrations of arsenic in groundwater near Buildings 1311 and 1313. This area is called the Gateview Arsenic/TPH Area (formerly referred to as Building 1311/1313 Area). In addition to the elevated arsenic concentrations in groundwater, elevated TPH concentrations in soil and groundwater have been reported. A 1971 report indicated an “abandoned, buried oil tank” near Buildings 1311 and 1313. Although the report also indicated the UST was to be removed during grading of the site for housing construction, there is no documentation of removal or closure of the UST.

An automobile service station was located directly east of the current Building 1311 location during the 1938 to 1939 Golden Gate International Exposition. Fuel tanks associated with the service station were removed around 1944. The abandoned oil tank described above and the former service station may be the sources of TPH contamination for the Gateview Arsenic/TPH Area; however, diesel is the predominant fuel detected in groundwater, and the service station apparently stored and dispensed gasoline. It is possible that diesel fuel may have been stored and dispensed at this station as well because minimal service station record keeping was likely conducted during this era.

A technical memorandum published in 2001 attributed the elevated arsenic concentrations to the reducing environment created by the natural biodegradation of TPH at the site. A bench-scale treatability study of arsenic in groundwater has been completed. A pilot-scale treatability study was conducted that also addressed free product that was observed in the area. Review of historical drawings indicated former buildings in the area may have had associated USTs. Groundwater wells were installed and have been monitored for TPH. Soil gas sampling was

conducted in November 2010 near Building 1313 and again in July 2012 near Buildings 1311 and 1313. Based on the presence of TPH with arsenic in groundwater, the Navy ceased pilot study activities in 2011, and further action in this area was addressed in the 2014 FS and 2015 FS addendum. The Navy prepared a draft action memorandum in June 10, 2015, to initiate a removal action in this area; the final action memorandum is scheduled for September 2015. The removal action field work is anticipated for spring and summer 2016.

Remedial Investigation / Feasibility Study / Proposed Plan

Between 1998 and 2010, the Navy collected 4,039 samples of soil, soil gas, and groundwater. The RI report for Site 12, excluding the SWDAs, was finalized on June 20, 2012. The Navy conducted data gap sampling in February 2013 and prepared an FS that was finalized in March 2014. Additional data gap sampling was recommended and was performed in September and October 2014. An FS addendum that incorporated the results of the 2014 data gaps sampling investigation was finalized on June 10, 2015. A draft PP/draft RAP will be prepared in December 2015 for the non-SWDA portions of Site 12 and will exclude radiological isotopes (to be addressed in an FS addendum).

Radiological

The Navy conducted a gamma walkover survey investigation of areas within Site 12 and outside the known SWDAs in late 2013 and early 2014; the summary report was finalized on April 27, 2015. In addition, soil sampling within the 1400 series housing of Site 12 was conducted from November to December 2013 to collect additional radiological information; the summary report was finalized on February 27, 2015. The Navy completed interior scans of residential buildings at Site 12 in August 2014. The summary report for the interior housing scans was finalized on February 2, 2015. A total of three areas of interest were identified during the interior scanning fieldwork. These three areas were investigated in July 2015. Additional analysis of the open space scanning data and subsequent investigations are also planned. After a FS addendum for radiological isotopes (and CERCLA contaminants in the SWDAs), final remedies for radiological concerns will be evaluated. Also refer to the summary of the [Radiological Program](#) on page A-55.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	93.2
Source of Concern	Incinerator; debris disposal areas; former storage yard
Contaminants of Concern	PCBs, PAHs, dioxins, TPH, metals, and Radium-226
Interim Actions	<ul style="list-style-type: none"> • First soil removal action conducted at SWDA Bayside between June and August 1999 for constituents including lead, antimony, arsenic, copper, dioxins, and TPH. • Second soil removal action conducted at SWDA Westside during the summer 1999 for constituents including lead, aluminum, copper, and TPH. • Third soil removal action conducted at former storage yard at Halyburton and Bigelow Courts in 2000 to 2001 for constituents including PCBs, PAHs, and benzo(a)pyrene equivalent. • Fourth soil removal action conducted in areas of Buildings 1252, 1254, 1246, 1248, and 1413 in October and November 2001 for constituents including PCBs and PAHs.
Current Status	<ul style="list-style-type: none"> • NTCRA of SWDAs is under way (with FSS surveys). • PCSR for NTCRA at SWDA Bigelow Court is being prepared. • Action memorandum for TCRA at Gateview Arsenic/TPH Area, discrete areas in the southern portion of Site 12, and the Halyburton Court area is being prepared. • Draft PP/draft RAP for the non-SWDA areas will be distributed in December 2015
USTs/ASTs	One previously suspected UST received NFA concurrence from the Water Board on December 2, 2003.
Estimated Site Closeout	December 2020

SITE 13 – STORM WATER OUTFALLS/OFFSHORE SEDIMENTS

Site 13 comprises the offshore areas around the perimeter of NAVSTA TI and Clipper Cove. It excludes Site 27, the former skeet range located in Clipper Cove, and a submerged parcel that has been reassigned to the USCG (see EBS Parcel S007 on [Figure 3](#)). In 1992, the Navy collected data to assess whether chemicals were moving off shore via the storm water outfalls. Based on the results of this storm water investigation, it was determined that chemicals may have been released to the offshore areas and that further investigation of Site 13 was warranted. A second investigation was therefore conducted in 1996 to further characterize the sources, extent, and potential toxicity of chemical contamination in the offshore sediments. The results of these two offshore investigations indicated that metals, PCBs, PAHs, dichlorodiphenyltrichloroethane (DDT), and other organic compounds were the chemicals most frequently detected in the sediment samples.

In 2001 and 2002, two additional investigations were conducted of the sediments adjacent to possible onshore source areas at Sites 11 and 12, where burned solid waste or PCB-contaminated material may have been deposited. Offshore samples were collected and analyzed for TPH and PCBs. Analytical results showed concentrations of metals, PCBs, and TPH in the offshore sediments were not elevated. These studies indicated that no additional investigation was needed. A PP for Site 13 was prepared and released to the public on April 1, 2004. Results of four offshore sediment investigations were used to conduct an ecological risk assessment, which concluded the offshore sediments at Site 13 do not pose an unacceptable risk to the environment. After a public meeting that presented the no action alternative, a ROD was drafted and signed on April 7, 2005.

Transfer Category	Transferred to TIDA on May 29, 2015 (excluding Site 27)
Regulatory Classification	CERCLA
Acreage	520
Source of Concern	Storm drains, storm water outfalls
Contaminants of Concern	Metals, PAHs, PCBs, DDT, and TPH
Interim Actions	None
Current Status	No action ROD signed on April 7, 2005.
USTs/ASTs	None
Site Closeout	Closed

SITE 21 – VESSEL WASTE OIL RECOVERY AREA

Site 21, the Vessel Waste Oil Recovery Area, was along the southeastern edge of TI, adjacent to Clipper Cove. Site 21 was originally a 400-foot-long by 75-foot-wide area along the shoreline. The site boundary has since been expanded to include the southeast corner of Building 3 and the open area between Building 3 and the shoreline.

The vessel waste oil recovery area operated between 1946 and 1995. Waste oil from ships was unloaded into floating cylindrical steel shells called “donuts.” From the “donuts,” the waste oil was transferred to an onshore oil-water separation facility at Site 21. The separation facility consisted of five aboveground tanks, each with a capacity of 2,000 gallons. These tanks were removed in 1995. The separation system was maintained on a paved area that was reportedly heavily stained, but little staining is still visible. Analytical data from sampling of monitoring wells at Site 21 demonstrated no pattern of elevated levels of TPH in groundwater.

A treatability study to evaluate cleanup alternatives for contaminated groundwater at Site 21 was conducted between August 2005 and August 2010. The treatability study report was completed in March 2011. An RI report for Site 21, finalized in February 2007, recommended an FS be conducted using data collected from treatability studies of in situ treatment technologies. The focused FS (FFS) was submitted in February 2009. A PP/draft RAP was prepared in October 2011, and a public meeting was held November 2, 2011, to outline the Navy’s preferred alternative of ICs for the site. At the request of the BCT, the Navy conducted a soil gas investigation at the site in February 2012 and finalized the HHRA addendum in November 2012 to present the results of the soil gas sampling. The ROD/RAP was finalized in February 2013. The selected remedy consisted of ICs to address chlorinated VOCs in groundwater and continued soil gas and groundwater monitoring to confirm that the human health risk from the vapor intrusion pathway remains within or below the risk management range for non-residential users.

The land use control (LUC) RD/RAWP was finalized in October 2013. Annual LUC inspections and reporting are ongoing. Site 21 was included in the first basewide 5-year review that was finalized on December 15, 2014. The Navy finalized the remedial action completion report (RACR) on February 24, 2015. As noted in the RACR, groundwater monitoring demonstrated there were no increasing trends in groundwater concentrations and that the goals identified in the ROD/RAP have been achieved. However, soil gas monitoring will continue at three locations in Site 21 through 2015.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA, UST
Acreage	2
Source of Concern	OWS; ASTs; petroleum, oil, lubricants lines; dip tank
Contaminants of Concern	VOCs and TPH
Interim Actions	Treatability study for VOC source area
Current Status	<ul style="list-style-type: none"> • RACR finalized in February 2015. • Soil gas monitoring continues. • Annual LUC inspections continue.
USTs/ASTs	ASTs 12A through 12E removed
Site Closeout	Not applicable; site ICs and 5-year review process will continue

SITE 24 – DRY CLEANING FACILITY

Site 24 is located on the southeastern part of TI and extends from the central portion of the island east, toward the Bay. Site 24 encompasses two former CERCLA sites, Sites 5 (the Old Boiler Plant) and 17 (ASTs 103 and 104), which are located along the southwest boundary of Site 24. Petroleum sites within Site 24 include Site 4/19, the former Hydraulic Training School/Refuse Transfer Area; Inactive Fuel Line sites D1A, D4B, F2B, and a small portion of Site F2A; Building 530 Fuel Line Site; and former UST 230.

Other Sites within the Site 24 Boundary

Former Sites 5 and 17 were incorporated into Site 24 for further investigation. Site 5 included Building 102, a boiler plant operated from 1943 through 1968, when it was demolished. Various chemicals may have been used during the boiler operations to prevent scaling. Typical chemicals used to prevent scaling include morphaline, caustic soda, sulfite, and brine. It is reported that building debris, including asbestos-containing materials (ACM), were buried where the building stood. Pipeline trenching in 1987 uncovered the buried debris, including asbestos insulation. The debris was not removed, but instead was backfilled and covered with asphalt. Following recommendations in the 1988 PA/SI to further evaluate the area, ground-penetrating radar (GPR) was used to delineate the disposal area. Soil samples were collected from borings and a test pit and analyzed for asbestos. No asbestos was observed during field activities, and no asbestos was detected in the soil samples collected. It was decided in January 2001 that the CERCLA constituents within the Site 5 boundary will be considered a part of Site 24 and evaluated in the Site 24 RI report. The petroleum-related constituents were evaluated as part of Fuel Line Site F2B, which has since been closed by the Water Board on August 19, 2005.

Site 17 contains the area surrounding ASTs 103 and 104. The ASTs are each 200,000-gallon-capacity diesel fuel storage tanks, approximately 20 feet in diameter and 20 feet high. They are surrounded by a concrete paved area and a 4-foot-high berm built sometime after 1983. A small pump house, Building 105, is situated between the two tanks. The ASTs were installed before 1943, decommissioned in 1993, and emptied and cleaned in 1996, but have not yet been dismantled. Historical releases in the area have been documented. A second possible source of contamination is waste oil, possibly containing PCBs, which was reportedly spread at least once around the base of both ASTs for weed and dust control. This practice was discontinued when the area was paved after 1983. The ASTs were investigated and closed as part of Fuel Line Site F2B.

Former Petroleum Program Sites 4 and 19 are also within the Site 24 boundary. In December 2003, the Water Board concurred that NFA was required for petroleum contamination at Sites 4 and 19. In addition, former fuel pipelines D1, D2, D4, and F2 traversed portions of Site 24. Fuel leaks associated with the fuel lines have been addressed under the Petroleum Program. A removal action was completed along former fuel line F2 along 5th Street. The Water Board concurred that NFA was required at fuel lines F2A and F2B. A change for Site 24 proposed in March 2005 adjusted the boundary to completely encompass Building 99 and an associated VOC plume (discussed below), as well as to reduce overlap with the F2 fuel line sites and Site 33. The BCT concurred in November 2005.

Several radiological sites are included within the boundary of Site 24: Building 342 and yard area, 343, 343, and Lot 69. Buildings 343 and 344 were previously investigated and received

radiological free release from DTSC and the California Department of Public Health (CDPH) in 2008. Building 342 and yard area and Lot 69 are new sites that were identified in the Historical Radiological Assessment Supplemental Technical Memorandum (HRASTM).

Building 99 VOC Plume

Building 99 is located in the northwestern section of Site 24. It was used as a laundry facility from 1942 to 1977 and as a dry cleaning facility for an unknown interval within that period. Waste solvents used during dry cleaning operations were discharged to soil and groundwater beneath the floor of Building 99 from leaks or spills. The volume of solvents that was released to the ground is unknown. Building 99 was later used for meat processing and as a print shop, and most recently as an office and workshop for film sets.

The Navy conducted an investigation from April through July 2003 to delineate the horizontal and vertical extent of a plume of VOCs in groundwater that originates from Building 99 within Site 24. A pilot treatability study was conducted in the source area under Building 99 from May 2003 through March 2004 to evaluate anaerobic in situ bioremediation as a potential remedial option to treat high VOC concentrations at the site. The treatability study was expanded in late 2004 and early 2005 to evaluate the effectiveness of the in situ bioremediation treatment to address low VOC concentrations in the more mobile portions of the plume. The expanded treatability study in the plume area successfully reduced VOC concentrations to below the treatability study cleanup goal of 100 micrograms per liter total VOCs in most areas of the plume. The treatability study was expanded again in 2008 to investigate the potential presence of dense nonaqueous-phase liquids near Building 99 and to test reversal of the injection and extraction pump system to optimize bioorganism circulation and degradation. The treatability study report for Phases I and II was finalized in November 2011, when Phase III began. Phase III was intended to promote the enhanced degradation of chlorinated ethenes in groundwater areas of low and medium concentrations. This enhanced degradation was to reduce or eliminate a continuing source for soil gas contamination, via a vapor intrusion pathway and potentially reduce the need for LUCs. Phase III treatment was completed in December 2012, and the Phase III treatability study report was finalized in August 2013.

In 2012, a 3-dimensional visualization and groundwater remedy optimization analysis was conducted and was included as part of the FFS addendum. This analysis resulted in an updated conceptual site model, identification of groundwater data gaps in the lower portions of the shallow plumes, qualitative confirmation of plume reductions, and identification of potential strategies for source area remediation.

RI / FFS / FFS Addendum

The Site 24 Final RI/FFS was submitted on July 3, 2008. In December 2013, the Navy expanded the site boundary to encompass the entire VOC plume detected after the Phase I treatability study. However, based on a subsequent request from the TIDA, the Navy proposed to modify the southern boundary of Site 24 in September 2014 to allow for earlier development of adjacent portions of the property by TIDA. The Navy finalized a FFS addendum on October 3, 2014 to address source area remediation and radiation issues. The purpose of the FFS addendum was to address the updated conceptual site model, future land use, alternatives not previously considered, and to address radiological concerns under the CERCLA program. The Navy finalized the PP/draft RAP in March 2015. The preferred alternative would remove

soil that may be contaminating groundwater and soil gas, in situ groundwater treatment, groundwater and soil gas monitoring, investigation of potentially radiologically impacted areas, and ICs. A public meeting was held on March 11, 2015. The Navy is currently finalizing the ROD/RAP, which is anticipated for September 2015. Annual groundwater monitoring continues.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	Petroleum, CERCLA, UST
Acreage	20.30
Source of Concern	Solvent spills and leaks within Building 99; petroleum, oil, lubricants
Contaminants of Concern	Petroleum, oil, lubricants, chlorinated solvents
Interim Actions	Treatability study for VOC source and plume areas
Current Status	<ul style="list-style-type: none"> • PP/Draft RAP issued in March 2015. • Final ROD/RAP is being prepared. • Groundwater monitoring continues.
USTs/ASTs	<ul style="list-style-type: none"> • UST 230 closed by the Water Board in 1997. • ASTs 103, 104 received NFA concurrence from the Water Board May 9, 2005. • ASTs 455A-D (boiler additives) are noted as inactive.
Estimated Site Closeout	October 2017

SITE 27 – CLIPPER COVE SKEET RANGE

Site 27, located in Clipper Cove, was situated directly between TI and YBI. Until 1989, a portion of Clipper Cove was used as a naval skeet range. Naval personnel fired lead shot over the water as clay skeet targets were launched from the shoreline. In 1993, the Clipper Cove Skeet Range was identified as a potential environmental concern, based on Water Board Order No. 93-130, “Site Cleanup Requirements for NAVSTA TI Skeet Range.” In October 1993, the BCT agreed to comply with the Water Board Order requirements through the CERCLA process and include the Clipper Cove Skeet Range in the Navy’s IR Program as Site 27 (Remedial Project Manager/BCT Meeting Minutes October 1993). In 1996, samples were collected at Site 27 to define the vertical and horizontal extent of lead shot, lead, and PAHs in the offshore sediments and overlying surface water. Additional investigation of lead and PAHs in the onshore soils of Site 27 was conducted under the EBS data gaps investigation in 2004. In September 2005, a hydrographic study was conducted to evaluate sedimentation rates and deposition in Clipper Cove. The results indicated steady-state conditions and sediment thickness may not be protective of diving ducks within 150 feet of the shoreline; therefore, an additional sediment investigation to characterize the distribution of lead shot in near-shore sediments was conducted in March 2008. The investigation indicated that lead shot was covered by only 1 foot of sediment in some near-shore locations. A revised FS report was finalized August 13, 2010.

The Navy prepared a site boundary change technical memorandum to exclude the upland portion of the site. No further action in the upland portion, was necessary as PAHs and lead detected in the soil were found to not pose unacceptable risk to human health or the environment. The boundary change was finalized on August 20, 2010. The PP/draft RAP was finalized in June 2011 and a public meeting was held on June 14, 2011. The ROD/RAP was signed and finalized on March 28, 2012, and the selected remedy consisted of focused dredging and backfilling the area within 75 feet of the shoreline, off-site disposal, and ICs to minimize sediment disturbing activity. The remedy removes a potentially complete exposure pathway for diving ducks to access the lead shot in sediment that poses a risk. No CERCLA action was required to protect human health. The RD was finalized on May 22, 2013, and the RAWP was finalized on July 12, 2013. The remedial action (RA) began in July 2013 and was completed on November 29, 2013. A bathymetry survey was conducted at Site 27 in November 2014, 1 year after the remedial action. Future bathymetry surveys will be timed to correspond to the basewide 5-year reviews. A RACR was finalized on December 12, 2014. Site 27 was included in the first basewide 5-year review that was finalized on December 15, 2014. An addendum to the LUC RD was developed to detail the specific controls required for the site (the 2013 RD provided only general information) and was finalized in April 2015. Annual LUC inspections and reporting are ongoing.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	19
Source of Concern	Skeet range
Contaminants of Concern	Lead shot
Interim Actions	None
Current Status	<ul style="list-style-type: none"> • RACR was finalized on December 12, 2014. • A LUC RD addendum was finalized on April 30, 2015. • Annual LUC inspections continue.
USTs/ASTs	None
Site Closeout	Not applicable; site ICs and 5-year review process will continue

SITE 28 – WEST SIDE ON/OFF RAMPS

Site 28 is located in the western portion of YBI and is bounded to the east by Treasure Island Road, to the south by Site 29, and to the west by the Bay. The Navy owned the property comprising the area beneath the bridge until 2001, when the FHWA transferred the bridge right-of-way from the Navy to Caltrans. A CERCLA site boundary change in June 2005 transferred the southernmost portion of Site 28 to Site 29 so that the remaining area of Site 28 would continue as Navy property, and most of Site 29 would be Caltrans property. Apart from the roads running through Site 28, most of the site is steeply sloped to the southwest toward the Bay and densely vegetated with trees and brush.

The Bay Bridge connects San Francisco with Oakland and other East Bay cities and crosses NAVSTA TI through a tunnel on YBI. Treasure Island Road has been in operation since the Bay Bridge was constructed in 1936.

Site 28 was not included in the IR Program until after the 1992 draft Phase I RI reporting period. An initial soil investigation was conducted in 1993 by Blaine Technical Services, Inc. The investigation was conducted in connection with health and safety concerns for workers performing seismic improvements to the on/off ramps in areas possibly containing elevated concentrations of metals in airborne dust. Additional investigations performed as part of the primary Phase IIB RI were reported in the draft 1997 RI report. In December 2001, the Navy completed a validation study to confirm results of the SLERA included in the 1997 RI report for the peregrine falcon. The study concluded that no unacceptable risk was posed to the falcon at Sites 8, 11, 28, and 29.

The Navy finalized the RI report with recommendations for NFA. An NFA PP and public comment period were completed by April 29, 2010. An NFA ROD was signed on November 22, 2010. Although Site 28 has a NFA ROD and no LUCs will be included as part of the CERCLA remedy, use of the property will be restricted because it has been included in the Tidelands Trust. The Tidelands Trust is overseen by the California State Lands Commission. The Treasure Island Tidelands Trust Exchange Act of 2004 proposed an exchange of lands under which non-Trust lands on YBI would be brought into the Trust, and Trust lands on TI would be released from the Trust. Upon inclusion in the Tidelands Trust, Site 28 lands would be limited to uses that attract people to the waterfront, promote public recreation, protect habitat, or preserve open space. Transfer to the Tidelands Trust is expected to be complete in late 2015.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	CERCLA
Acreage	10.53
Source of Concern	LBP from the Bay Bridge
Contaminants of Concern	Lead
Interim Actions	None
Current Status	NFA ROD was signed November 22, 2010.
USTs/ASTs	None
Site Closeout	Closed

SITE 29 – EAST SIDE ON/OFF RAMPS

Site 29 is located below and parallel to the Bay Bridge from the northeastern portion of YBI westward to the YBI tunnel, with a portion of the site on the western side of the YBI tunnel. The western and central portions of the site are mostly covered by pavement or concrete associated with the bridge and the on- and off-ramps. The Navy owned the property comprising the area beneath the bridge until 2001, when the FHWA transferred the bridge right-of-way from the Navy to Caltrans. The Bay Bridge and west side on/off ramps border the southern portion of Site 28 and were included in Site 29 based on the boundary change made in June 2005. The boundary change did not add to or delete acreage from the total of Site 28 and Site 29, but only transferred a portion of Site 28 to Site 29. The remainder of the site, on the east side of the YBI tunnel, is steeply sloped to the southwest and vegetated with trees and brush. The YBI on/off ramps have been in operation since the Bay Bridge was constructed in 1936. The Bay Bridge connects San Francisco with Oakland and other East Bay cities and crosses NAVSTA TI through a tunnel on YBI. The surface soil on the site may be contaminated by lead and other metals from vehicle emissions, as well as bridge and ramp painting and maintenance.

Site 29 was not included in the IR Program until after the 1992 draft Phase I RI reporting period. While Site 29 was not investigated during the Phase I RI, samples for the Site 11 RI (adjacent to Site 29) were collected within the Site 29 boundary. Additional investigations performed as part of the primary Phase IIB RI were reported in the draft 1997 RI report. In December 2001, the Navy completed a validation study to confirm results of the SLERA included in the 1997 RI report for the peregrine falcon. The study concluded that no unacceptable risk was posed to the falcon at Sites 8, 11, 28, and 29.

Petroleum Program investigations have overlapped with the Site 29 boundaries. The former fuel pipelines YF3 and USCG were investigated in 1997, and additional borings were drilled in 2000 and 2001 for further delineation of the extent of contamination along the former fuel pipelines. The Water Board has requested the Navy to perform additional investigation along this section of the pipeline. Removed UST 270, formerly within the Site 29 boundaries, was investigated from 1995 to 1997. The Navy received an NFA closure letter from the Water Board for UST 270 in 2004.

An SI was performed by Caltrans in 2001 to characterize soil and groundwater for potential chemical contaminants that may be encountered during construction. In 2002, additional lead investigations were conducted to (1) fully delineate the extent and magnitude of lead in surface soils at Sites 8, 11, and 29; (2) collect additional soils data for comparison to the validation study results; and (3) provide additional data, if needed, for the HHRA presented in the 1997 RI report for Sites 8, 11, and 29. Field inspections of Site 29 were performed in April and October 2006 to verify removal of contaminated soil by Caltrans and to document ongoing construction activities.

The Navy finalized the interim RI report for Sites 8 and 29 in March 2009. The schedule in [Appendix B](#) is based on Caltrans' quarterly schedule, which indicates bridge construction will be complete in 2017. The next anticipated milestone will be development of an RI addendum.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	On Caltrans temporary construction easement property
Regulatory Classification	CERCLA, UST
Acreage	15.13
Source of Concern	LBP from the Bay Bridge, fuel line
Contaminants of Concern	Lead and SVOCs
Interim Actions	None
Current Status	<ul style="list-style-type: none"> • Interim RI report (for Sites 8 and 29) was submitted in March 2009. • Bridge construction is scheduled to be complete in 2017.
USTs/ASTs	<ul style="list-style-type: none"> • UST Quarters 8: removed, received NFA concurrence from the Water Board October 3, 1997. • UST 213, previously suspected, never existed: received NFA concurrence from the Water Board December 2, 2003. • UST 270: received case closure letter from the Water Board February 10, 2004.
Estimated Site Closeout	October 2021

SITE 30 – DAYCARE CENTER

Site 30, Daycare Center (Building 502), is located south of the Treasure Island Elementary School, at the corner of Avenue D and 11th Street. The site was undeveloped until the Navy's former daycare center was built in 1985. After NAVSTA TI closed, the Treasure Island Daycare Center was leased to the City of San Francisco under a finding of suitability to lease (FOSL) on July 29, 1997. The current daycare center opened on March 17, 2003.

As part of the EBS to support the leasing of the daycare center, the Navy reviewed a 1989 as-built drawing of the water lines in the area; the drawing noted the comment "buried trash" along 11th Street. In 2002, a series of investigations identified various types of wastes, including buried burned debris associated with historical practices that contained lead at concentrations that exceeded the site soil screening level. Based on these findings, in July 2002 the Navy completed a time-critical removal action. Additional burned debris was found, and analytical results for soil samples showed the presence of dioxins, lead, arsenic, and vanadium. The Navy continued to investigate in an effort to delineate the extent of the burned debris and dioxin contamination. Some of the soil containing burned debris was not accessible because of the adjacent location of the daycare center (Building 502) and could not be removed. The site was designated as a CERCLA site in September 2002. In January 2003, the Navy installed a 6-inch concrete pad adjacent to the daycare center to cover the 1,400-square-foot area around and between the locations that contain elevated concentrations of dioxin in the subsurface soil. The concrete pad with asphalt cover serves as a protective barrier to prevent contact with the soil. The Site 30 boundary adjacent to Site 31 was modified in February 2005 to exclude the sidewalks on the south side of 11th Street.

A groundwater investigation was conducted in May 2004. Samples were analyzed for VOCs, SVOCs, metals, TPH, pesticides, PCBs, and dioxins. No chemicals were detected above TI groundwater screening values. The RI report was finalized in February 2006. The FS was finalized in November 2006. The PP was finalized September 18, 2008, and the public meeting was held on October 7, 2008. The ROD was finalized August 5, 2009. The selected remedy was engineering controls and ICs to address the principal threats by preventing exposure to potentially contaminated soils beneath the building and allow the site to be used currently and in the future as a daycare center. The LUC RD/RAWP was finalized on November 24, 2010. Annual LUC inspections and reporting are ongoing and have observed that no violations to the LUCs have occurred. Site 30 was also included in the first basewide 5-year review that was finalized on December 15, 2014.

During development of the HRASTM, Site 30 was identified as located within the footprint of former storage areas that extended to the north and south of the site (see [Figure 10](#)). Based on the results of the final HRASTM and the proximity of Site 30 within a former storage yard, a radiological survey was conducted at Site 30 in July 2015. A summary report of the radiological scanning will be prepared, and a draft FSS is anticipated in July 2016.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	1.46
Source of Concern	Burn debris disposal area
Contaminants of Concern	Dioxins and metals
Interim Actions	Time-critical removal actions in July 2002 and agency-approved concrete cap installed January 2003.
Current Status	<ul style="list-style-type: none"> • Site 30 was included in the first basewide 5-year review finalized in December 2014. • Radiological survey was completed in July 2015; a draft FSS report will be prepared in July 2016. • Annual LUC inspections and reporting are ongoing.
USTs/ASTs	None
Estimated Site Closeout	Not applicable; site ICs and 5-year review process will continue for CERCLA. Radiological free release is pending.

SITE 31 – FORMER SOUTH STORAGE YARD

Site 31, the asphalt-covered playground south of the Treasure Island Elementary School, referred to as the Former South Storage Yard, is located at the corner of Avenue E and 13th Street. According to historical aerial photographs, Site 31 was used during the 1970s as a storage yard or laydown area; however, the nature of and operations at the storage yard are unknown. In the late 1970s, the area was paved over and developed as a playground for the elementary school. Based on the FOSL and the restrictions it identified, the Navy entered into a lease agreement with the San Francisco Unified School District (SFUSD) on May 13, 1996 for the elementary school and associated playground. The school had originally been constructed by SFUSD around 1968 when the military housing was built and was operated under a previous agreement with the Navy until the 1996 lease agreement.

In 2002, the Navy investigated the area based on its former use as a storage yard and because of the reference to an “old trash dump” noted on a 1989 as-built drawing for the 11th Street water line replacement project. An initial investigation identified the presence of construction and burned debris. The initial investigation also identified concentrations of lead, PCBs, and DDT in soil that were elevated above the site screening levels. These chemicals may have been associated with fuel leaks or other releases from the machinery, electrical equipment, and paint that were stored in the former storage yard area. The site was designated as a CERCLA site in September 2003.

An additional soil investigation in 2003 identified concentrations of TPH as diesel and motor oil, PAHs, and dioxins at the site. The concrete pad overlain by asphalt currently serves as a protective barrier to prevent contact with the soil beneath the playground. A groundwater investigation was conducted in May 2004. Samples were analyzed for VOCs, SVOCs, metals, TPH, pesticides, PCBs, and dioxins. None of these chemicals was detected above TI groundwater screening values. The Site 31 boundary, which is adjacent to Site 30, was modified in April 2005 to include the sidewalks on the south side of 11th Street.

The RI report was finalized in July 2006. The FS report was finalized in March 2007. The PP was finalized September 18, 2008, and the public meeting was held on October 7, 2008. The ROD was finalized on August 5, 2009. A final soil remediation work plan was submitted January 28, 2010. The soil remediation field work (referred to as Phase I) began in February 2010 and continued through July 2010. During the field work, radium-226 was also detected at the site.

The Navy finalized a RAWP on January 27, 2012, for additional excavation and radiological characterization of soil (referred to as Phase II) at Site 31. The Navy has completed the Phase II soil removal action for Site 31 and included radiological characterization because of the site’s proximity to Site 12, site history, and presence of debris at the site. The Navy has backfilled the excavations, conducted a gamma walkover survey, and is currently preparing a RACR for chemical constituents. Further characterization is needed for radioisotopes. A draft FSS will be developed in July 2016 after the additional radiological investigation in March and April 2016.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	2.02
Source of Concern	Storage yard, burn debris disposal
Contaminants of Concern	Lead, dioxins, PAH, TPH, and radium-226
Interim Actions	None
Current Status	<ul style="list-style-type: none"> • RACR is currently being prepared. • Additional radiological investigation will be conducted in March and April 2016; a draft FSS report will be prepared in July 2016.
USTs/ASTs	None
Estimated Site Closeout	October 2016

SITE 32 – FORMER TRAINING AND STORAGE AREA

Site 32, the Former Training and Storage Area, consists of portions of EBS Parcels T111 and T115, is east of the WWTP on Avenue M, and includes Building 462 and area of former Building 463. The area has been used as a parking lot for vehicles and forklifts, a storage area for hazardous materials and hazardous wastes, a tear gas training area, and as storage for former training facilities. A concrete pad, located north of Building 463, formerly held an electrical transformer. Historically, the site was also used for radiological decontamination training. The Damage Control School was relocated from the northwestern area (Site 2) to the northeastern area of the base in March of 1970. The new training complex consisted of Buildings 461, 462, 463, and the exercise area containing the USS *Pandemonium* mockup. Training at the complex is discussed in more detail in the “Final Treasure Island Naval Station Historical Radiological Assessment [HRA]” by Weston Solutions, Inc., published in February 2006. The HRA evaluated past operations in the vicinity and concluded that radiological issues were not a concern at Site 32. Building 445 is located within Parcel T115 and was historically used for forklift maintenance, boat motor storage, general shop activities, and administrative offices. The Site 32 area was designated for investigation because fluid that contained PCBs was known to have been released from the former transformer and to assess the possibility of contamination associated with historical site usage.

Initial investigations, under the EBS data gaps study, were conducted at the site in April 2003. Additional investigations were conducted between September and November 2003. Soil and groundwater samples were collected. Soil samples from the initial investigation contained concentrations of PCBs, TPH as diesel and motor oil, dioxins, and pesticides. There were no detections in groundwater above screening criteria. The site was designated as a CERCLA site on April 6, 2004. The CERCLA boundary between Sites 6 and 32 was adjusted in June 2005 to move a small portion of EBS Parcel T111 from Site 32 into Site 6 based on dioxin data that had been collected in that parcel. Additional trenching was performed at Site 32 in October 2005 to investigate the nature and extent of dioxins in shallow soils. An RI report was finalized on October 30, 2008.

A Toxic Substances Control Act (TSCA) PCB remediation, which was an interim removal action that also addressed arsenic, was completed at Site 32 in March 2010. A year of post-removal action groundwater monitoring was completed in February 2012, and a groundwater monitoring summary report was finalized in July 2012. All concentrations of contaminants of concern (COC) were either non-detected or were detected at low levels during all four quarterly sampling events. There is no indication of residual petroleum contamination in groundwater. No further actions were recommended for groundwater at Site 32 as a result. A post-construction summary report (PCSR) was finalized in July 2011.

The Navy was not required to prepare an FS under CERCLA because the TSCA cleanup action removed all soil containing PCBs above the cleanup level of 1 milligram per kilogram and also removed all other constituents that exceeded NAVSTA TI cleanup goals. No additional cleanup action is necessary for Site 32 because there is no longer an unacceptable risk to human health or the environment. The PP/draft RAP was finalized September 16, 2011, and a public meeting was held on September 28, 2011.

A radiological survey was completed in 2014; however, additional survey work is necessary to complete the radiological investigation. The site was divided into two areas: 32A and 32B. A draft FSS report for Site 32A is planned for November 2015 after additional survey work is completed in the vicinity of the USS *Pandemonium* holding tanks. The area of Site 32B will not be surveyed until summer 2016 after that portion of Site 32 is no longer used to support the Site 12 SWDA removal actions. (See page A-55, summary of [Radiological Program](#) under Compliance and Basewide Program section). The draft ROD/final RAP is also planned to be issued in December 2015.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Acreage	2.60
Source of Concern	Transformer, storage area
Contaminants of Concern	PCBs, TPH, dioxins, pesticides, arsenic
Interim Actions	TSCA soil removal in 2010
Current Status	<ul style="list-style-type: none"> Additional radiological scanning at Site 32A will be completed in summer 2015, and in summer 2016 for Site 32B. FSS reports will be created for both Sites 32A and 32B. Draft ROD to be prepared in December 2015.
USTs/ASTs	None
Estimated Site Closeout	December 2016

SITE 33 – WATER LINE REPLACEMENT AREA

Site 33, the Water Line Replacement Area, was located south of Site 24. The area was identified on historical as-built drawings, which showed locations where crews observed debris in the trench for the water line during extensive repairs in the 1980s. In addition, areas of debris were identified near Building 530 (Parcel T015) during removal of a petroleum pipeline. Most of the areas of debris are within the footprint of the former Lake of the Nations, constructed for the Golden Gate International Exposition of 1939 and 1940.

Initial investigations, under the EBS data gaps study, were conducted at the site in April 2003 and between September and November 2003. Soil and groundwater samples were collected. Soil samples contained concentrations of dioxins and metals. The site was designated as a CERCLA site on April 6, 2004. An additional groundwater investigation was conducted in summer 2005. Groundwater samples contained concentrations of copper, lead, mercury, nickel, silver, and zinc. The RI report was finalized on April 30, 2010. An Explanation of Significant Differences (ESD) was finalized on May 24, 2011, to complete the RA for Site 33 under the Site 31 ROD.

The Navy finalized a RAWP on January 27, 2012, for excavation and potential radiological characterization of soil at Site 33. The Navy completed the soil remediation for Site 33 and backfilled the site in May 2014. Radium-226 screening was conducted during the removal action because of the presence of debris at the site and because the 2006 HRA stated that the Navy would evaluate the site further. The Navy finalized the RACR for Site 33 in October 2014. The regulatory agencies concurred with the report with signatures in the final RACR on October 29, 2014.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	CERCLA
Acreage	4.89
Source of Concern	Debris disposal area
Contaminants of Concern	Arsenic and lead
Interim Actions	None
Current Status	The RACR was finalized in October 2014; regulatory agencies concurred with NFA with signatures in the RACR on October 29, 2014.
USTs/ASTs	None
Site Closeout	Closed

PETROLEUM PROGRAM

SITE 4/19 – HYDRAULIC TRAINING SCHOOL/REFUSE TRANSFER AREA

Site 4 is located approximately 200 feet north of 5th Street, between Avenues M and N. Sites 4 and 19 are generally referred to as Site 4/19. Site 4 is known as the Hydraulic Training School and includes a paved, fenced area that formerly contained about 15 55-gallon drums of waste oil (mainly transmission oil). Waste oil released from drums stored at the site is the primary potential contaminant. Waste oil leaks or spills stained the underlying concrete pavement and an adjacent earthen area. Several hundred square feet of surface area has been affected. The site also includes an eastern lot, referred to as the investigation-derived waste storage area.

Site 19, located just south of Site 4, is known as the Refuse Transfer Area. The site was used to hold and transfer refuse beginning in 1953; it is unknown when operations ceased. Little information exists regarding disposal practices before 1970. Previous environmental assessments have found small, isolated areas of oil, grease and petroleum hydrocarbons in surface soils.

The closure report requesting NFA was submitted on December 15, 2003, and Water Board concurrence was received. An additional investigation of PAHs in soils was conducted under the EBS data gaps investigation with Parcels T066/T117 in 2004 at the request of the BCT. Based on the analytical results, the Navy recommended no further investigation in the May 2005 field activity report.

Transfer Category	Partially transferred to TIDA on May 29, 2015, the and remainder will be included in an upcoming FOST
Regulatory Classification	Petroleum Program
Acreage	1.72
Source of Concern	Storage area; spill area; maintenance yard; transfer facility
Contaminants of Concern	Petroleum, oil, lubricants
Interim Actions	None
Current Status	NFA concurrence received from the Water Board on December 17, 2003.
USTs/ASTs	None
Site Closeout	Closed

SITE 6 – FIRE TRAINING SCHOOL

Site 6, the former Navy firefighting training school, was used for nearly 50 years (1944 to 1992) for various firefighting training activities. The training school formerly included 23 buildings, six USTs, and a central training yard, which consisted of burn areas lined with asphalt and concrete. Fires fueled with diesel and gasoline, magnesium, and wood were set in various mockups in the training yard and were extinguished with a mixture of water, biodegradable soap, and industrial talc.

All buildings have been removed from the site. Four 1,500-gallon USTs (240A, 240B, 248A, and 248B) that contained gasoline and diesel for firefighting training were present within the northern and eastern portions of the training yard. USTs 240A and 240B were removed in 1992, and USTs 248A and 248B were removed in 1995. Two 1,000-gallon USTs (248C and 248D), previously used to store waste fuel, were removed in 2002. One known AST (248), located near UST 248D, was removed prior to 1995. UST M, a previously suspected UST for coolant, was reported in Shaw's "Final Facilitywide Underground Storage Tank Summary Report Update," dated August 25, 2004, as never having been installed, based on document reviews and discussions with Navy personnel. Petroleum remedial activities were conducted at Site 6 between May and December 2002. Remedial activities included excavation of USTs and excavation of petroleum-contaminated soils near the USTs, pipelines, and OWS components throughout the site. Remediation also included evaluation and excavation of free product near USTs 240A and 240B. In October 2002, during remedial excavation at the UST 248 area, burn surfaces were identified near the former Building 464 foundation. Shallow soil samples collected in this area contained dioxins and furans at concentrations above the soil screening levels. The excavation was subsequently expanded to include removal of burn debris and soot-discolored areas. Results from confirmation samples found dioxins and furans above the screening levels, causing Site 6 to be transferred to the CERCLA Program on September 18, 2003.

Further investigation and delineation of dioxins and furans detected in soil were conducted under the CERCLA Program as part of the EBS data gaps investigation in 2003. Based on the results of the investigation, the BCT agreed to a boundary revision for the CERCLA site at the June 7, 2005, BCT meeting. The boundary revision included a portion of Parcel T112 east and north of the WWTP area, where dioxins were detected in shallow soil samples. On January 24, 2007, a second boundary revision was submitted separating Site 6 (CERCLA Program) and Site 6A (Petroleum Program). DTSC did not concur with the request to modify the boundary. Other investigations include a soil gas sampling program completed in October 2004 to evaluate VOCs in soil gas near former USTs 240A and 240B. Groundwater at Site 6 continues to be monitored semi-annually under the Basewide Petroleum Sites Groundwater Monitoring Program.

Between 2007 and 2008, Site 6 was used as a temporary excavated soil staging and loading area, including the RCA for the Site 12 NTCRA. Before it was used for staging and loading, a baseline radiological survey was conducted. While staging and loading were ongoing, engineering controls were developed, air monitoring equipment was installed, and a surveillance program for health and safety was in place. In addition to engineering controls, best management practices, such as keeping soil stockpiles covered to prevent releases, were used. The soil staging and loading area included temporary stockpiling and loading of soil into bins, at

which point they were characterized and shipped off site to a licensed disposal facility. The waste shipped off site included both chemical and low-level radiologically impacted soil (radium-226). Since 2008, soils have not been stockpiled at Site 6. However, LLRW that has been characterized and placed in sealed bins was temporarily stored in the Site 6 RCA while awaiting off-site disposal. In 2014, all remaining LLRW bins awaiting off-site disposal were relocated to a paved area north of Building 461, adjacent to Site 6. The Navy is currently conducting an FSS for Site 6, which is designed to achieve free release for radiological issues.

In 2010, the Navy completed a CERCLA data gaps investigation to further evaluate the nature and extent of chemicals in soil, soil gas, and groundwater. The Navy finalized the combined RI/FS in October 2012. To address the concerns expressed by the Water Board, the Navy completed a petroleum corrective action near the 240 series USTs in March 2013. The Navy prepared a PCSR for the UST 240 removal action and will be requesting regulatory closure for USTs 240A, 240B, 248A, 248B, 248C, and 248D in June 2017, after post-action monitoring.



Aerial photographs taken by American Aerial Surveys Inc. on May 10, 2012.

Transfer Category	Upcoming FOST
Regulatory Classification	Petroleum; CERCLA
Acreage	3.45
Sources of Concern	USTs, firefighting training area, OWSs
Contaminants of Concern	Petroleum (CERCLA contaminants include dioxins and furans, VOCs, PAH)
Interim Actions	<ul style="list-style-type: none"> • USTs removed in 1992, 1995, and 2002. • Floating product removal action completed in 2002.
Current Status	<ul style="list-style-type: none"> • Annual groundwater monitoring continues. • Removal action of USTs (240 series) is complete. • Post-action monitoring being evaluated
USTs/ASTs	<ul style="list-style-type: none"> • AST 240, 248 and USTs 240A, 240B, 248A, 248B, 248C, and 248D all are removed; NFA concurrence will be requested in June 2017 following additional groundwater monitoring. • Previously suspected UST M received concurrence on NFA December 2, 2003.
Site Closeout	Closed; transferred to the CERCLA Program on September 18, 2003

SITE 14/22 – NEW FUEL FARM/NAVY EXCHANGE SERVICE STATION

Site 14/22 represents the combination of two adjacent petroleum sites located in the northeast portion of TI. Site 14 (New Fuel Farm) was established in 1943 as the primary fuel storage and distribution center at NAVSTA TI. Shortly thereafter (in approximately 1946), the Navy centralized the distribution of automotive fuel with the construction of the Naval Exchange Service Station (referred to as Site 22). It served as a fuel storage area and gas station for more than 50 years. Fuel storage and dispensing at Site 14/22 released diesel, waste oil, and gasoline into the environment. Based on available information about the site history and operations, the suspected sources of gasoline, diesel, and petroleum contamination at Site 14/22 include the tanks and associated piping, a gasoline pumphouse (Building 85), and the service station (Building 330). A full-scale treatment system including air sparging and soil vapor extraction, installed in the area of the former USTs, has been dismantled. The system operated for 3 years and was effective in removing TPH. A soil cleanup action, including large-scale soil excavation, was completed at Site 14/22 in 2004. The site received NFA concurrence from the Water Board in July 2005.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	Petroleum; UST
Acreage	2.18
Source of Concern	ASTs and USTs; petroleum pipelines; vehicle maintenance
Contaminants of Concern	Petroleum, oil, lubricants, VOCs
Interim Actions	UST/AST removals completed, 1997 pipeline removal action completed, in situ groundwater treatment system completed, large-scale shallow soil excavation completed in 2004.
Current Status	NFA concurrence received from Water Board on July 18, 2005.
USTs/ASTs	<ul style="list-style-type: none"> • USTs 85, 330A through 330F removed. <ul style="list-style-type: none"> – USTs 85, 330A, 330B, 330E, and 330F removed, received NFA concurrence July 18, 2005. – USTs 330C and 330D received closure July 22, 1996. • ASTs 4, 5, and 456 removed. • ASTs 6A through 6G removed. • AST 672 removed.
Site Closeout	Closed

SITE 15 – OLD FUEL FARM

Site 15 is located on the southeastern shore of TI at the intersection of Avenues M, N, and California Avenue. The site was the original fuel storage and distribution facility for NAVSTA TI, which consisted of two large-capacity ASTs (4M and 5M), four smaller-capacity ASTs (collectively identified as AST 6M), a gasoline pump house (Building 84), a diesel pump house (Building 86), and a diesel oil clarifier (Building 85). In 1943, ASTs 4M, 5M, and 6M were relocated to the New Fuel Farm (Site 14). In 1945, Building 85 was moved to the New Fuel Farm, and Building 86 was demolished; Building 84 was demolished in 1961. Two smaller former diesel ASTs (ASTs 34A and 34B) were located near Building 34. Former fuel AST 34A was located on concrete mounts east of Building 34, and former fuel AST 34B was apparently located on a concrete pad next to an emergency generator southeast of Building 34. Investigations at Building 34 in 1985 revealed soil suspected of containing oil or petroleum hydrocarbons. No impact to groundwater has been identified in the area of Building 34.

Fuel lines, where found, were removed during remedial activities in 1997 and 1998. Preliminary remediation wells were installed in 2001 to assess TPH contamination in the eastern subarea, along fuel line D1, and approximately 400 feet west and downgradient of Building 34 within Site 15. The remediation wells were not effective at recovering free product because of the nature of TPH contamination at Site 15. The Navy excavated several areas of PAH-contaminated shallow soil in 2002 and continued monitoring groundwater at the site from 2001 until 2004. In September 2004, the site received concurrence from the Water Board that NFA was required.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	Petroleum
Acreage	4.87
Source of Concern	ASTs; petroleum/pipelines
Contaminants of Concern	Petroleum, oil, lubricants
Interim Actions	Tank removals completed and excavation of petroleum contamination completed.
Current Status	NFA concurrence received from Water Board in September 2004.
USTs/ASTs	ASTs 4M, 5M, 6M, 34A, 34B removed
Site Closeout	Closed

SITE 16 – CLIPPER COVE TANK FARM

Site 16, the Clipper Cove Tank Farm, is located on the eastern side of the isthmus that joins YBI and TI, adjacent to the causeway. Ten 17,000-gallon ASTs, reported to have stored aviation gasoline and automotive diesel fuel at Site 16, were in use from at least 1943 until they were dismantled in the 1960s. Sludge was removed from the ASTs when they were dismantled, with unknown quantities of sludge reportedly deposited on bare ground east of the former AST locations. No documentation of removal and disposal of the sludge during the 1960s has been found. Based on the investigation at the site, it appears that at least some portion of the sludge was left on the surface to degrade and leach into the underlying soils. In 2001, contaminated surface soil was excavated by the Navy and disposed of off site. The area has a picnic table and is currently unpaved and covered with shrubs and trees. The Navy requested NFA for the site in April 2004 and received NFA concurrence from the Water Board on June 17, 2004.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	Petroleum
Acreage	1.22
Source of Concern	ASTs
Contaminants of Concern	Petroleum, oil, lubricants
Interim Actions	Tank removal action completed; soil excavation completed.
Current Status	NFA concurrence received from Water Board on June 17, 2004.
USTs/ASTs	10 ASTs removed
Site Closeout	Closed

SITE 20 – AUTO HOBBY SHOP/TRANSPORTATION CENTER

Site 20, the Auto Hobby Shop and Transportation Center, is located on the northwestern side of TI. Site 20 is fully encircled by Site 12. The area was used as the NAVSTA TI transportation center from 1943 to 1950. The transportation center included the transportation building (Building 194), garage and repair shop (Building 284), and storage or barracks (Building 225 and 267). In approximately 1961, Building 225 was converted to an Auto Hobby Shop, the garage portion of Building 224 was demolished, and the filling station became Building 370 (east of Building 225) until it was demolished in 1976. Four known USTs (225A through 225D) were located at Site 20, east of Building 225 at the site of the former service station; all four were removed in 1988. Approximately 2,200 cubic yards of soil surrounding the former USTs was excavated in 1990 and was aerated adjacent to the excavation. The Navy later disposed of the aerated soils at an off-site, permitted landfill. In 2001, soil was removed near the former USTs and in two areas of surface contamination. The Navy received Water Board concurrence on NFA for the USTs at Site 20 on May 5, 2004, and received overall site closure on June 17, 2004.

Transfer Category	Upcoming FOST
Regulatory Classification	Petroleum; UST
Acreage	1.63
Source of Concern	Maintenance yard; USTs
Contaminants of Concern	Petroleum, oils, lubricants, VOCs
Interim Actions	UST corrective action completed; soil excavation completed.
Current Status	NFA concurrence letter received for USTs 225A through 225D; overall site closure letter received on June 17, 2004.
USTs/ASTs	USTs 225A through 225D removed
Site Closeout	Closed

SITE 25 – SEAPLANE MAINTENANCE AREA

Site 25 was previously used for vehicle and seaplane maintenance. Based on available information about the history and operations at the site, the suspected sources of gasoline, diesel, and petroleum contamination at Site 25 are (1) the suspected USTs, (2) the former fuel pump house (Building 143), (3) the former airplane and vehicle maintenance, (4) the causeway pipeline (between Sites 16 and 25), and (5) the former auxiliary boiler (Building 520) and associated AST. The seaplane maintenance area consists of a total of 11 buildings that were used for or associated with storing and maintaining seaplanes. Pipelines between Sites 16 and 25 have been removed. An in situ groundwater treatment system, including soil vapor extraction and air sparging, operated at the site until April 28, 2005.

The Navy submitted the “Final Site 25 Closure Report and Request for No Further Action” on December 7, 2005. After correspondence with the Water Board, a final letter from the Water Board dated August 29, 2006, did not concur with closure and the NFA request for the site. As a result, additional groundwater monitoring was conducted at the site through 2008. In early 2009, soil samples were collected to confirm post-treatment concentrations of TPH. Results of the groundwater and soil samples were presented in the “Final Addendum to the Closure Report Site 25, submitted January 29, 2010. This report requested NFA concurrence and closure of the suspected USTs 2B and 143A through 143I. At the request of the Water Board, the Navy conducted a targeted soil gas investigation in late 2010 and early 2011. The Navy submitted a technical memorandum with the results of the soil gas investigation and vapor intrusion pathway evaluation and request for site closure on March 7, 2011. The Water Board provided concurrence on the Navy’s recommendation for NFA at the site in a letter dated October 28, 2011.

Transfer Category	Transferred to TIDA on May 29, 2015
Regulatory Classification	Petroleum; UST
Acreage	3.26
Source of Concern	USTs; petroleum pipelines
Contaminants of Concern	Petroleum, oil, lubricants
Interim Actions	Groundwater monitoring
Current Status	NFA concurrence received from Water Board on October 28, 2011.
USTs/ASTs	USTs 2B, 145, 143A through 143I suspected
Site Closeout	Closed

SITE 26 – UST SITES

Site 26 was designated in the 1988 PA/SI report and includes all USTs that have been used at NAVSTA TI to store fuels and oils for package heaters or boilers at individual buildings, backup power generators, gas stations, firefighter training, and aviation. The USTs were filled either through underground pipeline or by tanker truck. In addition, a number of USTs were used to store waste oil. Most of the USTs were installed in the 1940s. The USTs were removed from service over time as the specific uses of the buildings changed; many of the USTs were out of service by the 1980s.

The Navy began investigating known and suspected USTs in the early 1980s because of California's UST operating regulations. In addition to the USTs mentioned previously, numerous USTs were outside of site boundaries and were reported as individual closure efforts. The Navy submitted the facilitywide UST summary report (October 2003), which assigns each of the 96 USTs identified to one of three categories:

- **Known USTs:** USTs that are known to have existed.
- **Suspected USTs:** USTs that are suspected to have existed but that were removed previously or that may have been abandoned.
- **Previously suspected USTs:** USTs that were once thought to have existed but that are now suspected to have never existed based on further investigation.

Regulatory concurrence on closure or NFA has been achieved for 89 of the 96 known, suspected, or previously suspected USTs at NAVSTA TI. Seven USTs are pending closure or NFA. USTs with known releases to the environment are closed pursuant to Title 23 of the *California Code of Regulations*. If the UST was used to store heating oil and had a capacity of less than 1,100 gallons, or if no release occurred, the Navy requested NFA and submitted a letter to the Water Board for concurrence. The Navy demonstrated to the Water Board that NFA is required for sites that have received NFA concurrence. The Navy has completed all site investigations and remedial actions related to the UST site for sites that received regulatory closure.

All USTs on Navy property have been removed from service; the only active USTs on NAVSTA TI are operated by the USCG at its facility on YBI. The current status of all known and suspected USTs on TI and YBI are summarized below as well as shown on [Figures 7 and 8](#).

Previously Suspected USTs with NFA Concurrence (16 Sites)

Regulatory concurrence for NFA was received December 2, 2003, for 16 previously suspected USTs located at NAVSTA TI.

Letter Date	TI UST	YBI UST
December 2, 2003	3A, 3B, 7, 145, 180F, 180G, 267, 368C, 450, 452, 453, 461, FF8, and M	213, 262

Known or Suspected USTs with Regulatory Closure or NFA Concurrence (73 Sites)

The Water Board issued concurrence for NFA on 24 USTs on TI and 19 USTs on YBI. Regulatory closure has been received for 25 USTs on TI and five USTs on YBI.

USTs with NFA Concurrence		
Letter Date	TI UST	YBI UST
July 23, 2002	--	1 through 7, 9, 10, 62, 240
September 5, 2003	234	57
February 9, 2004	15, 26, 29	--
June 17, 2004	140	204A, 204B, 204C, 204D, 221, 230, 237
September 21, 2004	227	--
May 9, 2005	14A, 14B	--
July 18, 2005	85, 330A, 330B, 330E, 330F	--
October 11, 2005	180C	--
October 28, 2011	143A, 143B, 143C, 143D, 143E, 143F, 143G, 143H, 143I, 2B	--

Closed USTs		
Letter Date	TI UST	YBI UST
July 22, 1996	1B, 1C, 1D, 1F, 2A, 2D, 180A, 180B, 330C, 330D	111, 169
October 3, 1997	180D, 180E, 230, 257	8 [QTR8, QR08]
July 7, 2000	1G [469]	--
February 25, 2002	1A, 1E, 2C, 368A	--
October 23, 2002	--	66
December 17, 2003	368B	--
February 10, 2004	201	270
May 5, 2004	225A, 225B, 225C, 225D	--

USTs Requiring Regulatory Closure or NFA Concurrence (7 Sites)

Six USTs on TI (240A, 240B, and 248A through 248D) and one UST on YBI (238) still require regulatory closure or NFA concurrence.

A final closure report for Site 6 was submitted on December 16, 2005, and requested closure for six USTs: 240A, 240B, and 248A through 248D. However, the Water Board indicated it appeared based on soil, soil gas, and groundwater data that ongoing sources had not been entirely removed and remediated. Thus, the Navy performed additional excavation in 2013, and a PCSR report was finalized in 2013. The Navy will request closure of USTs 240A, 240B, and 248A through 248D in June 2017 after post-action monitoring results are evaluated.

Further investigation of UST 238 on YBI (on USCG property) is on hold until Caltrans completes work in the vicinity.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	Petroleum
Acreage	Not applicable
Source of Concern	USTs, ASTs
Contaminants of Concern	Petroleum
Interim Actions	Petroleum corrective action conducted in March 2013 for USTs 240A and 240B in Site 6.
Current Status	<ul style="list-style-type: none"> • Additional groundwater monitoring planned for Site 6 (USTs 240A, 240B, 248A, 248B, 248C, and 248D). • Investigation of UST 238 on YBI (on USCG property) is on hold until bridge construction is complete.
USTs/ASTs	Not Applicable
Site Closeout	June 2017 for USTs 240 and 248 series; November 2017 for suspected UST 238 on YBI (on USCG property)

INACTIVE FUEL PIPELINE SITES

A former fuel pipeline system was located on NAVSTA TI. Six main fuel lines (D1, D2, D4, D5, F2, and GS-1 [evaluated as part of D2A]) were installed on TI as early as the 1940s and transported gasoline, diesel, bunker C fuel, and other petroleum products. Figures 7 and 8 show the fuel pipeline sites. Reports indicate that some fuel lines were inactive as early as 1945, the remaining fuel lines were reportedly removed from service in 1989. Three major fuel lines (F-01, F-02, and F-03) were installed in 1944 to carry fuel oil from storage tanks to steam boilers on YBI and have been inactive since 1980. In addition, the Causeway Pipeline system was installed circa 1939 to convey fuel from the Clipper Cove Tank Farm on YBI to TI, though the system ceased to be used after Pan American Airlines stopped operating in Clipper Cove in the 1946. The Building 530 Pipeline system supplied fuel between ASTs 103/104 and Building 530, which was built in 1987. A majority of the pipeline systems on TI and YBI has been removed or abandoned in place.

A total of 16 pipeline sites were investigated at NAVSTA TI. Of those, 14 fuel pipeline sites have received closure. Two sites (YF3 and USCG) were identified as portions of the pipeline system where additional corrective actions or evaluations may be necessary. An investigation of petroleum contamination at Inactive Fuel Line YF3, identified under the Petroleum Program, was documented in the Final Field Activity Report dated March 19, 2013. As a result, the Navy conducted a SLERA to evaluate the risks due to residual concentrations of TPH as diesel and as motor oil. The Navy plans to collect additional data at Site YF3 in response to Water Board comments received on the SLERA. The new data will be used to support closure of Site YF3.

Remaining Fuel Pipeline Sites (2 Sites)

The following fuel lines on YBI have not received regulatory closure: **YF3** and **USCG**.

Closed Fuel Pipeline Sites (14 Sites)

The fuel lines listed below on TI and YBI have received regulatory closure.

- **Causeway Pipeline** – Water Board NFA concurrence letter received March 11, 2003.
- **Building 530 Pipeline** – Water Board NFA concurrence letter received July 9, 2003.
- **D1A, D1C, D2A, D2B, D4A, D4B, D5, and YF1** – Water Board NFA concurrence letter received February 9, 2004.
- **YF2** – Water Board NFA concurrence letter received June 17, 2004.
- **F2A** – Water Board NFA concurrence letters received May 9, 2005 and August 22, 2005.
- **D1B** – Water Board NFA concurrence letters received July 20, 2005 (for shallow soil only) and May 15, 2006.
- **F2B** – Water Board NFA concurrence letter received August 22, 2005.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	Petroleum
Acreage	Not applicable
Source of Concern	Pipeline
Contaminants of Concern	Petroleum
Interim Actions	Pipeline removal action completed; floating product removal completed.
Current Status	<ul style="list-style-type: none"> • YF3 - SLERA was finalized in March 2015. Additional data gaps investigation to be conducted. • USCG - Investigations postponed until after Caltrans has completed construction activities in the area.
USTs/ASTs	USTs associated with the pipelines have been removed
Site Closeout	May 2006 or earlier for majority of sites, with the exception of Sites YF3 (September 2017) and USCG (July 2019)

COMPLIANCE AND BASEWIDE PROGRAMS

Polychlorinated Biphenyls Program

Residential Lead-Based Paint Program

Radiological Program

Asbestos-Containing Material Program

Groundwater Monitoring Program

Regulatory Interaction Support

Community Relations Program

Transfer Related

POLYCHLORINATED BIPHENYLS PROGRAM

PCB contamination has been investigated and remediated at NAVSTA TI under CERCLA and TSCA regulations and guidelines (Figure 9). PCBs exist at various locations and concentrations at NAVSTA TI. A remedial program was initiated at NAVSTA TI for electrical equipment, such as high-voltage primary transformers with dielectric fluid that may contain PCBs. Transformers were inventoried under the program, and several transformers identified as containing PCBs were removed between 1995 and 1996. A 1995 EBS documented spills and stains potentially related to PCBs. The Navy conducted an additional evaluation by reviewing aerial photographs and historical information on building usage.

PCBs have been investigated under CERCLA at the following IR sites: Site 3 (PCB Equipment Storage Area), Site 7 (Pesticide Storage Area), Site 9 (Foundry), Site 10 (Bus Painting Shop), Site 11 (YBI Landfill), Site 12 (Old Bunker Area), Site 21 (Vessel Waste Oil Recovery Area), Site 24 (Dry Cleaning Facility), Site 31 (Former South Storage Yard), and Site 32 (Former Training and Storage Area).

The Navy investigated all known former PCB-containing equipment within FOST 1 and 2 areas in May 2004 to confirm that property is suitable for transfer (see Figure 9). The Navy also sampled all equipment locations that exhibited suspicious staining and the remaining (unstained) equipment locations in areas not part of FOST 1 and 2 in summer 2006. A summary report of sample results was published in February 2008. PCBs were abated at some sampled equipment locations in spring 2008 and a final summary report of activities was submitted March 9, 2009. The following table lists the locations identified in the February 2008 PCB summary report as requiring ICs. Locations in this table determined to contain elevated PCB concentrations, and that will be addressed through LUCs, will be further addressed and defined by the Navy during the transfer of NAVSTA TI.

Locations Requiring Institutional Controls				
6585265	T-114A and B	TX-118	TX-139	TX-147
C-598	T-1012	TX-127	TX-140	TX-252
SW-1144	T-1016	TX-138	TX-146	TX-2045
SW-1146	T-1018			

In addition, seven locations were identified in the February 2008 PCB summary report as requiring remediation: EP-108-1, T-1102, TX-120, TX-152(1), TX-152(2), SW1-73A/B/C, and T-104. PCB abatement was performed at four of the seven locations requiring remediation (EP-108-1, T-1102, TX-120, TX-152[2]) in spring 2008, and a final summary report of activities was submitted on March 9, 2009. PCB-contaminated soil adjacent to Building 1102 will be addressed during a forthcoming project in Site 12 at two of the seven locations (SW1-73A/B/C and T-104).

A removal action was completed at Site 32 and transformer location TX-152(1) under the TSCA PCB remediation program in early 2010. The Site 32 PCSR was finalized on July 13, 2011. Based on the Navy's post-remedial activity screening evaluation, residual contaminant concentrations were compared with screening criteria made up of updated health-based

screening concentrations and site screening criteria established for Site 32 in the 2009 work plan. The results of these comparisons indicated that nearly all residual chemical concentrations are below updated health-based screening concentrations and all residual concentrations are below the site screening criteria for Site 32; therefore, no further action under CERCLA was required. Furthermore, a year of post-removal action groundwater monitoring was completed in February 2012 and summarized in a report finalized in July 2012. All concentrations for chemicals of concern were either non-detected or detected at low levels during all four quarterly sampling events. NFA was recommended for groundwater at Site 32 (see previous CERCLA Site 32 discussion).

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	TSCA and CERCLA
Source of Concern	Transformers and fluid-filled electrical equipment and past disposal activities
Contaminants of Concern	PCBs
Interim Actions	None
Current Status	None
USTs/ASTs	Not applicable
Site Closeout	Closed (with exception of some CERCLA sites)

RESIDENTIAL LEAD-BASED PAINT PROGRAM

The Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X of the Housing and Community Development Act (Public Law No. 102-550), applies at NAVSTA TI. As part of Title X, Congress amended the 1971 Lead-Based Paint Poisoning Prevention Act (42 *United States Code* [U.S.C.] Sections 4801-4846) and added a new Title IV to TSCA. Under this law, certain federally owned housing constructed before 1960 must be inspected for LBP, and LBP hazards must be abated. In addition, federally owned housing constructed after 1960 and before 1978 must be inspected for LBP hazards and the results disclosed to prospective property recipients (42 U.S.C. Section 4822).

LBP may be present on the interior and exterior surfaces of nonresidential buildings at NAVSTA TI because many were constructed before 1978. Public Works Center Norfolk began inspecting the family housing at NAVSTA TI for LBP in 1995. In October 1999, Engineering Field Activity West documented a completed LBP assessment and a “mini” risk assessment of facilities on NAVSTA TI. Facilities were selected under the implementing regulations for Title X of the Housing and Community Development Act. Pursuant to Title X, not all facilities require an inspection for LBP.

To date, LBP at all pre-1978 residential housing on TI and YBI has been assessed. LBP at all pre-1960 YBI residential housing has been abated, and hazard reduction measures were put in place to protect the residents. Friction surfaces, such as window sashes, were stripped to the original wood surface and repainted. All other interior and exterior surfaces containing LBP were covered with a 20-year encapsulating paint. To ensure all hazard reduction measures remain protective, a re-evaluation survey is conducted every 2 years per the recommended U.S. Department of Housing and Urban Development (HUD) schedule. LBP in residential housing on YBI was re-evaluated between April and May 2004 and again between May and July 2006. As required by the HUD guidelines, the survey included (1) a 100 percent visual survey, (2) two composite dust samples for 100 percent of all pre-1960 housing, and (3) two composite dust samples from a representative sample of the post-1960 housing. LBP maintenance was conducted during the winter of 2006 at Quarters 2 through 7, 240, 83, and 61. Another LBP re-evaluation of the residential housing on YBI and TI was completed in 2009 and finalized in a report dated February 28, 2011.

Soil samples were also collected to evaluate the status of drip line and mid-yard areas at representative TI and YBI residential buildings. Based on the analytical results, soil abatement of the planter boxes and drip line areas was conducted in 2004 and 2005 in accordance with Title X, HUD, and Navy Policy at Quarters 1 through 7, 10, and Buildings 62, 83, 205, and 230 on YBI. HUD guidelines state only bare soils may pose a hazard, and soils covered by grass, concrete, or asphalt are protective. Any future disturbance of the concrete or asphalt at these buildings will require further evaluation for lead. The Navy will either abate or require the transferee to abate any LBP hazards found in existing residential facilities within 1 year after they are transferred. If an existing residential facility is scheduled for demolition or nonresidential use, it will not be inspected or abated for LBP. Buildings should be demolished according to applicable laws and regulations.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	Title X Housing and Community Development Act, Title IV TSCA
Source of Concern	House paint/LBP
Contaminants of Concern	Lead
Interim Actions	<ul style="list-style-type: none"> • LBP risk assessment on TI and YBI residential housing buildings completed. • Interior, exterior, and soil abatement on pre-1960 YBI residential housing buildings completed. • LBP maintenance conducted during winter of 2006 at Quarters 2-7, 240, 83, and 61.
Current Status	Not applicable
USTs/ASTs	Not applicable
Estimated Site Closeout	Transfer

RADIOLOGICAL PROGRAM

Site 2

Site 2 (Parcel T102 [shown in [Figure 3](#)] and located within the footprint of Site 12), the Radiation Training Area, was located near the intersection of 12th Street and Avenue A on the northwestern side of TI. This area contained a ship mockup used for radiation training. Operations in this area began in the early 1950s and ceased in 1969 when the school moved to its current location in Building 371 (Parcel T111, within Site 32). Radiation sources were identified as potential contaminants from the radioactive water generated during training. The 1988 PA/SI recommended this site not be carried forward in an RI. The site is considered closed under the CERCLA Program.

Historical Radiological Assessment (HRA)

The Navy completed a basewide HRA in 2006 to document use of radioactive materials and to present a comprehensive history of radiological operations conducted by the Navy at NAVSTA TI. In the first phase of the HRA, the Navy reviewed documents and conducted interviews to identify all historical radiological sites on NAVSTA TI and to determine if there is a need to conduct a Phase II survey. Results of the first phase of the HRA are reported in the “Final Naval Station Treasure Island Historical Radiological Assessment” dated February 10, 2006. The following sites were identified for further evaluation: Building 233 and its associated drain lines, four SWDAs located within Site 12, and Buildings 343 and 344.

Building 233

Building 233 (Parcel T013 [shown in [Figure 3](#)]), the former Radiation Detection, Indication, and Computation Instrument Calibration School, is located on Avenue M between 3rd and 4th Streets on the eastern side of TI. In 1950, a spill of radium sulfate was reported in one of the laboratories located in Building 233. Students unknowingly tracked the radiological material throughout the building before the spill was discovered. The U.S. Naval Radiological Defense Laboratory decontaminated and cleaned up the building. Although the building was decontaminated, the Navy needed to verify that the 1950 cleanup met current standards. The Navy therefore worked with DTSC and CDPH to complete a survey of Building 233 by May 2006. A radiological assessment of Building 233 was conducted and a survey report was issued in January 2007. It was determined that further remediation was necessary. After the highest residual contamination had been removed, the building was demolished in 2011. Foundation, utility, and surface contamination was then removed. The Navy has completed the characterization, remediation, and FSS for the building footprint. The FSS report was finalized in October 2014, and the Navy is currently awaiting a Recommendation for Unrestricted Radiological Release (RURR) letter from the State of California. Storm and sanitary drain lines and the surrounding area are also being investigated in accordance with MARSSIM (Revision 1 August 2000, with the June 2001 updates). A draft FSS report for the storm and sanitary drain lines in the surrounding area is planned for November 2015.

Solid Waste Disposal Areas (SWDA)

An NTCRA began in May 2007 at three Site 12 SWDAs along the shoreline. During the NTCRA, LLROs containing radium-226 were found within the SWDAs. Confirmation samples will be collected in the SWDA areas once excavations are completed. The Navy estimates that

the removal action field work for all SWDAs will be completed in summer 2016. The FSS report for all SWDAs is anticipated as a draft in April 2016. A final RACR is anticipated in December 2020 for the SWDAs. A detailed schedule of the radiological investigation is included in the Radiological Program schedules (see [Appendix B](#)).

Buildings 343 and 344

A radiological status survey for Buildings 343 and 344 and Building 233 drain lines was conducted in September 2007. In 2008, FSS reports were prepared for Buildings 343 and 344. The Buildings 343 and 344 and the Building 233 Drain Lines Scoping Survey Reports were finalized in the fall 2008. DTSC and CDPH provided free release for Buildings 343 and 344 in 2008. Additional radiological surveying is planned in 2015 for adjacent Building 342 because of the historical use as a counting room, where samples may have been processed and handled without encapsulation, as well as the outside yard area of the building compound.

Historical Radiological Assessment – Supplemental Technical Memorandum (HRASTM)

In 2013, the regulatory agencies requested an update to the HRA because of the significant number of radium-226 LLROs recovered during the NTCRA at the SWDAs. A final HRASTM for TI was issued in July 2014. The document identified additional impacted areas that would be subject to future investigation. The Navy completed or is currently conducting radiological surveys at the following sites (see [Figure 10](#)). These areas were identified during development of the HRASTM.

- Site 12 non-SWDA areas and roadways, including housing interiors.
- Building 3 and associated sanitary sewer lines (impacted based on ship repair activities and the presence of a former optical shop in the building during World War II [WWII]).
- USS *Pandemonium* Site II (NE), within Site 32 (former site of the training ship mock-up, identified as impacted based on a reevaluation of existing data after the HRA).
- Selected sanitary sewer and storm lines associated with Building 233.
- Site 6 RCA (Soil Stockpile and Truck Loading & Decon Site) (impacted based on remedial activities in association with the Site 12 SWDAs).
- Site 30 and adjacent areas to north and south (impacted based on investigatory results obtained after the HRA).
- Lot 69 (Supply Department Salvage Yard, impacted based on the handling of salvage materials in that area).
- Building 342 (impacted based on the presence of a counting room, as well as the outside yard area of the building compound).
- Building 461 and vicinity (impacted based on the presence of a counting room, as well as the outside yard area of the building compound).

- Vicinity of former Salvage Yard and Current Sewage Treatment Plant (impacted based on probable WWII-era salvage yard was identified as impacted based on the potential for scrap metal recycling activities adjacent to former Building 327 during WWII).
- Site 20 (impacted based on its location within Site 12).
- Miscellaneous sanitary sewer lines (force main, lines associated with Building 233 including wood stave pipe, and Building 342).

Additional areas planned for radiological surveys include (see [Figure 10](#)):

- Navy contractor compound (Building 570 and a surrounding laydown area; impacted based on remedial activities done in association with the Site 12 SWDAs).
- Navy laydown area (adjacent to Building 461, impacted based on remedial activities done in association with the Site 12 SWDAs).

Transfer Category	Upcoming FOST
Regulatory Classification	CERCLA
Source of Concern	Radium sulfate spill and historical radiological operations
Contaminants of Concern	Radium-226, radiological materials
Interim Actions	<ul style="list-style-type: none"> • 1950s cleanup at Building 233 • Building 233 was demolished in January 2011 • Ongoing SWDA NTCRAs
Current Status	<ul style="list-style-type: none"> • NTCRA of Site 12 SWDAs is underway. • Building 233 FSS and reporting are complete; awaiting RURR letter from the State of California. • Radiological surveys currently under way at various areas on TI.
USTs/ASTs	Not applicable
Estimated Site Closeout	<ul style="list-style-type: none"> • September 2015 for Building 233 (RURR letter) • March 2016 for Basewide Radiological Surveys Part I • December 2016 for Basewide Radiological Surveys Part II • August 2021 for Building 570 Radiological Survey

ASBESTOS-CONTAINING MATERIAL PROGRAM

Beginning in 1995, several surveys to identify the presence of ACM have been completed at NAVSTA TI. The Navy conducted an asbestos survey of 108 major nonresidential buildings at NAVSTA TI and compiled the results in an asbestos survey report in 1995. In 1997, Radian, Inc., completed a more comprehensive asbestos survey for a total of 212 nonresidential buildings, including an inspection of the 108 buildings previously surveyed, to estimate the scope and costs for abating damaged, friable asbestos. In 1998, the Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment, Vallejo (SSPORTS) performed an asbestos survey of underground steam utility lines and miscellaneous facilities. Results of the survey of underground steam utility lines indicated that ACM-wrapped pipes exist only within a portion of the property, documented in the Asbestos Building Survey Report issued in November 1998 by SSSPORTS and as discussed further in the FOST. Remedies for ACM were implemented.

Friable, accessible ACM identified during surveys was remediated beginning with 38 buildings in 1998 by Allied Technology Group, Inc. (ATG). ATG remediated an additional 20 buildings in 1998. In 1999, SSSPORTS remediated friable ACM found in residences at both YBI and TI. In 2002, Mendalian Construction, Inc., covered the crawlspaces to prevent access, posted ACM signs at seven barracks on TI, and abated and removed ACM from six quarters on YBI. A re-evaluation of ACM in 2009 was finalized in a report dated February 28, 2011. All known damaged, friable, or accessible ACM has been abated within the TI and YBI FOST areas, and remaining ACM does not pose a threat to human health.

Notices and restrictions related to asbestos were identified for both TI and YBI in FOSTs 1, 2, 3, and 4.

Transfer Category	Partially transferred to TIDA on May 29, 2015, and the remainder will be included in an upcoming FOST
Regulatory Classification	Clean Air Act
Source of Concern	ACM
Contaminants of Concern	Friable, accessible ACM
Interim Actions	<ul style="list-style-type: none">• 1998 remediation of 38 buildings• 1998 remediation of 20 buildings• 1999 remediation of residences• 2002 remediation of crawl spaces, barracks and six quarters on YBI
Current Status	Not applicable
USTs/ASTs	Not applicable
Estimated Site Closeout	Transfer

GROUNDWATER MONITORING PROGRAM

The purpose of the groundwater monitoring program is to evaluate sites with known or suspected impacts to groundwater using data collected from a network of monitoring wells as well as data from other environmental investigations. The principal objective at the identified groundwater sites was to determine whether receptors at the terminus of the groundwater pathway — aquatic life at the shoreline along NAVSTA TI — are being exposed to concentrations of contaminants that exceed applicable toxicity criteria for (1) protection of saltwater life, or (2) protection of humans who consume fish. Potential impacts to groundwater because of releases of hazardous substances and petroleum-related chemicals from operations when NAVSTA TI was an active base are being studied under the facility-wide groundwater monitoring program. The Water Board concurred on January 23, 2001, that groundwater at Treasure Island meets the exemption criteria, such that the groundwater is not a potential source of drinking water.

Currently, only groundwater at CERCLA Sites 6, 12, and 24 is monitored as the petroleum program sites requiring monitoring in the past have received NFA concurrence. Contaminants defined as hazardous under CERCLA have been detected at elevated concentrations in samples from Sites 6, 12, and 24. Groundwater monitoring results are reported annually and will be used in assessing risk in CERCLA decision documents or petroleum closure reports.

Groundwater monitoring at Site 6 continued after the UST 240 removal action was completed and will support a closeout request in 2016.

Groundwater monitoring is conducted at five areas within Site 12. The areas include the three SWDAs (Westside, Bayside, and North Point), Mariner Drive, and the 175 Gateview Avenue petroleum areas. The current semiannual and annual groundwater monitoring program was designed to monitor the fate and transport of COPCs to support the Site 12 RI/FS. The monitoring program provides continuing data for wells with reported chemicals of potential concern above screening values and nearby wells to delineate the extent of groundwater impacts. Semiannual groundwater monitoring at Site 12 is estimated to continue through the end of the RACR in December 2020.

The current semiannual groundwater monitoring program for Site 24 was designed to monitor the effectiveness of treatability studies and to provide long-term monitoring data to support preparation of a ROD/RAP and RD. Semiannual groundwater monitoring continues at Site 24 and is planned to continue through at least the 2019 5-year review period.

REGULATORY INTERACTION SUPPORT

The Navy provides support for regulatory interaction for the entire TI environmental program. Included in the regulatory interaction support are the following deliverables.

BCT Meetings and Minutes

As part of the regulatory interaction support, the Navy holds monthly meetings with the members of the BCT to discuss current topics, issues, and decisions that pertain to the environmental restoration program for TI. Meeting minutes are prepared to document decisions, actions, processes, and discussions. The minutes are reviewed by all members and revised based on any comments received.

Site Management Plan

The Navy prepares and delivers annual updates of this Site Management Plan to identify site closure schedules and strategies and to aid in management of IR sites. The IR sites are at various stages in the environmental restoration process. The status and strategies at each site are discussed in this document, as well as the current basewide issues that must be addressed before property may be transferred for development. The schedules provided in [Appendix B](#) update the schedule produced in the 1992 FFSRA and supplement the IR sites not identified at the time of the FFSRA.

COMMUNITY RELATIONS PROGRAM

The Navy provides direction and support for community relations activities on site-specific and basewide levels. Included in the community relations support are the following deliverables.

Restoration Advisory Board Meetings and Minutes

The Navy hosts Restoration Advisory Board (RAB) meetings regularly as a means to communicate, share, and present current information on the environmental restoration program to the RAB and community members. Fact sheets, meeting minutes, telephone conferences, and meetings are used to provide a method for the RAB to have input on the environmental restoration process at NAVSTA TI. Meeting minutes are prepared for public viewing. The minutes are reviewed by all members of the RAB and revised based on any comments received. The final minutes are included in the information repositories and on the Navy's website.

Community Relations Plan

The Community Relations Plan (CRP) identifies community interest in the investigation and cleanup of contaminated soil, sediments, and groundwater at NAVSTA TI, and outlines community relations activities to inform and involve the community. The original CRP for NAVSTA TI was issued in 1997, and a final CRP was issued in 2002 and updated in 2006, 2008, and 2014.

The purpose of the CRP is to identify the NAVSTA TI community, describe community outreach activities conducted in support of the IR Program, identify community interest in and concern about environmental activities at NAVSTA TI, facilitate two-way communication with the surrounding community and other interested parties, and meet all public involvement regulatory requirements for the environmental cleanup program at NAVSTA TI.

Fact Sheets, Progress Reports, Proposed Plans, and Work Notices

Fact sheets, progress reports, proposed plans, and work notices are prepared on an as-needed basis depending on commencement or completion of significant milestones such as an upcoming field investigation or a significant report. Fact sheets, progress reports, and proposed plans are distributed to the entire TI community mailing list, which includes the DTSC mandatory mailing list. Work notices are distributed to residents or businesses who may be affected by the field work. In addition, the Navy will prepare progress reports to update the progress of field work on the island.

Of particular interest is the Site 12 environmental program. Work notices are sent to residents any time they are affected by work in Site 12. In addition, fact sheets will be distributed on all projects where radiological data have been collected at Site 12.

Public Notices

Public notices are prepared on an as-needed basis for announcement of significant milestones, such as announcement of public review and comment periods for proposed plans and completion of significant documentation such as a ROD/RAP. Public notices are typically published as an in-column ad in the *San Francisco Examiner* newspaper.

Information Repository Support

On a quarterly basis, the Navy conducts inspections and updates to the TI information repositories located at Building 1 on TI and at the San Francisco Main Public Library. Updates include organizing, indexing the documents, and providing updates of the index and document availability.

TRANSFER RELATED

A basewide EBS was conducted in 1994. In 2005, the Navy updated the EBS with a supplemental EBS based on progress made under the Navy's environmental programs and in preparation for two FOST documents that summarized how the requirements and notifications for hazardous substances, petroleum products and derivatives, and other regulated material have been met for parcels on TI and YBI.

The TI FOST (FOST 1) for four parcels and YBI FOST (FOST 2) for one parcel were finalized in 2006. The Navy prepared a third FOST (YBI FOST 3) for five parcels on YBI to support property transfer to the city; the YBI FOST 3 was finalized on January 17, 2012. FOST 4 was prepared for nine parcels on TI and finalized on October 30, 2014. The Navy will be preparing a draft of FOST 5 in December 2015 for additional parcels on TI to support a property transfer in 2016.

An Economic Development Conveyance Memorandum of Agreement was signed between the Navy and TIDA on July 2, 2014. Through the BRAC process, the Navy transferred, by deed, portions of property identified in TI FOSTs 1 and 4 and YBI FOSTs 2 and 3 to the City of San Francisco on May 29, 2015.

The Navy will prepare additional FOSTs to support transfer of property on TI in coming years. [Appendix B](#) has the anticipated schedules for upcoming FOST documents and the related State of California's Covenant to Restrict Use of Property documents that will be completed to support property transfers in the future.

APPENDIX B
ENVIRONMENTAL SCHEDULE

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TABLE B-1: SITE INVENTORY

Site Management Plan, Naval Station Treasure Island, San Francisco, California

Site	Program	Status
Site 1	CERCLA	Closed – Received agency concurrence on March 20, 2002.
Site 2	CERCLA	Closed – Site recommended for NFA in 1988 Final PA/SI.
Site 3	CERCLA	Closed – Received agency concurrence on March 20, 2002.
Site 4/19	Petroleum	Closed – NFA concurrence letter received from Water Board dated December 17, 2003.
Site 5	Petroleum	Closed – Merged into Site 24 by letter dated January 17, 2001.
Site 6	CERCLA	Active – Transferred from Petroleum Program on September 18, 2003.
Site 7	CERCLA	Closed – Received agency concurrence on November 1, 2005.
Site 8	CERCLA	Active – On hold; pending completion of Caltrans activities.
Site 9	CERCLA	Closed – No Action ROD signed October 2, 2007.
Site 10	CERCLA	Closed – No Action ROD signed October 2, 2007.
Site 11	CERCLA	Active – On hold; pending completion of Caltrans activities.
Site 12	CERCLA	Active
Site 13	CERCLA	Closed – No Action ROD signed April 7, 2005.
Site 14/22	Petroleum	Closed – NFA concurrence letter received from Water Board dated July 18, 2005.
Site 15	Petroleum	Closed – NFA concurrence letter received from Water Board dated September 2004.
Site 16	Petroleum	Closed – NFA concurrence letter received from Water Board dated June 17, 2004.
Site 17	Petroleum	Closed – Merged into Site 24 by letter dated January 17, 2001.
Site 18	CERCLA	Closed – Site recommended for NFA in 1988 Final PA/SI.
Site 20	Petroleum	Closed – NFA concurrence letter received from Water Board dated June 17, 2004.
Site 21	CERCLA	Active – RACR signed February 19, 2015; LUC inspections ongoing.
Site 23	CERCLA	Closed – Site recommended for NFA in 1988 Final PA/SI.
Site 24	CERCLA	Active
Site 25	Petroleum	Closed – NFA concurrence letter received from Water Board dated October 28, 2011.
Site 26	Petroleum	Closed – See entry for “UST Sites” below.
Site 27	CERCLA	Active – RACR signed December 24, 2014; LUC inspections ongoing.
Site 28	CERCLA	Closed – No Action ROD signed November 22, 2010.
Site 29	CERCLA	Active – On hold; pending completion of Caltrans activities.
Site 30	CERCLA	Active – ROD signed August 5, 2009; LUC inspections and radiological survey ongoing.
Site 31	CERCLA	Active
Site 32	CERCLA	Active
Site 33	CERCLA	Closed – NFA concurrence received on October 29, 2014 in final RACR
Pipeline Sites	Petroleum	With the exception of pipeline Sites USCG and YF3, all pipeline sites have received concurrence letters and are closed.
UST Sites	Petroleum	With the exception of UST 238 on YBI and USTs 240 and 248 (within Site 6), all USTs have received concurrence letters and are closed.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
1	CERCLA PROGRAM	5282 days	Wed 3/20/02	Wed 4/13/22	
2	 EBS DATA GAP INVESTIGATION COMPLETED	502 days	Wed 4/2/03	Tue 2/22/05	
22	 SITE 1 - Closed	1 day	Wed 3/20/02	Wed 3/20/02	
23	 SITE 3 - Closed	1 day	Wed 3/20/02	Wed 3/20/02	
24	 SITE 7 - Closed	880 days	Fri 8/16/02	Tue 11/1/05	
28	 SITE 13 - Closed	707 days	Tue 11/5/02	Sat 5/21/05	
61	 SITES 9 & 10 - Closed	1200 days	Sun 4/6/03	Thu 11/1/07	
116	 SITE 21 - Closed (Remedy in Place)	3042 days	Tue 7/1/03	Tue 2/24/15	
234	 SITE 27 - Closed (Remedy in Place)	3126 days	Wed 5/7/03	Thu 4/30/15	
354	 SITE 28 - Closed	2738 days	Thu 12/2/04	Fri 5/29/15	
411	 SITE 33 - Closed	2849 days	Tue 12/2/03	Wed 10/29/14	

All start and finish dates on Saturday
or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
467	SITE 6 (CERCLA)	3615 days	Mon 5/12/03	Fri 3/17/17	
468	✓ NATURE AND EXTENT DELINEATION FOR SITE 6 CERCLA	540 days	Mon 5/12/03	Tue 6/7/05	
474	✓ REMEDIAL INVESTIGATION FOR SITE 6	690 days	Sun 10/31/04	Wed 6/20/07	
485	✓ REVISED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REPORT FOR SITE 6	973 days	Mon 2/2/09	Thu 10/25/12	
509	SITE 6 RADIOLOGICALLY CONTROLLED AREA CHARACTERIZATION / FINAL STATUS SURVEY	693 days	Fri 6/14/13	Wed 2/10/16	
510	✓ Site 6 RCA Characterization / Final Status Survey (FSS) Work Plan	315 days	Fri 6/14/13	Fri 8/29/14	
516	Final Status Survey Field Work at Site 6 RCA	225 days	Mon 9/29/14	Fri 8/7/15	515FS+20 days
517	Site 6 RCA Final Status Survey Report	133 days	Mon 8/10/15	Wed 2/10/16	
518	Prepare Internal Draft RCA FSS Report	32 days	Mon 8/10/15	Tue 9/22/15	516
519	Navy Review Internal Draft and Prepare Draft RCA FSS Report	45 days	Wed 9/23/15	Tue 11/24/15	518
520	Agency Review Draft RCA FSS Report	25 days	Wed 11/25/15	Tue 12/29/15	519
521	Agency RTCs and Prepare Final RCA FSS Report	31 days	Wed 12/30/15	Wed 2/10/16	520
522	✓ PP/DRAFT RAP FOR SITE 6	334 days	Wed 12/19/12	Mon 3/31/14	
537	✓ ROD/RAP FOR SITE 6	218 days	Mon 3/3/14	Wed 12/31/14	
544	REMEDIAL DESIGN / REMEDIAL ACTION FOR SITE 6	699 days	Tue 7/15/14	Fri 3/17/17	
545	✓ Navy Award Contract for Site 6 Remedial Design, Data Gaps Sampling, and Remedial Action	55 days	Tue 7/15/14	Mon 9/29/14	
546	✓ Site 6 Pre-Remedial Design Data Gaps Sampling	208 days	Tue 9/30/14	Thu 7/16/15	
547	✓ Pre-Remedial Design Data Gaps Sampling Work Plan / Sampling and Analysis Plan	187 days	Tue 9/30/14	Wed 6/17/15	
552	✓ Pre-Remedial Design Data Gaps Sampling Field Work	9 days	Mon 7/6/15	Thu 7/16/15	551FS+16 edays
553	Remedial Design / Remedial Action Work Plan	183 days	Mon 6/29/15	Wed 3/9/16	
554	Prepare Internal Draft RD/RAWP for Site 6	58 days	Mon 6/29/15	Wed 9/16/15	552SS-5 days
555	Navy Review Internal Draft and Prepare Draft RD/RAWP for Site 6	44 days	Thu 9/17/15	Tue 11/17/15	554
556	Agency Review Draft RD/RAWP for Site 6	22 days	Wed 11/18/15	Thu 12/17/15	555
557	Agency RTCs and Prepare Final RD/RAWP for Site 6	59 days	Fri 12/18/15	Wed 3/9/16	556
558	Remedial Action Field Work	100 days	Mon 3/28/16	Fri 8/12/16	
559	Remedial Action Completion Report (RACR)	155 days	Mon 8/15/16	Fri 3/17/17	
560	Prepare Internal Draft RACR for Site 6	44 days	Mon 8/15/16	Thu 10/13/16	558
561	Navy Review Internal Draft and Prepare Draft RACR for Site 6	30 days	Fri 10/14/16	Thu 11/24/16	560
562	Agency Review of Draft RACR for Site 6	22 days	Fri 11/25/16	Mon 12/26/16	561
563	Agency RTCs and Prepare Final RACR for Site 6	59 days	Tue 12/27/16	Fri 3/17/17	562

All start and finish dates on Saturday or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
564	 SITES 8 & 29	4393 days	Thu 12/2/04	Fri 10/1/21	
565	 INTERIM REMEDIAL INVESTIGATION FOR SITES 8 & 29	1127 days	Thu 12/2/04	Fri 3/27/09	
589	 CALTRANS BRIDGE CONSTRUCTION PROJECT	2260 days	Mon 11/3/08	Fri 6/30/17	
590	REMAINING CERCLA ITEMS (IF NECESSARY)	1134 days	Mon 5/1/17	Sun 9/5/21	
591	SITES 8 & 29 RI ADDENDUM (IF NECESSARY)	176 days	Mon 5/1/17	Tue 1/2/18	
603	FEASIBILITY STUDY FOR SITES 8 & 29 (IF NECESSARY)	250 days	Thu 11/9/17	Thu 10/25/18	
617	PP/DRAFT RAP FOR SITES 8 & 29	229 days	Mon 10/1/18	Sat 8/17/19	
634	ROD/RAP SITES 8 & 29	229 days	Mon 6/24/19	Sat 5/9/20	
649	REMEDIAL DESIGN FOR SITES 8 & 29 (IF NECESSARY)	197 days	Sat 2/15/20	Tue 11/17/20	
661	REMEDIAL ACTION FOR SITES 8 & 29 (IF NECESSARY)	208 days	Tue 11/17/20	Sun 9/5/21	
672	SITE CLOSEOUT FOR SITES 8 & 29	20 days	Mon 9/6/21	Fri 10/1/21	671

All start and finish dates on Saturday
or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
673	 SITE 11	4110 days	Thu 7/13/06	Wed 4/13/22	
674	 INTERIM REMEDIAL INVESTIGATION FOR SITE 11	924 days	Thu 7/13/06	Wed 1/27/10	
691	 CALTRANS BRIDGE CONSTRUCTION PROJECT	2260 days	Mon 11/3/08	Fri 6/30/17	
692	REMAINING CERCLA ITEMS (IF NECESSARY)	1272 days	Mon 5/1/17	Wed 3/16/22	
693	SITE 11 RI ADDENDUM (IF NECESSARY)	176 days	Mon 5/1/17	Tue 1/2/18	
705	 FEASIBILITY STUDY FOR SITE 11 (IF NECESSARY)	207 days	Thu 11/9/17	Mon 8/27/18	
718	PP/DRAFT RAP FOR SITE 11	230 days	Sat 8/4/18	Sun 6/23/19	
735	ROD/RAP FOR SITE 11	230 days	Sun 4/28/19	Sun 3/15/20	
750	REMEDIAL DESIGN FOR SITE 11 (IF NECESSARY)	222 days	Sun 3/15/20	Tue 1/19/21	749
762	REMEDIAL ACTION FOR SITE 11 (IF NECESSARY)	301 days	Tue 1/19/21	Wed 3/16/22	
775	SITE CLOSEOUT FOR SITE 11	20 days	Thu 3/17/22	Wed 4/13/22	774

All start and finish dates on Saturday
or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
776	SITE 12	4594 days	Wed 5/7/03	Tue 12/15/20	
777	✓ ADDITIONAL INVESTIGATION FOR COMMON AREAS	95 days	Wed 5/7/03	Fri 9/19/03	
785	✓ HALYBURTON COURT SOIL GAS/INDOOR AIR SAP ADDENDUM	511 days	Fri 1/7/05	Wed 12/20/06	
796	✓ HALYBURTON COURT INDOOR AIR EVALUATION TECHNICAL MEMORANDUM SITE 12	947 days	Mon 12/1/03	Fri 7/13/07	
802	✓ ARSENIC IN GROUNDWATER TECHNICAL MEMORANDUM SITE 12	268 days	Thu 1/1/04	Tue 1/11/05	
811	✓ ARSENIC IN GROUNDWATER PILOT STUDY	1361 days	Mon 12/11/06	Tue 2/28/12	
821	✓ REMEDIAL INVESTIGATION FOR SITE 12	2090 days	Sun 6/20/04	Wed 6/20/12	
869	✓ NON-TIME CRITICAL INTERIM REMOVAL ACTION WORK PLANS FOR SITE 12 SWDAs	316 days	Thu 12/1/05	Thu 2/15/07	
899	NON-TIME CRITICAL REMOVAL ACTION FOR SITE 12 SWDAs	2659 days	Thu 3/30/06	Tue 6/7/16	
900	✓ Navy to award contract for Site 12 for Removal Action Work Plan and Removal Action	176 edays	Thu 3/30/06	Fri 9/22/06	
901	✓ Site 12 Remedial Action Work Plan (RAWP)	117 days	Fri 9/22/06	Tue 3/6/07	
909	Non-Time Critical Removal Action of Site 12 SWDAs	2772 edays	Mon 2/26/07	Mon 9/29/14	908FS-8 edays
910	✓ Non-Time Critical Removal Action Summary Open House	0 edays	Sat 10/24/09	Sat 10/24/09	
911	SWDA FINAL NTCRA REPORTS	2421 days	Mon 2/26/07	Tue 6/7/16	
912	✓ SWDA WESTSIDE - PHASE I	2029 days	Mon 2/26/07	Fri 12/5/14	
920	✓ SWDA WESTSIDE - PHASE II	506 days	Thu 5/31/12	Thu 5/8/14	
943	SWDA WESTSIDE - PHASE III	550 days	Wed 4/30/14	Tue 6/7/16	
944	✓ SWDA Westside (A&B), Bayside (1207/1209), and North Point (1231/1233) - NTCRA Work Plan (Phase III)	294 days	Wed 4/30/14	Mon 6/15/15	
950	SWDA Westside, Bayside, and North Point - NTCRA Field Work (including complete backfilling of excavation SWDA Westside) - Phase III	281 days	Tue 5/12/15	Tue 6/7/16	949FS-25 days
951	SWDA Westside, Bayside, and North Point Final Status Survey (FSS) Work Plan - Phase III	77 days	Fri 8/21/15	Mon 12/7/15	
952	Prepare Internal Draft Phase III FSS Work Plan	23 days	Fri 8/21/15	Tue 9/22/15	950SS+73 days
953	Navy Review Internal Draft and Prepare Draft Phase III FSS Work Plan	15 days	Wed 9/23/15	Tue 10/13/15	952
954	Agency Review Draft Phase III FSS Work Plan	22 days	Wed 10/14/15	Thu 11/12/15	953
955	Agency RTCs and Prepare Final Phase III FSS Work Plan	17 days	Fri 11/13/15	Mon 12/7/15	954
956	SWDA Westside, Bayside, and North Point FSS Report - Phase III	83 days	Mon 2/1/16	Wed 5/25/16	
957	Prepare Internal Draft Site 12 Phase III FSS Report	30 days	Mon 2/1/16	Fri 3/11/16	955FS+39 days
958	Navy Review Internal Draft and Prepare Draft Site 12 Phase III FSS Report	16 days	Mon 3/14/16	Mon 4/4/16	957
959	Agency Review Draft Site 12 Phase III FSS Report	22 days	Tue 4/5/16	Wed 5/4/16	958
960	Agency RTCs and Prepare Final Site 12 Phase III FSS Report	15 days	Thu 5/5/16	Wed 5/25/16	959
961	SWDA Westside, Bayside, and North Point PCSR Report - Phase III	83 days	Mon 2/1/16	Wed 5/25/16	
962	Prepare Internal Draft Site 12 Phase III PCSR Report	30 days	Mon 2/1/16	Fri 3/11/16	955FS+39 days
963	Navy Review Internal Draft and Prepare Draft Site 12 Phase III PCSR Report	16 days	Mon 3/14/16	Mon 4/4/16	962

All start and finish dates on Saturday or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
964	Agency Review Draft Site 12 Phase III PCSR Report	22 days	Tue 4/5/16	Wed 5/4/16	963
965	Agency RTCs and Prepare Final Site 12 Phase III PCSR Report	15 days	Thu 5/5/16	Wed 5/25/16	964
966	SWDA BAYSIDE (1207/1209) AND NORTH POINT (1231/1233)	503 days	Fri 8/19/11	Wed 7/24/13	
967	Bayside/North Point Post-Construction Summary Report (Phase I Removal Action)	503 days	Fri 8/19/11	Wed 7/24/13	
976	SWDA BIGELOW COURT	1355 days	Thu 7/8/10	Thu 9/17/15	
977	Removal Action Work Plan for Site 12 SWDA Bigelow Court	1002 days	Thu 7/8/10	Mon 5/12/14	
983	Non-Time Critical Removal Action Field Work Site 12 SWDA Bigelow Court	148 days	Mon 4/7/14	Wed 10/29/14	982FS-26 days
984	Final Status Survey Report for Site 12 SWDA Bigelow Court	156 days	Fri 8/1/14	Fri 3/6/15	
989	Post-Construction Summary Report for Site 12 SWDA Bigelow Court	205 days	Fri 12/5/14	Thu 9/17/15	
990	Prepare Internal Draft SWDA Bigelow Court PCSR Report	45 days	Fri 12/5/14	Thu 2/5/15	983FS+26 days
991	Navy Review Internal Draft and Prepare Draft SWDA Bigelow Court PCSR Report	120 days	Fri 2/6/15	Thu 7/23/15	990
992	Agency Review Draft SWDA Bigelow Court PCSR Report	23 days	Fri 7/24/15	Tue 8/25/15	991
993	Agency RTCs and Prepare Final SWDA Bigelow Court PCSR Report	17 days	Wed 8/26/15	Thu 9/17/15	992
994	1400 SERIES RADIOLOGICAL SAMPLING AND REPORT	435 days	Fri 6/28/13	Fri 2/27/15	
995	Navy to award contract for Radiological Sampling and Report	64 days	Fri 6/28/13	Thu 9/26/13	
996	1400 Series Radiological Sampling Work Plan	45 days	Thu 9/26/13	Wed 11/27/13	995
1001	1400 Series Radiological Sampling Field Work	35 days	Mon 12/2/13	Fri 1/17/14	
1002	1400 Series Radiological Sampling Report	290 days	Mon 1/20/14	Fri 2/27/15	
1008	RADIOLOGICAL SURVEY FOR SITE 12 - SEE BASEWIDE RADIOLOGICAL SURVEY AND REPORT - PART I	0 edays	Mon 4/27/15	Mon 4/27/15	2044FF
1009	RADIOLOGICAL HOUSING SURVEY	168 days	Thu 6/12/14	Mon 2/2/15	
1010	Radiological Housing Scans - Field Work	50 days	Thu 6/12/14	Wed 8/20/14	
1011	Survey Completion Report	118 days	Thu 8/21/14	Mon 2/2/15	1010
1016	GATEVIEW ARSENIC/TPH AREA (1311/1313)	1306 days	Tue 4/17/12	Tue 4/18/17	
1017	GATEVIEW ARSENIC/TPH AREA - SOIL GAS INVESTIGATION	124 days	Tue 4/17/12	Sun 10/7/12	
1025	GATEVIEW ARSENIC/TPH AREA - TIME-CRITICAL REMOVAL ACTION (TCRA)	640 days	Wed 11/5/14	Tue 4/18/17	
1026	GATEVIEW ARSENIC/TPH AREA TCRA ACTION MEMORANDUM	236 days	Wed 11/5/14	Wed 9/30/15	
1027	Prepare Internal Draft Gateview Arsenic/TPH Area Action Memo	91 days	Wed 11/5/14	Wed 3/11/15	1071FS+10 days
1028	Navy Review Internal Draft and Prepare Draft Gateview Arsenic/TPH Area Action Memo	65 days	Thu 3/12/15	Wed 6/10/15	1027
1029	Agency Review Draft Gateview Arsenic/TPH Area Action Memo	20 days	Thu 6/11/15	Wed 7/8/15	1028
1030	Agency RTCs and Prepare Final Gateview Arsenic/TPH Area Action Memo	60 days	Thu 7/9/15	Wed 9/30/15	1029
1031	GATEVIEW ARSENIC/TPH AREA TCRA WORK PLAN	211 days	Mon 5/25/15	Mon 3/14/16	
1032	Navy to award contract for Gateview Arsenic/TPH TCRA	85 days	Mon 5/25/15	Fri 9/18/15	
1033	Prepare Internal Draft Gateview Arsenic/TPH Area TCRA WP	44 days	Mon 9/21/15	Thu 11/19/15	1032

All start and finish dates on Saturday or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1034	Navy Review Internal Draft and Prepare Draft Gateview Arsenic/TPH Area TCRA WP	15 days	Fri 11/20/15	Thu 12/10/15	1033
1035	Agency Review Draft Gateview Arsenic/TPH Area TCRA WP	22 days	Fri 12/11/15	Mon 1/11/16	1034
1036	Agency RTCs and Prepare Final Gateview Arsenic/TPH Area TCRA WP	45 days	Tue 1/12/16	Mon 3/14/16	1035
1037	GATEVIEW ARSENIC/TPH AREA TCRA - FIELD WORK	150 days	Tue 3/29/16	Mon 10/24/16	1036FS+10 days
1038	GATEVIEW ARSENIC/TPH AREA - POST-CONSTRUCTION SUMMARY REPORT (PCSR)	126 days	Tue 10/25/16	Tue 4/18/17	
1039	Prepare Internal Draft Gateview Arsenic/TPH Area PCSR	44 days	Tue 10/25/16	Fri 12/23/16	1037
1040	Navy Review Internal Draft and Prepare Draft Gateview Arsenic/TPH Area PCSR	15 days	Mon 12/26/16	Fri 1/13/17	1039
1041	Agency Review Draft Gateview Arsenic/TPH Area PCSR	22 days	Mon 1/16/17	Tue 2/14/17	1040
1042	Agency RTCs and Prepare Final Gateview Arsenic/TPH Area PCSR	45 days	Wed 2/15/17	Tue 4/18/17	1041
1043	FEASIBILITY STUDY FOR SITE 12 (NON-SWDA AREAS)	442 days	Fri 7/6/12	Tue 3/18/14	
1044	DATA GAPS SAMPLING INVESTIGATION	161 days	Fri 7/6/12	Mon 2/18/13	
1055	FEASIBILITY STUDY REPORT	260 days	Tue 3/19/13	Tue 3/18/14	
1064	FEASIBILITY STUDY ADDENDUM FOR SITE 12 (NON-SWDA AREAS)	277 days	Tue 5/20/14	Wed 6/10/15	
1065	ADDITIONAL SAMPLING TO SUPPORT SITE 12 FS ADDENDUM	111 days	Tue 5/20/14	Tue 10/21/14	
1072	FEASIBILITY STUDY ADDENDUM FOR SITE 12	168 days	Mon 10/20/14	Wed 6/10/15	
1077	CERCLA NON-SWDA PP/DRAFT RAP FOR SITE 12	267 days	Fri 5/1/15	Mon 5/9/16	
1078	Navy to award PP/Draft RAP for Site 12	76 days	Fri 5/1/15	Fri 8/14/15	1076FS-65 days
1079	Prepare Internal Draft PP/Draft RAP for Site 12	60 days	Mon 8/17/15	Fri 11/6/15	1078
1080	Navy Review Internal Draft and Prepare Draft PP/RAP for Site 12	30 days	Mon 11/9/15	Fri 12/18/15	1079
1081	Agency Review of Draft PP/Draft RAP for Site 12	20 days	Mon 12/21/15	Fri 1/15/16	1080
1082	Agency RTCs and Prepare Final PP/Draft RAP for Site 12	59 days	Mon 1/18/16	Thu 4/7/16	1081
1083	Public Notice of Final PP/Draft RAP for Site 12	0 edays	Thu 4/7/16	Thu 4/7/16	1082
1084	Public Comment Period of Final PP/Draft RAP for Site 12	22 days	Fri 4/8/16	Mon 5/9/16	1083
1085	Public Meeting for Final PP/Draft RAP for Site 12	0 edays	Thu 4/21/16	Thu 4/21/16	1084SS+10 days
1086	CERCLA NON-SWDA ROD/RAP FOR SITE 12	190 days	Wed 3/16/16	Tue 12/6/16	
1087	Prepare Internal Draft ROD/RAP for Site 12	60 days	Wed 3/16/16	Tue 6/7/16	1082FS-17 days
1088	Navy Review Internal Draft and Prepare Draft ROD/RAP for Site 12	30 days	Wed 6/8/16	Tue 7/19/16	1087
1089	Agency Review of Draft ROD/RAP for Site 12	20 days	Wed 7/20/16	Tue 8/16/16	1088
1090	Agency RTCs and Prepare Final ROD/RAP for Site 12	59 days	Wed 8/17/16	Mon 11/7/16	1089
1091	ROD/RAP for Site 12 Signature	21 days	Tue 11/8/16	Tue 12/6/16	1090
1092	Public Notice of Signing ROD/RAP for Site 12	0 edays	Tue 12/6/16	Tue 12/6/16	1091
1093	CERCLA NON-SWDA REMEDIAL DESIGN FOR SITE 12	209 days	Fri 9/2/16	Wed 6/21/17	
1094	Navy to award contract for Site 12 Remedial Design/Remedial Action	40 days	Fri 9/2/16	Thu 10/27/16	1090FS-47 days

All start and finish dates on Saturday or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1095	Prepare Internal Draft RD for Site 12	60 days	Fri 10/28/16	Thu 1/19/17	1094
1096	Navy Review Internal Draft and Prepare Draft RD for Site 12	30 days	Fri 1/20/17	Thu 3/2/17	1095
1097	Agency Review of Draft RD for Site 12	20 days	Fri 3/3/17	Thu 3/30/17	1096
1098	Agency RTCs and Prepare Final RD for Site 12	59 days	Fri 3/31/17	Wed 6/21/17	1097
1099	CERCLA NON-SWDA REMEDIAL ACTION FOR SITE 12	537 days	Thu 6/22/17	Fri 7/12/19	
1100	CERCLA NON-SWDA REMEDIAL ACTION WORK PLAN (RAWP)	122 days	Thu 6/22/17	Fri 12/8/17	
1101	Prepare Internal Draft Site 12 RAWP	44 days	Thu 6/22/17	Tue 8/22/17	1098
1102	Navy Review Internal Draft and Prepare Draft Site 12 RAWP	15 days	Wed 8/23/17	Tue 9/12/17	1101
1103	Agency Review Draft Site 12 RAWP	20 days	Wed 9/13/17	Tue 10/10/17	1102
1104	Agency RTCs and Prepare Final Site 12 RAWP	43 days	Wed 10/11/17	Fri 12/8/17	1103
1105	CERCLA NON-SWDA REMEDIAL ACTION FIELD WORK	262 days	Mon 12/11/17	Tue 12/11/18	1104
1106	CERCLA NON-SWDA REMEDIAL ACTION COMPLETION REPORT (RACR)	153 days	Wed 12/12/18	Fri 7/12/19	
1107	Prepare Internal Draft RACR for Site 12	44 days	Wed 12/12/18	Mon 2/11/19	1105
1108	Navy Review Internal Draft and Prepare Draft RACR for Site 12	30 days	Tue 2/12/19	Mon 3/25/19	1107
1109	Agency Review of Site 12 Draft RACR	20 days	Tue 3/26/19	Mon 4/22/19	1108
1110	Agency RTCs and Prepare Final RACR for Site 12	59 days	Tue 4/23/19	Fri 7/12/19	1109
1111	RADIOLOGICAL AND SWDA FEASIBILITY STUDY ADDENDUM REPORT (AND SWDA RISK ASSESSMENT)	219 days	Tue 3/29/16	Fri 1/27/17	
1112	Navy to award contract for RAD & SWDA FS Addendum/SWDA Risk Assess for Site 12	40 days	Tue 3/29/16	Mon 5/23/16	960FS-42 days,965FS-42
1113	Prepare Internal Draft RAD & SWDA FS Addendum/SWDA Risk Assess for Site 12	66 days	Tue 5/24/16	Tue 8/23/16	1112
1114	Navy Review Internal Draft and Prepare Draft RAD & SWDA FS Addendum/SWDA Risk Assess for Site 12	32 days	Wed 8/24/16	Thu 10/6/16	1113
1115	Agency Review Draft RAD & SWDA FS Addendum/SWDA Risk Assess for Site 12	22 days	Fri 10/7/16	Mon 11/7/16	1114
1116	Agency RTCs and Prepare Final RAD & SWDA FS Addendum/SWDA Risk Assess for Site 12	59 days	Tue 11/8/16	Fri 1/27/17	1115
1117	RADIOLOGICAL AND SWDA PP/DRAFT RAP FOR SITE 12	233 days	Tue 1/10/17	Thu 11/30/17	
1118	Navy to award RAD & SWDA PP/Draft RAP for Site 12	40 days	Tue 1/10/17	Mon 3/6/17	1114FS-30 days
1119	Prepare Internal Draft RAD & SWDA PP/Draft RAP for Site 12	60 days	Tue 3/7/17	Mon 5/29/17	1118,1114
1120	Navy Review Internal Draft and Prepare Draft RAD & SWDA PP/RAP for Site 12	30 days	Tue 5/30/17	Mon 7/10/17	1119
1121	Agency Review of Draft RAD & SWDA PP/Draft RAP for Site 12	22 days	Tue 7/11/17	Wed 8/9/17	1120
1122	Agency RTCs and Prepare Final RAD & SWDA PP/Draft RAP for Site 12	59 days	Thu 8/10/17	Tue 10/31/17	1121
1123	Public Notice of Final RAD & SWDA PP/Draft RAP for Site 12	0 edays	Tue 10/31/17	Tue 10/31/17	1122
1124	Public Comment Period of Final RAD & SWDA PP/Draft RAP for Site 12	22 days	Wed 11/1/17	Thu 11/30/17	1123
1125	Public Meeting for Final RAD & SWDA PP/Draft RAP for Site 12	0 days	Tue 11/14/17	Tue 11/14/17	1124SS+10 days
1126	RADIOLOGICAL AND SWDA ROD/RAP FOR SITE 12	191 days	Mon 10/9/17	Mon 7/2/18	
1127	Prepare Internal Draft RAD & SWDA ROD/RAP for Site 12	60 days	Mon 10/9/17	Fri 12/29/17	1122FS-17 days

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
1128	Navy Review Internal Draft and Prepare Draft RAD & SWDA ROD/RAP for Site 12	30 days	Mon 1/1/18	Fri 2/9/18	1127
1129	Agency Review of Draft RAD & SWDA ROD/RAP for Site 12	20 days	Mon 2/12/18	Fri 3/9/18	1128
1130	Agency RTCs and Prepare Final RAD & SWDA ROD/RAP for Site 12	59 days	Mon 3/12/18	Thu 5/31/18	1129
1131	RAD & SWDA ROD/RAP for Site 12 Signature	22 days	Fri 6/1/18	Mon 7/2/18	1130
1132	Public Notice of Signing RAD & SWDA ROD/RAP for Site 12	0 edays	Mon 7/2/18	Mon 7/2/18	1131
1133	RADIOLOGICAL AND SWDA REMEDIAL DESIGN FOR SITE 12	209 days	Wed 4/11/18	Mon 1/28/19	
1134	Navy to award contract for Site 12 RAD & SWDA Remedial Design/Remedial Action	40 days	Wed 4/11/18	Tue 6/5/18	1130FS-37 days
1135	Prepare Internal Draft RAD & SWDA RD for Site 12	60 days	Wed 6/6/18	Tue 8/28/18	1134
1136	Navy Review Internal Draft and Prepare Draft RAD & SWDA RD for Site 12	30 days	Wed 8/29/18	Tue 10/9/18	1135
1137	Agency Review of Draft RAD & SWDA RD for Site 12	20 days	Wed 10/10/18	Tue 11/6/18	1136
1138	Agency RTCs and Prepare Final RAD & SWDA RD for Site 12	59 days	Wed 11/7/18	Mon 1/28/19	1137
1139	RADIOLOGICAL AND SWDA REMEDIAL ACTION FOR SITE 12	491 days	Tue 1/29/19	Tue 12/15/20	
1140	RADIOLOGICAL AND SWDA REMEDIAL ACTION WORK PLAN (RAWP)	100 days	Tue 1/29/19	Mon 6/17/19	
1141	Prepare Internal Draft Site 12 RAD & SWDA RAWP	20 days	Tue 1/29/19	Mon 2/25/19	1138
1142	Navy Review Internal Draft and Prepare Draft Site 12 RAD & SWDA RAWP	15 days	Tue 2/26/19	Mon 3/18/19	1141
1143	Agency Review Draft Site 12 RAD & SWDA RAWP	22 days	Tue 3/19/19	Wed 4/17/19	1142
1144	Agency RTCs and Prepare Final Site 12 RAD & SWDA RAWP	43 days	Thu 4/18/19	Mon 6/17/19	1143
1145	RADIOLOGICAL AND SWDA REMEDIAL ACTION FIELD WORK AND FINAL STATUS SURVEY	262 days	Tue 6/18/19	Wed 6/17/20	1144
1146	RADIOLOGICAL AND SWDA REMEDIAL ACTION COMPLETION REPORT (RACR) INCLUDING FSS REPORT	129 days	Thu 6/18/20	Tue 12/15/20	
1147	Prepare Internal Draft RAD & SWDA RACR/FSS Report for Site 12	20 days	Thu 6/18/20	Wed 7/15/20	1145
1148	Navy Review Internal Draft and Prepare Draft RAD & SWDA RACR/FSS Report for Site 12	30 days	Thu 7/16/20	Wed 8/26/20	1147
1149	Agency Review of Site 12 Draft RAD & SWDA RACR/FSS Report	20 days	Thu 8/27/20	Wed 9/23/20	1148
1150	Agency RTCs and Prepare Final RAD & SWDA RACR/FSS Report for Site 12	59 days	Thu 9/24/20	Tue 12/15/20	1149

All start and finish dates on Saturday or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1151	SITE 24	3882 days	Tue 1/21/03	Thu 10/26/17	
1152	✓ PLUME DELINEATION INVESTIGATION	146 days	Mon 2/3/03	Wed 7/23/03	
1159	✓ REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY FOR SITE 24	960 days	Sun 10/31/04	Thu 7/3/08	
1186	✓ PILOT STUDY FOR SITE 24	651 days	Tue 1/21/03	Thu 6/9/05	
1202	✓ EXPANDED TREATABILITY STUDY FOR SITE 24	2453 days	Fri 3/26/04	Fri 8/16/13	
1236	✓ SITE 24 SOIL GAS INVESTIGATION	239 days	Fri 2/4/11	Wed 1/4/12	
1247	✓ FOCUSED FEASIBILITY STUDY ADDENDUM REPORT	350 days	Sat 6/1/13	Fri 10/3/14	
1253	LOT 69 AND BUILDING 342 FINAL STATUS SURVEY REPORT (see Line 2081 under Radiological Program)	0 days	Wed 11/4/15	Wed 11/4/15	2085FF
1254	✓ PP/DRAFT RAP FOR SITE 24	582 days	Sat 12/29/12	Tue 3/24/15	
1263	✗ ROD/RAP FOR SITE 24	410 days	Fri 2/7/14	Thu 9/3/15	
1264	✓ Navy to award contract for ROD/RAP for Site 24	44 days	Fri 2/7/14	Wed 4/9/14	
1265	✓ Prepare Internal Draft ROD/RAP for Site 24	58 days	Mon 1/5/15	Wed 3/25/15	1257FS+10 days
1266	✓ Navy Review Internal Draft and Prepare Draft ROD/RAP for Site 24	30 days	Thu 3/26/15	Wed 5/6/15	1265
1267	✓ Agency Review of Draft ROD/RAP for Site 24	22 days	Thu 5/7/15	Fri 6/5/15	1266
1268	Agency RTCs and Prepare Final ROD/RAP for Site 24	59 days	Mon 6/8/15	Thu 8/27/15	1267
1269	ROD/RAP Signature for Site 24	5 days	Fri 8/28/15	Thu 9/3/15	1268
1270	Public Notice of Signing ROD/RAP for Site 24	0 edays	Thu 9/3/15	Thu 9/3/15	1269
1271	SOIL GAS DATA GAPS SAMPLING	614 days	Fri 8/29/14	Wed 1/4/17	
1272	✓ Navy award contract for Soil Gas Data Gaps Sampling	66 days	Fri 8/29/14	Fri 11/28/14	
1273	✓ Work Plan Addendum to Monitoring Work Plan for Sites 6, 12, 21, 24	161 days	Mon 12/1/14	Mon 7/13/15	
1278	Soil Gas Sampling Field Work	262 days	Mon 7/13/15	Tue 7/12/16	1277FS-1 day
1279	Soil Gas Data Gaps Summary Report	126 days	Wed 7/13/16	Wed 1/4/17	
1280	Prepare Internal Draft Site 24 Soil Gas Data Gaps Report	22 days	Wed 7/13/16	Thu 8/11/16	1278
1281	Navy Review Internal Draft and Prepare Draft Site 24 Soil Gas Data Gaps Report	20 days	Fri 8/12/16	Thu 9/8/16	1280
1282	Agency Review of Draft Site 24 Soil Gas Data Gaps Report	22 days	Fri 9/9/16	Mon 10/10/16	1281
1283	Agency RTCs and Prepare Final Site 24 Soil Gas Data Gaps Report	62 days	Tue 10/11/16	Wed 1/4/17	1282
1284	REMEDIAL DESIGN / REMEDIAL ACTION FOR SITE 24	590 days	Fri 7/24/15	Thu 10/26/17	
1285	✗ Navy to award contract for Site 24 RD/RA	49 days	Fri 7/24/15	Wed 9/30/15	1268SS+34 days
1286	✗ Remedial Design/Remedial Action Work Plan (RD/RAWP)	182 days	Thu 10/1/15	Fri 6/10/16	
1287	Prepare Internal Draft RD/RAWP for Site 24	60 days	Thu 10/1/15	Wed 12/23/15	1285
1288	Navy Review Internal Draft and Prepare Draft RD/RAWP for Site 24	40 days	Thu 12/24/15	Wed 2/17/16	1287
1289	Agency Review of Draft RD/RAWP for Site 24	20 days	Thu 2/18/16	Wed 3/16/16	1288
1290	Agency RTCs and Prepare Final RD/RAWP for Site 24	62 days	Thu 3/17/16	Fri 6/10/16	1289

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1291	Remedial Action Field Work	44 days	Mon 6/13/16	Thu 8/11/16	1290
1292	Remedy Performance Monitoring	262 days	Fri 8/12/16	Mon 8/14/17	1291
1293	Remedial Action Completion Report (RACR)	162 days	Wed 3/15/17	Thu 10/26/17	
1294	Prepare Internal Draft RACR for Site 24	40 days	Wed 3/15/17	Tue 5/9/17	1292FS-109 days
1295	Navy Review Internal Draft and Prepare Draft RACR for Site 24	40 days	Wed 5/10/17	Tue 7/4/17	1294
1296	Agency Review of Site 24 Draft RACR	20 days	Wed 7/5/17	Tue 8/1/17	1295
1297	Agency RTCs and Prepare Final RACR for Site 24	62 days	Wed 8/2/17	Thu 10/26/17	1296

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or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
1298	SITE 30	3555 days	Sun 3/16/03	Mon 10/10/16	
1299	 SITE 30 DATA AND FIELD ACTIVITY REPORT	108 days	Sun 3/16/03	Mon 7/28/03	
1305	 GROUNDWATER MONITORING FOR SITES 30/31	160 days	Thu 1/1/04	Thu 8/12/04	
1318	 REMEDIAL INVESTIGATION FOR SITE 30	425 days	Thu 7/8/04	Fri 2/17/06	
1332	 FEASIBILITY STUDY FOR SITE 30	357 days	Mon 7/4/05	Tue 11/14/06	
1346	 PP FOR SITE 30	575 days	Sun 8/6/06	Sat 10/18/08	
1365	 ROD/RAP FOR SITE 30	444 days	Wed 1/30/08	Tue 10/13/09	
1379	 SITE 30 LAND USE CONTROL REMEDIAL DESIGN/ REMEDIAL ACTION WORK PLAN (LUC RD/RAWP)	472 days	Wed 2/11/09	Thu 12/2/10	
1390	 SITE 30 FINAL STATUS SURVEY REPORT (see Line 2071 under Radiological Program)	0 days	Mon 10/10/16	Mon 10/10/16	2075FF
1391	MEMO TO FILE (to reference post-ROD radiological scanning work)	22 days	Fri 9/9/16	Mon 10/10/16	1390FF

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
1392	SITE 31	3480 days	Wed 6/11/03	Mon 10/10/16	
1393	 ADDITIONAL INVESTIGATION FOR SITE 31	67 days	Wed 6/11/03	Fri 9/12/03	
1405	 GROUNDWATER MONITORING FOR SITES 30/31	155 days	Thu 1/1/04	Thu 8/5/04	
1418	 REMEDIAL INVESTIGATION FOR SITE 31	530 days	Thu 7/8/04	Fri 7/14/06	
1441	 FEASIBILITY STUDY FOR SITE 31	429 days	Wed 7/20/05	Tue 3/13/07	
1455	 PP FOR SITE 31	575 days	Sun 8/6/06	Sat 10/18/08	
1474	 ROD/RAP FOR SITE 31	449 days	Wed 1/23/08	Tue 10/13/09	
1487	 REMEDIAL ACTION WORK PLAN AND REMEDIAL ACTION FOR SITE 31	411 days	Wed 7/2/08	Thu 1/28/10	
1500	REMEDIAL ACTION FOR SITE 31	1746 days	Mon 2/1/10	Mon 10/10/16	
1501	 Site 31 Phase I Remediation Field Work	116 days	Mon 2/1/10	Tue 7/13/10	
1503	 Explanation of Significant Differences (ESD) for Site 31 ROD/RAP to include Site 33	251 days	Sat 6/5/10	Tue 5/24/11	
1514	 Site 31 Phase 2 Remedial Action Field Work Plan (Including Site 33)	411 days	Sat 7/3/10	Mon 1/30/12	
1525	 Work Plan Addendum for Sites 31 and 33 Remedial Action	135 days	Mon 3/25/13	Fri 9/27/13	
1532	 Site 31 Phase 2 Field Work	240 days	Mon 9/30/13	Fri 8/29/14	
1533	 Site 31 Final Status Survey (FSS) Field Work	6 edays	Tue 2/11/14	Mon 2/17/14	1531
1534	Site 31 Work Plan (WP) / Sampling and Analysis Plan (SAP) Addendum	88 days	Fri 10/30/15	Tue 3/1/16	
1535	 Prepare Internal Draft Site 31 WP/SAP Addendum	22 days	Fri 10/30/15	Mon 11/30/15	
1536	Navy Review Internal Draft and Prepare Draft Site 31 WP/SAP Addendum	22 days	Tue 12/1/15	Wed 12/30/15	1535
1537	Agency Review Draft Site 31 WP/SAP Addendum	22 days	Thu 12/31/15	Fri 1/29/16	1536
1538	Agency RTCs and Prepare Final Site 31 WP/SAP Addendum	22 days	Mon 2/1/16	Tue 3/1/16	1537
1539	 Site 31 Phase 3 Field Work	30 days	Wed 3/2/16	Tue 4/12/16	1538
1540	Site 31 Final Status Survey (FSS) Report (see Line 2233 under Radiological Program)	0 days	Mon 10/10/16	Mon 10/10/16	2075FF
1541	 Remedial Action Completion Report (RACR) for Site 31	410 days	Tue 3/18/14	Mon 10/12/15	
1542	 Prepare Internal Draft RACR for Site 31	61 days	Tue 3/18/14	Tue 6/10/14	1532FS-200 days
1543	 Navy Review Internal Draft and Prepare Draft RACR for Site 31	273 days	Wed 6/11/14	Fri 6/26/15	1542
1544	Agency Review of Draft RACR for Site 31	21 days	Mon 6/29/15	Mon 7/27/15	1543
1545	Agency RTCs and Prepare Final RACR for Site 31	55 days	Tue 7/28/15	Mon 10/12/15	1544

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	 Task Name	Duration	Start	Finish	Predecessors
1546	SITE 32	3194 days	Wed 9/15/04	Thu 12/8/16	
1547	 REMEDIAL INVESTIGATION FOR SITE 32	1079 days	Wed 9/15/04	Thu 10/30/08	
1569	 PCB SOIL ABATEMENT T111 / SITE 32 REMOVAL ACTION (see PCB Program)	1070 days	Fri 8/8/08	Wed 7/13/11	
1570	 POST-CONSTRUCTION HHRA REVIEW	141 edays	Tue 4/13/10	Wed 9/1/10	
1571	 PP/DRAFT RAP FOR SITE 32	149 days	Mon 3/21/11	Mon 10/17/11	
1584	SITE 32A FINAL STATUS SURVEY REPORT (See Line 2054 under Radiological Program)	0 days	Tue 3/8/16	Tue 3/8/16	2058FF
1585	SITE 32B FINAL STATUS SURVEY REPORT (See Line 2096 under Radiological Program)	0 days	Thu 12/8/16	Thu 12/8/16	2101FF
1586	Memo TO FILE (to reference post-ROD radiological scanning work)	0 days	Thu 12/8/16	Thu 12/8/16	1585
1587	ROD/RAP FOR SITE 32	253 days	Fri 5/1/15	Tue 4/19/16	
1588	 Navy to award contract for ROD/RAP for Site 32	76 days	Fri 5/1/15	Fri 8/14/15	1078SS
1589	 Prepare Internal Draft ROD/RAP for Site 32	40 days	Mon 8/17/15	Fri 10/9/15	1588
1590	Navy Review Internal Draft and Prepare Draft ROD/RAP for Site 32	51 days	Mon 10/12/15	Mon 12/21/15	1589
1591	 Agency Review of Draft ROD/RAP for Site 32	20 days	Tue 12/22/15	Mon 1/18/16	1590
1592	Agency RTCs and Prepare Final ROD/RAP for Site 32	46 days	Tue 1/19/16	Tue 3/22/16	1591
1593	ROD/RAP Signature for Site 32	20 days	Wed 3/23/16	Tue 4/19/16	1592
1594	Public Notice of Signing ROD/RAP for Site 32	0 edays	Tue 4/19/16	Tue 4/19/16	1593

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
1595	PETROLEUM PROGRAM	4505 days	Wed 6/26/02	Tue 7/30/19	
1596	 SITE 4/19 - Closed	248 days	Wed 2/5/03	Wed 12/17/03	
1606	 SITES 14/22 - Closed	842 days	Wed 6/26/02	Mon 7/18/05	
1623	 SITE 15 - Closed	454 days	Tue 2/4/03	Tue 9/28/04	
1641	 SITE 16 - Closed	228 days	Sat 8/2/03	Thu 6/17/04	
1650	 SITE 20 - Closed	285 days	Tue 5/13/03	Thu 6/17/04	
1660	 SITE 25 - Closed	2199 days	Wed 5/28/03	Fri 10/28/11	
1699	 F2A/F2B - Closed	602 days	Thu 5/1/03	Mon 8/22/05	
1716	 SITE YF2 - Closed	73 days	Tue 3/9/04	Thu 6/17/04	
1723	 D1B (3rd Street) Closed	793 days	Thu 5/1/03	Sun 5/14/06	

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or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	 Task Name	Duration	Start	Finish	Predecessors
1736	SITE 6 PETROLEUM	3715 days	Tue 4/8/03	Thu 6/22/17	
1737	 POST-CONSTRUCTION REPORT FOR SITE 6	261 days	Tue 4/8/03	Thu 4/1/04	
1744	 Groundwater Monitoring for Site 6	339 edays	Wed 5/28/03	Sat 5/1/04	
1745	 Additional Investigation: Soil Vapor Sampling	45 edays	Mon 7/12/04	Thu 8/26/04	
1746	 CLOSURE SUMMARY REPORT FOR SITE 6	181 days	Sat 3/26/05	Tue 12/6/05	
1753	 Receipt of Water Board Letter of Non-Concurrence with NFA at Site 6	0 edays	Mon 5/15/06	Mon 5/15/06	
1754	 Site 6 Groundwater Monitoring	210 edays	Thu 6/1/06	Thu 12/28/06	
1755	 Prepare Revised Site 6 Boundary Paper	215 edays	Fri 6/23/06	Wed 1/24/07	
1756	 Agency Review Revised Site 6 Boundary Paper	86 days	Wed 1/24/07	Thu 4/19/07	1755
1757	 Evaluate Site 6 Path Forward	60 edays	Thu 4/19/07	Mon 6/18/07	1756
1758	ADDITIONAL INVESTIGATION USTs 240	1592 days	Wed 3/16/11	Thu 4/20/17	
1759	 Navy to Award Contract for Additional Investigation of USTs 240	90 edays	Wed 3/16/11	Tue 6/14/11	
1760	 Additional Investigation of USTs 240 Corrective Action Plan (CAP) Work Plan	302 days	Tue 7/19/11	Wed 9/12/12	
1768	 Additional Investigation of USTs 240 Work Plan / Field Work	154 edays	Mon 11/12/12	Mon 4/15/13	1767FS+61 edays
1769	 Additional Investigation of USTs 240 Post-Construction Summary Report (PCSR)	156 days	Fri 3/8/13	Mon 10/14/13	
1778	Post-Corrective Action Groundwater Monitoring (2 years)	524 days	Mon 4/20/15	Thu 4/20/17	2292SS
1779	UST 240A and 240B CLOSURE	45 days	Fri 4/21/17	Thu 6/22/17	1778
1780	USTs 240 Request for Closure	25 days	Fri 4/21/17	Thu 5/25/17	563FF
1781	Receive Water Board Concurrence Letter for USTs 240 Closure	20 days	Fri 5/26/17	Thu 6/22/17	1780
1782	UST 248A, 248B, 248C, AND 248D CLOSURE	45 days	Fri 4/21/17	Thu 6/22/17	
1783	UST 248 Request for Closure	25 days	Fri 4/21/17	Thu 5/25/17	1780SS
1784	Receive Water Board Concurrence Letter for UST 248 Closure	20 days	Fri 5/26/17	Thu 6/22/17	1783

All start and finish dates on Saturday
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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1785	SITE YF3	1692 days	Tue 4/5/11	Wed 9/27/17	
1786	YF3 ADDITIONAL INVESTIGATION	511 days	Tue 4/5/11	Tue 3/19/13	
1806	SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT (SLERA) FOR YF3	307 days	Wed 1/15/14	Thu 3/19/15	
1813	YF3 Data Gaps Investigation	397 days	Tue 3/1/16	Wed 9/6/17	1812
1814	Navy to award contract for Data Gaps Sampling and BERA at YF3	44 days	Tue 3/1/16	Fri 4/29/16	
1815	YF3 Data Gaps Work Plan	131 days	Mon 5/2/16	Mon 10/31/16	
1816	Prepare Internal Draft YF3 Data Gaps Work Plan	44 days	Mon 5/2/16	Thu 6/30/16	1814
1817	Navy Review Internal Draft and Prepare Draft YF3 Data Gaps Work Plan	22 days	Fri 7/1/16	Mon 8/1/16	1816
1818	Agency Review of Draft YF3 Data Gaps Work Plan	22 days	Tue 8/2/16	Wed 8/31/16	1817
1819	Agency RTCs and Prepare Final YF3 Data Gaps Work Plan	43 days	Thu 9/1/16	Mon 10/31/16	1818
1820	YF3 Data Gaps Field Work	44 days	Tue 11/1/16	Fri 12/30/16	1819
1821	YF3 Baseline Ecological Risk Assessment (BERA)	178 days	Mon 1/2/17	Wed 9/6/17	1820
1822	Prepare Internal Draft YF3 BERA	66 days	Mon 1/2/17	Mon 4/3/17	
1823	Navy Review Internal Draft and Prepare Draft YF3 BERA	33 days	Tue 4/4/17	Thu 5/18/17	1822
1824	Agency Review of Draft YF3 BERA	22 days	Fri 5/19/17	Mon 6/19/17	1823
1825	Agency RTCs and Prepare Final YF3 BERA	57 days	Tue 6/20/17	Wed 9/6/17	1824
1826	Site YF3 Closure Received Water Board Concurrence Letter	15 days	Thu 9/7/17	Wed 9/27/17	1825
1827	US COAST GUARD (USCG)	607 days	Mon 4/3/17	Tue 7/30/19	
1828	Navy to Award Contract for Additional Investigation and Reporting at USCG	60 days	Mon 4/3/17	Fri 6/23/17	
1829	USCG Additional Investigation Work Plan	118 days	Mon 6/26/17	Wed 12/6/17	
1830	Prepare Internal Draft USCG Additional Investigation Work Plan	40 days	Mon 6/26/17	Fri 8/18/17	1828
1831	Navy Review Internal Draft and Prepare Draft USCG Additional Investigation Work Plan	15 days	Mon 8/21/17	Fri 9/8/17	1830
1832	Agency Review Draft USCG Additional Investigation Work Plan	20 days	Mon 9/11/17	Fri 10/6/17	1831
1833	Agency RTCs and Prepare Final USCG Additional Investigation Work Plan	43 days	Mon 10/9/17	Wed 12/6/17	1832
1834	USCG Additional Investigation Field Work and Sample Analysis	40 days	Thu 12/7/17	Wed 1/31/18	1833
1835	Prepare USCG Additional Investigation Report	96 days	Thu 2/1/18	Thu 6/14/18	
1836	Prepare Internal Draft USCG Additional Investigation Report	20 days	Thu 2/1/18	Wed 2/28/18	1834
1837	Navy Review Internal Draft and Prepare Draft USCG Additional Investigation Report	15 days	Thu 3/1/18	Wed 3/21/18	1836
1838	Agency Review Draft USCG Additional Investigation Report	20 days	Thu 3/22/18	Wed 4/18/18	1837
1839	Agency RTCs and Prepare Final USCG Additional Investigation Report	41 days	Thu 4/19/18	Thu 6/14/18	1838
1840	USCG CAP Addendum	98 days	Fri 6/15/18	Tue 10/30/18	
1841	Prepare Internal Draft USCG CAP Addendum	20 days	Fri 6/15/18	Thu 7/12/18	1839
1842	Navy Review Internal Draft and Prepare Draft USCG CAP Addendum	15 days	Fri 7/13/18	Thu 8/2/18	1841

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
1843	Agency Review Draft USCG CAP Addendum	20 days	Fri 8/3/18	Thu 8/30/18	1842
1844	Agency RTCs and Prepare Final USCG CAP Addendum	43 days	Fri 8/31/18	Tue 10/30/18	1843
1845	USCG CAP Addendum Implementation	86 days	Wed 10/31/18	Wed 2/27/19	1844
1846	USCG Post-Construction Summary Report (PCSR)	98 days	Thu 2/28/19	Mon 7/15/19	
1847	Prepare Internal Draft USCG PCSR	20 days	Thu 2/28/19	Wed 3/27/19	1845
1848	Navy Review Internal Draft and Prepare Draft USCG PCSR	15 days	Thu 3/28/19	Wed 4/17/19	1847
1849	Agency Review of Draft USCG PCSR	20 days	Thu 4/18/19	Wed 5/15/19	1848
1850	Agency RTCs and Prepare Final USCG PCSR	43 days	Thu 5/16/19	Mon 7/15/19	1849
1851	Site USCG Closure Received Water Board Concurrence Letter	11 days	Tue 7/16/19	Tue 7/30/19	1850

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	 Task Name	Duration	Start	Finish	Predecessors
1852	 USTs	3787 days	Sun 5/25/03	Tue 11/28/17	
1853	 CLOSED	1756 days	Sun 5/25/03	Mon 2/15/10	
1854	 Tanks 204A and 204B (YBI) Removal	86 days	Sun 5/25/03	Wed 9/24/03	
1863	 USTs 237/238 & 204 A-D Post-Construction Summary Report	130 days	Sun 11/23/03	Mon 5/24/04	
1870	 Site USTs 237, 204A-D Closure Received Water Board Concurrence Letter	2227 edays	Sun 1/11/04	Mon 2/15/10	1869
1871	 USTs 140, 221, & 230 Post-Construction Summary Report	87 days	Sun 1/11/04	Tue 5/11/04	
1878	 Site USTs 140, 221, & 230 Closure Received Water Board Concurrence Letter	37 edays	Tue 5/11/04	Thu 6/17/04	1877
1879	 UST Site 227 Closure Summary Report	130 days	Sat 1/24/04	Fri 7/23/04	
1889	 Site 227 Closure Received Water Board Concurrence Letter	60 edays	Fri 7/23/04	Tue 9/21/04	1888
1890	 UST Site 180C Closure Summary Report	398 days	Sun 2/15/04	Mon 8/22/05	
1897	 Site UST 180C Closure Receive Water Board Concurrence Letter	50 edays	Mon 8/22/05	Tue 10/11/05	1896
1898	OPEN	112 days	Mon 6/26/17	Tue 11/28/17	
1899	UST 238 (Additional investigation pending Caltrans project completion)	112 days	Mon 6/26/17	Tue 11/28/17	1828

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
1900	RADIOLOGICAL PROGRAM	4520 days	Sat 4/17/04	Tue 8/10/21	
1901	BUILDING 233 AND VICINITY	2991 days	Sat 4/17/04	Wed 9/30/15	
1902	Building 233 Asbestos Abatement and RAD Removal	731 days	Sat 4/17/04	Wed 1/31/07	
1925	Final Status Survey of Building 233	823 days	Sun 7/18/04	Mon 9/10/07	
1942	Building 233 Demolition Work Plan	138 days	Tue 1/12/10	Fri 7/23/10	
1946	Building 233 Pre-Demolition Survey	104 edays	Fri 7/23/10	Thu 11/4/10	1945
1947	Building 233 Demolition	31 edays	Mon 12/6/10	Thu 1/6/11	1946FS+14 edays
1948	Building 233 Footprint Characterization, Remediation, and Final Status Survey Work Plan	410 days	Tue 6/29/10	Mon 1/23/12	
1959	Building 233 Field Work	560 days	Tue 2/7/12	Mon 3/31/14	1958FS+14 edays
1960	Building 233 Characterization and Final Status Survey Plan	125 days	Mon 7/1/13	Mon 12/23/13	
1969	Building 233 Final Status Survey Field Work	60 days	Fri 1/3/14	Thu 3/27/14	1968FS+8 days
1970	Building 233 Final Status Survey Report	141 days	Fri 3/28/14	Fri 10/10/14	
1975	Building 233 Site Completion	0 edays	Fri 10/10/14	Fri 10/10/14	1974
1976	Building 233 Recommendation of Unrestricted Radiological Release (RURR) Letter from State of California	253 days	Mon 10/13/14	Wed 9/30/15	1975
1977	HISTORICAL RADIOLOGICAL ASSESSMENT (HRA)	423 days	Sat 7/3/04	Fri 2/10/06	
1990	Further Radiological Investigation Areas (Site 12 SWDAs; Bldg 343, Bldg 344; and Sanitary Sewer and Drainage System at Bldg 233)	219 days	Mon 10/16/06	Fri 8/17/07	
2000	Further Radiological Investigation Field Activities for Buildings 233, 343, 344	423 edays	Tue 9/4/07	Fri 10/31/08	
2001	Summary Report of Further Radiological Investigation for Buildings 233, 343, 344	287 days	Thu 9/27/07	Fri 10/31/08	
2026	HISTORICAL RADIOLOGICAL ASSESSMENT SUPPLEMENTAL TECHNICAL MEMORANDUM (HRASTM) FOR TI	613 days	Fri 2/24/12	Tue 7/1/14	
2031	BASEWIDE RADIOLOGICAL SURVEYS AND REPORT - PART I (Includes Site 32, Site 12, Building 3, misc. utilities) - PART I	962 days	Sat 6/30/12	Tue 3/8/16	
2032	Basewide Radiological Survey Work Plan - Part I	305 days	Sat 6/30/12	Sat 8/31/13	
2043	Basewide Radiological Surveys Field Work - Part I	173 days	Mon 9/2/13	Wed 4/30/14	2032
2044	Site 12 and Selected Transportation Routes Scoping Survey Report (non-SWDA areas)	324 days	Wed 1/29/14	Mon 4/27/15	
2049	Building 3 Scoping / Characterization / FSS Report - Part I	179 days	Thu 4/9/15	Tue 12/15/15	
2050	Prepare Internal Draft Scoping/Characterization/FSS Report	76 days	Thu 4/9/15	Thu 7/23/15	
2051	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	22 days	Fri 7/24/15	Mon 8/24/15	2050
2052	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Tue 8/25/15	Wed 9/23/15	2051
2053	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	59 days	Thu 9/24/15	Tue 12/15/15	2052
2054	Site 32A Scoping / Characterization / FSS Report - Part I	186 days	Tue 6/23/15	Tue 3/8/16	
2055	Prepare Internal Draft Scoping/Characterization/FSS Report	82 days	Tue 6/23/15	Wed 10/14/15	2043
2056	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	23 days	Thu 10/15/15	Mon 11/16/15	2055
2057	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Tue 11/17/15	Wed 12/16/15	2056
2058	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	59 days	Thu 12/17/15	Tue 3/8/16	2057

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
2059	Selected Storm and Wastewater Lines near Buildings 3 and 233 Scoping / Characterization / FSS Report - Part I	209 days	Fri 3/20/15	Wed 1/6/16	
2060	Prepare Internal Draft Scoping/Characterization/FSS Report	106 days	Fri 3/20/15	Fri 8/14/15	2043
2061	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	22 days	Mon 8/17/15	Tue 9/15/15	2060
2062	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Wed 9/16/15	Thu 10/15/15	2061
2063	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	59 days	Fri 10/16/15	Wed 1/6/16	2062
2064	BASEWIDE RADIOLOGICAL SURVEY AND REPORT - PART II (includes Site 30/30N/30S, Site 31, Lot 69, Building 342, Building 461, sewage treatment plant, and misc. sewer lines)	792 days	Wed 11/27/13	Thu 12/8/16	
2065	Radiological Survey Project Work Plan - Part II	371 days	Wed 11/27/13	Wed 4/29/15	
2070	Basewide Radiological Surveys Field Work - Part II	85 days	Thu 4/30/15	Wed 8/26/15	2069
2071	IR Site 30/30N/30S and IR Site 31 Scoping / Characterization / Final Status Survey (FSS) Report	129 days	Wed 4/13/16	Mon 10/10/16	
2072	Prepare Internal Draft Scoping/Characterization/FSS Report	44 days	Wed 4/13/16	Mon 6/13/16	2070,1539
2073	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	18 days	Tue 6/14/16	Thu 7/7/16	2072
2074	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Fri 7/8/16	Mon 8/8/16	2073
2075	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Tue 8/9/16	Mon 10/10/16	2074
2076	Storm/Waste Water Lines Scoping / Characterization / Final Status Survey (FSS) Report	129 days	Fri 8/28/15	Wed 2/24/16	
2077	Prepare Internal Draft Scoping/Characterization/FSS Report	44 days	Fri 8/28/15	Wed 10/28/15	2070FS+1 day
2078	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	18 days	Thu 10/29/15	Mon 11/23/15	2077
2079	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Tue 11/24/15	Wed 12/23/15	2078
2080	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Thu 12/24/15	Wed 2/24/16	2079
2081	IR Site 24 (Lot 69, Bldg 342) Scoping / Characterization / Final Status Survey (FSS) Report	127 days	Mon 8/3/15	Tue 1/26/16	
2082	Prepare Internal Draft Scoping/Characterization/FSS Report	45 days	Mon 8/3/15	Fri 10/2/15	2070FS-18 days
2083	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	15 days	Mon 10/5/15	Fri 10/23/15	2082
2084	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Mon 10/26/15	Tue 11/24/15	2083
2085	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Wed 11/25/15	Tue 1/26/16	2084
2086	IR Site 20 Scoping / Characterization / Final Status Survey (FSS) Report	127 days	Mon 8/10/15	Tue 2/2/16	
2087	Prepare Internal Draft Scoping/Characterization/FSS Report	45 days	Mon 8/10/15	Fri 10/9/15	2070FS-13 days
2088	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	15 days	Mon 10/12/15	Fri 10/30/15	2087
2089	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Mon 11/2/15	Tue 12/1/15	2088
2090	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Wed 12/2/15	Tue 2/2/16	2089
2091	Northeast Corner of TI Scoping / Characterization / Final Status Survey (FSS) Report	127 days	Mon 8/17/15	Tue 2/9/16	
2092	Prepare Internal Draft Scoping/Characterization/FSS Report	45 days	Mon 8/17/15	Fri 10/16/15	2070FS-8 days
2093	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	15 days	Mon 10/19/15	Fri 11/6/15	2092
2094	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Mon 11/9/15	Tue 12/8/15	2093

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
2095	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Wed 12/9/15	Tue 2/9/16	2094
2096	Site 32B Scoping / Characterization / FSS Report	132 days	Wed 6/8/16	Thu 12/8/16	
2097	32B Radiological Survey Field Work	5 days	Wed 6/8/16	Tue 6/14/16	950
2098	Prepare Internal Draft Scoping/Characterization/FSS Report	45 days	Wed 6/15/16	Tue 8/16/16	2097
2099	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	15 days	Wed 8/17/16	Tue 9/6/16	2098
2100	Agency Review Draft Scoping/Characterization/FSS Report	22 days	Wed 9/7/16	Thu 10/6/16	2099
2101	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	45 days	Fri 10/7/16	Thu 12/8/16	2100
2102	HISTORIC AVENUE N STORM DRAIN REMOVAL	249 days	Tue 5/26/15	Fri 5/6/16	
2103	Navy to award contract for storm drain removal	40 days	Tue 5/26/15	Mon 7/20/15	
2104	Historic Storm Drain Removal - Work Plan (WP)/Sampling and Analysis Plan (SAP)	82 days	Tue 7/21/15	Wed 11/11/15	
2105	Prepare Internal Draft Historic Storm Drain Removal WP/SAP	14 days	Tue 7/21/15	Fri 8/7/15	2103
2106	Navy Review Internal Draft and Prepare Draft Historic Storm Drain Removal WP/SAP	20 days	Mon 8/10/15	Fri 9/4/15	2105
2107	Agency Review Draft Historic Storm Drain Removal WP/SAP	20 days	Mon 9/7/15	Fri 10/2/15	2106
2108	Agency RTCs and Prepare Final Historic Storm Drain Removal WP/SAP	28 days	Mon 10/5/15	Wed 11/11/15	2107
2109	Historic Storm Drain Removal - Field Work	44 days	Fri 11/20/15	Wed 1/20/16	2108FS+6 days
2110	Historic Storm Drain Removal - Scoping/Final Status Survey (FSS) Report	110 days	Mon 12/7/15	Fri 5/6/16	
2111	Prepare Internal Draft Scoping/FSS Report	33 days	Mon 12/7/15	Wed 1/20/16	2109FS-33 days
2112	Navy Review Internal Draft and Prepare Draft Scoping/FSS Report	10 days	Thu 1/21/16	Wed 2/3/16	2111
2113	Agency Review Draft Scoping/FSS Report	22 days	Thu 2/4/16	Fri 3/4/16	2112
2114	Agency RTCs and Prepare Final Scoping/FSS Report	45 days	Mon 3/7/16	Fri 5/6/16	2113
2115	RADIOLOGICAL SURVEY FOR BUILDING 570	299 days	Thu 6/18/20	Tue 8/10/21	
2116	Navy to award contract for Radiological Survey for Building 570	40 days	Thu 6/18/20	Wed 8/12/20	1145
2117	Radiological Survey - Task Specific Work Plan for Building 570	64 days	Thu 8/13/20	Tue 11/10/20	2116
2118	Radiological Survey - Field Work for Building 570	32 days	Wed 11/11/20	Thu 12/24/20	2117
2119	Building 570 Scoping / Characterization / Final Status Survey (FSS) Report	163 days	Fri 12/25/20	Tue 8/10/21	
2120	Prepare Internal Draft Scoping/Characterization/FSS Report	64 days	Fri 12/25/20	Wed 3/24/21	2118
2121	Navy Review Internal Draft and Prepare Draft Scoping/Characterization/FSS Report	30 days	Thu 3/25/21	Wed 5/5/21	2120
2122	Agency Review Draft Scoping/Characterization/FSS Report	20 days	Thu 5/6/21	Wed 6/2/21	2121
2123	Agency RTCs and Prepare Final Scoping/Characterization/FSS Report	49 days	Thu 6/3/21	Tue 8/10/21	2122

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
2124	BASEWIDE TASKS	12033 days	Mon 9/1/03	Tue 10/12/49	
2125	GROUNDWATER MONITORING PROGRAM	3331 days	Thu 1/11/07	Thu 10/17/19	
2126	GROUNDWATER MONITORING AND REPORTING (2008 - 2012)	1836 days	Thu 1/11/07	Thu 1/23/14	
2271	SITES 6, 12, 21, 24 MONITORING WORK PLAN AND 2013-2014 REPORTING	630 days	Mon 4/8/13	Fri 9/4/15	
2272	Monitoring Work Plan for Sites 6, 12, 21, 24	171 days	Mon 4/8/13	Tue 12/3/13	
2280	Groundwater Monitoring Event	30 edays	Tue 12/3/13	Thu 1/2/14	2279
2281	Groundwater Monitoring Event	15 days	Mon 3/24/14	Fri 4/11/14	2280FS+60 edays
2282	2013 Annual Monitoring Report for Sites 6, 12, 21, 24	185 days	Mon 5/12/14	Fri 1/23/15	
2287	Groundwater Monitoring Event	10 edays	Mon 8/25/14	Thu 9/4/14	
2288	Groundwater Monitoring Event	5 days	Mon 3/9/15	Fri 3/13/15	
2289	2014 Annual Monitoring Report for Sites 6, 12, 21, 24	198 days	Wed 12/3/14	Fri 9/4/15	
2290	Prepare Internal Draft Annual Monitoring Report for Sites 6, 12, 21, 24	60 days	Wed 12/3/14	Tue 2/24/15	2287FS+90 edays
2291	Navy Review Internal Draft and Prepare Draft Annual Monitoring Report for Sites 6, 12, 21, 24	38 days	Wed 2/25/15	Fri 4/17/15	2290
2292	Agency Review Draft Annual Monitoring Report for Sites 6, 12, 21, 24	47 days	Mon 4/20/15	Tue 6/23/15	2291
2293	Agency RTCs and Prepare Final Annual Monitoring Report for Sites 6, 12, 21, 24	53 days	Wed 6/24/15	Fri 9/4/15	2292
2294	Groundwater Monitoring Event	5 days	Mon 8/24/15	Fri 8/28/15	
2295	2015 ANNUAL BASEWIDE GROUNDWATER MONITORING	403 days	Thu 4/2/15	Mon 10/17/16	
2296	Navy to Award Contract for Basewide Groundwater Monitoring	40 days	Thu 4/2/15	Wed 5/27/15	
2297	Groundwater Monitoring Event	21 edays	Tue 3/1/16	Tue 3/22/16	
2298	Basewide Groundwater Monitoring Report	120 days	Tue 5/3/16	Mon 10/17/16	2297
2299	Prepare Internal Draft Basewide Groundwater Monitoring Report	43 days	Tue 5/3/16	Thu 6/30/16	2297FS+30 days
2300	Navy Review Internal Draft and Prepare Draft Basewide Groundwater Monitoring Report	15 days	Fri 7/1/16	Thu 7/21/16	2299
2301	Agency Review Draft Basewide Groundwater Monitoring Report	20 days	Fri 7/22/16	Thu 8/18/16	2300
2302	Agency RTCs and Prepare Final Basewide Groundwater Monitoring Report	42 days	Fri 8/19/16	Mon 10/17/16	2301
2303	2016 ANNUAL BASEWIDE GROUNDWATER MONITORING	462 days	Mon 1/11/16	Tue 10/17/17	
2312	2017 ANNUAL BASEWIDE GROUNDWATER MONITORING	458 days	Mon 1/16/17	Wed 10/17/18	
2321	2018 ANNUAL BASEWIDE GROUNDWATER MONITORING	461 days	Thu 1/11/18	Thu 10/17/19	

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**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
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ID	Task Name	Duration	Start	Finish	Predecessors
2330	BASEWIDE FIVE-YEAR REVIEWS	9292 days	Mon 3/3/14	Tue 10/12/49	
2331	BASEWIDE 2014 FIVE-YEAR REVIEW	206 days	Mon 3/3/14	Mon 12/15/14	
2337	BASEWIDE 2019 FIVE-YEAR REVIEW	160 days	Mon 3/4/19	Fri 10/11/19	
2338	Navy award contract for Basewide Five Year Review	40 days	Mon 3/4/19	Fri 4/26/19	
2339	Prepare Internal Draft Five Year Review	20 days	Mon 4/29/19	Fri 5/24/19	2338
2340	Navy Review Internal Draft and Prepare Draft Five Year Review	15 days	Mon 5/27/19	Fri 6/14/19	2339
2341	Agency Review Draft Five Year Review	20 days	Mon 6/17/19	Fri 7/12/19	2340
2342	Agency RTCs and Prepare Final Five Year Review	65 days	Mon 7/15/19	Fri 10/11/19	2341
2343	BASEWIDE 2024 FIVE-YEAR REVIEW	160 days	Mon 3/4/24	Fri 10/11/24	
2349	BASEWIDE 2029 FIVE-YEAR REVIEW	160 days	Mon 3/5/29	Fri 10/12/29	
2355	BASEWIDE 2034 FIVE-YEAR REVIEW	160 days	Fri 3/3/34	Thu 10/12/34	
2361	BASEWIDE 2039 FIVE-YEAR REVIEW	160 days	Thu 3/3/39	Wed 10/12/39	
2367	BASEWIDE 2044 FIVE-YEAR REVIEW	160 days	Thu 3/3/44	Wed 10/12/44	
2373	BASEWIDE 2049 FIVE-YEAR REVIEW	160 days	Wed 3/3/49	Tue 10/12/49	
2379	BASEWIDE LAND USE CONTROL (LUC) INSPECTIONS	2415 days	Fri 3/4/11	Thu 6/4/20	
2380	2011 Basewide LUC Inspections	74 days	Fri 3/4/11	Wed 6/15/11	
2381	2012 Basewide LUC Inspections	90 days	Wed 1/25/12	Tue 5/29/12	
2382	2013 Basewide LUC Inspections	83 days	Mon 1/14/13	Wed 5/8/13	
2383	2014 Basewide LUC Inspections	132 days	Thu 2/20/14	Fri 8/22/14	
2384	2015 Basewide LUC Inspections	118 days	Tue 1/13/15	Thu 6/25/15	
2385	2016 Basewide LUC Inspections	102 days	Mon 1/11/16	Tue 5/31/16	
2386	2017 Basewide LUC Inspections	102 days	Mon 1/9/17	Tue 5/30/17	
2387	2018 Basewide LUC Inspections	102 days	Mon 1/8/18	Tue 5/29/18	
2388	2019 Basewide LUC Inspections	102 days	Tue 1/15/19	Wed 6/5/19	
2389	2020 Basewide LUC Inspections	102 days	Wed 1/15/20	Thu 6/4/20	
2390	BATHYMETRY SURVEYS FOR SITE 27	4957 days	Mon 11/17/14	Tue 11/15/33	
2391	Year 1 Site 27 Bathymetry Survey	1 day	Mon 11/17/14	Mon 11/17/14	341FS+250 days
2392	Year 5 Site 27 Bathymetry Survey / Reporting	40 days	Mon 9/24/18	Fri 11/16/18	2391FS+1004 days
2393	Year 10 Site 27 Bathymetry Survey / Reporting	40 days	Fri 9/22/23	Thu 11/16/23	2392FS+1264 days
2394	Year 15 Site 27 Bathymetry Survey / Reporting	40 days	Thu 9/21/28	Wed 11/15/28	2393FS+1264 days
2395	Year 20 Site 27 Bathymetry Survey / Reporting	40 days	Wed 9/21/33	Tue 11/15/33	2394FS+1264 days

All start and finish dates on Saturday
or Sunday default to the following business day.

**TABLE B-2
NAVAL STATION TREASURE ISLAND ENVIRONMENTAL SCHEDULE
DRAFT -- AUGUST 2015**

ID	Task Name	Duration	Start	Finish	Predecessors
2396	TRANSFER RELATED	3269 days	Mon 9/1/03	Wed 3/9/16	
2397	✓ SEBS/FOST EXECUTION SCHEDULE	980 days	Mon 9/1/03	Fri 6/1/07	
2541	✓ FINAL SEBS	368 days	Fri 2/27/04	Fri 7/22/05	
2562	✓ TREASURE ISLAND FOST (FOST 1)	527 days	Fri 2/27/04	Thu 3/2/06	
2576	✓ YERBA BUENA ISLAND FOST (FOST 2)	613 days	Tue 11/18/03	Wed 3/22/06	
2621	✓ SITE 27 BOUNDARY CHANGE TECHNICAL MEMORANDUM	99 days	Sat 4/3/10	Fri 8/20/10	
2629	✓ SITE 29 (ON-OFF RAMPS) BOUNDARY CHANGE LETTER	196 days	Wed 3/24/10	Wed 12/22/10	
2637	✓ SITE 29 ARTIFACTS BOUNDARY CHANGE TECHNICAL MEMORANDUM	70 days	Wed 9/21/11	Wed 12/28/11	
2645	✓ SITE 24 BOUNDARY CHANGE LETTER - EXPANDED BOUNDARY	1 day	Mon 12/9/13	Mon 12/9/13	
2646	✓ YERBA BUENA ISLAND FOST 3	526 days	Mon 1/11/10	Tue 1/17/12	
2667	FOSTs 1 AND 2 ADDENDUM (CANCELLED)	308 days	Mon 2/14/11	Wed 4/18/12	
2679	✓ FOST 4	92 days	Wed 6/25/14	Thu 10/30/14	
2685	FOST 5	157 days	Tue 8/4/15	Wed 3/9/16	
2686	📅 Prepare Internal Draft FOST 5	44 days	Tue 8/4/15	Fri 10/2/15	
2687	Prepare Draft FOST 5	44 days	Mon 10/5/15	Thu 12/3/15	2686
2688	Agency Review of Draft FOST 5	25 days	Fri 12/4/15	Thu 1/7/16	2687
2689	Agency RTCs and Prepare Final FOST 5	44 days	Fri 1/8/16	Wed 3/9/16	2688
2690	Sign and Distribute Final FOST 5	0 days	Wed 3/9/16	Wed 3/9/16	2689
2691	2014 FINDING OF SUITABILITY TO LEASE (FOSL)	328 days	Fri 7/25/14	Tue 10/27/15	
2692	✓ Prepare Internal Draft FOSL	78 days	Fri 7/25/14	Tue 11/11/14	
2693	Navy Review Internal Draft and Prepare Draft FOSL	208 days	Wed 11/12/14	Fri 8/28/15	2692
2694	Agency Review of Draft FOSL	21 days	Mon 8/31/15	Mon 9/28/15	2693
2695	Agency RTCs and Prepare Final FOSL	21 days	Tue 9/29/15	Tue 10/27/15	2694
2696	Sign and Distribute Final FOSL	0 days	Tue 10/27/15	Tue 10/27/15	2695
2697	✓ COVENANT TO RESTRICT USE OF PROPERTY (CRUP)	81 days	Wed 9/10/14	Wed 12/31/14	
2698	✓ CRUPs - Initial TI and YBI Conveyance	81 days	Wed 9/10/14	Wed 12/31/14	2681,2687

All start and finish dates on Saturday
or Sunday default to the following business day.