PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN
FORMER NAVAL STATION TREASURE ISLAND
Installation Restoration Site 24

San Francisco, California

February 2015

INTRODUCTION

The Department of the Navy (Navy) presents this **Proposed Plan/Draft Remedial Action Plan (Proposed Plan/Draft RAP)**[1] for remediation of **Installation Restoration (IR) Program** Site 24 (Site 24) at the former Naval Station Treasure Island (NAVSTA TI) (Figure 1). Hazardous chemicals were released to the environment during the operations of a dry cleaning facility on the former Naval Installation. The Navy conducted environmental investigations at Site 24 and has evaluated technologies and options to clean up remaining chemicals at the Site.

This Proposed Plan/Draft RAP presents remedial (cleanup) alternatives developed in the 2014 Site 24 **Focused Feasibility Study Addendum (FFSA)** and identifies the Navy's preferred alternative. After all information submitted during the public comment period on the Proposed Plan/Draft RAP has been reviewed and considered, the Navy, in consultation with the regulatory agencies: U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the San Francisco Bay Regional Water Quality Control Board (Water Board), will select a remedial alternative for the Site. This will be documented in the **Record of Decision/Final Remedial Action Plan (ROD/Final RAP)**. The Navy may modify the preferred alternative or select another remedial alternative presented in this Proposed Plan/Draft RAP based on new information or public comments. The public is therefore encouraged to review and comment on all of the alternatives presented in this Proposed Plan/Draft RAP. A final decision will not be made until all comments submitted during the review period are considered. See instructions on how to provide comments in the text box on page 15.

This Proposed Plan/Draft RAP summarizes the remedial alternatives the Navy evaluated. It also explains the basis for selecting the preferred alternative to address chemical and potential radiological contamination at Site 24. The Navy recommends the alternative that is summarized below:

- Remove and dispose soil in areas that may be contaminating **groundwater** or **soil gas**.
- In-situ groundwater **treatment** to breakdown contaminants to non-toxic by-products.
- Conduct groundwater and soil gas monitoring.
- Investigate and characterize **radiologically impacted sites** within Site 24, and decontaminate the sites if necessary.
- Use **institutional controls (IC)** to restrict certain land uses as a contingency measure should the **cleanup goals** not be met prior to redevelopment.

Public comments on this Proposed Plan/Draft RAP will be accepted from Monday, February 23 through Monday, March 24, 2015. Public comments can be

CONTENTS

— NOTICE —

Public Comment Period
February 23 to March 24, 2015

Public Meeting
March 11, 2015

Casa de la Vista, 191 Avenue of the Palms
Treasure Island
6:30 p.m. to 8:00 p.m.

[1] Words in **bold** type are defined in the glossary on page 15.

submitted via mail, fax, or e-mail throughout the comment period. A public meeting will be held from 6:30 p.m. to 8:00 p.m. on Wednesday, March 11, 2015, at the Casa de la Vista, 191 Avenue of the Palms on Treasure Island. Members of the public may submit written and oral comments on this Proposed Plan/Draft RAP at the public meeting. Written comments can be provided any time during the comment period but must be received no later than Monday, March 24, 2015. Please refer to page 15 for further information on how to provide comments.

THE CERCLA PROCESS

The Navy is issuing this Proposed Plan/Draft RAP as part of its public participation responsibilities under Section 117(a) of the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** and Section 300.430(f)(2) of the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP)**.

This Proposed Plan/Draft RAP highlights key information and conclusions presented in the 2014 Site 24 FFSA, which is the most recent and definitive study of the Site. The FFSA supersedes a prior focused feasibility study that was part of the 2008 **Remedial Investigation/ Focused Feasibility Study (RI/FFS)**. The flowchart in Figure 2 illustrates the status of Site 24 in the CERCLA Process.

The 2008 RI/FFS, the 2014 FFSA, the 2006 **Historical Radiological Assessment (HRA)** and 2014 **HRA Supplemental Technical Memorandum (HRASTM)** are critical studies that lay the groundwork to address chemical and potential radiological contamination. The Navy received regulatory agency and public input during development of the 2008 RI/FFS and the 2014 FFSA. This input helped identify the remedial alternatives for site cleanup and aided in selection of the preferred remedial alternative combination presented in this Proposed Plan/Draft RAP.

An historic timeline presented in Figure 3 on page 3 lists the environmental investigations conducted from 1988 to 2014 at Site 24, or investigations that have included Site 24. The Navy has conducted numerous environmental investigations at Treasure Island since the mid-1980s. These investigations have identified contamination that poses a potential **risk** to human health. The Navy performed a three-phase treatability study from 2001 to 2012 that greatly reduced contaminant concentrations at Site 24, but the Navy must now address remaining contaminants with a final remedial action. The Navy's preferred chemical and radiological remedial alternatives for the final remedial action are presented in this Proposed Plan/Draft RAP.

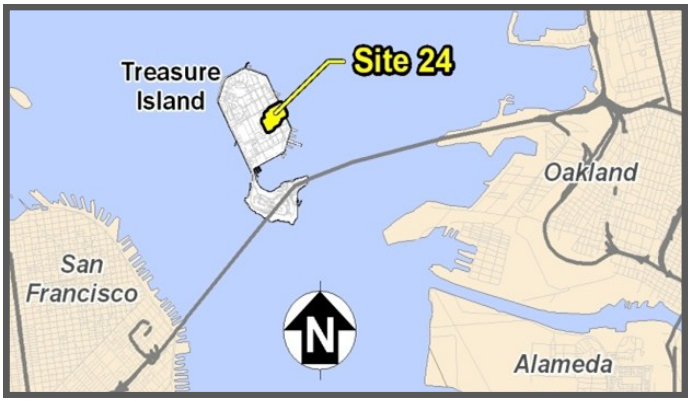

Figure 1. Location of Former Naval Station Treasure Island and Site 24

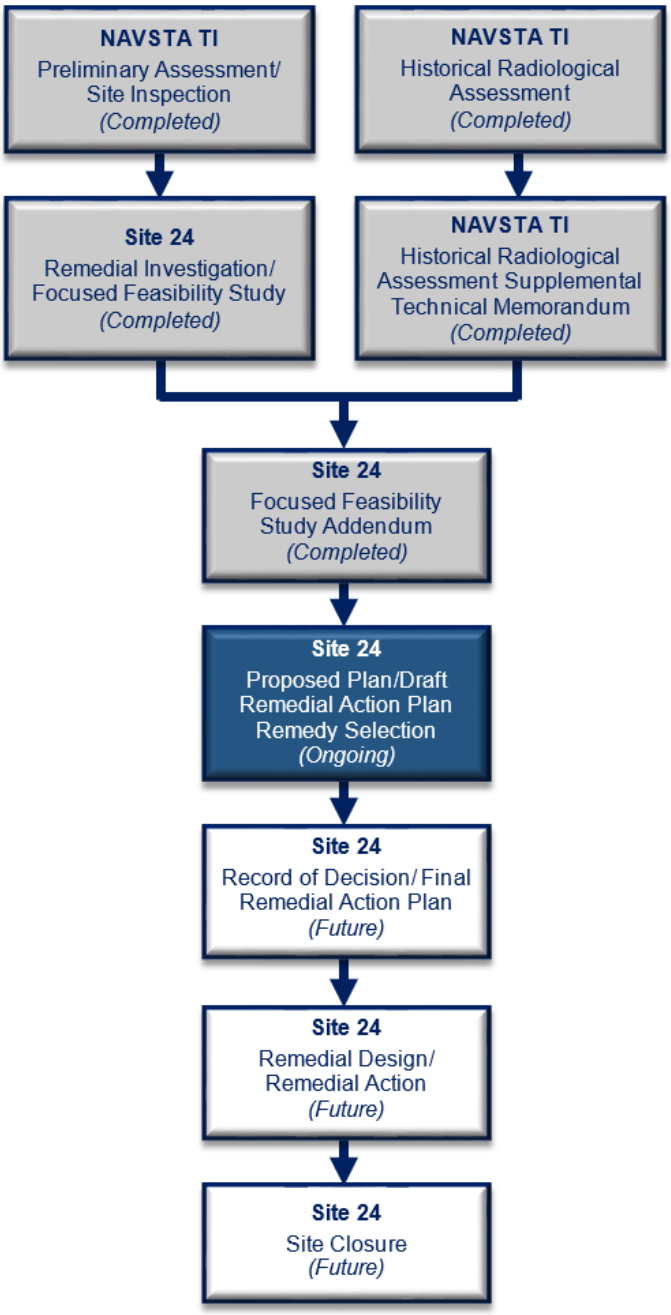

Figure 2. Current Phase in CERCLA and California Health and Safety Code Process

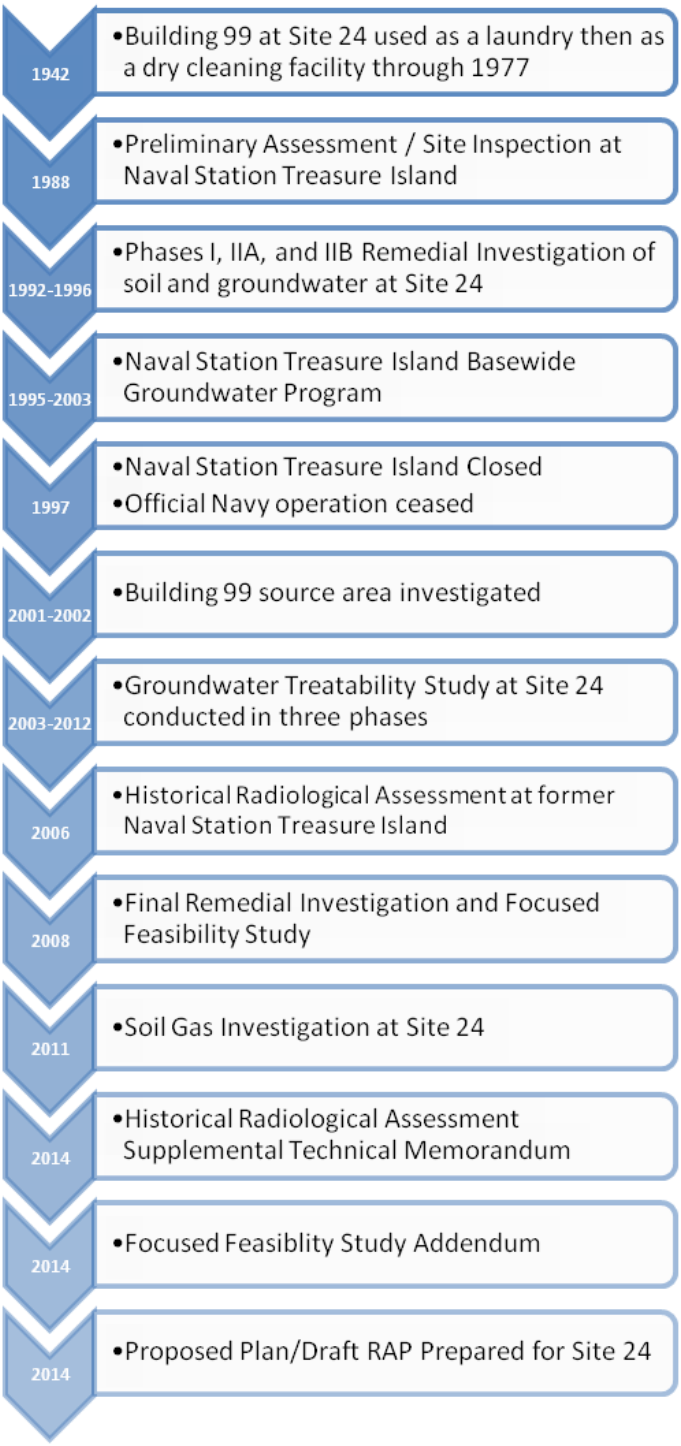

Figure 3. Site 24 Timeline

After the public comment period, the ROD/Final RAP will document the selected remedial alternative, identify the **remedial action objectives (RAO),** cleanup goals, and outline performance standards that must be met to complete the remedial action. After finalizing the ROD/ Final RAP, the next steps in the CERCLA process include the **remedial design (RD)** and remedial action which involve planning and implementing the site cleanup remedy. The 2014 FFSA and other Site 24 documents are available for public review at the locations listed on page 18.

SITE BACKGROUND

Treasure Island is located in the San Francisco Bay in between mainland San Francisco and Oakland (see Figure 1 on page 2). This Proposed Plan/Draft RAP applies to Site 24. Site 24 is located along the southeastern edge of Treasure Island and occupies 20.4 acres. Site 24 contains 10 existing buildings, most of which are unused.

Historically, Site 24 was used to support various Naval operations. Parts of Building 99 were used as a dry cleaning facility from 1942 through 1977. Dry cleaning facilities typically used chlorinated solvents that, when spilled or disposed of improperly, contaminate soil and groundwater. Other relevant historical uses include a Supply Department Salvage Yard (Lot 69), where hazardous and non-hazardous materials were temporarily stored prior to disposal, and a Radiation Detection, Indication, and Computation School (Buildings 342, 343, and 344) where radioactive materials were used in training naval personnel. These Site features are shown on Figure 4 on page 4.

NATURE AND EXTENT OF CONTAMINATION

The nature and extent of contamination at Site 24 is based on more than two decades of environmental investigations, groundwater monitoring, and groundwater treatability study actions at Treasure Island and Site 24 (see Figure 3). **Volatile organic compounds (VOC)**, specifically **tetrachloroethene (PCE)**, **trichloroethene (TCE)**, **dichloroethene (DCE),** and **vinyl chloride (VC)** were identified in soil, groundwater, and soil gas at and in the vicinity of the dry cleaning facility within Building 99. Dry cleaning chemicals were likely spilled or leaked into subsurface soil, migrated downward into groundwater, and volatilized into soil gas.

PCE is a commonly used dry cleaning solvent. Over time, bacteria break down PCE in the environment, producing the TCE, DCE, and VC. These chemicals are sometimes collectively referred to as **chlorinated ethenes** and are reported as a sum of their individual concentrations. With time and under favorable conditions, chlorinated ethenes can be broken down into non-toxic compounds.

In 2002, chlorinated ethenes were found in groundwater extending from Building 99 to the San Francisco Bay (see Figure 5 on page 5). The Navy conducted a multi-phase treatability study at Site 24 from 2003 through 2012. The treatability study involved injecting a type of **dechlorinating bacteria** and nutrient sources (such as vegetable oil) for microorganisms into the groundwater. The addition of the nutrient source allows the dechlorinating bacteria to grow, breaking down chlorinated ethenes to non-toxic **ethene** in the process. This is a common practice for treating groundwater, referred to as **in-situ bioremediation (ISB)**. The study showed that the contaminants could be broken down to non-toxic compounds.

After the completion of the study, the extent of chlorinated ethenes was reduced significantly, as shown in Figure 6 on page 5. Now, chlorinated ethenes in groundwater are limited to several smaller plumes and mainly consist of DCE and VC. Bacteria cannot break down DCE and VC as easily as bacteria can break down PCE and TCE.

VOCs in groundwater and soil can volatilize into soil gas and be transported to air inside buildings. Therefore, the extent of contamination can be measured by analyzing groundwater or soil gas samples. Preliminary soil gas samples collected in 2011 showed that chlorinated ethenes were present in low concentrations. In 2015, the Navy will be collecting comprehensive soil gas data at Site 24 to aid in designing the remedial action to clean up the remaining chlorinated ethenes.

RADIOLOGICAL SITES WITHIN SITE 24

The Navy completed a comprehensive review of the historical use of radioactive materials during Navy operations at the former NAVSTA Treasure Island, which are presented in the HRA and the HRASTM. The HRA and HRASTM identified "radiologically impacted" sites that are within the Site 24 boundary. These sites, shown on Figure 4, are:

- Former Supply Department Salvage Yard (Lot 69);
- Building 342, and associated yard area and sanitary sewer line;
- Building 343; and
- Building 344.

There is no confirmed radiological contamination at these sites; their "radiologically impacted" designation means that the Navy, in consultation with the State of California regulators, concluded that the area requires further investigation. Buildings 343 and 344 were investigated in 2008 and were confirmed to be acceptable for unrestricted reuse by the California Department of Public Health and DTSC. The Navy is currently planning an investigation of Lot 69 and Building 342 for the summer of 2015.

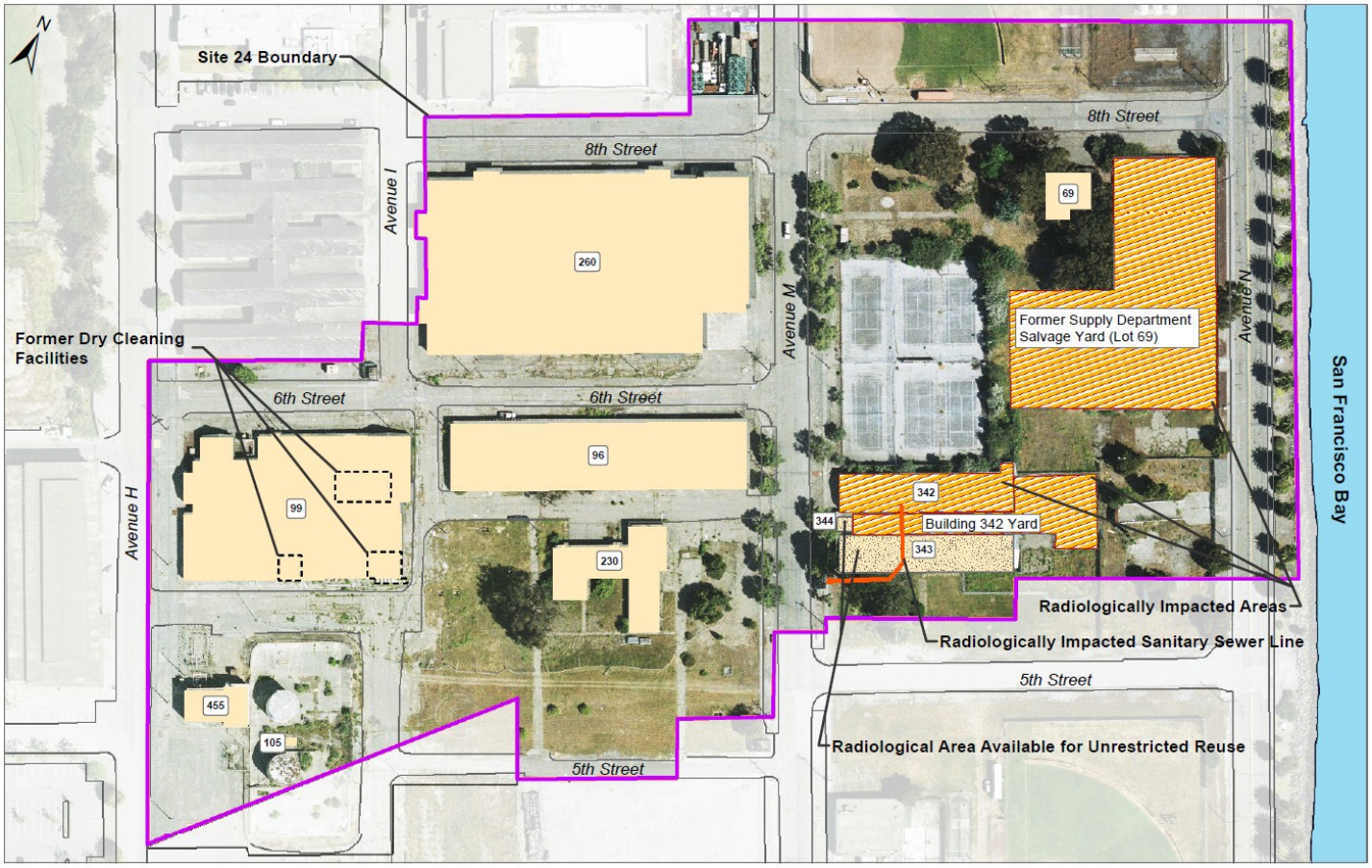

Figure 4. Site 24 Features

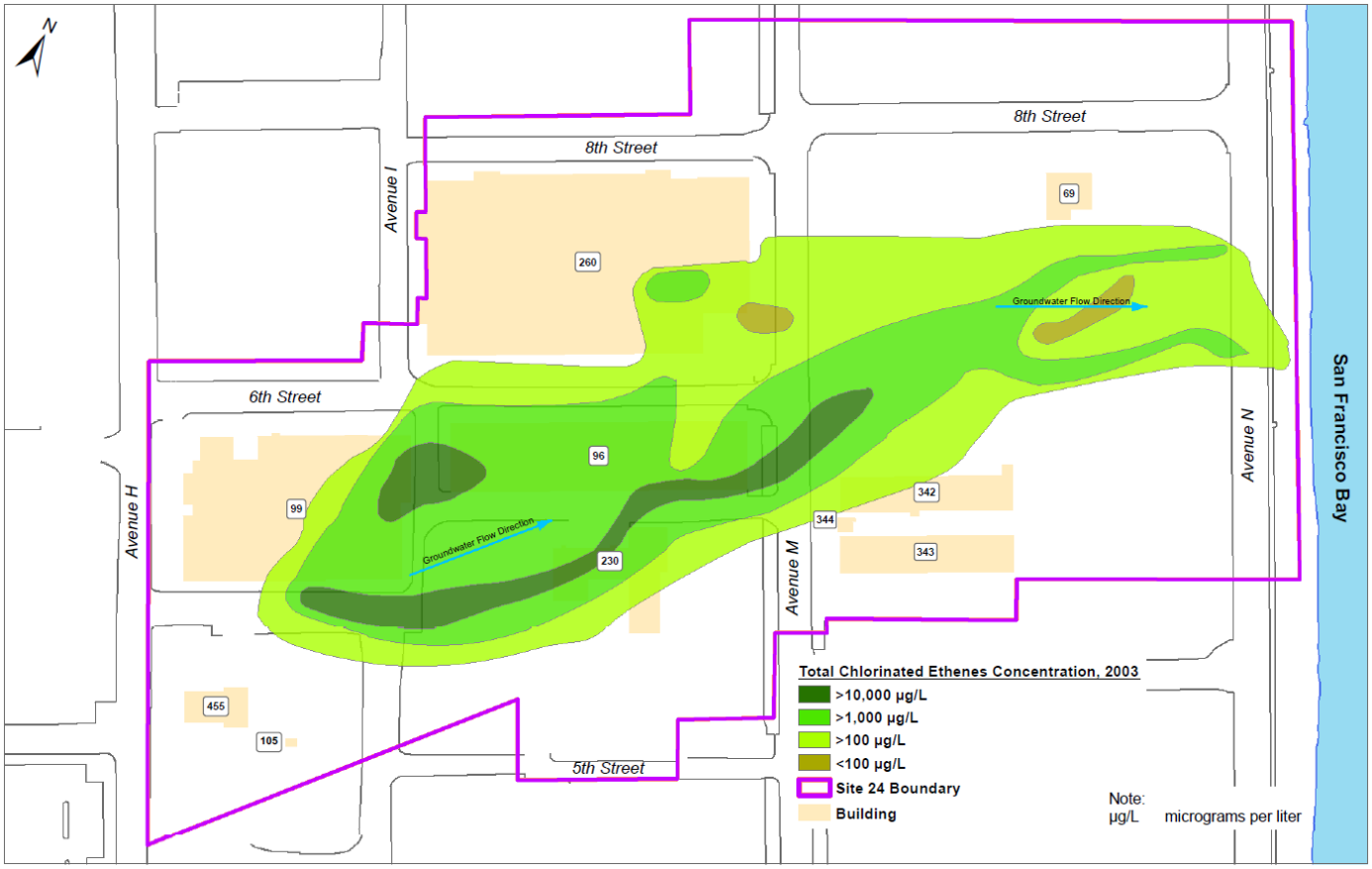

Figure 5. Pre-Treatability Study Chlorinated Ethenes Groundwater Plume (2003)

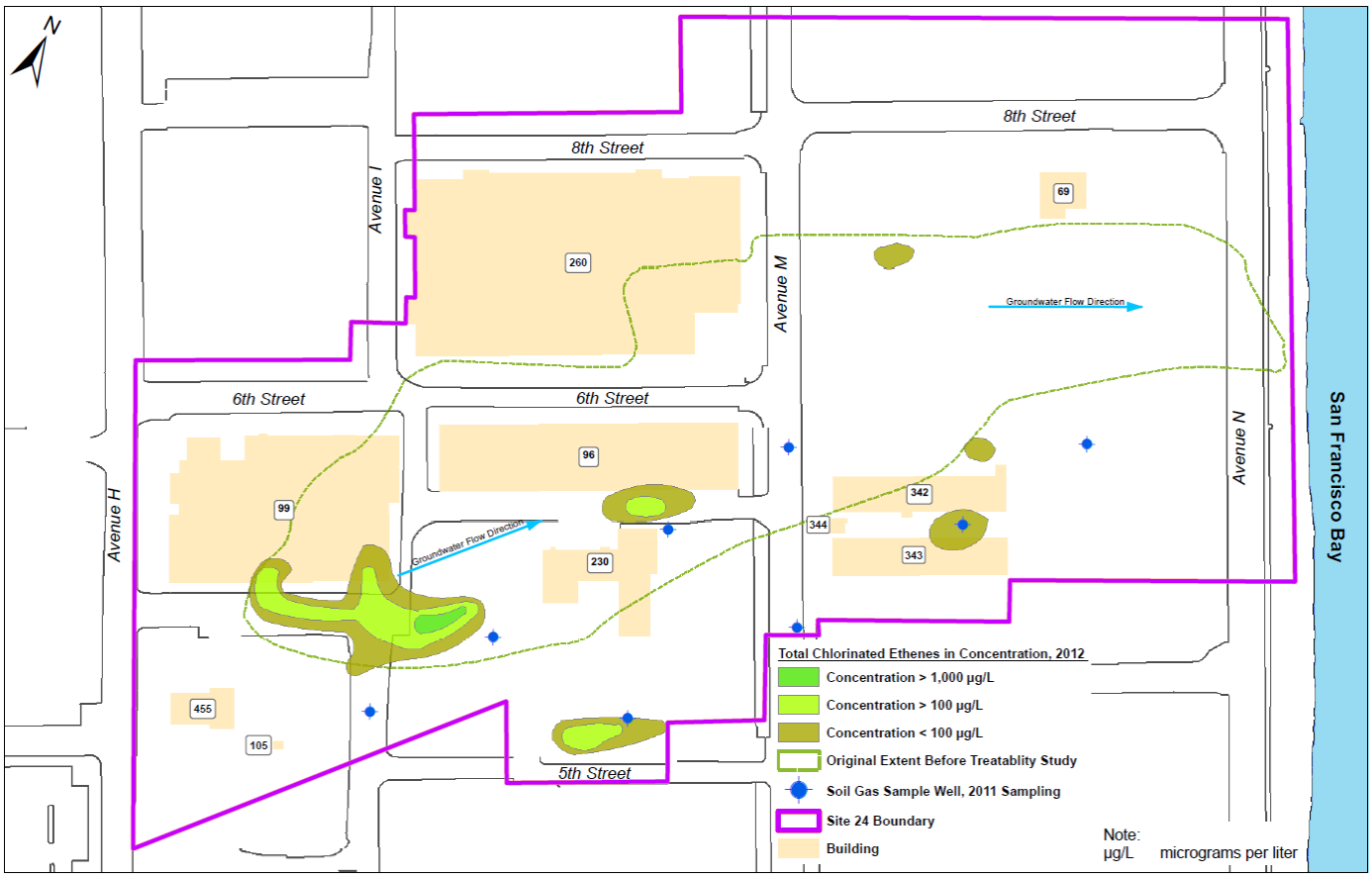

Figure 6. Post-Treatability Study Chlorinated Ethenes Groundwater Plume (2012)

SUMMARY OF SITE RISKS

Risk is the likelihood or probability that a hazardous chemical, when released to the environment, will cause effects (such as cancer or other illnesses) on exposed humans or wildlife. The most common ways that people may be exposed to contamination, such as breathing dust containing contaminants from soil, are referred to as **exposure pathways**. The Navy evaluated the risk to humans and wildlife from exposure to contaminated soil, groundwater, and soil gas. All hazardous chemicals identified at Site 24, regardless of their concentration, were included in the risk calculations. Radioisotopes could not be evaluated in the risk assessments because, to date, no radiological contamination has been found at Site 24. The risk assessment results are summarized below.

Human Health Risk Assessment

The Navy considered the various ways that humans might be exposed to chemicals, the possible concentrations of chemicals that could be encountered during exposure, and the potential frequency and duration of exposure. Table 1 includes exposure pathways and human **receptors** (e.g., construction worker, resident, etc.) considered in the baseline **human health risk assessment (HHRA)**. The HHRA used concentrations of VOCs at Site 24 before the treatability study was implemented which reduced the VOC concentrations.

Baseline HHRAs follow an established process recognized by the EPA, DTSC, and other regulatory agencies. This process includes: evaluating soil, soil gas, and groundwater data to quantify concentrations of chemicals in these media; determining exposure scenarios and exposure pathways to these chemicals; classifying their toxicity; and estimating intake rates. Exposure to toxic chemicals may cause cancer (**cancer risk**) or may have other adverse health effects (**noncancer hazard**).

Cancer risks are calculated in terms of the number of cancer cases that may result within a given population. Cancer risk is the estimated probability that a person will develop cancer from exposure to site contaminants and is generally expressed as a probability. For example, a 1 in 10,000 chance is a risk that for every 10,000 people, one additional cancer case may occur as a result of exposure to site contaminants. EPA considers risks less than 1 in 1,000,000 to be acceptable. Risks greater than 1 in 10,000 are generally not acceptable and require remedial action.

Noncancer risks assessed in HHRAs are expressed as a number called the **hazard index (HI)**. An HI value of 1 or less indicates that adverse noncancer human health effects are not expected to occur. An HI greater than 1 indicates that further evaluation or remedial action is required.

Table 1 provides a summary of the risk calculations in the Site 24 HHRA. Based on the risk assessment results for soil, groundwater and soil gas, cancer risks greater than 1 in 1,000,000 and noncancer risks with an HI greater than 1 were identified for potential future residents, commercial workers, and construction workers. The calculated risks resulted from potential exposure to VOCs (specifically chlorinated ethenes described above) by either inhalation of contaminants in vapor or dermal contact with contaminants in groundwater.

Table 1. Cancer and Noncancer Risks

Receptor[1]	Cancer Risk	Hazard Index
Current Receptor		
Current Commercial/Industrial Worker – Direct Exposure to Unpaved Soil (0 to 2 feet bgs) and Indoor Air Vapor Intrusion[2]	4 in 10,000,000	0.05
Future Receptor		
Future Commercial/Industrial Worker – Direct Exposure to Soil (0 to 2 feet bgs, 0 feet bgs to groundwater) and Indoor Air Vapor Intrusion[2]	9 in 100,000	1
Future Construction Worker – Direct Exposure to Soil (0 feet bgs to groundwater), Groundwater, and Trench Vapors[3]	3 in 10,000	30
Future Resident – Direct Exposure to Soil (0 to 2 feet bgs, 0 feet bgs to groundwater) and Indoor Air Vapor Intrusion[2]	9 in 10,000	20

Notes:

Summary of human health risk assessment (HHRA) conducted during the Site 24 2008 RI/FFS using pre-treatability study data.

1 Receptors include those expected under reasonably anticipated future land use consistent with EPA's land use directive.
2 Indoor air vapor intrusion from groundwater and site-wide combined surface and subsurface soil (0 feet bgs to groundwater)
3 Vapors from VOCs in groundwater under a trench exposure scenario.
bgs Below ground surface
EPA U.S. Environmental Protection Agency
RI/FFS Remedial Investigation/Focused Feasibility Study
VOC Volatile Organic Compounds

Ecological Risk Assessment

The Navy performed an **Ecological Risk Assessment (ERA)** to evaluate risks for wildlife. The ERA was done in two stages. A screening level ERA was completed for several sites at Treasure Island, including Site 24, which concluded that the industrial setting and managed habitat were inadequate to support healthy terrestrial wildlife populations.

A subsequent baseline ERA evaluated transport of groundwater contamination at Site 24 to determine if contaminants could reach the San Francisco Bay and potentially harm aquatic species. The baseline ERA determined that chemicals in groundwater at Site 24 do not pose an unacceptable risk to benthic invertebrates or other aquatic species offshore.

REMEDIAL ACTION OBJECTIVES AND CLEANUP GOALS

As part of the 2014 FFSA, RAOs were developed to identify and screen remedial alternatives that protect human health and the environment, and are in alignment with reasonably anticipated land use consistent with the EPA's land use directive for CERCLA remedy selection. RAOs are media-specific (such as soil or groundwater) goals for protecting human health and the environment, and provide the foundation for developing remedial alternatives. The RAOs are intended to be protective of future residents, commercial workers, and construction workers. RAOs were developed for soil gas and groundwater **chemicals of concern (COC)**, and for **radioisotopes of concern (ROC)** in soil and structures. The RAOs are as follows:

- Prevent or minimize exposure of future residents and future commercial workers to COCs in soil gas at concentrations that would pose an unacceptable risk via indoor inhalation of vapors.
- Prevent or minimize exposure of construction workers to COCs in groundwater at concentrations that would pose an unacceptable risk via dermal exposure or inhalation of trench vapors.
- Prevent or minimize potential for volatile COCs in soil source zones to migrate at concentrations that pose an unacceptable risk to future residents and future commercial workers via indoor inhalation of vapors.
- If radiological contamination is present, prevent human exposure to ROCs at radioactivity levels that exceed **free release** criteria for all potentially complete exposure pathways, including external exposure to radiation, and ingestion and inhalation of soil at radiologically impacted sites.

The RAOs are used to develop cleanup goals and other criteria for receptors exposed to contaminants. Table 2 presents a complete list of COCs, ROCs, and cleanup goals developed for Site 24. These cleanup goals will be

Table 2. Site 24 Cleanup Goals

Receptor	COC/ROC	Soil Gas Cleanup Goals ($\mu g/m^3$)	Groundwater Cleanup Goals (µg/L)	Radioisotope Surface Release Criterion (dpm/100 cm^2)	Radioisotope Soil and Sediment Release Criterion (pCi/g)
Future Land Use					
Commercial/Industrial Worker	*cis*-1,2-DCE	209,217	--	--	--
	PCE	2,862	--	--	--
	TCE	3,970	--	--	--
	VC	188	--	--	--
Construction Worker	*cis*-1,2-DCE	--	230	--	--
	PCE	--	210	--	--
	TCE	--	42	--	--
	VC	--	15	--	--
Resident (Adult and Child)	*cis*-1,2-DCE	46,408	--	--	--
	PCE	533	--	--	--
	TCE	615	--	--	--
	VC	31	--	--	--
All	Ra-226	--	--	100	1.0 above background
All	Cs-137	--	--	5,000	NA

Notes:

µg/L	Microgram per liter	Cs	Cesium	pCi/g	Picocurie per gram
$\mu g/m^3$	Microgram per cubic meter	DCE	Dichloroethene	Ra	Radium
--	Not applicable	dpm	Disintegrations per minute	ROC	Radioisotope of concern
cm^2	Square centimeter	NA	Not Available	TCE	Trichloroethene
COC	Chemical of concern	PCE	Tetrachloroethene	VC	Vinyl chloride

used to measure the achievement of RAOs during the remedial action at Site 24. Once the RAOs are achieved, the remedial action will be considered complete, and a Remedial Action Completion Report will be presented to the regulatory agencies for concurrence.

SUMMARY OF REMEDIAL ALTERNATIVES

The Navy, in consultation with regulatory agencies, developed a range of alternatives in the FFSA to address contamination at Site 24. The alternatives included a combination of various remediation strategies, including the following:

- Excavation: the removal of soil containing a source of contamination.
- **Engineering controls (EC)**: a variety of engineered and constructed barriers to contain or prevent exposure to contamination.
- IC: legal and administrative documents and processes put in place to limit exposure to contamination.
- **In-situ chemical reduction (ISCR)** using **zero-valent iron (ZVI)**: the injection of ZVI in groundwater, which stimulates chemical reactions that can degrade chlorinated ethenes to non-toxic products.
- ISB: adding amendments, such as nutrients, and/or dechlorinating bacteria into groundwater to promote the breakdown of contaminants to non-toxic compounds, as was done in the treatability study.
- **Air sparging (AS)**: involves the injection of air into the groundwater and soil to volatilize contaminants, and collect the contaminants for treatment and disposal.
- **Soil vapor extraction (SVE)**: actively extracts vapors through wells using a vacuum.

Each of the chemical and radiological remedial alternatives that are considered in the FFSA and their estimated costs are described in Table 3 on page 9.

Remedial Alternatives for COCs

The following eight chemical remedial alternatives, including the preferred alternative shown in bold underline, were developed in the FFSA to address potentially unacceptable risk to human receptors:

- Alternative 1: No Action
- Alternative 2: Vapor Barriers, ICs, and Monitoring
- Alternative 3: Clay Cap at Source Area; ICs; ZVI/ ISB Treatment of Groundwater; and Monitoring
- **Alternative 4: Soil Excavation at Source Area; ZVI/ISB Treatment of Groundwater; and Monitoring**
- Alternative 5: SVE at Source Area; ZVI/ISB Treatment of Groundwater; and Monitoring
- Alternative 6: SVE at Source Area; AS/SVE Treatment of Groundwater; and Monitoring
- Alternative 7: Soil Excavation at Source Area; ZVI/ ISB Treatment of Source Area Groundwater; AS/ SVE Treatment of Downgradient Groundwater; and Monitoring
- Alternative 8: Soil Excavation at Source Area; ISB Treatment of Groundwater; and Monitoring

With the exception of the no action alternative, all of the alternatives will achieve RAOs.

Remedial Alternatives for Potential Radiological Contamination

The Navy's intent is to achieve unrestricted release of radiologically impacted sites at Site 24 with no radiological related notices, restriction, or covenants required. Because risk potentially posed by radioisotopes is unknown at this time, the Navy presents only two radiological remedial alternatives, with the preferred alternative shown in bold underline:

- Alternative R-1: No Action
- **Alternative R-2: Survey, Decontamination, Disposal, and Release**

Table 3. Summary of Remedial Alternatives

Remedial Alternative (Number and Description	Cost[1]	Components of Remedial Alternatives
Chemical		
1 No Action	$0	No actions or costs. This alternative is required by CERCLA as a baseline for comparison with other alternatives. Under this alternative, no further remediation would be performed.
2 Vapor Barriers, ICs, and Monitoring	$1.143M	Alternative 2 uses a combination of ECs and ICs to prevent vapor intrusion exposure to chemicals at Site 24 in the event that occupied buildings are constructed on site. ICs would require that all future construction within 100 feet of a VOC source area would include vapor intrusion mitigation appropriate to the level of soil gas contamination measured at the time of construction. Alternative 2 includes groundwater and soil gas monitoring to evaluate the need for vapor intrusion mitigation and any operational soil gas monitoring that might be needed to assess the protectiveness of mitigation systems.
3 Clay Cap at Source Area, ICs, ZVI/ISB Treatment of Groundwater, and Monitoring	$1.755M	Alternative 3 includes installation of a clay cap across a portion of the footprint of Building 99 and ICs on the property to restrict site activities that would breach the cap integrity. Alternative 3 includes VOC plume treatment by applying a ZVI product to promote ISCR and enhancing ISB by applying a nutrient substrate for dechlorinating bacteria. Alternative 3 also includes groundwater and soil gas monitoring.
4 Soil Excavation at Source Area, ZVI/ISB Treatment of Groundwater, and Monitoring	$1.992M	Alternative 4 includes the excavation of soil and offsite disposal, in-situ ZVI/ISB treatment of remaining VOC groundwater plumes, and groundwater and soil gas monitoring. The soil beneath and adjacent to Building 99 would be excavated based on the potential for soil being an ongoing source of PCE and TCE to groundwater.
5 SVE at Source Area, ZVI/ISB Treatment of Groundwater, and Monitoring	$1.982M	Alternative 5 includes in-situ SVE treatment of unsaturated soil in the source area, in-situ ZVI/ISB treatment of remaining VOC groundwater plumes, and groundwater and soil gas monitoring. SVE would treat unsaturated soil beneath and adjacent to Building 99 based on the potential for soil being an ongoing source of PCE to groundwater.
6 SVE at Source Area, AS/SVE Treatment of Groundwater, and Monitoring	$3.957M	Alternative 6 includes in-situ SVE treatment of unsaturated soil in the source area, in-situ AS/SVE treatment of remaining groundwater plumes, and groundwater and soil gas monitoring. SVE would treat unsaturated soil located beneath and adjacent to Building 99 based on the potential for soil being an ongoing source of PCE to groundwater. In-situ groundwater treatment would include a combination of AS and SVE to actively extract VOCs.
7 Soil Excavation at Source Area, ZVI/ISB Treatment of Source Area Groundwater, AS/SVE Treatment of Downgradient Groundwater, and Monitoring	$3.894M	Alternative 7 includes the excavation of source area soil, in-situ treatment of remaining VOC groundwater plumes, and groundwater and soil gas monitoring. The source area soil beneath and adjacent to Building 99 would be excavated based on the potential for soil being an ongoing source of PCE to groundwater. In-situ groundwater treatment would include: (1) treatment of the source area plume by in-situ ZVI/ISB; and (2) treatment of the downgradient VOC groundwater plumes with AS/SVE.
8 Soil Excavation at Source Area, ISB Treatment of Groundwater, and Monitoring	$1.518M	Alternative 8 includes the excavation of soil, in-situ ISB treatment of remaining VOC groundwater plumes, and groundwater and soil gas monitoring. In-situ groundwater treatment would only include enhancement of ISB by applying a nutrient substrate for dechlorinating bacteria.
Radiological		
R-1	$0	No actions or costs. This alternative is required by CERCLA as a baseline for comparison with other alternatives. Under this alternative, no remedial activities would be undertaken.
R-2 ICs and Groundwater Monitoring	$0.602M[2]	Alternative R-2 involves conducting scoping/characterization surveys at each of the radiologically impacted sites at Site 24: Building 342, Building 342 sanitary sewer line, Building 342 yard area, and Lot 69. If the scoping/characterization surveys identify ROC contamination, site decontamination and/or, contaminant excavation and disposal would be implemented, followed by final status surveys to meet unrestricted release criteria.

Notes: The preferred alternatives are indicated by blue shading.

1 Costs are in millions of dollars.

2 Cost includes only scoping/characterization surveys due to the speculative nature of decontamination, excavation, and disposal components.

AS	Air sparging	ISCR	In-situ chemical reduction	SVE	Soil Vapor Extraction
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ISB	In-situ bioremediation	TCE	Trichloroethene
		M	Million	VOC	Volatile organic compound
EC	Engineering Control	PCE	Tetrachloroethene	ZVI	Zero-valent iron
IC	Institutional Control				

EVALUATION OF REMEDIAL ALTERNATIVES

The chemical and radiological remedial alternatives represent a range of remediation strategies that fulfill the RAOs. The alternatives were evaluated using the criteria specified by federal regulations in the NCP criteria listed in Figure 7. The eight chemical remedial alternatives are evaluated against the first seven NCP criteria in the following remedial alternatives comparison analysis and summarized in Table 4 on page 11. The two radiological remedial alternatives are evaluated in the discussion below and summarized in Table 5 on page 11.

The last two NCP criteria, state regulatory acceptance and public acceptance, will be addressed through regulatory agency review and the public comment period. The Navy will make the final decision on the remedy for Site 24 after regulatory agency and public input has been received and evaluated.

1. Overall Protection of Human Health and the Environment

The no action Alternative 1 and radiological Alternative R-1 do not address any risks at the Site and do not provide protection to human health or the environment. The remaining alternatives (Alternatives 2, 3, 4, 5, 6, 7, 8, and R-2) protect human health and the environment under reasonably anticipated future land uses at Site 24.

2. Compliance with Applicable or Relevant and Appropriate Requirements

Applicable or relevant and appropriate requirements (ARAR) are federal or more stringent state environmental standards, requirements, criteria, or limitations that need to be attained by final remedial actions. There are no ARARs associated with chemical Alternative 1 or radiological Alternative R-1. The remaining chemical alternatives (Alternatives 2, 3, 4, 5, 6, 7, and 8) and radiological Alternative R-2 comply with ARARs.

3. Long-Term Effectiveness and Permanence

Alternative 1 is not acceptable because it does not provide any degree of long-term effectiveness. Similarly, radiological Alternative R-1 does not provide long-term effectiveness and is not acceptable. Alternatives 2 through 8 would provide long-term effectiveness in meeting the RAOs. Alternative 2 is rated very effective because the exposure pathway would be eliminated, but adequacy and reliability depend on proper installation of vapor barriers and **long-term monitoring (LTM)**. Alternative 3 is rated as moderately effective because risk is reduced by capping the source area and cleanup of groundwater, but ICs are needed to ensure integrity of the cap. Alternatives 4, 7, and 8 are rated as highly effective because risk is reduced by cleanup, with no ICs required. Alternatives 5 and 6 are rated as very effective because risk is reduced by cleanup, with no ICs required, but the effectiveness of SVE below Building 99 may be limited. Radiological Alternative R-2 is highly effective because ROCs would be removed and free release criteria would be achieved.

4. Reduction of Toxicity, Mobility, and Volume

Alternatives 1 and 2 are rated as not effective because they do not reduce mobility, toxicity, or volume through treatment. Alternative 3 is rated moderately effective because it would reduce the toxicity and volume of chemicals through treatment, and mobility would be addressed by a clay cap. Alternatives 4, 7, and 8 are rated very effective because they would reduce the toxicity and volume of COCs through treatment, and mobility would be addressed by soil excavation. Alternatives 5 and 6 are rated highly effective because they would reduce the toxicity, mobility, and volume through treatment. Both radiological Alternatives R-1 and R-2 are not effective since neither involves reducing toxicity, mobility, or volume of ROCs through treatment.

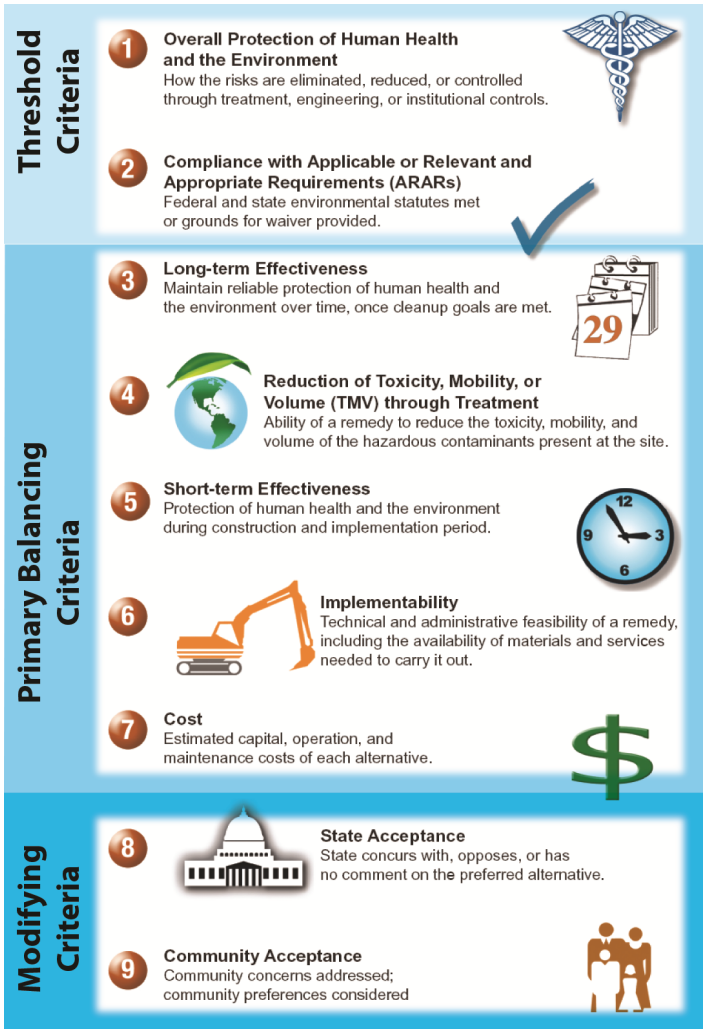

Figure 7. NCP Comparison Criteria

Table 4. Chemical Remedial Alternatives Comparative Analysis

Alternative Description	Alternative 1 No Action	Alternative 2 Vapor Barriers, ICs, Monitoring	Alternative 3 Clay Cap, ICs, ZVI/ISB, Monitoring	Alternative 4 Excavation, ZVI/ISB, Monitoring	Alternative 5 Soil SVE, ZVI/ISB, Monitoring	Alternative 6 Soil SVE, AS/SVE, Monitoring	Alternative 7 Excavation, ZVI/ISB, AS/SVE, Monitoring	Alternative 8 Excavation, ISB, Monitoring
Overall Protectiveness								
ARARs Compliance								
Long-term Effectiveness								
Reduction of T, M, V								
Short-term Effectiveness								
Implementability								
Cost	$0	$1,143,000	$1,755,000	$1,992,000	$1,982,000	$3,957,000	$3,894,000	$1,518,000
Rank[1]	8	3	5	1	4	7	6	2

Key

 Not effective

 Slightly effective

 Moderately effective

 Very effective

 Highly effective

1. Rank is the relative order of alternatives based on overall effectiveness for all criteria.

AS Air sparge

ARAR Applicable or relevant and appropriate requirements

IC Institutional control

ISB In situ bioremediation

SVE Soil vapor extraction

T, M, V Toxicity, mobility, or volume

ZVI Zero-valent iron

Table 5. Radiological Remedial Alternatives Comparative Analysis

Alternative Description	Alternative R-1 No Action	Alternative R-2 Survey, Decontamination, Disposal, and Release
Overall Protectiveness		
ARARs Compliance		
Long-term Effectiveness		
Reduction of T, M, V		
Short-term Effectiveness		
Implementability		
Cost	$0	$602,000
Rank[1]	2	1

Key

 Not effective

 Slightly effective

 Moderately effective

 Very effective

 Highly effective

1. Rank is the relative order of alternatives based on overall effectiveness for all criteria.

ARAR Applicable or relevant and appropriate requirements

T, M, V Toxicity, mobility, or volume

5. Short-Term Effectiveness

Alternative 1 (as well as radiological Alternative R-1) is rated highly effective, as there would be no short-term risk and no **environmental footprint**. Alternative 2 is rated highly effective, as there would be no risk to the community and minimal risk to construction workers from installation of vapor barriers, minimal risks to the community and workers from periodic monitoring, and the lowest environmental footprint. Monitoring would be conducted for approximately 30 years. Alternative 3 is rated very effective, as there would be no risk to the community and minimal risk to workers during treatment system installation and capping. The treatment system would be installed in six months, and monitoring would be conducted for five years or less. Alternative 4 is rated very effective, as there would be no risk to the community and moderate risk to workers during treatment system installation, soil excavation, and monitoring. The treatment system would be installed in six months, and monitoring would be conducted for five years or less. Alternative 5 is rated moderately effective, as there would be no risk to the community and moderate risk to workers during treatment system installation and monitoring. The treatment system would be installed in six to nine months, and monitoring would be conducted for six years. Alternative 6 is rated slightly effective, as there would be no risk to the community and moderate risk to workers during treatment system installation and monitoring. The treatment system would be installed in six to nine months, and monitoring would be conducted for nine years. Alternative 7 is rated slightly effective, as there would be no risk to the community and moderate risk to workers during treatment system installation, soil excavation, and monitoring. The treatment system would be installed in six to nine months, and monitoring would be conducted for nine years. Alternative 8 is rated very effective, as there would be no risk to the community and moderate risk to workers during treatment system installation, soil excavation, and monitoring. The treatment system would be installed in three months, and monitoring would be conducted in five years or less. Radiological Alternative R-2 is highly effective, as there would be no risk to the community and moderate risk to workers during survey, decontamination, and disposal.

6. Implementability

Alternative 1 is rated implementable only because it does not involve any construction or monitoring, and therefore is the easiest to implement. Radiological Alternative R-1 is rated implementable for the same reason. Alternative 2 is highly effective because installation of vapor barriers and vapor collection systems would be readily implemented as a component of new building construction and would not be a hindrance to construction. Alternatives 4 and 8 are very implementable, since the soil remediation component for each alternative is straight forward and easily accomplished. The groundwater remediation component for these two alternatives is similar in terms of implementability. Alternatives 3, 5, and 7 are moderately effective because they require the most infrastructure and longer time to achieve cleanup goals. Alternative 6 is rated below these alternatives as slightly effective because it could take even longer to achieve cleanup goals, since ZVI/ISB groundwater treatment is not included. Radiological Alternative R-2 is moderately effective because decontamination and disposal of contamination from radiologically impacted sites would require special handling and disposal.

7. Cost

No costs are associated with Alternative 1 or radiological Alternative R-1. Alternative 2 would incur the second lowest cost because it would only include vapor barriers, ICs, and monitoring. Alternatives 3, 4, 5, and 8 would incur moderate costs. Alternatives 6 and 7 would incur higher costs because they both include AS/SVE treatment. Radiological Alternative R-2 cost is low as decontamination, excavation, and disposal components are not included, since it is not known if these actions will be required.

8. Regulatory Acceptance

Regulatory acceptance of the Navy's preferred chemical and radiological remedial alternative combination will be evaluated after regulatory agency comments are received and addressed through a responsiveness summary that will be attached to the ROD/Final RAP for Site 24.

9. Community Acceptance

Community acceptance of the Navy's preferred chemical and radiological remedial alternative combination will be evaluated after public comments are received at the public meeting and during the public comment period. Comments received from the public will be addressed in a responsiveness summary that will be part of the ROD/ Final RAP for Site 24.

SUMMARY OF THE PREFERRED ALTERNATIVES FOR SOIL AND GROUNDWATER

The Navy's preferred chemical remedial alternative is **Alternative 4: Soil Excavation at Source Area, ZVI/ ISB Treatment of Groundwater, and Monitoring**, which is shown in Figure 8. Figure 9 on page 14 shows a conceptual view of this proposed remedy. The Navy estimates that approximately 1,125 cubic yards of soil beneath and adjacent to Building 99 will be removed. Excavation would be followed by groundwater treatment with a combination of ISCR with a ZVI product and enhanced ISB by adding nutrients to stimulate the natural breakdown of VOCs by dechlorinating bacteria. Groundwater and soil gas monitoring would be conducted to verify and optimize success of ZVI/ISB groundwater treatment and to determine when cleanup goals are met. Although Alternative 4 costs more than Alternative 8, Alternative 4 is likely to reach cleanup goals more quickly than Alternative 8. The timeframe for meeting cleanup goals is an important consideration for redevelopment of Site 24.

These remedial actions are anticipated to meet cleanup goals presented in Table 2 on page 7 and achieve unrestricted reuse of the site. However, if cleanup goals are not met prior to redevelopment of the property, ICs will be implemented to restrict the property use.

The preferred radiological alternative is **Alternative R-2: Survey, Decontamination, Disposal, and Release**. Alternative R-2 involves conducting scoping/ characterization surveys at each of the radiologically impacted sites at Site 24. If ROC contamination is found during the investigation of Lot 69 and Building 342 and associated areas, Alternative R-2 would include ROC contaminant removal and disposal to meet unrestricted release criteria.

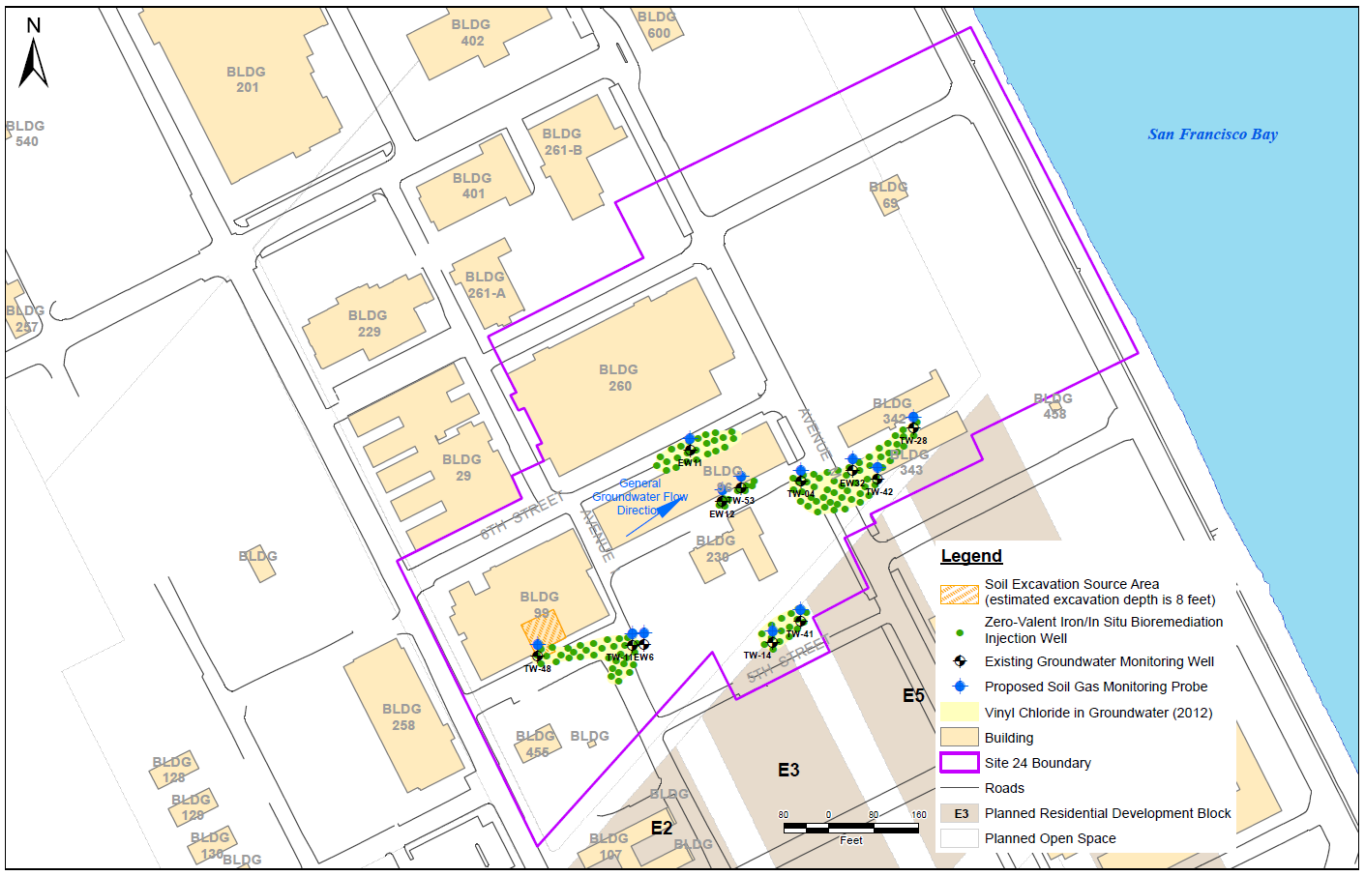

Figure 8. Alternative 4: Excavation, ZVI/ISB, and Monitoring

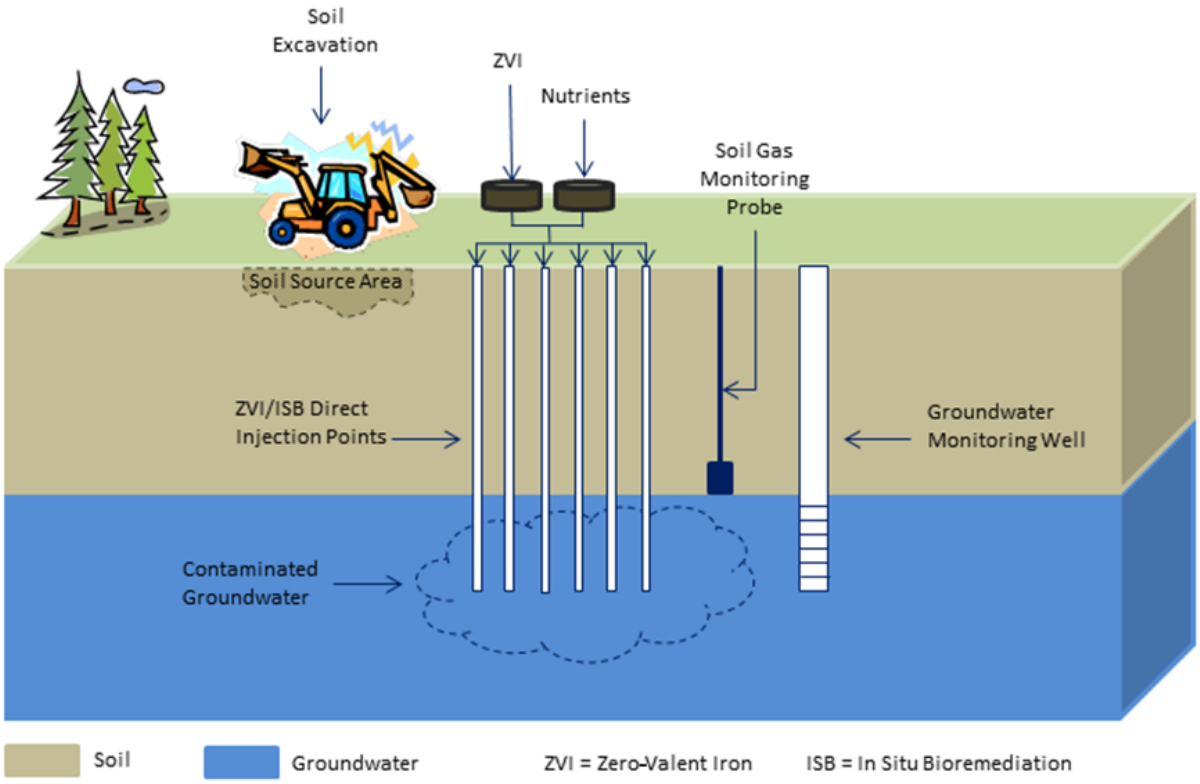

Figure 9. Conceptual View of Alternative 4: Excavation, ZVI/ISB, and Monitoring

REGULATORY SUMMARY

California Health and Safety Code

This document meets applicable requirements of the Health and Safety Code (HSC) Section 25356.1 for hazardous substance release sites. The HSC requires preparation of a RAP for sites that are not listed on the National Priorities List (NPL), such as Treasure Island. Therefore, this document also serves as a Draft RAP to fulfill the public notice and comment requirements of the HSC. The Final RAP is the HSC equivalent of the ROD for this Site. The CERCLA and California HSC Process (including the current phase) is shown in Figure 2.

California Environmental Quality Act

In compliance with the California Environmental Quality Act, DTSC has prepared an Initial Study to evaluate potential impact of the proposed project on the environment. The findings of the Initial Study indicate that the project would not have a significant effect on public health or the environment. Therefore, DTSC has prepared a proposed Negative Declaration for the Site 24 cleanup. Both the Initial Study and proposed Negative Declaration are available for review and comment during the public comment period at the two information repositories listed on page 18 and the DTSC File Room (located at 700 Heinz Avenue, Berkeley, California 94710; please call for an appointment at 510-540-3800).

THE NEXT STEP

After the comment period has ended, the Navy and the regulatory agencies will review and consider the comments received on this Proposed Plan/Draft RAP before making a final decision for Site 24. The final decision will be documented in a ROD/Final RAP, which will include a responsiveness summary for all comments received on this Proposed Plan/Draft RAP. A public notice will be placed in the San Francisco *Examiner* announcing when the Site 24 ROD/Final RAP will be available to the public in the information repositories listed on page 18.

OPPORTUNITIES FOR COMMUNITY PARTICIPATION

Community involvement is essential to selecting remedial alternatives and we encourage you to provide comments. The 30-day public comment period for the Proposed Plan/Draft RAP is February 23, 2015 through March 24, 2015.

COMMENTS

There are two ways to provide comments during this period:

1. Offer oral comments during the public meeting (March 11, 2015)
2. Provide written comments in person, by mail, e-mail, or fax (no later than March 24, 2015)

Public Meeting **March 11, 2015— 6:30 p.m. to 8:00 p.m.**
Casa de la Vista, 191 Avenue of the Palms, Treasure Island, California

You are invited to this public meeting to discuss the information presented in this Proposed Plan/Draft RAP for Site 24. Navy representatives will provide information on the environmental investigations conducted for Site 24. You will have an opportunity to ask questions and formally comment on the Navy's preferred chemical and radiological remedial alternatives at Site 24 as presented in this Proposed Plan/Draft RAP.

Submit Comments

We encourage you to comment on this Proposed Plan/Draft RAP during the 30-day public comment period. You may provide written or oral comments on the Proposed Plan/Draft RAP at the public meeting or submit your comments in writing after the public meeting. You may mail or e-mail written comments on this Proposed Plan/Draft RAP to the Navy contact person provided on page 18, postmarked no later than March 24, 2015.

GLOSSARY OF TERMS

Air Sparging (AS): An in-place remediation technology that injects air (or oxygen) into groundwater and soil to increase the volatilization of contaminants.

Applicable or Relevant and Appropriate Requirements (ARAR): Federal or more stringent state environmental standards, requirements, criteria, or limitations that need to be attained by final remedial actions for a CERCLA site.

Cancer Risk: The probability that an individual will develop cancer over a 70-year lifetime as a direct result of exposure to contaminants.

Chemicals of Concern (COC): Chemicals identified as potentially posing an unacceptable risk through an evaluation called a site-specific human health risk assessment.

Chlorinated Ethenes: Chlorinated ethenes is a collective term that includes PCE, TCE, DCE, and VC in Site 24 groundwater. It can be expressed as the sum of the individual concentrations of these contaminants.

Cleanup Goals: Media-specific cleanup goals for a selected remedial action. Remediation efforts would be considered complete and no further action would be necessary when the cleanup goals have been attained. Cleanup goals have been established at Site 24 for soil gas, groundwater, and ROC

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law that sets up a program to identify hazardous waste sites and establishes procedures for cleaning up sites to protect human health and the environment. The Navy implements its IR Program at hazardous waste sites to meet the requirements of CERCLA.

Dechlorinating bacteria: Dechlorinating bacteria are naturally occurring bacteria that have been shown to break down (dechlorinate) chemicals such as PCE, TCE, and DCE to simpler compounds as a part of their digestive process.

Dichloroethene (DCE): DCE is a breakdown product of PCE and TCE. The natural reduction of PCE is the most likely the source of DCE in groundwater at Site 24.

Ecological Risk Assessment (ERA): ERA is a regulatory process to evaluate risk to ecological receptors (plants and wildlife, including land animals and aquatic animals) for chemicals in the environment. ERA typically begins with a screening level risk assessment which is based on published screening criteria, and proceeds to more detailed ERA steps if warranted.

Engineering Controls (EC): ECs are a variety of engineered and constructed barriers (e.g., soil, asphalt or concrete capping, subsurface venting systems, vapor barriers, fences) to contain or prevent exposure to contamination on a property.

Environmental Footprint: Environmental footprint refers to the sustainability metrics of the remedial alternatives evaluated under the short-term effectiveness criterion, including energy consumption, greenhouse gas emissions, air emissions of criteria pollutants, water impacts, ecological impacts, resource consumption, and worker safety.

Ethene: Ethene is a non-toxic, typically gaseous, hydrocarbon compound. PCE, TCE, DCE, and VC can eventually break down to ethene.

Exposure Pathways: The ways that humans, animals, and plants may come in contact with a chemical, such as by touching, breathing, or ingesting it.

Focused Feasibility Study Addendum (FFSA): The FFSA conducted in 2014: (1) summarized the current site conditions with regard to VOC concentrations in soil, groundwater, and soil gas and potential radiological issues; (2) summarized new information since the 2008 RI/FFS; and (3) developed and evaluated remedial alternatives that address both the chemical and radiological conditions at Site 24.

Free Release: Free release, also referred to as unrestricted release or unrestricted use, designates the release of a site, area, or structure from regulatory control without requirements for future radiological restrictions.

Groundwater: Water below the ground surface in rock or sediment.

Hazard Index (HI): A calculated value used to represent a potential noncancer health effect. An HI value of 1 or less is considered protective of human health.

Historical Radiological Assessment (HRA): The HRA performed in 2006 summarized the review completed by the Navy to evaluate potential residual radiological contamination from the use of radioactive materials at former NAVSTA Treasure Island and the identification of radiologically impacted sites at Treasure Island.

Historical Radiological Assessment Supplemental Technical Memorandum (HRASTM): The HRASTM documented findings of additional research of historical radiological operations and radioactive waste disposal that may have occurred during Navy operations at Treasure Island.

Human Health Risk Assessment (HHRA): An analysis of the potential negative impacts to human health caused by exposure to hazardous substances released from a site.

In-Situ Bioremediation (ISB): Technologies that treat groundwater or soil contamination through placement or injection of amendments (such as a nutrient substrate) and/or specialized bacteria in the subsurface to induce or enhance natural biodegradation of contaminants.

In-Situ Chemical Reduction (ISCR): ISCR involves the injection of a chemical agent in the subsurface to stimulate reactions that degrade chlorinated ethenes to simpler compounds and eventually to non-toxic products.

Installation Restoration (IR) Program: The program initiated by the Department of Defense, in compliance with CERCLA (see above), to identify, investigate, assess, characterize, clean up, or control past releases of hazardous substances.

Institutional Controls (IC): Legal and administrative documents and processes established to limit human exposure to contaminated waste, soil, or groundwater. These mechanisms may include deed restrictions, covenants, easements, laws, and regulations.

Long-Term Monitoring (LTM): LTM refers to monitoring of groundwater or soil gas, including sampling and chemical analysis. LTM evaluates changes in site contaminant concentrations, and monitors for potential migration of these contaminants in site groundwater or soil gas over time.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The federal regulatory basis for government responses to oil and hazardous substances spills, releases, and sites where these materials have been released.

Noncancer Hazard: Likelihood or probability that a hazardous substance released to the environment will cause adverse effects (other than cancer) on exposed humans.

PCE: See tetrachloroethene.

Proposed Plan/Draft Remedial Action Plan (Proposed Plan/Draft RAP): A document that reviews the remedial alternatives presented in the FS (see RI/FFS below), summarizes the recommended remedial action, explains the reasons for recommending the action, and solicits comments from the public. The RAP is required under HSC Section 25356.1 for sites that are not listed on the NPL, such as Treasure Island. A Draft RAP is the California HSC equivalent of the Proposed Plan.

Radioisotopes of Concern (ROC): A radioisotope is an atom with an unstable nucleus that undergoes radioactive decay by emitting alpha, beta, or gamma radiation. Radioisotopes occur naturally or can be man-made. The HRA and HRASTM identified radium-226 and cesium-137 as ROCs at Site 24 based on their historic use at former NAVSTA Treasure Island and past operations at areas within Site 24 that could have potentially involved them.

Radiologically Impacted Sites: Areas that, because of past use or storage of radiological materials, require a radiological assessment before being released for reuse. Until radiological surveys are completed, it remains unknown whether radiological releases occurred at these areas.

Receptors: Humans, animals, and plants that may be exposed to site contaminants.

Record of Decision (ROD)/Final RAP: A decision document identifying the remedial alternatives chosen for implementation at a CERCLA site. The ROD/Final RAP is based on information from the RI/FS (see RI/FFS below) and on public comments and community concerns. A Final RAP is the California HSC equivalent of the ROD.

Remedial Action Objectives (RAO): A description of remediation goals for each medium of concern at a site (for example, soil or groundwater), expressed in terms of the contaminants of concern, target cleanup levels, and exposure pathways and receptors. Cleanup goals form the basis for RAOs by providing contaminant-specific concentrations that are protective under a given exposure scenario.

Remedial Design (RD): The RD is a step in the CERCLA process (Figure 2) following the ROD/Final RAP that provides the detailed description and plan to implement the final site remedy.

Remedial Investigation/Focused Feasibility Study (RI/FFS): The RI identifies the nature and extent of potential contaminants at a site and assesses human health and environmental risks. A FS is a study that identifies and evaluates remedial technologies for a site based on effectiveness, availability, cost, and other criteria. A FFS, as was conducted for Site 24, evaluates a limited number of alternatives.

Risk: Likelihood or probability that a hazardous substance released to the environment will cause adverse effects on exposed humans or other biological receptors. Risk calculations incorporate very conservative assumptions. Adverse health effects can be classified as carcinogenic (cancer-causing) or non-carcinogenic. Risk from cancer is expressed as a probability such as 1 in 1,000,000. This term means that one person in a population of 1,000,000 is more likely to get cancer over his or her lifetime. Noncancer risk is expressed as an HI (see above).

Soil Gas: Air present in soil pore spaces.

Soil Vapor Extraction (SVE): An in-place process for soil remediation where contamination is removed from soil under a vacuum. SVE is suitable for removing a variety of VOCs that have a high vapor pressure or a low boiling point compared with water.

Tetrachloroethene (PCE): PCE was a commonly used solvent for dry cleaning and other industrial purposes.

Treatment: Methods that reduce the toxicity, mobility, and volume of contaminated media, thereby reducing the chance of exposure to humans and the environment.

Trichloroethene (TCE): TCE was mainly used as an industrial solvent and as a dry cleaning agent before the 1950s but less commonly after that time when it was generally replaced by PCE. TCE is also a breakdown product of PCE, and this is most likely the source of TCE in groundwater at Site 24.

Vinyl Chloride (VC): VC is a breakdown product of PCE, TCE, and DCE. The natural reduction of PCE is the most likely the source of VC in groundwater at Site 24.

Volatile Organic Compounds (VOC): Organic chemical compounds that are man-made substances that tend to volatilize or evaporate from soil or water. These chemicals are commonly used as solvents, degreasers, and dry cleaning chemicals.

Zero-Valent Iron (ZVI): ZVI, or elemental metallic iron, is a mild reducing agent that has the ability to donate electrons to degrade chlorinated ethenes to simpler compounds and eventually to non-toxic compounds. It is commonly used as a stimulating agent for ISCR.

INFORMATION REPOSITORIES

Two information repositories and the administrative record provide public access to technical reports and other IR Program information that support this Proposed Plan/Draft RAP. The two information repositories are listed below.

San Francisco Public Library
Government Publications Section
100 Larkin Street, 5th Floor
San Francisco, California 94102
Call for hours: (415) 557-4400

Navy BRAC Caretaker Support Office
1 Avenue of the Palms, Suite 161
Treasure Island
San Francisco, California 94130
Call for hours: (415) 743-4729

Navy Administrative Record File
ATTN: Diane Silva, Command Records Manager
NAVFAC Southwest
1220 Pacific Highway
Code EV33, NSDB Building 3519
San Diego, California 92132
(619) 556-1280
diane.silva@navy.mil

Administrative record file hours are Monday through Friday from 8:00 a.m. to 5:00 p.m. Documents may not be removed from the facility; however, they may be photocopied at requesters' expense. Please contact Ms. Silva to make an appointment.

Site 24 documents are available in the information repositories and administrative record locations listed above. Other information, such as meeting minutes and fact sheets related to Site 24, can be found on the Navy's website at www.bracpmo.navy.mil. Select "BRAC bases," then select "California". On the left-hand side, select "Former Naval Station Treasure Island." Site-related documents can also be viewed at DTSC's website at http://www.envirostor.dtsc.ca.gov/public/. Enter "San Francisco" as the City, scroll down and select "Naval Station Treasure Island/Site 24-Dry Cleaning Facility" and click on the link "Activities" to view documents.

PROJECT CONTACTS

For more information on the environmental program at Treasure Island, the Proposed Plan/Draft RAP, or the Negative Declaration, please contact the following:

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(415) 972-3187
burke.nadiahollan@epa.gov

FORMER NAVAL STATION TREASURE ISLAND
Installation Restoration Site 24
PUBLIC MEETING
March 11, 2015
6:30 – 8:00 p.m.
Casa de la Vista, 191 Avenue of the Palms
Treasure Island
San Francisco, CA

Proposed Plan / Draft RAP — Comment Form

The public comment period for the Proposed Plan/Draft RAP for Installation Restoration Site 24 at the Former Naval Station Treasure Island, San Francisco, California, is from **February 23 through March 24, 2015**. You may provide oral comments at the public meeting listed above, where all comments will be recorded by a court reporter. Alternatively, you may provide written comments in the space provided below or on your own stationery. All written comments must be postmarked no later than **March 24, 2015**. After you complete your comments and your contact information, please mail this form to the address provided on the reverse side or submit this form to a Navy representative at the public meeting. Comments are also being accepted by e-mail and fax. Please address e-mail messages to Mr. Keith Forman at keith.s.forman@navy.mil or fax to (619) 532-0983.

Name: _____

Representing: (optional) _____

Phone Number: (optional) _____

Address: (optional) _____

Please check the appropriate box if you would like to be added to or removed from the Navy's Environmental Mailing List for Treasure Island: ☐ Add me ☐ Remove me

Comments

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Postage

Mr. Keith Forman
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1455 Frazee Road, Suite 900
San Diego, CA 92108-4310