

# Proposed Plan/Draft Remedial Action Plan for Site 30, Daycare Center Naval Station Treasure Island

## INTRODUCTION

The Department of the Navy (The Navy) is responsible for cleaning up contamination that may have resulted from historical operations at Naval Station Treasure Island (NAVSTA TI) (Figure 1). Under the **Installation Restoration (IR)** Program, the Navy conducted environmental investigations at Site 30, a parcel of property that includes a child-care facility. The investigations were conducted in cooperation with the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC), the Cal/EPA Regional Water Quality Control Board (Water Board), the U.S. Environmental Protection Agency (EPA) and the Treasure Island Development Authority (TIDA).

This **Proposed Plan/Draft Remedial Action Plan (RAP)** for **remedial action** provides information on the environmental investigations, the remedial alternatives (the options for cleaning up the site) that were evaluated, and identifies the Navy's preferred remedial alternative. The preferred alternative is engineering controls combined with **institutional controls**, which is the most cost effective alternative that will provide adequate protection to human health and the environment. This Proposed Plan/Draft RAP meets requirements of the National Contingency Plan (NCP), which is a part of the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, and the California Health and Safety Code (HSC), chapter 6.8.

## INVITATION TO COMMENT

The Navy invites you to participate by submitting comments on the Proposed Plan/Draft RAP for remedial action for Site 30. This Proposed Plan/Draft RAP is being issued pursuant to the NCP as found in CERCLA and the HSC to ensure that the public has an opportunity to provide comments to fulfill public participation requirements.

You are also invited to attend a public meeting scheduled on October 7, 2008 at 7:00 p.m. at the Casa de la Vista, Building 271, on Treasure Island to discuss this Proposed Plan/Draft RAP. The 30-day public comment period will be from September 23 to October 23, 2008. This Proposed Plan/Draft RAP highlights information from the final **Feasibility Study** report for Site 30. For a detailed review, the final Feasibility Study report is available to the public at the San Francisco Public Library information repository, and at the Treasure Island Building 1 information repository, see page 9 for information.

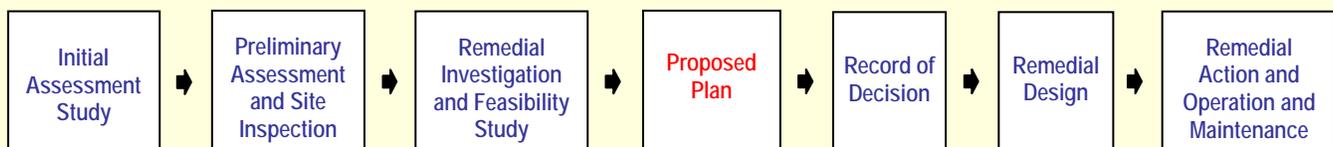
*Note: Specialized or technical terms are highlighted in **Bold** the first time they appear and are defined in the glossary on page 10.*

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Figure 1: Treasure Island Location

## THE CERCLA PROCESS



## SITE BACKGROUND

Treasure Island was constructed from San Francisco Bay fill in the 1930s for use during the World Exposition in 1939. Navy operations at the island began in 1941, primarily for training, administration, housing, and other support services to the U.S. Pacific Fleet. In 1993, the Defense Base Realignment and Closure (BRAC) Commission recommended closure of NAVSTA TI; the facility was subsequently closed on September 30, 1997.

Site 30 is located in the central portion of NAVSTA TI, (see Figure 2 below). Site 30 was undeveloped until 1985, when Building 502 was built on a portion of the parcel for use as a child-care facility (see Figure 3). The child-care facility in Building 502 was operated by the Navy until NAVSTA TI closed in 1997. After the station closed, the property was leased to the city of San Francisco on July 29, 1997. The Treasure Island Homeless Development Initiative renovated the facility and it was reopened as a daycare center on March 17, 2003.



Figure 2: Site 30 Location

## NATURE AND EXTENT OF CONTAMINATION

The Navy began investigating Site 30 in 2002 after a utility map was found that identified an old “trash dump” near a utility line along 11<sup>th</sup> Street. Investigations conducted at the site include the following:

- 2002 – Trench Investigation Sampling
- 2002/2003 – Time-Critical Removal Action
- 2004 – Groundwater Investigation
- 2006 – Final **Remedial Investigation** Report and Feasibility Study

Environmental data collected between 2002 and 2004 were used to assess the extent of impacts to the soil and **groundwater** and to evaluate potential **risks** to human health and the environment.

In 2002, the Navy conducted a trenching investigation to identify the extent of the “trash dump.” The trash dump consisted of buried debris and burned materials. Based on results of soil investigation at the site, the Navy conducted a time-critical removal action. Approximately 200 cubic yards of affected soil and debris that was not covered by roadway or sidewalks was removed. Additionally, a concrete/asphalt pad (i.e., Site 30 Concrete Pad) was installed to cover affected soil adjacent to Building 502. A groundwater investigation followed in 2004 to assess the impacts to shallow groundwater from chemicals detected in the soil at Site 30.

The results of the investigations concluded that soil was the only contaminated medium at Site 30. The only **chemicals of concern** in soil at Site 30 are dioxins. (See text box “What are the “Chemicals of Concern”).

The extent of dioxin in soil was evaluated by collecting soil samples from areas where contamination was likely to be present, specifically, in areas containing burnt debris. Burnt debris was found in two investigation trenches adjacent to Building 502, in the area now covered by the concrete pad (see Figure 3). Samples from these two trenches had elevated concentrations of dioxins. However, the exploratory trenching did not extend under the building for fear of undermining the building. Therefore, the full extent of dioxin beneath the building is unknown. The concrete pad was added as a precautionary measure to prevent exposure to the soil by children at the daycare center. A risk assessment later determined that the dioxins in soil did not present a risk to the children, as discussed in the next section.

## SUMMARY OF SITE RISKS

As part of the Remedial Investigation, a quantitative baseline **human health risk assessment (HHRA)** was completed to assess the potential adverse human health effects from exposure to chemicals at the site. The HHRA for Site 30 is summarized below.

Risks to ecological receptors, including birds and animals likely to be found at the site, were evaluated in the *Final Screening-Level Ecological Risk Assessment for Sites 6, 12, 21, 24, 30, 31, and 32*, March 2007.

### Human Health Risk Assessment

The HHRA considered the existing and planned future use of Building 502 as a daycare center, including the following potential **receptors**: day care center children and staff, and construction workers. The HHRA also

## Proposed Plan/Draft RAP for Site 30, Daycare Center

considered hypothetical alternate site uses, including commercial/ industrial and residential uses.

Estimated excess cancer risk for a daycare center child and construction worker was below the levels the EPA considers safe. These results indicate that the site does not pose an **unacceptable risk** to these receptors. Estimated excess cancer risk for a hypothetical future commercial/ industrial worker, and child/adult resident were within EPA's **risk management range**. The risk management range was established by EPA to set guidelines for making risk management decisions. That is, information from the risk assessment along with other information such as economic or legal concerns, is used to reach decisions regarding the need for and practicability of site cleanup actions.

Noncancer hazards (the likelihood of illness or injury other than cancer) was also evaluated for all receptors. The noncancer hazards did not exceed the level the EPA considers safe. Since the soils beneath Building 502 are uninvestigated and the dioxin hotspots beneath the Site 30 Concrete Pad remain in place, a potential health concern exists from dioxins for future residential and/or commercial/industrial users.

### Ecological Risk

A Tier 1 screening-level **ecological risk assessment (ERA)** evaluated the potential for terrestrial receptors to be exposed to soil at IR Sites 6, 12, 21, 24, 30, 31, 32, and 33 at NAVSTA TI. The draft screening-level ERA did not identify any ecological resources at Treasure Island that need to be protected. Based on the overall poor quality of the habitat on Treasure Island, the Navy does not recommend further evaluation of ecological risk for these sites. Potential impacts to marine receptors in San Francisco Bay were evaluated for chemicals detected in groundwater at the site. This evaluation determined that the groundwater was not a potential risk to the marine receptors.

### REMEDIAL ACTION OBJECTIVES

**Remedial action objectives (RAOs)** are developed to identify and screen remedial action alternatives that protect human health and the environment and are consistent with reasonably anticipated land use. The Navy does not anticipate changing the current land use (daycare center) for Site 30. Residential-use scenarios, however, were considered in developing the RAOs to assess cleanup alternatives that would result in unrestricted land use.

Based on the potential for receptors to be exposed to dioxin-contaminated soil beneath Building 502 and the Site 30 Concrete Pad in the commercial/industrial and residential reuse scenarios, the following RAOs were developed for Site 30:

- To protect future commercial/industrial and residential receptors by preventing the ingestion of and direct contact with soil containing unknown concentrations of dioxin beneath Building 502 and known concentrations under the Site 30 Concrete Pad.
- To protect current daycare center receptors by preventing the ingestion of, and direct contact with, soil containing unknown concentrations of dioxins beneath Building 502.

#### WHAT ARE THE "CHEMICALS OF CONCERN"

The Navy, in cooperation with DTSC and the Water Board, has identified dioxins as the contaminants that pose potential risk to human health at Site 30.

**Dioxins:** Dioxins are a group of chlorinated hydrocarbons that form as by-products of a variety of chemical reactions and combustion processes. The most common health effect from dioxin exposure in humans is a skin condition called *chloracne*. Other effects of exposure to large amounts of dioxin include skin rashes, skin discoloration, excessive body hair, and possibly mild liver damage.

Several studies suggest that workers exposed to high levels of dioxins at their workplace over many years have an increased risk of cancer. Animal studies have also shown an increased risk of cancer from long-term exposure to dioxins. Also, based on data from animal studies, there is some concern that exposure to low levels of dioxins over long periods (or high level exposures at sensitive times) might result in reproductive or developmental effects.

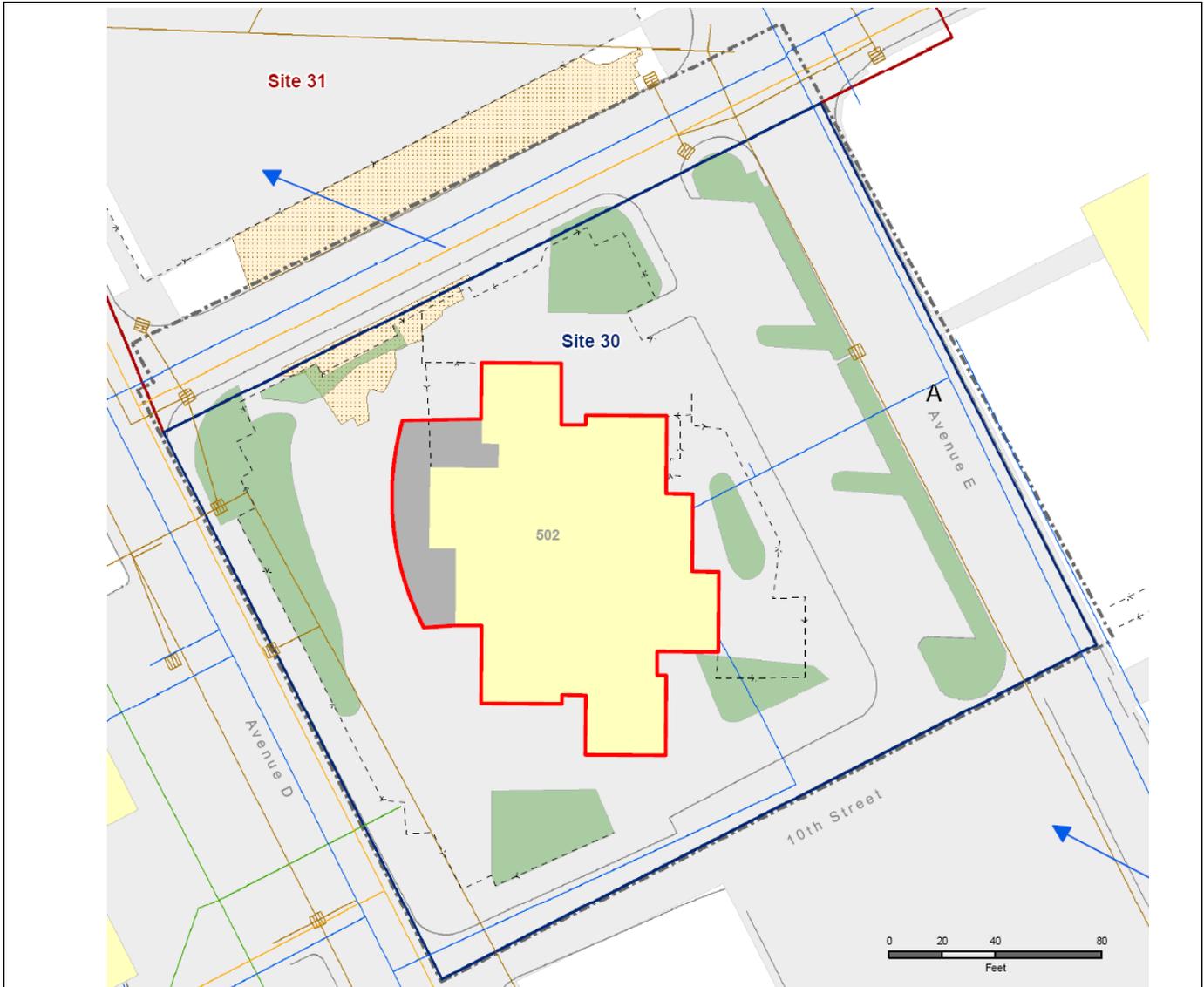
### SUMMARY OF REMEDIAL ALTERNATIVES

The Feasibility Study identified three alternative actions that can prevent or minimize human exposure to contaminants at levels that may result in a future health concern.

#### Summary of Remedial Alternatives - Site 30

Feasibility Study Designation	Description
1	No Action
2	Engineering Controls Combined with Institutional Controls
3	Building Demolition, Excavation, Off-Site Disposal at Permitted Landfill

Alternative 2 is identified in this proposed plan as the preferred alternative. Each of the alternatives and their estimated costs are described below.



**LEGEND**

- |  |  |
|--|--|
|  IR SITE 30 BOUNDARY                |  WATER PIPELINE                                     |
|  IR SITE 31 BOUNDARY                |  GAS PIPELINE                                       |
|  AREA WHERE DEBRIS HAS BEEN REMOVED |  SANITARY SEWER PIPELINE                            |
|  SITE 30 CONCRETE PAD               |  STORM DRAIN LINE                                   |
|  VEGETATED AREAS, SITE 30           |  STORM DRAIN  |
|  BUILDING                           |  FENCE  |
|  PAVED AREA                         |  ROAD CURB  |
|  UNPAVED AREA                       |  GROUNDWATER FLOW DIRECTION                         |
|  PROPOSED REMEDIAL ACTION AREA      |  MONITORING WELL LOCATION                           |
|  |  ENVIRONMENTAL BASELINE SURVEY PARCEL T094 BOUNDARY |



**Figure 3**  
**Site 30, Daycare Center Layout**  
 Naval Station Treasure Island, California

**Alternative 1: No Action Alternative**

*Estimated Present Worth Cost: .....\$0*

Alternative 1 provides a baseline used to compare the other alternatives. Under this alternative, no action would be taken to alter the current situation, and no land use restrictions would be put in place. Existing actions such as restricted access or property maintenance would, however, continue under this alternative. Under the no action alternative, no additional remedial or monitoring activities at Site 30 would be conducted. There are no costs associated with the no action alternative.

**Alternative 2: Engineering Controls Combined with Institutional Controls**

*Estimated Present Worth Cost: .....\$782,000*

Alternative 2 uses engineering controls combined with institutional controls to prevent exposure to potentially contaminated soils beneath Building 502 and impacted soils beneath Site 30 Concrete Pad. Engineering controls consist of maintaining the building foundation slab to prevent contact with potential dioxin contamination beneath the slab. An example of an institutional control is a deed notice to notify the public of potential contamination and restrict actions that may disturb affected soil. Institutional controls generally do not involve active cleanup of contaminated media at sites, but can minimize or prevent exposure to contaminants in soil or groundwater. Institutional controls may limit human exposure to potentially contaminated soil by preventing changes or alterations to the building foundation.

The results of the risk assessment indicate that there are no unacceptable risks to human health due to site contaminants for the current and planned future use of Building 502 as a daycare center, even if the Site 30 Concrete Pad is removed. Since the nature and extent of dioxin in soil beneath Building 502 has not been characterized, there is a need to prevent exposure to potentially contaminated soils beneath Building 502. Under Alternative 2, the existing daycare center building slab would be maintained as an exposure prevention barrier. The existing slab is not likely to require maintenance to continue serving as an exposure prevention barrier; however, periodic inspections would be required to verify its integrity.

The Site 30 Concrete Pad adjacent to Building 502 would not be maintained as an engineering control, because contaminants beneath the pad do not pose a risk to current use of the site as a daycare center. Institutional controls would be implemented to address risk from soil beneath the pad to potential future industrial/commercial or residential users.

Alternative 2 would use institutional controls to restrict any removal or penetration of the Building 502 slab, except when following specific guidelines to prevent exposure to potentially contaminated soil. If utility repairs (such as water or sewer repairs) are required, measures would be implemented to prevent exposure of the occupants and workers to potentially contaminated soil. Institutional controls would include:

- A “Covenant to Restrict Use of Property, Environmental Restriction” to (1) prohibit any removal of the Building 502 slab, (2) require periodic inspection of the Building 502 and reporting of the inspection results (3) provisions for making utility repairs, as necessary, (4) require remedial investigation and any necessary remediation beneath Building 502 upon building demolition and removal.
- A Deed Notice to notify the public of the existence of potential contamination.
- A Remedial Action Work Plan (RAWP) to specify the roles and responsibilities for implementing, monitoring, and enforcing the institutional controls.

**Alternative 3 – Building Demolition, Excavation, and Off-Site Disposal at a Permitted Landfill**

*Estimated Present Worth Cost: .....\$2,086,000*

Alternative 3 is an active remediation alternative that meets the Department of Defense requirement to evaluate an alternative that would result in “unrestricted” use of the site. Alternative 3 would involve demolition of Building 502 and the associated slab for access to the soil beneath the building. Samples would be collected from that soil to determine the nature and extent of contamination. All contaminated soil identified within this area would be excavated and transported to a landfill for disposal. The excavation would then be backfilled with clean soil. Alternative 3 does not include the construction of a new daycare center.

**EVALUATION OF ALTERNATIVES**

The remedial action alternatives considered represent a range of distinct environmental restoration strategies that fulfill the RAOs associated with dioxin contamination in soil at Site 30. The alternatives were evaluated against the nine EPA criteria listed in the text box on Page 6.

These criteria are used to evaluate the cleanup alternatives proposed for this site. The first seven criteria are discussed in the following alternative comparison. The last two criteria will be addressed through public comment and regulatory agency review periods. The final decision on the remedy for Site 30 will then be made by the Navy and DTSC after receiving and evaluating the public input.

**EVALUATION CRITERIA FOR REMEDIAL ALTERNATIVES**

**Overall Protection of Human Health and the Environment** determines whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

**Compliance with Applicable or Relevant and Appropriate Requirements** evaluates whether the alternative meets Federal and State environmental statutes, regulations, and other requirements that pertain to the site.

**Long-Term Effectiveness and Permanence** considers the ability of an alternative to maintain protection of human health and the environment over time.

**Reduction of Toxicity, Mobility, or Volume** assesses the relative performance of recycling or treatment technologies on the toxicity, mobility or volume of contaminants.

**Short-Term Effectiveness** considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents, and the environment during implementation.

**Implementability** considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.

**Cost** includes estimated capital and annual operations and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.

**Regulatory Acceptance** considers whether the DTSC and other regulators agree with the Navy's analyses and recommendations, as described in the Remedial Investigation/Feasibility Study and Proposed Plan/Draft RAP.

**Community Acceptance** considers whether the local community agrees with Navy's analyses and preferred alternative. Comments received on the Proposed Plan/Draft RAP are an important indicator of community acceptance.

**1. Overall Protection of Human Health and the Environment**

All alternatives protect human health and the environment under the current and future use of the site as a daycare center. However, only Alternatives 2 and 3 are protective of human health under the hypothetical alternate land use scenarios (commercial/industrial or residential).

- Alternative 1 does not address potential dioxin contamination beneath and adjacent to Building 502 and it is not protective for the hypothetical alternate land use receptors.
- Alternative 2 uses engineering controls and institutional controls to prevent human exposure to contaminants by (1) requiring the existing building slab be preserved and periodically inspected, and (2) requiring any alternative future property reuse preserve the existing building slab and consider soil contamination beneath the Site 30 Concrete Pad.

- Alternative 3 would remove any contaminated soil, and thus the source of potential human health risk. Alternative 3 would also allow for future unrestricted use of the site without any further land use restrictions.

**2. Compliance with Applicable or Relevant and Appropriate Requirements**

**Applicable or Relevant and Appropriate Requirements (ARARs)** are Federal or more stringent State environmental standards, requirements, criteria, or limitations that need to be attained by final remedial actions. *Applicable* requirements are cleanup standards or other substantive requirements under laws that specifically address the situation at a CERCLA site. *Relevant and appropriate* requirements are environmental regulations that, although not applicable, address problems or situations sufficiently similar and are well suited to the conditions at a site.

- There are no ARARs applicable to Alternative 1.
- Alternatives 2 and 3 are expected to meet the chemical-specific and potential action-specific ARARs identified in the Feasibility Study Report.

**3. Long-Term Effectiveness and Permanence**

Any residual risks remaining after implementation of Alternatives 1 and 2 would be the same. The site would be safe for humans and the environment for the current and future use of the site as a daycare center. Potential risks may exist from direct contact with and ingestion of potentially contaminated soil beneath the existing building slab if it is penetrated.

- Alternative 1 provides no protection from these potential risks.
- Alternative 2 provides an adequate level of long-term effectiveness and permanence for both its current use as a daycare center and the hypothetical alternate land use scenarios by requiring that the integrity of the building slab be monitored and reported and contamination beneath the Site 30 Concrete Pad be considered regarding future development of the site.
- Alternative 3 provides a higher level of long-term effectiveness and permanence than Alternative 2 as any soil contamination under the building slab would be removed and disposed of off-site at a permitted landfill.

### 4. Reduction of Toxicity, Mobility, and Volume

None of the alternatives would reduce the mobility, toxicity, or volume of potential contamination through treatment.

- Alternatives 1 and 2 do not involve active treatment of potential contamination, or reduce its toxicity, mobility, or volume.
- Alternative 3 would identify and remove any contaminated soil from Site 30 and, therefore, reduce the toxicity and volume of contaminated soil at the site. Placing the soil in an approved landfill would reduce the mobility of contaminants in the environment.

### 5. Short-Term Effectiveness

Alternatives 1 and 2 will not pose a risk to the community or the environment in the short term, since no active treatment will be conducted.

- Alternatives 1 and 2 are effective in the short term, because Site 30 poses no unacceptable risk for the current and anticipated future use of the site as a day care center.
- Alternative 2 is more effective than Alternative 1, because institutional controls would prevent exposure to unknown dioxin concentrations beneath the building slab and Site 30 Concrete Pad.
- Alternative 3 could introduce some risk to the community during remedial construction work due to truck traffic. These risks, however, could be managed by implementing good safety measures such as traffic control. Although the risk assessment indicates there is no excess risk for construction workers from contaminants at the site, any construction or demolition poses some risk for workers. These construction-related risks can be managed by implementing good safety practices. Alternative 3 field work is estimated to take six weeks to complete.

### 6. Implementability

All of the alternatives are technically feasible and are considered to be equally implementable.

- Alternative 1 does not require any action.
- Alternatives 2 and 3 are proven technologies, and it is unlikely technical or administrative issues would delay implementing either of these alternatives. The materials and services necessary to implement Alternative 3 are available locally.

### 7. Cost

Cost estimates are as follows:

- No costs are associated with Alternative 1.
- Alternative 2 would be \$782,000.
- Alternative 3 has the highest overall costs (over \$2,086,000), which is about 2.7 times the cost of Alternative 2. The cost of Alternative 3 does not include the construction of a new daycare center.

### 8. Regulatory Acceptance

Regulatory acceptance of the Navy's preferred alternative will be addressed through meetings, response to comments, and approval on the PP, **Record of Decision (ROD)** and RAP.

### 9. Community Acceptance

Community acceptance of the preferred alternative will be evaluated after the public comment period and will be described in the ROD and RAP for Site 30.

## SUMMARY OF THE PREFERRED ALTERNATIVE

The Navy's preferred alternative is Alternative 2, engineering controls combined with institutional controls. Alternative 2 would prevent exposure to potentially contaminated soils beneath Building 502 and known contamination beneath the Site 30 Concrete Pad in both the short term and long term, and would allow Site 30 to be used in its current and future use as a daycare center, serving the community. Alternative 2 would provide the most cost-effective remedial alternative that is adequately protective of human health. Alternative 1 was rejected because it would provide a lower degree of protection to potential human receptors at the site. Alternative 3 was rejected because the higher cost associated with excavation and removal are not warranted since the building slab provides an adequate barrier between potential receptors and any contamination that may be present. Alternative 2 would require approximately one year for implementation, followed by long-term site monitoring.

## MULTI-AGENCY PARTICIPATION

The BRAC Cleanup Team (BCT) is comprised of the Navy, EPA, and Cal/EPA. The primary goals of the BCT are:

- to protect human health and the environment,
- coordinate environmental investigations, and
- expedite the environmental cleanup at the facility.

The BCT reviewed all major documents and activities associated with Site 30 including the Feasibility Study. Based on these reviews and discussions on key documents, the BCT supports the Navy's recommendation for the preferred alternative at Site 30.

### REGULATORY SUMMARY

#### ***California Health and Safety Code***

This document is intended to meet the requirements of California 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 Priority List (NPL)**, such as NAVSTA TI. Therefore, this document also serves as a Draft RAP in order to fulfill the public notice and comment requirements of the HSC. The final RAP will be incorporated in the ROD for this site.

#### ***California Environmental Quality Act***

DTSC has prepared an Initial Study to evaluate the 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 30 cleanup. Both the Initial Study and proposed Negative Declaration are available for review and comment during the public comment period.

#### ***Nonbinding Allocation of Responsibility***

HSC Section 25356.1(e) requires DTSC to prepare a preliminary nonbinding allocation of responsibility among all identifiable potentially responsible parties. HSC Section 25356.3(a) allows potentially responsible parties with an aggregate allocation in excess of 50 percent to convene an arbitration proceeding by submitting to binding arbitration before an arbitration panel. Based on available information regarding the former NAVSTA TI, DTSC determines that the Navy is a responsible party with aggregate alleged liability in excess of 50 percent of the costs of removal and remedial action pursuant to HSC Section 25356.3. The Navy may convene arbitration if they so choose.

### COMMUNITY PARTICIPATION

Community involvement is essential to selecting remedial alternatives. Input will be collected after the alternatives are presented to the public, and a final decision will be made after regulatory agencies and community input on the Proposed Plan/Draft RAP has been reviewed. The Navy will then issue a ROD and DTSC will approve the RAP to select the final remedy.

The public comment period on the Proposed Plan/Draft RAP and the proposed Negative Declaration begin on September 23, 2008 and ends on October 23, 2008. A public meeting will be held on October 7, 2008, so the public can discuss the Proposed Plan/Draft RAP and the proposed Negative Declaration with representatives from the Navy and DTSC. The Navy and DTSC invite you to comment on the results of environmental investigations at Site 30, this Proposed Plan/Draft RAP, and the proposed Negative Declaration.

### THE NEXT STEP

The 30-day public comment period will end on October 23, 2008. After the comment period has ended, the Navy and DTSC will consider the comments received on this Proposed Plan/Draft RAP and the proposed Negative Declaration before making a final decision for Site 30. The final decision will be documented in a ROD, which will include the final RAP and responses to all comments received on this Proposed Plan/Draft RAP and the proposed Negative Declaration. A public notice will be placed in the San Francisco Chronicle announcing when the Site 30 ROD will become available to the public in the information repository at the San Francisco Public Library and at Treasure Island Building 1.

## INFORMATION REPOSITORIES

The Proposed Plan/Draft RAP, the proposed Negative Declaration, and other Site 30 related documents are available at:

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

Navy BRAC Caretaker Support Office  
410 Palm Avenue, Building 1, Room 161  
Treasure Island  
San Francisco, California  
(415) 743-4704

## OPPORTUNITIES FOR COMMUNITY INVOLVEMENT

**Public Meeting, October 7, 2008, 7:00-8:00 p.m.**

**Location: Casa de la Vista, Building 271, Treasure Island**

You are invited to this community meeting to discuss the information presented in this Proposed Plan/Draft RAP and the proposed Negative Declaration for Site 30. Navy representatives will provide information on the environmental investigations conducted for Site 30. You will have an opportunity to ask questions and formally comment on the Navy's and DTSC's preferred remedial alternative for Site 30 as presented in this Proposed Plan/Draft RAP and DTSC's proposed Negative Declaration.

### **Public Comment Period Continues through October 23, 2008**

We encourage you to comment on this Proposed Plan/Draft RAP and the proposed Negative Declaration during the 30-day public comment period. You may provide comments on the Proposed Plan/Draft RAP and the proposed Negative Declaration orally at the public meeting or submit your comments in writing at or after the public meeting. You may mail or email written comments on this Proposed Plan/Draft RAP to the Navy contact person provided on page 11 postmarked no later than October 23, 2008. Similarly, you may mail or email written comments of the proposed Negative Declaration to the DTSC contact person identified on page 11 of this document with the same deadline. The Navy and DTSC will consider all public comments received during this comment period, or in person at the public meeting mentioned above, before making a final decision for Site 30.

### GLOSSARY OF TERMS

Specialized terms used in this Proposed Plan/Draft RAP are defined below:

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

**Chemical of Concern** – Chemical identified as a potential risk during a site-specific human-health, or ecological risk assessment.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund)** – A Federal law that sets up a program to identify hazardous waste sites and establishes procedures for cleaning up those sites to protect human health and the environment.

**Ecological Risk Assessment (ERA)** - An analysis of the potential negative ecological effects to plants and animals caused by exposure to hazardous substances released from a site.

**Exposure Pathway** – The way that a chemical comes into contact with a living organism, such as touching, breathing, or ingesting.

**Feasibility Study** – A study that identifies and evaluates potential cleanup methods based on their effectiveness, availability, cost, and other factors.

**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.

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

**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** – Non-engineered mechanisms established to limit human exposure to contaminated waste, soil, or groundwater. These mechanisms may include deed restrictions, covenants, easements, laws, and regulations.

**National Priority List (NPL)** – The Federal list of Superfund sites nationwide. NPL sites are those considered high priority for cleanup under the Federal Superfund program. NAVSTA TI is not on the NPL list.

**Proposed Plan** – A document that reviews the cleanup alternatives, summarizes the Navy's recommended or preferred cleanup actions, explains the reasons for recommending them, and solicits comments from the community.

**Receptors** – Any organism (human, animal, or plant) that may be exposed to site contaminants.

**Record of Decision (ROD)** – a public document that specifies the final cleanup alternative for a site, based on information from the Remedial Investigation and Feasibility Study, and on public comments and concerns. Under Federal law (CERCLA), the decision document is called a ROD. Under State law, the document is called a Remedial Action Plan (RAP).

**Remedial Action** – CERCLA phase in which the selected cleanup technology is constructed, installed, implemented, and/or operated until confirmatory sampling and analysis indicate that cleanup levels have been reached.

**Remedial Action Objective (RAO)** – A description of remedial 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, exposure pathways and receptors, and/or maximum acceptable exposure levels based on cumulative risks and hazards.

**Remedial Action Plan (RAP)** – A plan prepared for public review and comment that outlines a specific program leading to the remediation of a contaminated site. The RAP is required under California Health and Safety Code Section 25356.1 for sites that are not listed on the NPL.

**Remedial Investigation** – An investigation to identify nature and extent of potential contaminants at a site and assess human health and environmental risks and hazards that the chemicals may cause.

**Risk** – Likelihood or probability that a hazardous substance released to the environment will cause adverse effects on exposed human 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 (also expressed  $1 \times 10^{-6}$ ). This means that one person in a population of 1,000,000 are more likely to get cancer over their lifetime. Non-cancer risk is expressed as a hazard Index (HI), see above.

**Risk Management Range** – The risk management range is considered to represent a risk between 1 in 10,000 and 1 in 1,000,000 ( $1 \times 10^{-4}$  and  $1 \times 10^{-6}$ ).

**Tier 1 screening-level ecological risk assessment** – An assessment of ecological risk based on published screening criteria.

**Unacceptable Risk** – A quantification of potential harm to humans, animals, or plants from exposure to contaminants at elevated levels. An unacceptable risk means there is a threat to human health or the environment and that a remedial action must be taken. Unacceptable risk is characterized by a site risk above 1 in 10,000 ( $1 \times 10^{-4}$ ).

**FOR MORE INFORMATION**

For more information on the environmental program at NAVSTA TI, the Proposed Plan/Draft RAP, RAP, Record of Decision, or Negative Declaration, please contact the following:

**Navy Contact**

Mr. Charles Perry  
1455 Frazee Road, Suite 900  
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**Water Board Contact**

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**DTSC Contact**

Mr. Ryan Miya  
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[rmiya@dtsc.ca.gov](mailto:rmiya@dtsc.ca.gov)

**EPA Contact**

Ms. Christine Katin  
75 Hawthorne St. SFD-8-1  
San Francisco, CA 94105-3901  
(415) 972-3112  
[katin.christine@epa.gov](mailto:katin.christine@epa.gov)

**WHERE TO SUBMIT COMMENTS**

**Proposed Plan/Draft RAP**

In addition to the public meeting, you may submit your comments on the Proposed Plan/Draft RAP via fax, email, or mail to the Navy contact person identified above.

**Proposed Negative Declaration**

You may submit your comments on the proposed Negative Declaration via mail or email to the DTSC contact person listed above.

**DATES TO REMEMBER**

**October 7, 2008  
7:00-8:00 p.m.**

Public meeting for comments on the Proposed Plan/Draft RAP and the proposed Negative Declaration.

All comments must be postmarked by October 23, 2008 for consideration.

**USE THIS SPACE TO WRITE YOUR COMMENTS**

COMMENTS: \_\_\_\_\_  
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**Proposed Plan/Draft RAP for Site 30, Daycare Center**

**MAILING COUPON**

If you would like to be added to the Naval Station Treasure Island mailing list and receive copies of future newsletters and fact sheets, please fill out the coupon below and mail it to:

Mr. James Sullivan  
Navy BRAC Program Management Office West  
410 Palm Avenue  
Building 1, Room 161  
Treasure Island, San Francisco, CA 94130-1806

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