



Final

**Land Use Control
Remedial Design/Remedial Action Work Plan
IR Site 30**

**NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA**

November 24, 2010

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EXECUTIVE SUMMARY

This Remedial Design/Remedial Action Work Plan (RD/RAWP) for Installation Restoration (IR) Site 30 Naval Station Treasure Island San Francisco, California (NAVSTA TI) addresses the land use restrictions required by Section 2.12 of the Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan (ROD) dated July 27, 2009, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It requires the implementation of land-use restrictions to prevent exposure to potentially dioxin-contaminated soils beneath IR Site 30 from an “old trash dump” situated along a waterline replacement area within 11th Street to the north of IR Site 30 noted on a 1989 as-built drawing in both the short term and long term, and allows IR Site 30 to be used in its current and future use as a daycare center. The RD/RAWP specifies the roles and responsibilities for implementing, monitoring, and enforcing the engineering controls (ECs) and institutional controls (ICs) specified in the ROD.

At sites, such as IR Site 30, where contaminants are left in place at levels that do not allow for unrestricted use, Land Use Controls (LUCs) are used to ensure that the contaminants do not pose an unacceptable risk to human health or the environment. LUCs are defined as any restriction or administrative action, including ECs and ICs, arising from the need to reduce risk to human health and the environment. The selected remedy in the ROD utilizes both ECs and ICs.

The IR Site 30 ECs specify maintaining the building foundation slab to prevent contact with potential dioxin contamination beneath the slab. Periodic inspections are required to verify its ongoing integrity. The IR Site 30 ICs address risk from soil beneath the Building 502 slab and the adjacent IR Site 30 Concrete Pad to potential future industrial/commercial or residential users. ICs restrict any removal or penetration of the Building 502 slab or the IR Site 30 Concrete Pad, except when following specific guidelines to prevent exposure to potentially contaminated soil. If utility repairs are required, engineering controls, procedures and safety measures would be required to prevent exposure of the occupants and workers to potentially contaminated soil and provide for proper disposal. Any future owner is required to conduct an investigation and potentially prepare a work plan for a remedial/removal action prior to any demolition or removal of the existing structures on the site. A CERCLA-mandated Five-Year Review must also be conducted.

The RD/RAWP describes measures required per the ROD to document the ongoing effectiveness of the ECs and ICs. The measures are to:

1. Conduct annual inspections of the Building 502 concrete slab to evaluate its physical state and need for maintenance activities;
2. Report the annual inspection results to the appropriate agencies and organizations;
3. Upload the RD/RAWP and annual inspection results to the Naval Installation Restoration Information Solution (NIRIS) system;
4. Make provisions for utility repairs, as necessary;
5. Conduct an investigation and any necessary remediation beneath Building 502 upon building demolition and removal; and

6. Conduct CERCLA Five-Year reviews of the site conditions to assure that the selected remedy is still protective of human health and the environment.

Procedures to accomplish the above measures are described in the RD/RAWP including inspection procedures and records, site diagrams, use of the NIRIS system and a discussion of protective measures required to be developed in the event of utility repairs or demolition and removal of site structures. The RD/RAWP also includes the requirement for the preparation and submittal of the annual inspection report. The annual site reports and additional site inspection records will be used to conduct the CERCLA Five-Year Review. The Navy will present the RD/RAWP and the annual inspection results report to the Treasure Island Restoration Advisory Board (RAB) and the BRAC Closure Team (BCT).

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ACRONYMS

ng/kg	nanograms per kilogram
AHA	Activity and Health Analysis
bgs	Below ground surface
BRAC	Base Realignment and Closure
BCT	BRAC Cleanup Team
CCR	California Code of Regulations
CMECC	California Military Environmental Coordinating Committee
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DoD	Department of Defense
DTSC	Department of Toxic Substances Control
ECs	engineering controls
EFD	Naval Facilities Engineering Command Engineering Field Division
FFSRA	Federal Facilities Site Remediation Agreement.
ICs	institutional controls
IR	installation restoration
LUC	land use control
LUCIP	Land Use Control Implementation Plan
NAVSTA TI	Naval Station Treasure Island
Navy	Department of the Navy
NIRIS	Naval Installation Restoration Information Solution
PCBs	Polychlorinated Biphenyls
PWD	Public Works Department
RAB	Restoration Advisory Board
RD/RAWP	Remedial Design/Remedial Action Work Plan
ROD	Record of Decision
RPM	Remedial Project Manager
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SSHHP	Site Safety and Health Plan
TCRA	Time Critical Removal Action
TIDA	Treasure Island Development Authority
TEQ	Toxic Equivalent
YBI	Yerba Buena Island

1.0 INTRODUCTION

This Remedial Design/Remedial Action Work Plan (RD/RAWP) for Installation Restoration (IR) Site 30 Naval Station Treasure Island San Francisco, California (NAVSTA TI) addresses the land use restrictions required by Section 2.12 of the Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan (ROD) dated July 27, 2009 (BAI 2009), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).. It requires the implementation of land-use restrictions to prevent exposure to potentially contaminated soils beneath IR Site 30 from an “old trash dump” situated along a waterline replacement area within 11th Street to the north of IR Site 30 noted on a 1989 as-built drawing in both the short term and long term, and allows IR Site 30 to be used in its current and future use as a daycare center, serving the community. The RD/RAWP specifies the roles and responsibilities for implementing, monitoring, and enforcing the engineering and institutional controls specified in the ROD.

This document was prepared in accordance with the “Navy Principles and Procedures for Specifying Monitoring and Enforcement of Land Use Controls and Other Post-ROD Actions” attached to the January 16, 2004 Department of Defense (DoD) Memorandum titled “Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision and Post-ROD Policy”.

1.1 Definition of Land Use Controls

At sites, such as IR Site 30, where contaminants are left in place at levels that do not allow for unrestricted use, Land Use Controls (LUCs) are used to ensure that the contaminants do not pose an unacceptable risk to human health or the environment. LUCs are defined as any restriction or administrative action, including engineering controls (ECs) and institutional controls (ICs), arising from the need to reduce risk to human health and the environment.

1.2 Engineering Controls

ECs may include physical barriers between contamination and potential receptors (such as caps, concrete slabs, and fences), or alarm systems (such as signage and sirens), that warn potential receptors of the presence of contamination.

1.3 Institutional Controls

ICs are legal and administrative mechanisms for restricting exposures to residual contamination. There are four general categories of ICs: governmental controls, proprietary controls, enforcement with LUC components, and informational devices.

1.4 Navy Responsibilities for LUC Inspections, Reporting, and Enforcement

The Navy shall be responsible for implementing, maintaining, inspecting, reporting, and enforcing the LUCs identified in Section 3 prior to conveyance of the property. Navy will later transfer these procedural responsibilities to another party (“transferee”) by contract, property transfer agreement, or other means. Although the Navy may contractually arrange for third parties to assume responsibility for and perform any and all actions associated with ICs, the

Navy is ultimately responsible under CERCLA for the successful implementation of ICs, including maintaining, monitoring, reporting on, and enforcing the controls as necessary for remedy integrity before and after property transfer. Should any LUC objectives fail, the Navy shall ensure that appropriate actions are taken to re-establish protectiveness of the remedy and may initiate legal action to either compel action by a third party(ies) and/or recover the Navy's costs for mitigating any discovered LUC violation(s).

2.0 SITE DESCRIPTION

2.1 Site Location

NAVSTA TI lies in San Francisco Bay, midway between San Francisco and Oakland, California. The Naval facility consists of two contiguous islands: TI, and Yerba Buena Island (YBI). IR Site 30, Daycare Center, consists of approximately 1.5 acres located in the northwest portion of TI (Figures 1 and 2).

IR Site 30 is bounded to the north by a line drawn 2 feet north of the daycare center fence, to the east by Avenue E, to the south by 10th Street, and to the west by the sidewalk of Avenue D (Figure 2). IR Site 30 is a relatively small site with an area of approximately 1.5 acres. The shortest distance between IR Site 30 and San Francisco Bay is approximately 1,200 feet. The site boundary of adjacent IR Site 31 was modified in February 2005 to include the sidewalks on the south side of 11th Street (Figure 2).

2.2 Site Characteristics

IR Site 30 includes Building 502, currently used as a daycare center. The daycare center property is fenced and consists of the daycare center building surrounded by paved or landscaped areas (Figure 2). Access to the property is provided only through the front entrance of the daycare center. A wooden fence prevents unauthorized access to the daycare center play yard. The paved areas, which comprise the majority of the property, include walking paths, playground, storage areas, a parking lot, and a concrete and asphalt pad (i.e. IR Site 30 Concrete Pad). This pad was installed in January 2003 (Figure 2) as part of the Time Critical Removal Action (TCRA) at Parcel T094. Small grass lawns and landscaped areas cover a smaller fraction of the property.

The plans for Building 502 indicate the existing daycare center building slab is 10.25 inches of concrete consisting of a 4-inch thick reinforced sub-slab, a 3.25-inch airfloor/concrete layer, and a 3-inch thick reinforced concrete layer over the airfloor/concrete layer. Airfloor is an interlocking metal form that provides both ventilation and radiant heat. Beneath this rigid system are a 2-inch sand layer, a vapor barrier, a capillary water barrier, and a minimum of 9 inches of engineered fill (Navy 1982). The existing daycare center building slab is considered to be an effective EC because of its thickness, construction, and the presence of several layers of clean fill material immediately beneath the building slab which provides further separation between the slab and potentially contaminated soils.

2.3 Investigation History

In April 2002, a 1989 as-built drawing was discovered indicating that the Navy Public Works Center installed an 8-inch water line down the middle of 11th Street. A note on the as-built drawing for the water line project identified an “old trash dump” within the western portion of the water line excavation along 11th Street between Avenues D and E (Shaw 2003). Subsequently, a multi-phase investigation and removal action was conducted beginning in May 2002 to determine the nature and extent of the buried debris (Shaw 2003; 2004). Based on the findings of the early phases of this investigation, the Navy designated a portion of Parcel T094 as IR Site 30 on September 6, 2002 (Shaw 2003).

An exploratory trenching and subsurface investigation was performed in five phases, and included IR Site 31 located immediately north of IR Site 30. All trenches were logged for debris, and soil samples were collected for analysis of polycyclic aromatic hydrocarbons (PAH), metals, organochlorine pesticides, polychlorinated biphenyls (PCBs) and dioxins. Six of 19 soil samples exceeded the EPA residential Preliminary Remediation Goal (PRG) of 3.9 nanograms per kilogram (ng/kg) for dioxin toxic equivalent (TEQ) (EPA 2004, SulTech 2006a). Two of these samples (sample T094-29-1 at 34.1 ng/kg and sample T094-48-1 at 27.7 ng/kg) exceeded both the NAVSTA TI dioxin ambient concentration of 12.0 ng/kg and the field screening concentration of 19.0 ng/kg (Shaw 2003). These two samples were collected at depths of 4.0 and 5.0 feet below ground surface (bgs) from investigatory trenches excavated on the west side of Building 502. Because burnt debris was visually identified in the two trenches adjacent to Building 502, the full lateral and vertical extent of dioxin contamination beneath Building 502 has not been determined (SulTech 2006a). The results of the trenching investigation led the Navy to perform a Time Critical Removal Action (TCRA) on part of IR Site 30 and nearby portions of IR Site 31.

The Navy performed a TCRA at IR Site 30 in July 2002. The objective was to remove debris-contaminated soil from areas that 1) were not already covered with a substantial pavement barrier, 2) contained concentrations of lead exceeding the residential PRG of 400 mg/kg, or 3) contained dioxin TEQ concentrations exceeding the guideline of DTSC's School Property Evaluation and Cleanup Division of 19.5 ng/kg. Approximately 200 cubic yards of soil were removed from IR Site 30. Also, a 1,400 square foot concrete and asphalt pad (IR Site 30 Concrete Pad) was installed adjacent to the daycare center building (Shaw 2003) to cover soil containing dioxin TEQ concentrations exceeding the 19.5 ng/kg guideline found adjacent to Building 502 at a depth between 4 and 5 feet bgs.

Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors, construction workers, residential uses, and industrial/commercial uses to be below the risk management range (BAI 2009). Therefore, the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors (SulTech 2006b). However, dioxin beneath the Site 30 Concrete Pad adjacent to Building 502 represents unacceptable risk to hypothetical commercial/industrial receptors and residents. Therefore, that soil should not be disturbed except when following specific guidelines to prevent the exposure to potentially contaminated soils.

3.0 IR SITE 30 LAND USE CONTROLS

3.1 Selected Remedy for IR Site 30

The selected remedy presented in the ROD, Alternative 2 Engineering Controls combined with Institutional Controls, will use ECs combined with ICs to prevent exposure to potentially contaminated soils beneath Building 502 and impacted soils beneath IR Site 30 Concrete Pad.

3.2 Alternative 2 LUC Components

The selected remedy for IR Site 30, Alternative 2, is described in the ROD as:

IR Site 30 ECs will consist of maintaining the building foundation slab to prevent contact with potential dioxin contamination beneath the slab. 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 IR Site 30 Concrete Pad adjacent to Building 502 would not be maintained as an EC, because contaminants beneath the pad do not pose a risk to current use of the site as a daycare center.

The ICs will restrict any removal or penetration of the Building 502 slab or excavation below the IR Site 30 Concrete Pad except when following specific guidelines to prevent exposure to potentially contaminated soil. If utility repairs (such as water or sewer pipe repairs) are required, measures would be implemented to prevent exposure of the occupants and workers to potentially contaminated soil.

ICs 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, and (4) require an investigation and any necessary remediation beneath Building 502 upon building demolition and removal.*
- *A notice and restrictive covenant included in a quit claim deed from the Navy to the property recipient.*

CERCLA Five-Year Reviews of the site conditions will be conducted to assure that the selected remedy is still protective of human health and the environment.

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4.0 PROJECT DESCRIPTION

4.1 *Project Activities*

The IR Site 30 ROD selected remedy relies on the presence of the Building 502 concrete slab to provide adequate protection to the occupants of the building and the environment. Therefore the tasks to be conducted under this RD/RAWP are to:

1. Conduct annual inspections of the Building 502 concrete slab to evaluate its physical state and any need for maintenance activities;
2. Report the inspection results to appropriate agencies and organizations;
3. Upload the RD/RAWP and the annual inspection results to the Naval Installation Restoration Information Solution (NIRIS) system;
4. Make provisions for utility repairs, as necessary;
5. Conduct an investigation and any necessary remediation beneath Building 502 upon building demolition and removal; and
6. Conduct CERCLA Five-Year Reviews of the site conditions to assure that the selected remedy is still protective of human health and the environment.

Section 5, Remedial Design, provides descriptions and standard operating procedures to be followed to accomplish the above tasks.

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5.0 REMEDIAL DESIGN

Based on the requirements of the institutional controls for the Building 502 slab described in the ROD, five tasks were developed to implement, document and report that the LUCs are in place and providing the appropriate protection to human health and the environment.” Implementation of these tasks is described in this section.

5.1 Transfer Requirements

Prior to transfer of Site 30, a State land use covenant will be executed by DTSC and the Navy, and recorded by the Navy. The State land use covenant will contain the following restrictions 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) *provide for making utility repairs, as necessary, and*
- 4) *require remedial investigation and any necessary remediation beneath Building 502 upon building demolition and removal.*

5.2 Annual Inspections

The Navy will conduct annual inspections of the Building 502 concrete slab. Inspection activities will include:

1. A thorough visual examination of the Building 502 concrete slab for the presence of chipped or cracked concrete, cracks penetrating the concrete surface, installation of unauthorized borings, groundwater wells, holes, repairs or other potential removals or penetrations of the surface.
2. Photographs of the surface of the slab, especially any areas of cracks, breaks, penetrations or other potential or actual damage. These photographs must be of sufficient detail and quality, including a ruler or other device for scale that will accurately and completely illustrate the problem or potential problem identified. Photographs of the slab will also be taken to provide a baseline to be used in subsequent annual inspections to identify any new damage since the last inspection.
3. Collecting measurements of specific location(s), length, width, depth of cracks, breaks, damage, etc., that would be useful in developing appropriate remedial actions. Documentation of the apparent/actual cause of the damage, if possible will also be conducted.
4. Completion of the IR Site 30 Field Inspection Checklist (Appendix A). Copies of this form and associated information will be kept on file at the Navy BRAC Program Management Office West Room 161 Treasure Island, 1 Avenue of the Palms, Suite 161 Treasure Island, San Francisco, CA, 94130.
5. Completion of IR Site 30 LUC Annual Compliance Monitoring Report (Appendix B).

5.3 Report of Annual Inspection Results

A report of the annual inspection using the IR Site 30 LUC Annual Compliance Monitoring Report including copies of the completed inspection forms, recommendations for repair and/or

maintenance of the building slab if necessary, and any other pertinent information will be made within 90 days of the inspection. Copies of the inspection report will be provided to US EPA Region 9, DTSC, RWCQB, the Treasure Island Development Authority, and the Kidango Daycare Center (or the current daycare center operator). Addresses for these agencies are provided in Appendix B. A copy of each report will also be kept at the NAVSTA TI Information Repositories located at:

- **Department of the Navy, Navy BRAC Program Management Office West Room 161 Treasure Island** 1 Avenue of the Palms, Suite 161 Treasure Island, San Francisco, CA, 94130
- **San Francisco Main Library Science, Technical, and Government Documents Room** 100 Larkin Street, San Francisco, CA, 94102
- **BRAC PMO West** 1455 Frazee Road, Suite 900 San Diego, CA 92108-4310

The results of the annual inspection will be provided to the NAVSTA TI BRAC Closure Team (BCT). A copy of each annual inspection report will be uploaded to the NIRIS system.

The Navy will notify the appropriate regulatory agencies (U.S. EPA, DTSC, and RWQCB) within ten working days of the discovery of any violation of an IC and include in the notification a written explanation indicating the specific LUC violations found and what efforts or measures have or will be taken to correct those violations. The Navy will also provide to the appropriate regulatory agencies an annual Compliance Monitoring Report and LUC Compliance Certificate for IR Site 30 consistent with the form provided in Appendix B unless and until all LUCs are terminated at the site.

If any LUC violations are discovered during an annual site inspection, the Navy will provide the regulatory agencies along with the required LUC Compliance Monitoring Report Certificate, a separate written explanation indicating the specific LUC violations found and what efforts or measures have or will be taken to correct those violations. The annual Compliance Monitoring Report and Certificate shall be sent to the U.S. EPA, DTSC, and RWQCB by Certified Mail, Return Receipt Requested on an annual basis. An address and contact name list for the above agencies is provided in Appendix B. The need to continue to provide such inspections and certifications on an annual basis will be re-evaluated every five years by the Federal Facilities Site Remediation Agreement (FFSRA) signatories.

5.3 Upload Inspection Results to the NIRIS Portal

The Navy can use web-based management tools on the NIRIS to allow RPMs and other personnel to effectively manage their LUCs. NIRIS provides web-based access for data entry, storage, and management of all installation LUC data in a database system.

Following the completion of each annual report, the site inspection data, figures, descriptions, and photographs will be uploaded into the NIRIS system.

5.4 Provisions for Utility Repairs

The daycare center is currently in use, therefore, provisions to allow for utility repair (such as water pipe or sewer main repairs) that may be required as part of the general maintenance of the building are necessary. These measures require that all subsurface work within the known or

potentially contaminated areas be performed using procedures designed to prevent the exposure of the workers and the occupants of the building to potentially contaminated soils, dusts, or other contaminant sources during the project.

A project-specific work plan shall be developed that describes the specific actions to be taken and what procedures will be implemented to prevent exposure to contaminated media. It will include provisions for the proper removal, storage, characterization, and disposal of any contaminated waste that may be generated in the course of the intrusive project. This work plan must be submitted to the Navy for approval before any work is initiated.

The provisions also include development of a project-specific (e.g. water main replacement) site safety and health plan (SSHP). The SSHP will cover all necessary aspects of safety and health requirements for the project. An Activity and Hazard Analysis (AHA) will be developed for each project activity as part of the SSHP.

Should emergency utility repairs be required for occurrences such as a water or sewer main break caused by an earthquake and it is not feasible to prepare a project-specific work plan and project-specific HASP prior to conducting the repairs, the building operator would need to contract with a licensed hazardous materials contractor to properly access the break area, and segregate and remove contaminated soil to allow utility crews to safely access the area for repairs.

5.5 Remedial Investigation and Remediation for Building Demolition and Removal.

In the event that a future owner decides to demolish and remove the building and slab, an investigation would be required before construction activities could proceed. This investigation would determine what type of remediation, if any, would be necessary to identify, remove, and properly dispose of the contaminated soils currently present. The future owner would be responsible for developing and implementing an investigation and action plan. The future owner would be responsible for submitting these plans to the US EPA, DTSC, RWQCB, and/or any other appropriate agency or parties for review, comment, and approval prior to beginning an investigation.

5.6 CERCLA Five Year Remedy Review

The Navy shall conduct Five-Year Reviews of the IR Site 30 remedy as required by CERCLA Section 121(c) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Five-Year Review will evaluate implementation and compliance with the ICs to determine whether the remedy is or will be protective of human health and the environment in the future.

The annual monitoring reports prepared by the Navy will be used in preparation of the Five Year Review to evaluate the effectiveness of the remedy. As part of the five-year review the Navy will conduct a comprehensive inspection of the site, including an examination of the state of the Building 502 concrete slab and building foundation, and surrounding areas. The inspection will examine and document any issues identified in the annual reviews or issues discovered during the five-year review.

A report of the findings of the CERCLA five-year review will be uploaded to the NIRIS system.

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6.0 PROJECT ORGANIZATION AND SCHEDULE

This section presents the schedules for the plan development, regulatory and public meetings, and regulatory review and comment of the plan. Additionally, the proposed schedule for the annual site inspections for 2010 and 2011 are provided.

6.1 Public and Regulatory Agency Meetings

The Navy will present the draft RD/RAWP to the BCT and RAB for review and comment. Following review and response to comments, a final version of the RD/RAWP will be produced and sent to the BCT. The final version of the RD/RAWP will be uploaded with any other required LUC information, to the NIRIS system.

6.2 LUC Inspections

The LUC inspection will be performed during the second week of January each year and the inspection report will be submitted to the BCT by February 28th each year. This inspection frequency and reporting schedule may be revised as agreed by the BCT. The inspections will involve the pre-field preparation, the inspection of the site, and the preparation of the IR Site 30 IC Annual Compliance Monitoring Report. The results of each annual report will be presented at two BCT meetings (as required). Additionally, all required inspection information will be uploaded to the NIRIS system as part of the Annual Report submittal. The proposed dates for the inspections are:

1. 2011 Annual Inspection – January 11, 2011
2. 2011 Report to BCT (2) – February and March 2011
3. 2012 Annual Inspection – January 11, 2012
4. 2012 Report to BCT (2) – February and March 2012

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7.0 REFERENCES

42 U.S.C. § 7401 et seq., The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986.

40 *CFR* Pt. 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP)

BAI – see Barajas & Associates, Inc.

Barajas & Associates, Inc. 2008. Draft IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan Naval Station Treasure Island Treasure Island, San Francisco, California October 16, 2008

Barajas & Associates, Inc. 2010. Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan Naval Station Treasure Island Treasure Island, San Francisco, California August

Department of Defense 2004. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD) and Post-ROD Policy January 16, 2004.

Shaw Environmental & Infrastructure, Inc. (Shaw). 2003. “Final Field Activity Report, Exploratory Trenching and Soil Excavation, Time-Critical Removal Action, Parcel T094, Treasure Island, San Francisco, California.” Prepared for the Department of the Navy, Naval Facilities Engineering Command, Southwest Division (NFECSW). October 23.

Shaw. 2004. “Final Field Activity Report, Excavation Drilling, Direct Push Drilling, and Sampling, Site 31, Treasure Island, San Francisco, California.” Prepared for the Department of the Navy, NFECSW. February 12.

SulTech. 2004. “Final Addendum to the Sampling and Analysis Plan Facility-wide Groundwater Monitoring Program Installation Restoration Sites 30 and 31, Naval Station Treasure Island, San Francisco, California.” Prepared for the Department of the Navy, NFECSW. May 21.

SulTech. 2006a “Final Feasibility Study Report for Installation Restoration Site 30, Daycare Center, Naval Station Treasure Island, San Francisco, California.” Prepared for the Department of the Navy, BRAC PMO West. November 16.

SulTech. 2006b. “Final Remedial Investigation Report, Installation Restoration Site 30, Daycare Center, Naval Station Treasure Island, San Francisco, California.” Prepared for the Department of the Navy, BRAC PMO West. February.

U.S. Environmental Protection Agency (EPA). 2004. “Region IX Preliminary Remediation Goals (PRG).” Available Online at: <http://www.epa.gov/region09/waste/sfund/prg/index.htm>

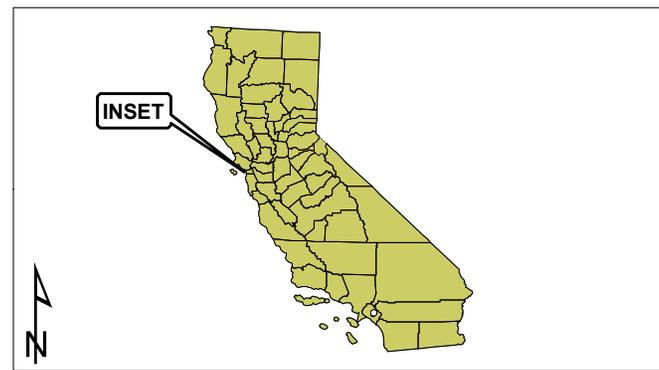
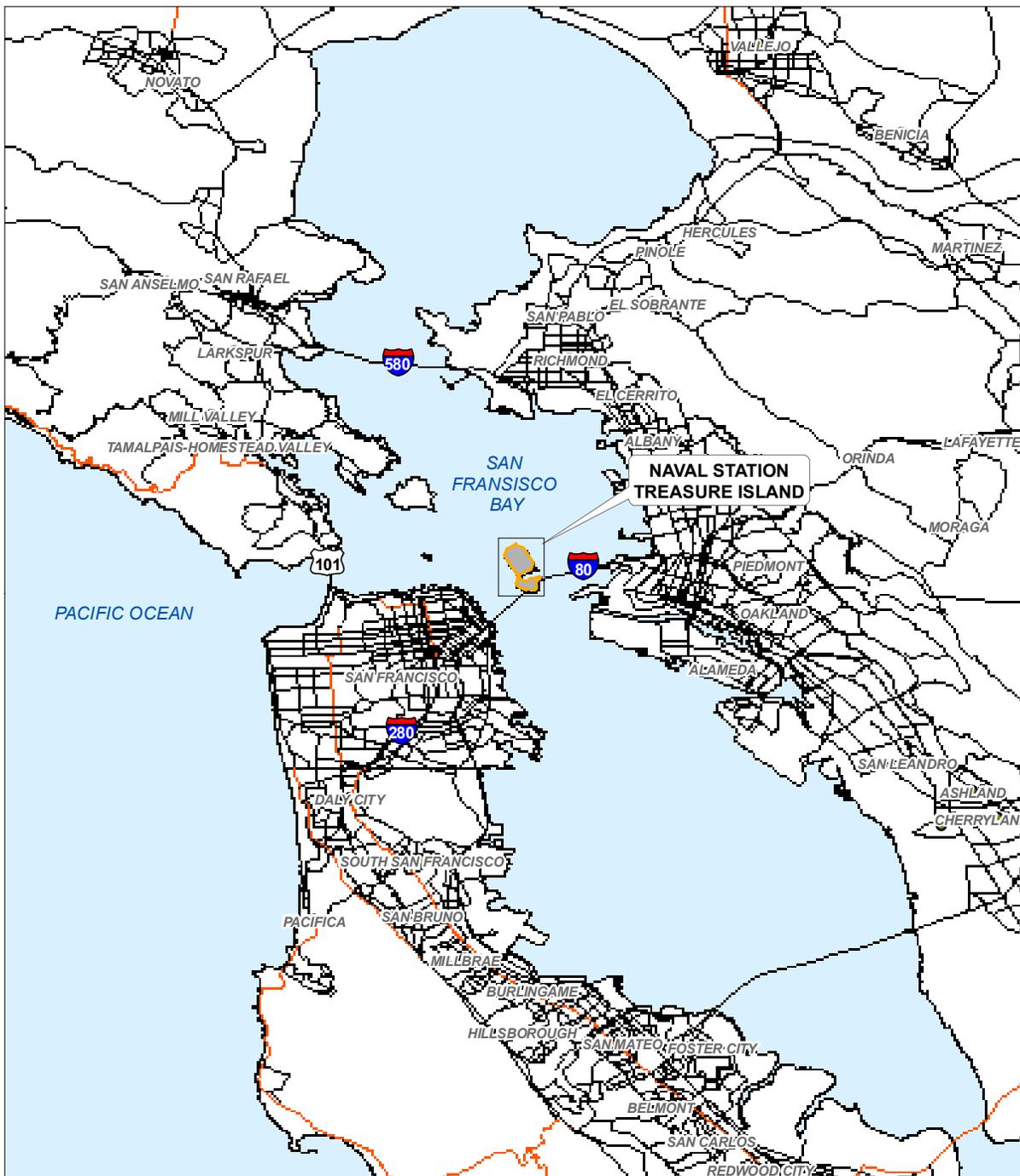
U.S. Navy 1982. Sheet S3, Concrete Sections, for NAVSTA TI P-218 Child Care Center. NAVFAC Drawing Number 6172602. October 1982

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FIGURES

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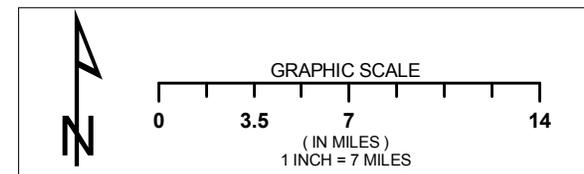
TreasureIsland\Figs_Site00_8-10\Fig1_TI_Site00_SLM_5-09.mxd 8/17/2010



LEGEND

 NAVAL STATION TREASURE ISLAND

SOURCE: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI) USA SPATIAL FEATURE CLASSES



DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

BRAC PMO WEST



NAVAL STATION TREASURE ISLAND

FIGURE 1

INSTALLATION LOCATION MAP



DATE: NOVEMBER 2010

CONTRACT NO.: N62473-08-C-9202

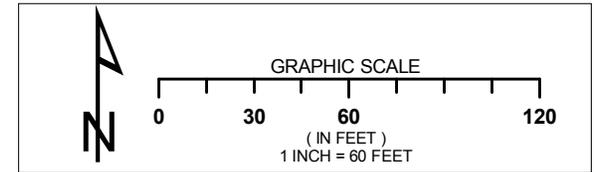
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LEGEND

-  BUILDING 502
-  INSTALLATION RESTORATION (IR) SITE 30 BOUNDARY
-  LAND USE CONTROL (LUC)
-  IR SITE 30 CONCRETE PAD

SOURCE:
GOOGLE EARTH AERIAL IMAGE, DATE UNKNOWN.
ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE
(ESRI) USA SPATIAL FEATURE CLASSES



DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

BRAC PMO WEST



NAVAL STATION TREASURE ISLAND

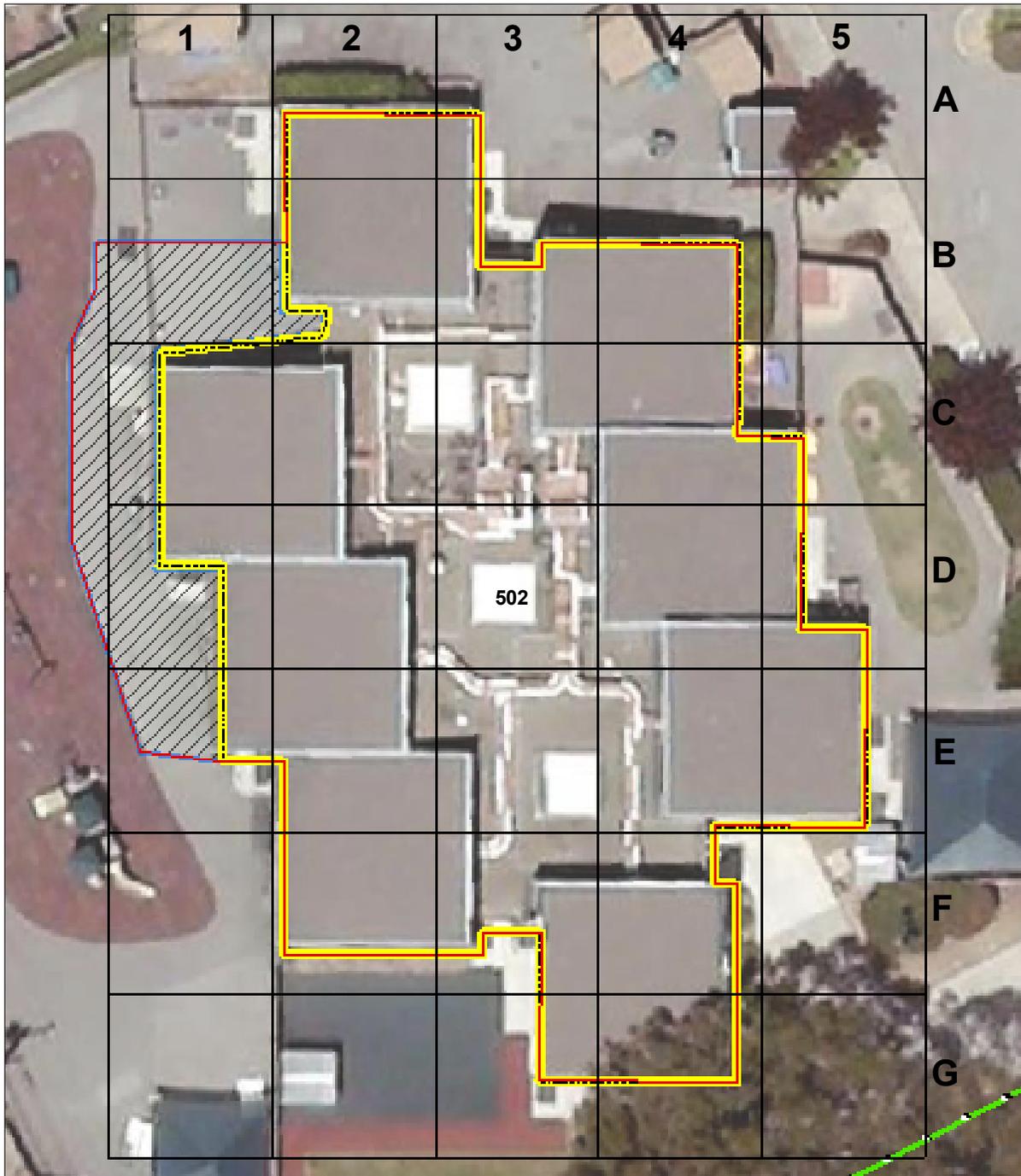
FIGURE 2
SITE VICINITY MAP



DATE: NOVEMBER 2010

CONTRACT NO.: N62473-08-C-9202

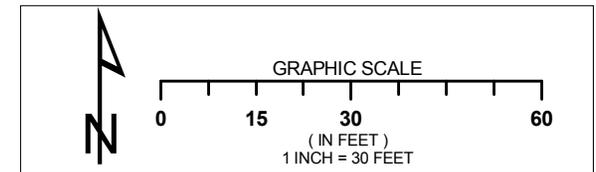
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LEGEND

-  BUILDING 502
-  INSTALLATION RESTORATION (IR) SITE 30 BOUNDARY
-  LAND USE CONTROL (LUC)
-  IR SITE 30 CONCRETE PAD
-  25 x 25 SAMPLING GRID

SOURCE:
 GOOGLE EARTH AERIAL IMAGE, DATE UNKNOWN.
 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE
 (ESRI) USA SPATIAL FEATURE CLASSES



DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

BRAC PMO WEST



NAVAL STATION TREASURE ISLAND

FIGURE 3
 BUILDING 502 FIELD
 INSPECTION MAP



DATE: NOVEMBER 2010

CONTRACT NO.: N62473-08-C-9202

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APPENDICIES

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APPENDIX A
IR SITE 30 INSPECTION CHECKLIST

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Inspection Date _____

Inspector _____

Property Owner _____

FIELD INSPECTION CHECKLIST

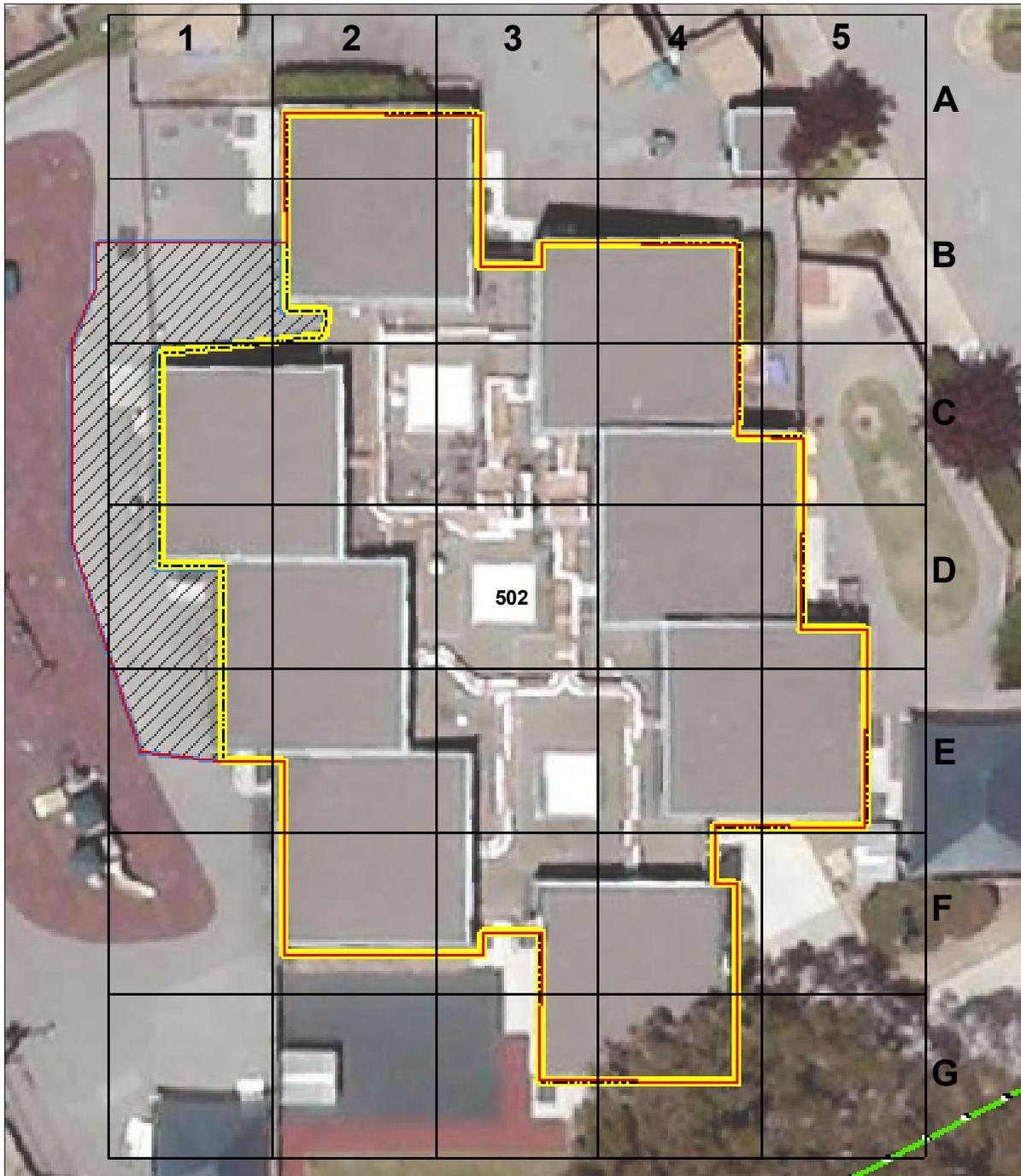
Site Condition	Location No.	Comments (location, number, size, length, depth, etc.)	NA	Photo No.
Are there cracks, holes, penetrations, or removals in the Building 502 concrete slab ? Provide location and description.			<input type="checkbox"/>	
Have there been any installation of chipped or cracked concrete, cracks penetrating the concrete surface, installation of unauthorized borings, groundwater wells, holes, repairs or other potential removals or penetrations of the surface of any type within the area requiring institutional controls ? Provide location and description.			<input type="checkbox"/>	
Was notification provided prior to any unauthorized change in land use (utility repairs, removals, etc.)? For what and by whom?			<input type="checkbox"/>	
Have contaminated soils brought to the surface by grading, excavation, trenching, drilling, or backfilling been managed in accordance with all applicable provisions of state and federal law? Provide source, type, storage location, transporter, disposal facility, date of disposal.			<input type="checkbox"/>	
Have any violations of these LUCs been reported within 10 business days of discovery with an explanation provided of those actions taken or to be taken within 10 days of notification of discovery ? Describe.			<input type="checkbox"/>	

Note NA – Not Applicable

Note all damaged areas on Figure 3, record grid number (e.g. A4) in the “Location No.” column and indicate corresponding photograph number

Use additional sheets if needed.

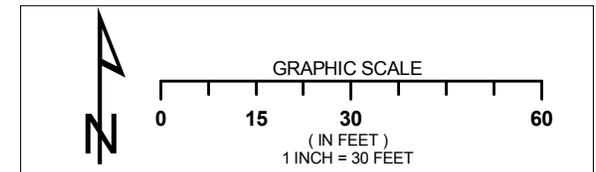
TreasureIsland\Figs_Site00_8-10\Fig3_TI_Site00_SVM_8-10.mxd 8/17/2010



LEGEND

-  BUILDING 502
-  INSTALLATION RESTORATION (IR) SITE 30 BOUNDARY
-  LAND USE CONTROL (LUC)
-  IR SITE 30 CONCRETE PAD
-  25 x 25 SAMPLING GRID

SOURCE:
 GOOGLE EARTH AERIAL IMAGE, DATE UNKNOWN.
 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE
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DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

BRAC PMO WEST



NAVAL STATION TREASURE ISLAND

FIGURE 3
 BUILDING 502 FIELD
 INSPECTION MAP



DATE: NOVEMBER 2010

CONTRACT NO.: N62473-08-C-9202

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APPENDIX B
IR SITE 30 LUC ANNUAL COMPLIANCE MONITORING REPORT

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Certification Checklist

Property

Owner: _____

This evaluation is the final Navy certification just prior to site conveyance (check if yes)

If for an annual inspection, this evaluation covers the period from _____ through _____

Inspection Items	In Compliance	Non-Compliance	See Comment
1) No cracks, holes, penetrations, or removals of the Building 502 concrete slab observed during the site inspection .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) No installation of unauthorized borings, groundwater wells, holes, repairs or other potential removals or penetrations of the surface of any type within the area requiring institutional controls. ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Notification provided prior to any unauthorized change in land use (utility repairs, removals, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Any contaminated soils brought to the surface by grading, excavation, trenching, drilling, or backfilling have been managed in accordance with all applicable provisions of state and federal law.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Any violations of these LUCs were reported within 10 business days of discovery and an explanation provided of actions taken or to be taken was provided within 10 days of notification of discovery.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Recommendations for repair and/or maintenance of Building 502 concrete pad (also see Comments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Attach photographs of damaged areas, penetrations, etc. Number photographs and indicate location(s) on Figure 3.

I, the undersigned, hereby certify that the above-described land use restrictions have been complied with for the period noted. Alternately, any known deficiencies and completed or planned actions to address them are described in the Explanation of Deficiencies.

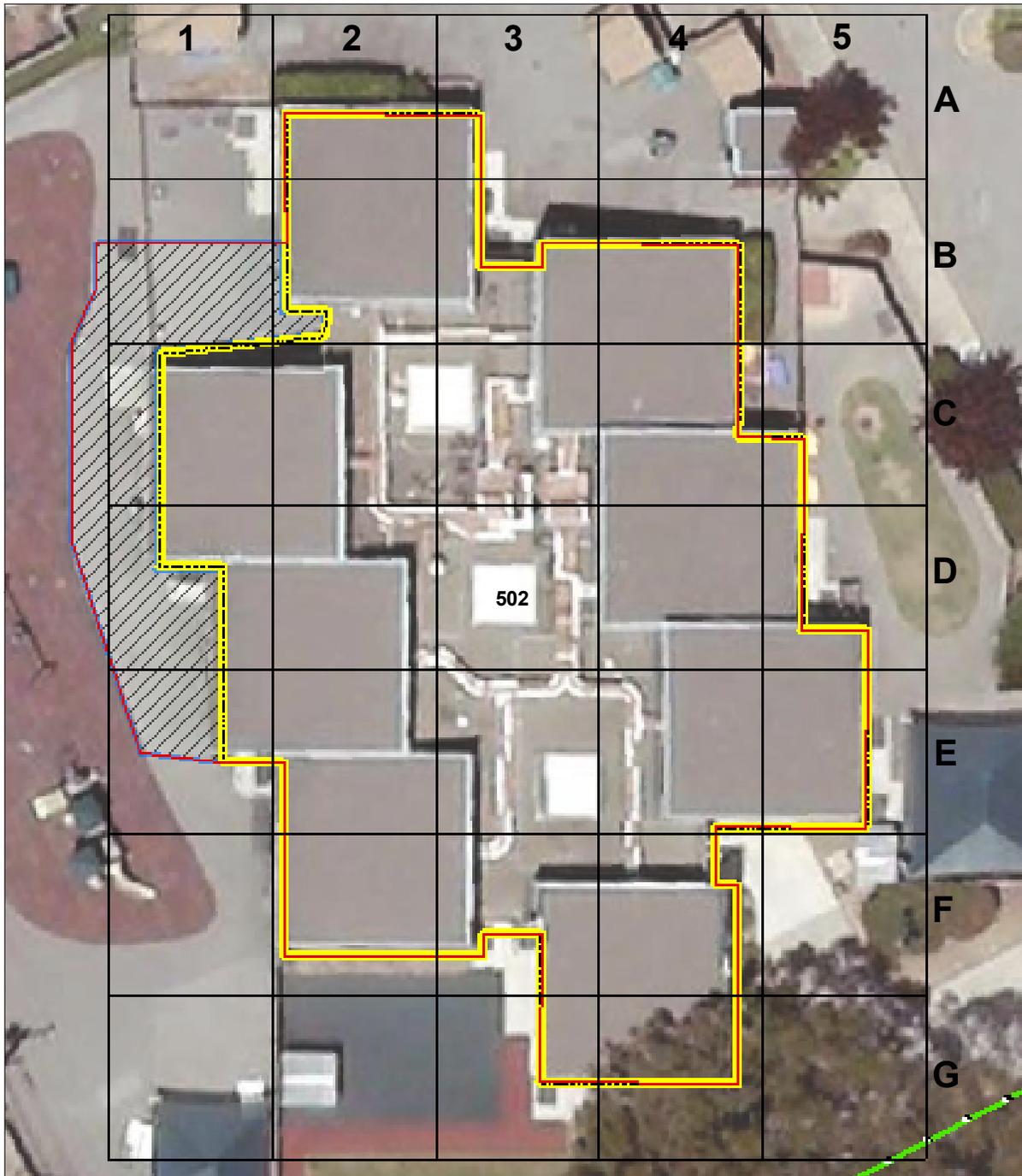
Signature _____

Date

^a – Future property owner may provide plans to the Navy, U.S. EPA, DTSC, and RWQCB for review and approval if the actions do not impact land use restrictions provided in the LUC RAWP/RD.

Mail completed form(s) to the Navy, U.S. EPA, DTSC, and RWQCB following each annual inspection.

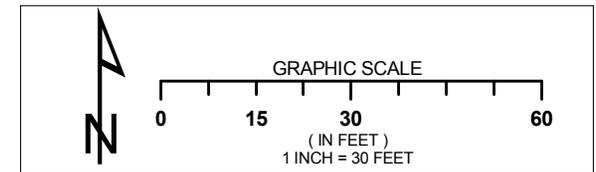
TreasureIsland\Figs_Site00_8-10\Fig3_TI_Site00_SVM_8-10.mxd 8/17/2010



LEGEND

-  BUILDING 502
-  INSTALLATION RESTORATION (IR) SITE 30 BOUNDARY
-  LAND USE CONTROL (LUC)
-  IR SITE 30 CONCRETE PAD
-  25 x 25 SAMPLING GRID

SOURCE:
 GOOGLE EARTH AERIAL IMAGE, DATE UNKNOWN.
 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE
 (ESRI) USA SPATIAL FEATURE CLASSES



DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

BRAC PMO WEST



NAVAL STATION TREASURE ISLAND

FIGURE 3
 BUILDING 502 FIELD
 INSPECTION MAP



DATE: NOVEMBER 2010

CONTRACT NO.: N62473-08-C-9202

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Site Photographs

Add photographs here

Compliance Certificate

I _____, hereby certify that the attached IR Site 30 Soil Land Use Control Compliance Monitoring Report is complete and accurate. The requirements of LUC RD/RAWP Section 4 have been met. I further certify that a copy of this compliance certificate and the attached IR Site 30 Soil Land Use Control Compliance Monitoring Report have been sent by Registered Mail to the following addressees:

(Name and title)

Date _____

(Affiliation)

(Property Owner)

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Interested Parties for IR Site 30 LUC Annual Compliance Monitoring Report Distribution

1. U.S. Environmental Protection Agency (EPA) Region IX
75 Hawthorne Street
San Francisco, CA 94105
ATTN:

2. California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay St
Suite 1400
Oakland, CA 94612
ATTN: Mr. Bruce H. Wolfe
Executive Officer

3. Department of Toxic Substances Control (DTSC)
8800 Cal Center Drive
Sacramento, CA 95826
ATTN: Ms. Barbara Cook
Cleanup Program - Berkeley

4. Regional Water Quality Control Board (RWQCB), San Francisco Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN:

5. Treasure Island Development Authority
410 Avenue of Palms,
Building 1, 2nd Floor
San Francisco, CA 94130
ATTN: Ms. Mirian Saez, Director

6. US Navy BRAC Office
410 Palm Avenue, Bldg 1
Suite 161
Treasure Island
San Francisco, CA 94130-1806
ATTN: Mr. Michael Mentink
Environmental Compliance Officer

7. BRAC PMO West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310
ATTN: Mr. David Clark
Naval Station Treasure Island Lead RPM

8. Kidango
Principal
Treasure Island Center
850 Avenue D
San Francisco, CA 94130

(or to current day care operator if ownership has changed)

APPENDIX C
RESPONSE TO COMMENTS

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Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Ross Steenson PG, CHG, Regional Water Quality Control Board San Francisco Bay Region

No.	Comment	Response
1.	<p>Internal Cover Page</p> <p>The Site is identified as “ER Site 30” instead of “IR Site 30.” Also, the facility is identified as the “Former Naval Station Treasure Island” instead of “Naval Station Treasure Island.” Please correct these errors and extend these comments throughout the document.</p>	<p>All references to Site 30 have been revised to read “IR Site 30.” The word “former” has been removed from all references to Naval Station Treasure Island.</p>
2.	<p>Executive Summary and Section 1.0 (Introduction) – These sections cite the October 2008 Draft Record of Decision (ROD)/Remedial Action Plan (RAP) rather than the July 2009 Final ROD/RAP. Please update the citations.</p>	<p>The text has been revised to read:” This Remedial Design/Remedial Action Work Plan (RD/RAWP) for Installation Restoration (IR) Site 30 Naval Station Treasure Island San Francisco, California (NAVSTA TI) addresses the land use restrictions required by Section 2.12 of the Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan (ROD) dated July 27, 2009, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).</p>
3.	<p>Section 5.2 (Report of Annual Inspection Results), p. 9 to 10 – Please address the following:</p>	
3a	<p>Correct the font/printing problem for the text in the bullets</p>	<p>The font/printing problem text has been corrected in the bullets</p>
3b	<p>On p. 10, identify the “appropriate regulatory agencies” and include an address/contact list as an appendix in the final <i>LUC RD</i>.</p>	<p>The text has been revised to read “The Navy will notify the appropriate regulatory agencies (U.S. EPA, DTSC, and RWQCB) within ten working days of the discovery of any violation of an IC and include in the notification a written explanation indicating the specific LUC violations found and what efforts or measures have or will be taken to correct those violations.” An address and contact name list for the above agencies is provided in Appendix B.</p>
4.	<p>Section 6.2 (LUC Inspections), p. 13 – Please indicate why the dates for the 2010 Report to the BCT and 2011 Report to the BCT are “TBD.”</p>	<p>The initial inspection will be conducted during the third week of October, 2010. The next annual inspection will be conducted in October 2011. Reports to the BCT will be provided at the November and December meetings of each year.</p>
5.	<p>Figure 2 (Site Vicinity Map) – The red boundary line appears to be mistakenly labeled as the Site 30 boundary line rather than the Building 502 boundary line. Please correct this and add a Site 30 boundary line</p>	<p>Figure 2 has been revised to identify the boundary of IR Site 30 along Building 502. Figure 2 is consistent with Figure 2 of the ROD. A hatched pattern has been added to delineate the concrete pad (see DTSC Specific Comment 8.2)</p>

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Treasure Island Development Authority. AMEC Geomatrix Gary R. Foote, P.G.

GENERAL COMMENT

Inspections of ER Site 30 Concrete Pad. Several sections of the document (Sections 4.1, 5.1 and 5.6) discuss annual inspections of the Building 502 concrete slab and the ER Site 30 Concrete Pad. However, it does not appear that inspection of the ER Site 30 Concrete Pad is necessary. The Site 30 ROD states that the Covenant to Restrict Use of Property, Environmental Restrictions will “require periodic inspection of the Building 502 and reporting of the inspection results (emphasis added).” Section 2.3 of Draft Site 30 LUC RD/RA Work Plan states, “the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors.” Additionally, Section 3.2 of the document states, “The ER Site 30 Concrete Pad adjacent to Building 502 would not be maintained as an EC (engineering control), because contaminants beneath the pad do not pose a risk to current use of the site as a daycare center.” As such, it appears appropriate to revise the text, ER Site 30 Field Inspection Checklist (Appendix A) and ER Site 30 LUC Annual Compliance Monitoring Report (Appendix B) to remove references to inspection of the ER Site 30 Concrete Pad.

Concur. Because the ROD states that the Site 30 Concrete Pad is not needed as an exposure prevention barrier and also that it does not have to be maintained as an Engineering Control (EC), reference to inspections and maintenance of the Site 30 Concrete Pad will be removed from the applicable LUC RD/RA Work Plan sections and appendices.

SPECIFIC COMMENTS

Executive Summary, Page ES-1. The first paragraph of the Executive Summary states, “It [the Site 30 Record of Decision] requires the implementation of land-use restrictions to prevent exposure to potentially dioxin-contaminated soils beneath Building 502 and the ER Site 30 Concrete Pad from an “old trash dump” noted on a 1989 as-built drawing..... “ As written, the reader would conclude that the 1989 drawing identified the “old trash dump” as being beneath Building 502, whereas we understand that the 1989 drawing actually identified the “old trash dump” along a water-line replacement area within 11th Street. Please revise the

The text has been revised to state “It requires the implementation of land-use restrictions to prevent exposure to potentially dioxin-contaminated soils beneath IR Site 30 from an “old trash dump” situated along a waterline replacement area within 11th Street to the north of IR Site 30 noted on a 1989 as-built drawing in both the short term and long term, and allows IR Site 30 to be used in its current and future use as a daycare center.”

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Treasure Island Development Authority. AMEC Geomatrix Gary R. Foote, P.G.

	<p>text to more accurately describe the location where the "old trash dump" was identified.</p>	
	<p>Section 2.3 Investigation History, page 4, first paragraph. It would be helpful if the document provided the dioxin concentration for the two samples that exceeded the Treasure Island ambient concentration of 12 nanograms per kilogram (ng/kg) and the field screening concentration of 19 ng/kg so that the reader will understand the magnitude of the exceedances (i.e., 34.1 and 27.7 ng/kg).</p>	<p>The text has been revised to state "Two of these samples (sample T094-29-1 at 34.1 ng/kg and sample T094-48-1 at 27.7 ng/kg) exceeded both the NAVSTA TI dioxin ambient concentration of 12.0 ng/kg and the field screening concentration of 19.0 ng/kg (Shaw 2003).</p>
	<p>Section 2.3 Investigation History, page 4 third paragraph. The end of this paragraph states, "Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors to be below the risk management range. Therefore, the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors (SulTech 2006b)." The document should summarize the findings with respect to other receptors evaluated in the human health risk assessment, so that the reader will understand why institutional controls are needed for the soil beneath the concrete pad, even though an engineering control (i.e. the concrete pad itself) is not necessary.</p>	<p>The text has been revised to state: "Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors, construction workers, residential uses, and industrial/commercial uses to be below the risk management range (BAI 2009). Therefore, the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors (SulTech 2006b). However, dioxin beneath the Site 30 Concrete Pad adjacent to Building 502 represents unacceptable risk to hypothetical commercial/industrial receptors and residents. Therefore, that soil should not be disturbed except when following specific guidelines to prevent the exposure to potentially contaminated soils"</p>
	<p>Section 2.3 Investigation History, page 4 third paragraph. November 2, 2010 In response to a comment on Section 2.3, the text was revised to state: "Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors, construction workers, residential uses, and industrial/commercial uses to be below the risk management range (BAI 2009). Therefore, the concrete pad is not needed as an</p>	<p>The Section 2.3 text has been revised to state "Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors, construction workers, residential uses, and industrial/commercial uses to be below the risk management range (BAI 2009). Therefore, the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors (SulTech 2006b). However, the HHRA determined that risk to certain hypothetical future receptors (residential users, and industrial/commercial users) are within the risk management range."</p>

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Treasure Island Development Authority. AMEC Geomatrix Gary R. Foote, P.G.

<p>exposure prevention barrier for the daycare center receptors (SulTech 2006b)." This isn't correct. Some of the hypothetical future scenarios were within, not below, the risk management range and this is the reason that there is a RAO to protect potential future receptors from direct contact with soils containing dioxin. I think this paragraph could be revised as follows: "Although the concrete pad was installed as an interim measure to prevent exposure to dioxins in soil, the results of the subsequent human health risk assessment (HHRA) determined the risk to daycare center receptors, construction workers, residential uses, and industrial/commercial uses to be below the risk management range (BAI 2009). Therefore, the concrete pad is not needed as an exposure prevention barrier for the daycare center receptors (SulTech 2006b). However, the HHRA determined that risk to certain hypothetical future receptors (residential users, and industrial/commercial users) are within the risk management range."</p>	
<p>Section 3.2 Alternative 2 LUC Components. The second bullet refers to a "quick claim." The correct terminology is "quit claim."</p>	<p>The text has been revised to" <i>A notice and restrictive covenant included in a quit claim deed from the Navy to the property recipient.</i></p>
<p>Section 5.2 Report of Annual Inspection Results. This section indicates that annual inspection reports will be provided to several stakeholders, including Kidango Daycare Center. To allow for potential changes to the operator of the daycare center, we suggest removing the reference to "Kidango Daycare Center" and replacing it with "daycare center operator."</p>	<p>The text has been revised to state" Copies of the inspection report will be provided to US EPA Region 9, DTSC, RWCQB, the Treasure Island Development Authority, and the Kidango Daycare Center (or the current daycare center operator). Addresses for these agencies are provided in Appendix B.</p>
<p>Section 5.4 Provisions for Utility Repair. The document should discuss provisions to allow for emergency utility repairs, when it is not feasible to develop a project-specific work plan and site safety and health plan prior to conducting the repairs.</p>	<p>The text has been revised to state "Should emergency utility repairs be required for occurrences such as a water or sewer main break caused by an earthquake, the building operator would need to contract with a licensed hazardous materials contractor to properly access the break area, and segregate and remove contaminated soil to allow utility crews to safely access the area for repairs.</p>

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Treasure Island Development Authority. AMEC Geomatrix Gary R. Foote, P.G.

<p>Section 5.4 Provisions for Utility Repair. November 2, 2010. I appreciate the changes made to address our request to include provisions for emergency utility repair in Section 5.4. However, I think the text should say that it won't be necessary (or feasible) to prepare a project-specific work plan and project-specific HASP when emergency repairs are required. Perhaps the text can be revised as follows: "Should emergency utility repairs be required for occurrences such as a water or sewer main break caused by an earthquake and it is not feasible to prepare a project-specific work plan and project-specific HASP prior to conducting the repairs, the building operator would need to contract with a licensed hazardous materials contractor to properly access the break area, and segregate and remove contaminated soil to allow utility crews to safely access the area for repairs."</p>	<p>The Section 5.4 text has been modified to state ""Should emergency utility repairs be required for occurrences such as a water or sewer main break caused by an earthquake and it is not feasible to prepare a project-specific work plan and project-specific HASP prior to conducting the repairs, the building operator would need to contract with a licensed hazardous materials contractor to properly access the break area, and segregate and remove contaminated soil to allow utility crews to safely access the area for repairs."</p>
<p>Figure 2 This figure shows the Site 30 boundary as being the outline of Building 502. The figure should be revised to show the correct site boundary (consistent with the description in Section 2.1).</p>	<p>Figure 2 has been revised to show the correct boundary of IR Site 30.</p>
<p>Appendix A (IR Site 30 Field Inspection Checklist) and Appendix B (IR Site 30 LUC Annual Compliance Monitoring Report). Both documents request the inspector to assess and report whether there has been any removal or damage to security features such as locks on site fencing, signs, survey monuments, or other appurtenances. Because such security features are not a component of the selected remedy, we request removing this item from the documents.</p>	<p>Security features, while not mentioned specifically in the ROD, are part of the selected remedy in that they provide an extra layer of protection by helping keep unauthorized persons and activities away from the Building 502 concrete slab.</p>
<p>Appendix A (IR Site 30 Field Inspection Checklist) and Appendix B (IR Site 30 LUC Annual Compliance Monitoring Report) November 2, 2010 I am still puzzled about why the checklists have security features listed (i.e., "Has there been any removal or damage to security features such as locks on site fencing, signs, survey monuments or other appurtenances?"). The</p>	<p>The ROD does not specifically mention "locks, site fencing, signs, survey monuments or other appurtenances" therefore the reference has been removed from Appendix A Field Inspection Checklist. If, during the inspection, any such security features related to IR Site 30 are encountered, they will be added to the checklist for future inspections.</p>

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Treasure Island Development Authority. AMEC Geomatrix Gary R. Foote, P.G.

<p>RTC says "Security features, while not mentioned specifically in the ROD, are part of the selected remedy in that they provide an extra layer of protection by helping keep unauthorized persons and activities away from the Building 502 concrete slab." If we actually have security features that need to be maintained, I agree with you. But I am not aware of the security features that are part of the selected remedy. Exactly what are the security features that we are asking the inspectors to inspect? If we truly do have security features, can we revise the checklist to explicitly list them?</p>	
--	--

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: U.S. EPA, Region 9. Christine Katin

1	The ROD for Site 30 specifies that "ICs would require inspection, maintenance, and reporting of the Site 30 Concrete Pad and Building 502 building slab to ensure remedy compliance" (page 26). The section on LUCs specifies that inspection of the Building 502 slab is required, but does not mention inspection of the Concrete Slab. If this section is revised, please consider revising the description of ICs to specify the components that apply to the Concrete Pad and the Building 502 slab.	Because the ROD states that the Site 30 Concrete Pad is not needed as an exposure prevention barrier and also that it does not have to be maintained as an Engineering Control (EC), reference to inspections of the Pad have been removed from the applicable LUC RD/RA Work Plan section and appendices.
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Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: William Carson P.E. ARCADIS for Lenar Bay Area Urban

<p>1</p>	<p>ARCADIS recommends that Section 5.5 (Remedial Investigation and Remediation for Building Demolition and Removal) of the subject document be revised.</p> <p>If the Removal Action Work Plan (RAWP) were revised to provide more detail on the type of investigation required, the risk assessment methodology acceptable to the agencies and the Navy, and the required remedial actions that would be necessary to allow for lifting the LUC, it would provide clarity to all parties regarding the feasibility of further development of the Site. ARCADIS recommends that Section 5.5 of the Draft LUC RD/RAWP be revised as follows:</p> <p>If demolition of the foundation is desired to facilitate site development, the property owner at the time of demolition will prepare a work plan outlining the proposed investigation, demolition and remedial activities for review and comment by the DTSC prior to removal of the foundation. The work plan will be provided to the Navy and US EPA for informational purposes and review and comment as appropriate. Upon completion of the investigation and demolition, soil impacted above the action level for dioxins will be excavated so that the exposure point concentration is less than the U.S. EPA Preliminary Remediation Goal appropriate for the proposed reuse of the site or the Naval Station Treasure Island dioxin ambient concentration of 12.0 nanograms per kilogram (ng/kg) (EPA 2004; SuTech 2006), whichever is higher. In the event that prerediation investigations indicate that the exposure point concentration is in excess of the appropriate action level for arsenic, lead and vanadium (PRG or ambient concentrations, whichever is higher), the confirmation soil testing program will include testing for arsenic, lead and vanadium and soil will be removed so that the exposure point concentration is less than the appropriate action level. Impacted soil will be removed to a depth of 10 feet or the depth of the</p>	<p>The RAWP would be based on the specific nature of the demolition and/or removal project to be conducted. Development of the RAWP would be the responsibility of the future owner or developer and would be submitted to the Navy and the appropriate regulatory agencies for review at that time. Any decisions on removal of the land use controls would be made based on the outcome of the project.</p> <p>The text has been revised to state “The future owner would be responsible for developing and implementing an investigation and action plan. The future owner would be responsible for submitting these plans to the US EPA, DTSC, RWQCB, and/or any other appropriate agency or parties for review, comment, and approval prior to beginning an investigation.</p>
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Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: William Carson P.E. ARCADIS for Lenar Bay Area Urban

<p>groundwater table, whichever is shallower. The excavated soil will be replaced with clean fill. Excavated soil will be transported to a licensed facility acceptable to the DTSC for disposal. The Site Owner will then prepare a site close-out report for review and comment by the DTSC. Upon acceptance of the report, DTSC will provide a no-further-action letter that includes language allowing removal of the land use control from the site.</p>	
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Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Remedios V. Sunga, Remedial Project Manger Brownfields and Environmental Restoration Program, Dept. of Toxic Substances Control**GENERAL COMMENTS**

No.	Comment	Response
1.	<p><u>Restricted Land Uses and Activities.</u> The specific land use controls or restrictions should be clearly identified under the Land Use Controls (LUC) section. The current use of the Site as a daycare center is allowed but other restricted land uses and activities are not clearly defined. For example, the inspection checklist includes inspections for groundwater wells that may have been installed at Site 30 but was not discussed in the text. As specified in the Final Record of Decision/ Remedial Action Plan (ROD), DTSC will prepare a "Covenant to Restrict Use of Property, Environmental Restriction" that will identify the specific land use restrictions and prohibited activities for recordation with the County. The Covenant will be between DTSC and the Navy or the City.</p>	<p>Section 5.1 Annual Inspections states "A thorough visual examination of the Building 502 concrete slab and the IR Site 30 Concrete Pad for the presence of chipped or cracked concrete, cracks penetrating the concrete surface, installation of unauthorized borings, holes, repairs or other potential removals or penetrations of either surface.</p> <p>The Appendix A Inspection Checklist text has been modified to state "Were there any areas of chipped or cracked concrete, cracks penetrating the concrete surface, installation of unauthorized borings, groundwater wells, holes, repairs or other potential removals or penetrations of the surface of any type within the area requiring institutional controls ? Provide location and description.</p> <p>The Appendix B Compliance Monitoring report has been modified to:</p> <p>2) No installation of unauthorized borings, groundwater wells, holes, repairs or other potential removals or penetrations of the surface of any type within the area requiring institutional controls.</p>
2.	<p><u>Site Boundary and LUC Area.</u> Figure 2 of the ROD has identified the Site 30 boundary as the 1.5 acre site and the Proposed Remedial Action Area (or LUC Area) that will be subject to land use restrictions and prohibited activities as the building slab and Concrete Pad. The RD/RAWP has identified the Site 30 boundary as the LUC Area. Please revise Figure 2 of the RD/RAWP consistent with the ROD.</p>	<p>Figure 2 has been revised to identify the boundary of IR Site 30 as depicted in the ROD.</p>
3.	<p><u>ROD Reference.</u> The Final Record of Decision/Remedial Action Plan dated July 27, 2009 should be referenced in the document and not the October 16, 2008 draft.</p>	<p>The text has been revised to read: "This Remedial Design/Remedial Action Work Plan (RD/RAWP) for Installation Restoration (IR) Site 30 Naval Station Treasure Island San Francisco, California (NAVSTA TI) addresses the land use restrictions required by Section 2.12 of the Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan (ROD) dated July 27, 2009, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)."</p>
4.	<p><u>Installation Restoration Site 30.</u> Please change "Environmental Restoration" to "Installation Restoration" consistent with the ROD and other documents for sites</p>	<p>All references to Site 30 have been revised to read "Installation Restoration" or "IR Site 30."</p>

Document Title:

Draft Land Use Control Plan, IR Site 30, Naval Station Treasure Island, San Francisco California

Reviewer: Remedios V. Sunga, Remedial Project Manger Brownfields and Environmental Restoration Program, Dept. of Toxic Substances Control**GENERAL COMMENTS**

No.	Comment	Response
	in Treasure Island. The Site name should be change to "IR Site 30" or just "Site 30" which is also consistent with the ROD	
5.	Building 502 slab and Concrete Pad. The RD/RAWP identifies these two areas that are subject to the LUC. The areal photograph of Site 30 in Figure 2 appears to have a pavement at the center that is surrounded by the daycare buildings. Please specify that this pavement is considered part of the building slab.	Figure 2 indicates the LUC Area (Building 502) to include the eight building units and the center courtyard area (yellow area on figure)

SPECIFIC COMMENTS

1.	<u>Executive Summary</u> , Page 1-3, and Section 1.0 - Introduction, Page 1. Please reference the July 2009 ROD. The discussion implies that the document was prepared per section 2.12 of CERCLA instead of section 2.12 of the ROD. The reference to CERCLA should be deleted.	The Executive Summary and Section 1.0 have been revised to read: "This Remedial Design/Remedial Action Work Plan (RD/RAWP) for Installation Restoration (IR) Site 30 Naval Station Treasure Island San Francisco, California (NAVSTA TI) addresses the land use restrictions required by Section 2.12 of the Final IR Site 30, Daycare Center Record of Decision/Final Remedial Action Plan (ROD) dated July 27, 2009, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)."
2.	Section 2.2 - Site Characteristics, Page 3. Please delete "The plans for Building 502 indicate" from the first sentence in the second paragraph.	The Sheet S3, Concrete Sections, for NAVSTA TI P-218 Child Care Center. NAVFAC Drawing Number 6172602. October 1982 provide information on the construction of Building 502 and are referred to as the plans for Building 502.
3.	Section 4.1 - Project Activities, Page 7. Item 1 states "Conduct annual inspections of the Building 502 concrete slab and the Site 30 Concrete Pad to evaluate their physical state and any need for maintenance activities." This statement is inconsistent with Section 3.2 - Alternative 2 LUC Components stating that maintenance of the Concrete Pad will not be performed. Since the selected alternative only requires Institutional Controls or restrictions in land uses and activities for the Concrete Pad area, this should be carried throughout the RD/RAWP. This alternative does not	Concur. See U.S. EPA comment No. 1. Text has been revised to read "Because the ROD states that the Site 30 Concrete Pad is not needed as an exposure prevention barrier and also that it does not have to be maintained as an Engineering Control (EC) reference to inspections of the Pad have been removed from the applicable LUC RD/RA Work Plan section and appendices."

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	<p>require inspections of Engineering Controls (ECs) or the integrity of the Concrete Pad since Site 30 does not pose an unacceptable risk to daycare receptors with or without the Concrete Pad.</p>	
<p>4.</p>	<p>Section 5 - Remedial Design, Page 9. The introductory paragraph states "The Site 30 ROD defines five tasks to be conducted to verify that the LUCs are in place ... " Please specify the section(s) of the ROD that defines these tasks.</p>	<p>ROD section 2.12.2 "Description of the Selected Remedy " describes the institutional controls that will be implemented to restrict any removal or penetration of the Building 502 slab, except when specific guidelines to prevent exposure to potentially contaminated soil are followed.</p> <p><i>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, and (4) require remedial investigation and any necessary remediation beneath Building 502 upon building demolition and removal.</i></p> <p><i>A Deed Notice to notify the public of the existence of potential contamination.</i></p> <p>Based on these institutional controls, the five tasks were developed to implement them.</p> <p>The text has been modified to state "Based on the requirements of the institutional controls for the Building 502 slab described in the ROD, five tasks were developed to implement, document and report that the LUCs are in place and providing the appropriate protection to human health and the environment."</p>
<p>5.</p>	<p>Section 5.1 - Annual Inspections, Page 9. Please insert the following as the new Section 5.1 and renumber the subsequent sections.</p> <p>"Prior to transfer of Site 30, a State land use covenant will be executed by DTSC and the Navy, and recorded by the Navy. The State land use covenant will contain the following restrictions:</p> <p>(Please list all the restrictions identified in the ROD)"</p>	<p>The text has been modified to state:</p> <p>5.1 Transfer Requirements</p> <p>Prior to transfer of Site 30, a State land use covenant will be executed by DTSC and the Navy, and recorded by the Navy. The State land use covenant will contain the following restrictions to:</p> <ol style="list-style-type: none"> 1) <i>prohibit any removal of the Building 502 slab,</i> 2) <i>require periodic inspection of the Building 502 and reporting of the inspection results</i> 3) <i>provide for making utility repairs, as necessary, and</i>

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		4) <i>require remedial investigation and any necessary remediation beneath Building 502 upon building demolition and removal.</i>
6.	Section 5.2 - Report of Annual Inspections Reports, Page 9. The Report should include any recommendations for repair or maintenance of the building slab.	The text has been modified to state: "A report of the annual inspection using the IR Site 30 LUC Annual Compliance Monitoring Report including copies of the completed inspection forms, recommendations for repair and/or maintenance of the building slab if necessary, and any other pertinent information will be made within 90 days of the inspection."
7	Section 6.2 - LUC Inspections, Page 13. Please replace the first two sentences with "The LUC inspection will be performed around September 15th each year and the inspection report will be submitted to the BCT by November 30th each year. This inspection frequency and reporting schedule may be revised as agreed by the BCT."	The text has been revised to state: "The LUC inspection will be performed during the third week of October each year and the inspection report will be submitted to the BCT by November 30th each year. This inspection frequency and reporting schedule may be revised as agreed by the BCT."
8	<p>Figure 2 - Site Vicinity Map 8.1 The Site 30 boundary in the ROD includes the area bounded by Avenue E, Avenue O, 10th Street and 11th Street. Figure 2 should be revised to be consistent with the ROD and the legend for the area labeled as "Site 30 Boundary" should be change to "LUC Area" or "Remedial Action Area" per the ROD.</p> <p>8.2 Please label Building 502 and add hatch lines or other marks for the concrete pad area to clearly see the area in a black and white copy.</p>	<p>Figure 2 has been revised to be consistent with the ROD and the legend has been revised to indicate the "LUC Area."</p> <p>Figure 2 has been revised to include hatch lines to indicate the location of the concrete pad.</p>
9	<p>Appendix A - Field Inspection Checklist</p> <p>9.1 The LUC Checklist and the Field Inspection Checklist include a "Location No." column. A figure with gridlines (e.g. 25 feet by 25 feet) in the LUC Area and grid numbers should be prepared and included in the RD/RAWP. The specific grid number should be identified under Location No. in the inspection form.</p>	The Appendix A – Field Inspection Checklist has been revised to include a "Location No." column. Figure 3, Building 502 Inspection Map, has been added to Appendix A. This number refers to the numbered grid shown on Figure 3 (e.g. A4). This number will be recorded in the "Location No." column and the area of damage will be indicated on the figure.

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	<p>9.2 The 3rd item should be deleted since the Concrete Pad does not require inspections for cracks, holes, penetration and removals of the Concrete Pad .</p> <p>9.3 The Inspection Checklist should include any recommendations for repair or maintenance of Building 502 slab and pavement.</p>	<p>Reference to the Concrete Pad has been removed from the Inspection Form.</p> <p>Appendix B IR Site 30 LUC Annual Compliance Monitoring Report line 7 has been added to include: "Recommendations for repair and/or maintenance of Building 502 concrete pad (also see Comments)"</p>