Draft

Finding of Suitability for Early Transfer of Disposal Areas 3, 5, 10, and 13

Naval Fuel Depot Point Molate
Richmond, California

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ACRONYMS AND ABBREVIATIONS

§	Section
ACC	ACC Environmental Consultants, Inc.
ACM	Asbestos-containing material
AST	Aboveground storage tank
Bechtel	Bechtel Environmental, Inc.
bgs	Below ground surface
BRAC	Base Realignment and Closure
CAP	Corrective action plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
Chevron	Chevron Corporation
City	City of Richmond
DVECC	Disease Vector Ecology and Control Center
DoD	U.S. Department of Defense
EBS	Environmental baseline survey
ECP	Environmental condition of property
EE/CA	Engineering evaluation and cost analysis
EPA	U.S. Environmental Protection Agency
ETCA	Early Transfer Cooperative Agreement
FOSET	Finding of suitability for early transfer
FPAL	Fuel product action level
FS	Feasibility study
FWENC	Foster Wheeler Environmental Corporation
HHERA	Human health and ecological risk assessment
IC	Institutional control
IR	Installation restoration
IT	International Technology Corporation
Jonas	Jonas and Associates, Inc.
LBP	Lead-based paint
LUC	Land use covenant
MK	Morrison Knudson Corporation

Navy	Department of the Navy
NEPA	National Environmental Policy Act
NFA	No further action
NFD	Naval Fuel Depot
OFEE	Oil-filled electrical equipment
OWS	Oil-water separator
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
ppm	Part per million
PRC	PRC Environmental Management, Inc.
PWC	Public Works Center
Radian	Radian International, LLC
RATM	Risk assessment technical memorandum
RI	Remedial investigation
ROD	Record of decision
SEBS	Supplemental environmental baseline survey
Sullivan	Sullivan Consulting Group
TCE	Trichloroethene
Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbon
Upstream	Upstream Point Molate, LLC
UST	Underground storage tank
VOC	Volatile organic compound
Water Board	San Francisco Bay Regional Water Quality Control Board

1.0 INTRODUCTION

This finding of suitability for early transfer (FOSET) documents the Department of the Navy's (Navy) finding that the remaining Navy-owned property at Naval Fuel Depot (NFD) Point Molate in Richmond, California, is suitable for early transfer to the City of Richmond (City) pursuant to the deferral provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

NFD Point Molate is not listed on the U.S. Environmental Protection Agency's (EPA) National Priorities List of hazardous waste sites; therefore, CERCLA Section (§) 120(h)(3)(C), titled "Deferral," allows the Governor of the state to defer the requirement that the United States provide a covenant in the deed conveying the property warranting that all response actions necessary to protect human health and the environment have been taken before the date of transfer. This type of transfer is commonly referred to as an "early transfer." There are two general types of early transfers: (1) transfer of property with the federal government retaining responsibility for the remaining environmental remediation activities; and (2) transfer of property where the subsequent property owner assumes the responsibility for the remediation. The proposed transfer of NFD Point Molate is in the second category, commonly referred to as "an early transfer with privatized remediation." The remaining remediation activities will be performed by Upstream Point Molate, LLC (Upstream), the master developer to which the City intends to transfer the property for development after deed transfer from the Navy.

The Navy designated NFD Point Molate for closure under the fourth round of the Base Realignment and Closure (BRAC) Program on September 30, 1995. In a letter dated November 18, 2004, the City initiated the request for the early transfer of the remaining Navy-owned property (City 2004). The parcels subject to early transfer will be disposed of to the City under the authority of § 2834(b) of the Military Construction Authorization Act for Fiscal Year 1993 (Division B of Public Law 102-484; 106 Statute 2614), as amended, and the National Defense Authorization Act for Fiscal Year 1996 (§ 2867 of Public Law 104-106, dated February 10, 1996).

This FOSET documents the environmental findings and status of environmental investigations for a proposed early transfer, pursuant to the provisions of CERCLA § 120(h)(3)(C), to the City of four disposal areas that comprise the early transfer property at NFD Point Molate. In this FOSET, the term "Transferee" refers to the City, Upstream, and any future successors or assigns in interest.

1.1 PURPOSE

The purpose of this document is to present the Navy's analysis and finding that four disposal areas of remaining Navy-owned property, consisting of approximately 41.1 acres at NFD Point Molate in Richmond, California (hereinafter called the "early transfer property"), is suitable for early transfer with appropriate notices, covenants, easements, and restrictions as specified herein. This document is also provided to allow the public an opportunity to provide written comments

on the suitability of the property for early transfer. The public may provide comments during a designated 30-day public comment and review period.

CERCLA § 120(h)(3)(C) requires that deferral of the deed covenant warranting that all response actions necessary to protect human health and the environment have been taken before the date of transfer be supported by a determination that the property is suitable for transfer, based on the following:

1. The property is suitable for transfer for the use intended by the transferee, and the intended use is consistent with the protection of human health and the environment;

2. The deed or other agreement proposed to govern the transfer contains response action assurances set forth in clause (ii) [sic] [CERCLA § 120(h)(3)(C)(ii)];

3. The Federal agency requesting deferral [sic] (Navy) has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of not less than 30 days after the date of the notice, written comments on the suitability of the property for transfer; and

4. The deferral and the transfer of the property will not substantially delay any necessary response action at the property.

As identified in item 2 above, the response action assurances required to be in the deed or transfer agreement include:

1. Provide for any necessary restrictions on the use of the property to ensure the protection of human health and the environment.

2. Provide that there will be restrictions on the use of the property necessary to ensure that required remedial investigations (RI), response actions, and oversight activities will not be disrupted.

3. Provide that all necessary response actions will be taken and identify schedules for investigation and completion of all necessary response actions, as approved by the appropriate regulatory agency.

4. Provide that the Navy will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for investigation and completion of all necessary response actions, subject to congressional authorizations and appropriations.

This FOSET executed by the Navy provides the basis for the determination by Navy that the property is suitable for early transfer and establishes that all the response action assurances have been provided. This FOSET is part of the package of documents the San Francisco Bay Regional Water Quality Control Board (Water Board) sends to the governor requesting deferral

of the covenant warranting that all remedial action necessary to protect human health and the environment has been taken prior to the date of transfer. That package is referred to as the Covenant Deferral Request, and will include, in addition to the FOSET and its attachments, the following documents:

- Tentative Site Cleanup Requirements Order issued by the Water Board to the City and Upstream. This Water Board Order, which will be approved and made final by the Water Board soon after the Navy transfers the property, will replace the Site Cleanup Requirements Order previously issued to the Navy. The City would have responsibilities under the Order only during its brief ownership of the property. The Order would set forth the responsibilities of the City and Upstream for preparing and implementing remedial work plans and briefly describe the type of remediation to be proposed and any necessary interim institutional controls (IC).

- A Land Use Covenant (LUC) executed by the Water Board, the City, and Upstream pursuant to the provisions of California Civil Code § 1471. The City will apply to the Water Board for a termination of (or release from) the existing LUC previously executed by the Navy and the City. The new LUC will be effective immediately upon early transfer of the property from the Navy to the City. The covenant will specify restrictions on the use of the property necessary to ensure that required RIs, response actions, and oversight activities will not be disrupted. Those restrictions will include a prohibition against excavation and other activities that disturb soil or groundwater in specified areas still undergoing investigation or remediation unless such activities are approved by the Water Board. The covenant will also specify that its restrictions are released in specified areas when the Water Board determines that No Further Action (NFA) is required in those areas.

- A draft deed for conveyance of the early transfer property, containing the restrictions set forth in the Site Cleanup Requirements Order, new LUC, and the notices and restrictions described in Section 6.0 of this FOSET.

1.2 DOCUMENT FORMAT

This document is organized in the following sections:

- Property Description (Section 2.0)
- Nature and Extent of Contamination (Section 3.0)
- Analysis of Future Land Use (Section 4.0)
- Requirements for Remedial, Corrective, and Response Actions and Operations (Section 5.0)
- Notices, Covenants, Easements, and Use Restrictions (Section 6.0)

- Responsiveness Summary (Section 7.0)
- Finding of Suitability for Early Transfer (Section 8.0)
- Supporting Environmental Documentation (Section 9.0)

Supporting figures and tables are provided at the end of the text. The following appendices are presented following the figures and tables:

- Appendix A, a notification of hazardous substances that were stored, released, or disposed of within the early transfer property.
- Appendix B, an Early Transfer Cooperative Agreement (ETCA) between the Navy and the City entered into pursuant to the authority of the Defense Environmental Restoration Program, Title 10 of the United States Code § 2701(d), which requires that the Navy provide a grant to the City of $28.5 million (twenty-eight million and five hundred thousand dollars) in exchange for the City's commitment to comply with the Water Board's Site Cleanup Requirements Order, to complete the remaining remediation activities at both the early transfer property and the property previously transferred by the Navy to the City, and to purchase an environmental insurance policy insuring against cost overruns for the known environmental conditions and paying for cleanup of previously undiscovered conditions.
- Appendix C, a responsiveness summary for comments received on the Draft FOSET from the State regulatory agencies and to public comments received on the Draft FOSET during the 30-day comment period [Forthcoming].

2.0 PROPERTY DESCRIPTION

NFD Point Molate is located in Richmond, California, along the northeastern shore of San Francisco Bay, on the San Pablo Peninsula and about 1.5 miles north of the Richmond-San Rafael Bridge (see Figure 1). Beginning in 1942, the Navy used NFD Point Molate for fuel storage and distribution for the Pacific Fleet. Fuel storage and supply ceased in May 1995.

NFD Point Molate is bounded by the Chevron Corporation (Chevron) refinery to the north, east, and south, and the San Francisco Bay to the west. Chevron uses most of the land near NFD Point Molate for oil refining and storage; the land east of NFD Point Molate is used for storage, shipping, and pipeline distribution of petroleum products. The land immediately to the north and south is unused open space (although the land to the north was previously a tank farm that has been decommissioned).

Environmental baseline survey (EBS) parcels were first established in conjunction with a final basewide EBS to assign environmental condition of properties (ECP) (see Figure 2). ECP classifications are used to help identify properties available for lease or transfer, as well as those properties undergoing cleanup activities (PRC Environmental Management, Inc. [PRC] and

Morrison Knudson Corporation [MK] 1996). These EBS parcels were later grouped into larger disposal areas in the Final Supplemental Environmental Baseline Survey (SEBS) Report to logically group areas with similar environmental issues and timelines for transfer purposes (see Figure 3) (Tetra Tech EM Inc. [Tetra Tech] 2003a). The four disposal areas that comprise the early transfer property subject to this FOSET are described below.

- **Disposal Area 3** consists of EBS Parcels 20 and 25 and occupies 11.2 acres along the northern shoreline.
- **Disposal Area 5** consists of EBS Parcels 29 and 30 and occupies 14.3 acres along the southern shoreline.
- **Disposal Area 10** consists of EBS Parcel 7b and occupies 3.3 acres near the center of NFD Point Molate.
- **Disposal Area 13** consists of EBS Parcel 32 and includes an appurtenance formerly used as a fueling pier. Disposal Area 13 occupies 12.3 acres and is located at the west side of NFD Point Molate. The submerged land underlying the appurtenant fuel pier is not included in the early transfer property.

3.0 NATURE AND EXTENT OF CONTAMINATION

This section summarizes the nature and extent of contamination and any response actions taken at sites investigated as part of the Navy's Installation Restoration (IR) Program. In addition, this section discusses other environmental factors considered relevant in evaluating the suitability of the early transfer property for early transfer.

Environmental factors of concern were reviewed in the basewide EBS (PRC and MK 1996). The Navy conducted the basewide EBS after NFD Point Molate was designated for closure. The 1996 basewide EBS consisted of nonintrusive data gathering, including reviews of documents, records, and aerial photographs; visual site inspections; and employee interviews, conducted in accordance with Navy guidance (Navy 1995).

The SEBS was conducted in 2003 (Tetra Tech 2003a). The SEBS updated the ECP for EBS parcels established in the 1996 basewide EBS based on the progress of environmental programs. The revised ECP categories helped to identify properties available for lease or transfer and those undergoing cleanup activities since the original 1996 EBS Report (PRC and MK 1996). The SEBS also updated EBS parcel boundaries, summarized inspections conducted on buildings used since 1996, updated environmental notifications that will be required for the early transfer property, and grouped the EBS parcels into 13 property disposal areas.

Together, the basewide EBS and SEBS provided a comprehensive evaluation of available environmental information for real property at NFD Point Molate. Table 1 summarizes the remaining environmental issues for each disposal area subject to this FOSET.

3.1 INSTALLATION RESTORATION PROGRAM

Four IR sites are located in the early transfer property: IR Site 1 (Disposal Area 10), IR Site 2 (Disposal Area 5), IR Site 3 (Disposal Area 3), and IR Site 4 (Disposal Areas 5 and 13). Figure 4 shows the locations of the four IR sites.

Table 2 provides a detailed summary of the IR sites listed above, including site history, chemicals of concern, human health and ecological risk assessment (HHERA) results, contaminated media, planned reuse, and an investigation reporting status.

3.1.1 IR Site 1 – Disposal Area 10

IR Site 1, Disposal Area 10, is a former waste disposal area. Waste was disposed of in a 1-acre area. Waste disposal at IR Site 1 began between 1953 and 1957 and ceased by 1979. Approximately 20,000 cubic yards of waste was disposed of at the site (Tetra Tech 2001c). Waste discarded at IR Site 1 was primarily construction debris. Some oily waste, thought to be petroleum sludge from tank bottoms or petroleum-contaminated soil from valve box removals, was also observed. In addition to waste, historical fuel leaks and spills from the underground storage tank (UST) system at NFD Point Molate have affected soil and groundwater within and downgradient of IR Site 1. Contaminants of concern include total petroleum hydrocarbons (TPH) and polycyclic aromatic hydrocarbons (PAH) in soil and groundwater. Exposed debris such as rebar, brick, and concrete also presented a potential hazard to future site users.

After the Phase I RI, IR Site 1 was further studied in 1999 as part of the Phase II RI (Tetra Tech 2000a). An engineering evaluation and cost analysis (EE/CA) (Tetra Tech 2000b) and Final Action Memorandum (Navy 2001) for IR Site 1 were completed by July 2001. These documents recommended and selected a non-time-critical removal action, including an engineered soil cover with drainage controls, methane venting, groundwater and methane monitoring, land use controls, and a maintenance program. The soil cover for IR Site 1 was designed in 2001 (Tetra Tech 2001c), and construction of the soil cover, drainage controls, and monitoring systems were completed in March 2002.

The Navy documented groundwater and methane monitoring and the landfill maintenance components of the removal action in the IR Site 1 Postclosure Maintenance and Monitoring Plan that was finalized on August 30, 2002 (Tetra Tech 2002d). In December 2002, the Navy installed an oil-water separator (OWS) at the seep collection drain because of the presence of fuel product (Sullivan Consulting Group [Sullivan] 2004).

The need for additional action was evaluated in a feasibility study (FS) (Sullivan 2004). The Navy subsequently documented its preferred remedy in a proposed plan and released the plan to the public in July 2004 (Navy 2004). The preferred remedy included maintenance and monitoring of the landfill cap and implementation of ICs, plus the use of engineering controls (a filtration system) for the OWS effluent. After the public comment period ended in August 2004, the Navy prepared the Final Record of Decision (ROD) for IR Site 1 (Navy 2005). The ROD

was signed by the Water Board on June 13, 2005, and by the Navy on June 21, 2005 (Navy 2005).

The selected remedy will maintain the integrity of the soil cover, thus preventing human, environmental, and ecological exposure to wastes in the landfill, contaminated groundwater, and contaminated discharge from the OWS. Additionally, the filtration system will reduce concentrations of dissolved petroleum in effluent discharged from the OWS. The selected remedy includes monitoring of groundwater, methane gas, and effluent from the OWS to confirm the effectiveness of the remedy.

Groundwater monitoring samples collected in 2006 and 2007 indicated dissolved concentrations of TPH at IR Site 1 were below fuel product action levels (FPAL) at locations upgradient of the OWS and filtration system.

3.1.2 IR Site 2 – Disposal Area 5, Partial

IR Site 2, partially within Disposal Area 5, consisted of five localized areas (Areas 2A, 2B, 2C, 2D, and 2E) of suspected historical sandblasting activities or sandblast grit disposal (see Figure 4). Sandblasting was conducted at NFD Point Molate to prepare metal surfaces for painting. The leftover grit was primarily composed of silica particles, with trace amounts of metals.

Three areas (2A, 2B, and 2D) of IR Site 2 were transferred to the City in 2003. The other two areas (2C and 2E) were located within the early transfer property (EBS Parcel 29 of Disposal Area 5, only). Of those two areas in Disposal Area 5, grit was found only in Area 2E; a human health risk-based screening evaluation confirmed that metals concentrations required further action to allow for unrestricted use. In 1997, the Navy excavated soil from Area 2E as part of a time-critical removal action and disposed of the soil at an appropriate disposal facility.

After the soil removal action at Area 2E, it was determined that risks from potential exposure to CERCLA contaminants at Area 2E were below EPA's risk management range of 1E-06 to 1E-04 (EPA 1991). In 1998, the Navy prepared a project completion report to document the results of the removal action (Tetra Tech 1998). The results were also documented in a 1999 proposed plan that recommended NFA (Navy 1999a). A public meeting on the proposed plan was held, and no significant comments were received. After the public comment period ended in June 1999, the Navy prepared a NFA ROD for all five areas of IR Site 2; the NFA ROD was signed by the Navy on August 31, 2000, and by the Water Board on September 5, 2000 (Navy 1999c).

3.1.3 IR Site 3 – Disposal Area 3

IR Site 3, the Treatment Ponds Area, is located within Disposal Area 3. Previous operations at IR Site 3 included a fuel reclamation facility, industrial waste disposal, and a sump pond. The three treatment ponds were a component of the UST french drain treatment system. Current

features in the area include a groundwater containment wall and extraction trench and a groundwater treatment plant.

The three treatment ponds were constructed beginning in 1974 in the former sump pond area to collect and treat stormwater that gathered in perimeter drains around the large USTs in the hillsides. Other water also reached the ponds through holes and leaks in the piping and through groundwater recharge. The stormwater in the ponds was sent through sand filters and carbon beds before discharging to San Francisco Bay.

Following the Phase I RI, in 1995 and 1996, the Navy installed a containment wall and extraction trench as part of an interim removal action at IR Site 3 to prevent floating free product from migrating to San Francisco Bay and near-shore sediments. IR Site 3 was further studied in 1999 as part of the Phase II RI, primarily to focus on evaluating a possible migration path of contaminants through bedrock and to analyze data collected to support field pilot testing (Tetra Tech 2000a). The Phase II RI Report noted that the distribution of hydrocarbons in soil below the water table was evident from the 1991 and 1992 data and hydrocarbons were present through nearly all geologic units in some areas. Based on the results of the Phase II RI Report, the Navy prepared a Draft EE/CA for IR Site 3 and submitted the EE/CA to the Water Board, the City, and the Restoration Advisory Board (Tetra Tech 2002a). A public participation review process was conducted for the EE/CA.

Water Board comments on the Draft EE/CA identified the need to close the treatment ponds and collect additional information on contaminants associated with the ponds. In fall 2003, the Navy removed the ponds from service, drained them, removed contaminated soil on the sidewalls and bottoms, and backfilled them to grade with clean fill. The closure activities at the treatment ponds were completed in May 2004. Excavation activities at the ponds were not intended to and did not remove all petroleum-impacted soil at depths greater than approximately 12 feet below ground surface (bgs). The remaining contamination after the treatment ponds were excavated and the need for additional action were further evaluated in the Draft FS Report (Bechtel Environmental, Inc. [Bechtel] 2005a) and Draft Corrective Action Plan (CAP) (Bechtel 2005b) for IR Site 3. The Draft FS Report evaluated soil from 0 to 10 feet bgs and considered a range of remedial alternatives, including no action, excavation and off-site disposal of soils that exceed industrial/commercial action levels, and excavation and off-site disposal of soils that exceed residential action levels (Bechtel 2005a). Section 3.2 discusses the Draft CAP (Bechtel 2005b), which evaluated groundwater and petroleum-impacted soils deeper than 10 feet bgs.

3.1.4 IR Site 4 – Disposal Areas 5 and 13

IR Site 4 includes Disposal Area 5 (Drum Lot 2/Building 87) and Disposal Area 13 (Drum Lot 1). IR Site 4 was previously evaluated as three areas: North Shoreline, South Shoreline, and Drum Lot 1. Following multiple investigations, the Water Board concurred with the Navy in 2002 that the North and South Shoreline areas were more appropriately managed under the basewide petroleum CAP because concerns within these areas are primarily petroleum-related. The Water Board also concurred with the Navy on the inclusion of Drum Lot 2/Building 87 within the boundary of IR Site 4. Drum Lot 2/Building 87 was deemed to be more efficiently

evaluated as part of IR Site 4 because of similar histories (drum lots), current progress in the CERCLA process, chemicals of potential concern, and planned future uses as set forth in the National Environmental Policy Act (NEPA) ROD (Navy 2002).

3.1.4.1 Drum Lot 1 – Disposal Area 13

Drum Lot 1, located in Disposal Area 13, is a paved area adjacent to the fuel pier, just south of the containment wall and extraction trench in IR Site 3. The lot was used to store fuel drums filled on site for transport off site. An inactive, aboveground, primary fuel pumping station and a drum filling plant (Building 89) are also present within the drum lot. As part of the facility's fuel distribution system, underground pipelines were located between the fuel pier to the north and south sides of the facility.

In 1994, Drum Lot 1 was investigated as part of the Phase I RI, which included soil and groundwater sampling along the shoreline (PRC 1994a, 1994b, 1994c, 1994d). This investigation identified floating free product at the site. In 1995 and 1996, the Navy implemented an interim removal action at Drum Lot 1 to prevent floating free product from migrating to San Francisco Bay and near-shore sediments. The removal action included extending the containment wall and extraction trench at IR Site 3 south into Drum Lot 1. The area behind the extension is being evaluated as part of IR Site 3.

Drum Lot 1 was further studied in 1999 as part of a Phase II RI (Tetra Tech 2000a), and between 1998 and 2000 during the removal of underground pipelines that were part of the fuel distribution system. Approximately 9,500 linear feet of fuel pipeline was removed during the pipeline removal at IR Site 4. The remainder of the pipeline (around Building 89) was removed in 2000 as part of the basewide pipeline removal (Tetra Tech 2001a).

Although samples were collected during the Phase II RI and the pipeline removal, additional sampling for TPH, PAHs, and volatile organic compounds (VOC) in soil and groundwater was necessary to support the HHERA for IR Site 4. The Navy collected soil samples in June 2001, and groundwater samples in June 2001, January 2002, and October 2002. The HHERA for IR Site 4 concluded that exposures to CERCLA contaminants at Drum Lot 1 were within EPA's acceptable risk management range of 1E-06 to 1E-04 and recommended NFA for soil under the CERCLA program. Continued monitoring of VOCs in groundwater under the basewide groundwater monitoring program was also recommended (Tetra Tech 2003b). The Water Board concurred with the findings of the HHERA for IR Site 4 in a letter dated March 25, 2003 (Water Board 2003). Based on recommendations in the HHERA for IR Site 4, groundwater at Drum Lot 1 has been continuously monitored during semiannual basewide groundwater monitoring events between July 2003 and October 2006 (Jonas and Associates, Inc. [Jonas] 2007) and in March 2008 (reference forthcoming).

3.1.4.2 Drum Lot 2/Building 87 – Disposal Area 5

Drum Lot 2, located in Disposal Area 5 (EBS Parcel 29 only), is a paved area in the southern half of NFD Point Molate, east of Main Road. The lot was used to store fuel drums filled on site and drums for transport off site. At one time, the lot was used to store and maintain rail cars used by the Pacific Locomotive Association for recreation (PRC and MK 1996). Sandblasting was conducted in the northwestern corner of Drum Lot 2. The sandblasting areas were addressed as IR Site 2, which was closed out with a NFA ROD in 2000 (Navy 1999b).

Building 87, located in Disposal Area 5 (EBS Parcel 30 only), is west of Drum Lot 2, along the southern shoreline of NFD Point Molate. Building 87, a one-story corrugated steel Quonset hut built on a concrete slab, was present as early as 1953 (PRC and MK 1996). The Disease Vector Ecology and Control Center (DVECC) used Building 87 for storage of pesticides, repairs to pesticide application equipment, and pesticide application training in a classroom setting. The DVECC did not conduct pesticide application at the facility.

As a result of the 1996 basewide EBS, Building 87 and Drum Lot 2 were identified as areas that required additional sampling and investigation (PRC and MK 1996). The subsequent Phase I and Phase II EBS investigations (Tetra Tech 1999a, 2002c) assessed whether hazardous substances or petroleum products were released to the environment in specific areas that were not being evaluated in the IR, UST, or other environmental programs, including Drum Lot 2 and Building 87.

Soil samples were collected at Drum Lot 2/Building 87 in 1998 as part of the Phase I EBS (Tetra Tech 1999a), and in both 1999 and 2000 during the Phase II EBS investigations (Tetra Tech 2001b). Sampling results identified areas where pesticide concentrations in surface soil around Building 87 exceeded risk-based screening levels for the potential child recreational user and ecological receptors. Potential risks to these receptors were found to be significant; thus, excavation of the contaminated soils was recommended (Tetra Tech 2001b). In June 2001, the Navy excavated approximately 206 tons of pesticide-contaminated soil around Building 87 and collected soil samples to verify that no elevated pesticide concentrations remained in this area. Soil confirmation sampling results showed a data gap in confirmation sampling locations; as a result, the Navy collected two additional soil samples in May 2002 to fill the data gap. The results concluded that risks to potential human or ecological receptors from exposure to CERCLA contaminants in soil at Drum Lot 2/Building 87 were within EPA's risk management range (Tetra Tech 2002c). The supplemental Phase II EBS recommended NFA for soil at Drum Lot 2/Building 87 (Tetra Tech 2002c). The Water Board concurred with this recommendation in a letter dated December 3, 2002 (Water Board 2002).

Groundwater samples were collected at Drum Lot 2/Building 87 in 1998 as part of the Phase I EBS (Tetra Tech 1999a), and in both 1999 and 2000 during the Phase II EBS investigations (Tetra Tech 2001b). Sampling results identified trichloroethene (TCE) and its breakdown products in groundwater at Disposal Area 5 (EBS Parcel 29 only). Although the Navy found no potential unacceptable risk to human health or the environment from TCE and its breakdown products in groundwater near Building 87, the Navy and Water Board determined that additional

data were needed to further characterize the TCE plume. The Navy installed four monitoring wells between 2001 and 2002 to further delineate the extent and likely source area of the TCE plume. The HHERA in the supplemental Phase II EBS concluded that risks to potential human health or the environment from exposure to CERCLA contaminants in groundwater at Drum Lot 2/Building 87 were within EPA's risk management range (Tetra Tech 2002c). However, because the plume was delineated based only on one sampling event in May 2002, the supplemental Phase II EBS recommended collecting additional groundwater samples during the following 2002-2003 wet season (Tetra Tech 2002c). In a letter dated December 3, 2002, the Water Board concurred with the recommendations of the supplemental Phase II EBS for groundwater (Water Board 2002). Based on the recommendations in the supplemental Phase II EBS, groundwater at Drum Lot 2/Building 87 was included in the basewide groundwater monitoring program and was sampled during all semiannual groundwater monitoring events between July 2003 and October 2006 (Jonas 2007) and in March 2008 (reference forthcoming).

The Navy prepared a Draft Risk Assessment Technical Memorandum (RATM) for IR Site 4 to evaluate whether unrestricted use was acceptable for IR Site 4 and to update the 2002 supplemental Phase II EBS risk evaluation with new groundwater monitoring data and updated toxicological information (Sullivan 2005). The Draft RATM concluded that potential risks to human health or the environment from exposure to CERCLA contaminants at IR Site 4 were within EPA's acceptable risk management range of 1E-06 to 1E-04 (Sullivan 2005). The RATM has not yet been approved by the Water Board.

3.2 CORRECTIVE ACTION PLAN PROGRAM

Two CAP documents have been created for NFD Point Molate: Final Basewide Petroleum CAP (Tetra Tech 2002b) and Draft IR Site 3 CAP (Bechtel 2005b).

Petroleum releases from adjacent tanks and pipelines near IR Site 1 (Disposal Area 10) have impacted soil and groundwater at IR Site 1. Two seeps were identified near the former waste disposal area, one upgradient and one downgradient of the landfill. Both seep areas were recommended for monitoring under the basewide petroleum CAP (Tetra Tech 2002b). Though no remediation is necessary for the upgradient seep, the Navy currently monitors the seep in accordance with the IR Site 1 Postclosure Maintenance and Monitoring Plan (Tetra Tech 2002d) and the Final Oil/Water Separator Postclosure Maintenance and Monitoring Plan Revision 1 (Sullivan 2003). The downgradient seep was ultimately replaced by an OWS and filtration system (Sullivan 2003) and is monitored as part of the basewide groundwater monitoring program per the IR Site 1 ROD (Navy 2005).

Soil and groundwater at IR Site 3 are impacted with petroleum hydrocarbons derived from leaks in former storage tanks and piping. Because petroleum products are excluded from CERCLA programs, the petroleum-impacted groundwater and soils deeper than 10 feet bgs at IR Site 3 were evaluated in the Draft IR Site 3 CAP (Bechtel 2005b). The Draft CAP evaluated groundwater and petroleum-impacted soils deeper than 10 feet bgs and considered remediation options, including continued operation of the existing groundwater containment wall/extraction trench and packaged groundwater treatment system, excavation of a few areas where TPH is

considered to be more mobile, and excavation and removal of the entire area of petroleum-impacted soil located below the water table (Bechtel 2005b).

In 2006 and 2007, samples were collected from monitoring wells at IR Site 3 and analyzed for TPH and modified with the analytical technique of silica gel cleanup (Jonas 2007). The groundwater samples yielded results for TPH at significantly lower levels than previously measured (Jonas 2007). During summer 2007, the Navy performed additional studies to better define the area where mobile fractions of TPH remained below the water table (Bechtel 2007; Navy 2007; ChaduxTt 2008). The results of these field studies were used to evaluate what actions and contingency plans would be reasonable to eliminate the threat of TPH leaching into San Francisco Bay when the existing containment wall was removed or modified.

3.3 UNDERGROUND STORAGE TANKS AND PIPELINES

No USTs are presently located on the property subject to this FOSET. Therefore, no additional action is required for closure or removal of USTs on the early transfer property. Table 3 summarizes the details of the previously removed USTs from the proposed early transfer property, including the tank identification number or name, capacity and type of construction, recorded contents, and the physical status.

Underground pipelines that were part of the fuel distribution system have been removed from the property. In areas where the removal of pipelines would have compromised the structural integrity of roadways or structures, short segments of the pipelines were closed in place and sealed with grout.

Historical releases from underground pipelines in Disposal Area 3 are currently being addressed under the IR Site 3 CAP (see Section 3.2). Short sections of underground pipelines associated with the former fuel reclamation facility and existing treatment systems are present in Disposal Area 3.

Historical releases from underground pipelines in Disposal Area 13 were investigated during the IR Site 4 pipeline removal (Tetra Tech 1999b), and results of the investigation were presented in the basewide petroleum CAP (Tetra Tech 2002b) and in the HHERA for IR Site 4 (Tetra Tech 2003b). Based on the low concentrations of TPH and high concentrations of PAHs detected in soil at Drum Lot 1, the site was recommended for evaluation in the HHERA for IR Site 4. The results of the soil risk assessment indicated that risks were below or within the risk management range of 1E-06 to 1E-04; thus, NFA was recommended for soil (Tetra Tech 2003b). The Water Board concurred with the findings of the HHERA for IR Site 4 in a letter dated March 25, 2003 (Water Board 2003). Therefore, soil at Disposal Area 13 does not require additional cleanup under the basewide petroleum CAP.

Historical releases from underground pipelines in Disposal Area 13 to groundwater were evaluated in the HHERA for IR Site 4. Because detections of TPH and PAHs in groundwater historically exceeded FPALs, groundwater was recommended for continued monitoring under

the basewide petroleum CAP (Tetra Tech 2002b). However, TPH has either been not detected or below FPALs since the HHERA for IR Site 4 was conducted in 2003. Based on the recommendation of the HHERA for IR Site 4, the Navy is currently monitoring groundwater at Disposal Area 13 under the basewide groundwater monitoring program.

3.4 ABOVEGROUND STORAGE TANKS

Sixteen aboveground storage tanks (AST) are located within the early transfer property. However, only three ASTs are currently active and are treatment system and process related: one flow-control tank in Disposal Area 3, and one OWS tank and one equalization tank in Disposal Area 10.

The remaining 13 ASTs are currently inactive. These tanks were cleaned and emptied before NFD Point Molate was closed. There are no regulatory requirements for closing these empty tanks.

In addition, several ASTs have previously been removed from the early transfer property. In spring 2001, a number of ASTs were removed from Disposal Area 3 (International Technology Corporation [IT] 2001b). The following ASTs were removed as part of these activities: small ASTs (500- and 1,000-gallon) that were part of a former groundwater extraction system, large ASTs (Tanks E, F, and G), vertical tube coalescers, and corrugated plate separators. At Disposal Area 13, the Navy removed Beach Tank and its associated piping as part of the basewide pipeline removal program (IT 2001a). A portable fuel tank was also removed from Disposal Area 13. No remaining closeout activities are required for the removed ASTs.

Table 4 summarizes each AST, including the identification number or name, capacity, historic contents, and physical status.

3.5 POLYCHLORINATED BIPHENYLS

During a 1993 polychlorinated biphenyl (PCB) survey, the Navy analyzed 83 primary pieces of oil-filled electrical equipment (OFEE) to determine if they contained PCBs above allowable limits (Navy Public Works Center [PWC] 1995a). The 1996 Basewide EBS Report identifies the locations, types, and concentrations of PCBs within the OFEEs (PRC and MK 1996). Subsequently, the Navy replaced all OFEEs having PCB concentrations greater than 50 parts per million (ppm), including transformers on Power Poles 46 and 47 (Disposal Area 3) and Power Pole 113 (Disposal Area 13) (Navy 1999b).

None of the OFEEs on the early transfer property contain PCBs at concentrations requiring action (greater than 50 ppm), thus they are all considered non-PCB transformers. According to Title 40 Code of Federal Regulations (CFR) § 761.3, non-PCB transformers are any transformer that contains less than 50 ppm of PCBs.

3.6 LEAD-BASED PAINT

There is no target housing in the early transfer property (Navy 2002). Lead-based paint (LBP) hazards are defined in the Federal Residential Lead-Based Paint Hazard Reduction Act of 1992 (Public Law 102-550) (Act) as "any condition that causes exposure to lead … that would result in adverse health effects." The Act provides for regulation of lead hazard abatement from LBP. Hazards include lead-contaminated dust and soil for target housing only. The Act defines target housing as any housing constructed before 1978, except housing for elderly persons or persons with disabilities (unless any child less than 6 years of age resides or is expected to reside in such housing) or any zero-bedroom dwelling. U.S. Department of Defense (DoD) guidelines also require that surveys, assessment, and abatement of LBP hazards be conducted for target housing constructed between 1960 and 1978 (DoD and EPA 1999).

Since the 1996 Basewide EBS Report, no further LBP investigations of buildings have been conducted at NFD Point Molate. Buildings constructed prior to 1978 may be presumed to have been painted with LBP. In addition, flaking LBP from the exterior surfaces of these buildings may have released lead to the soil. However, the property will be transferred pursuant to the NEPA ROD for light industrial, commercial, and open space/recreation purposes and not for use as target housing; as a result, LBP assessment, characterization, and abatement of structures and soil is not required on the property (Navy 2002). The Navy will disclose the potential presence of LBP in the deed for the early transfer property.

In 2003, the Navy conducted an LBP survey at the appurtenance formerly used as a fueling pier (Foster Wheeler Environmental Corporation [FWENC] 2003). Pier structures and the piping system, including pipe racks, were sampled to evaluate whether LBP was present (FWENC 2003). Paint chips were collected for lead analysis, and analytical results revealed nondetected concentrations (FWENC 2003).

The status of all buildings constructed before 1978 within the early transfer property is provided in Table 5.

3.7 ASBESTOS-CONTAINING MATERIAL

No known asbestos-containing material (ACM) hazards are located within the early transfer property. The Navy conducted several surveys at commercial/industrial buildings to determine the presence of ACM at NFD Point Molate. These surveys were conducted in 1993 and 1995 (Peers Consultants 1993; PWC 1995b), with a follow-up inspection in June 1997 (Radian International, LLC [Radian] and ACC Environmental Consultants, Inc. [ACC] 1997). Plans and specifications were developed in 1997 to remediate damaged, friable asbestos (Radian and ACC 1997). All damaged, friable ACM identified during the 1997 inspection was abated in August 1998 (Allied Technology Group, Inc. 1998). Nonfriable ACM also was identified during these surveys, but nonfriable ACM does not require abatement.

In 2003, the Navy conducted an asbestos survey for the appurtenance formerly used as a fueling pier. The pier structures and piping system, including pipe racks, were sampled to evaluate if asbestos was present (FWENC 2003). The inspection identified three lines from where the wharf and causeway meet that were wrapped with a cloth material. The cloth material was sampled for asbestos analysis; analytical results revealed nondetected concentrations (FWENC 2003). The Navy also collected paint chips from the silver paint layer below the cloth material. Results of the ACM testing showed that nonfriable ACM was present in the paint layer, which does not require abatement.

ACM may exist in wrapping and insulation on underground fuel and steam lines, but these lines will be left in place. Table 6 summarizes the status of ACM in the early transfer property.

3.8 RADON

Radon is a colorless and odorless radioactive gas produced by radioactive decay of naturally occurring uranium to radium. Radium, of which radon gas is a byproduct, is found at high concentrations in rocks containing uranium, granite, shale, phosphate, and pitchblende. Atmospheric radon is diluted to insignificant concentrations. Radon in soil, however, can enter a building through small spaces and openings, accumulating in enclosed areas such as basements.

In 1993, the Navy conducted a radon screening program at NFD Point Molate (Martin Marietta Energy Systems, Inc. 1993). During this survey, no buildings were identified as having radon gas levels above the EPA action level of 4.0 picoCuries per liter. Consequently, no further investigation was warranted or planned. DoD policy is to ensure that any available and relevant radon assessment data pertaining to BRAC property be included in transfer documents. DoD policy does not require assessment or radon mitigation prior to transfer of BRAC property, unless required by applicable law (DoD 1995).

3.9 PESTICIDES

The DVECC, located in Disposal Area 5 (EBS Parcel 30), stored pesticides, repaired pesticide application equipment, and conducted classroom training of personnel in the use and application of pesticides at Building 87. The DVECC did not conduct pesticide application at the facility; however, pesticides were found in shallow soils at a former rinse area outside of Building 87. These pesticides were investigated and addressed under the site-specific EBS investigations (see Section 3.1.4.2).

The pesticides and herbicides described below were obtained from lists of pesticides and herbicides ordered for NFD Point Molate. These pesticides and herbicides were ordered in small quantities. If these agents were received, the exact storage locations are unknown.

Pesticides and herbicides were properly applied intermittently as needed at NFD Point Molate; the pesticides and herbicides were applied by appropriately trained personnel from the PWC Pest Control Department or by a Navy contractor. A review of past records indicated the following

were typical pesticides and herbicides (including insecticides, termiticides, and rodenticides) that may have been used at NFD Point Molate: Diazinon 4E, Drione, Dursban 4E, Dursban TC, Ficam W, Krovar 1, Montar, Princep 80W, Ronstar 50 WP, Ronstar G, Roundup, Surflan A.S., Talon-G, Team 2G, and XL 2G.

Two pesticides were stored in reportable quantities at NFD Point Molate. These pesticides are presented in Appendix A, the hazardous substance notice.

3.10 ADJACENT PARCELS

All property surrounding the early transfer property within the original NFD Point Molate property boundary was transferred to the City on September 23, 2003 (Conveyed Property). The Navy originally retained responsibility for the ongoing petroleum programs within the Conveyed Property; however, those Navy-retained responsibilities will be transferred to the City under the ETCA attached to this FOSET (see Appendix B). No CERCLA sites are within the Conveyed Property. Adjacent sites affected by petroleum have the potential to impact the early transfer property. Parcels in the adjacent Disposal Areas 1, 2, 6, and 12 are affected by petroleum contamination in either soil or groundwater (see Figure 3). Disposal Areas 1, 2, 6, and 12 were evaluated in the final basewide petroleum CAP to develop objectives for corrective action (Tetra Tech 2002b).

The CAP remedy for groundwater included removal of the free-phase product to comply with UST regulations. CAP activities have been completed for groundwater, including the removal of free product by multi-phase extraction at several USTs. The CAP remedy also included semiannual monitoring of TPH concentrations to ensure their levels are below FPALs, developed for NFD Point Molate to protect human health and the environment (Tetra Tech 2001d, 2002b). Groundwater monitoring will continue under a basewide groundwater monitoring program, as dictated in the Site Cleanup Requirements Order to be issued by the Water Board to the new property owner.

Soil data from the characterization of the petroleum USTs and pipelines in Disposal Areas 1, 2, 6, and 12 were also evaluated in the Final Basewide Petroleum CAP (Tetra Tech 2002b). Soil data were evaluated to develop objectives for corrective action and were also compared with FPALs. CAP activities have been completed for soil, including confirmation sampling at seeps, remedial soil excavation and confirmation sampling at Tanks B and C, Valve Box 2, and selected seeps. The Navy is currently submitting individual tank reports to the Water Board for the 20 remaining USTs and two former Tanks B and C on the conveyed property. The Navy is requesting environmental closure of the tanks when appropriate, including Tanks B and C, which were removed. As of May 2008, the Water Board had granted environmental closure for 9 of 22 USTs (Tanks 1, 7, 9, 10, 11, 14, 16, 17, and 20). The Navy intends to submit all environmental tank reports to the Water Board prior to early transfer; however, not all tanks will be ready for closure at that time. The Transferee will be required to complete all activities necessary to obtain such closure. Routine monitoring and maintenance of the remaining tanks will continue beyond early transfer.

4.0 ANALYSIS OF FUTURE LAND USE

This section describes the anticipated future use of the property to be transferred and discusses whether the anticipated land use could be expected to result in exposure to CERCLA hazardous substances.

4.1 FUTURE LAND USE

The NEPA ROD issued by the Navy for the transfer of the property identifies the future uses of the property, after the environmental remediation is complete, as light industrial, commercial, and open space/recreation (Navy 2002). During the "covenant deferral" period (that is, the period after early transfer but before the completion of environmental remediation), activity in areas where remediation has not been completed is anticipated to be limited to remediation and preliminary development activities such as grading and infrastructure installation.

4.2 ANALYSIS OF WHETHER LAND USE RESTRICTIONS ARE NECESSARY TO PROTECT HUMAN HEALTH OR THE ENVIRONMENT

As discussed in Section 3.1.1 of this FOSET, the Navy's ROD for IR Site 1 requires the establishment of ICs to protect human health and the environment. Specifically, the LUC and deed will require the Transferee to continue to implement the ICs at IR Site 1 to maintain the integrity of the soil cover; prohibit residential use and development of the site; and prohibit the extraction and use of groundwater for any purpose other than monitoring, remediation, or construction dewatering.

The Navy has not identified any other significant risks to human health or the environment that would arise from the activities and uses intended for IR Site 1. Therefore, no other restrictions are necessary to protect human health or the environment. As part of its ultimate determination that remedial activities are complete, the Water Board may decide, in light of the physical conditions of the site and the future land uses anticipated at that time, that additional restrictions are necessary to protect human health or the environment.

As discussed in Section 6.3 of this FOSET, ICs may be necessary during the covenant deferral period to protect the environment and to prevent disruption of the investigation and remediation activities. ICs provided in the Site Cleanup Requirements Order will be incorporated into the quitclaim deed and LUC.

5.0 REQUIREMENTS FOR REMEDIAL, CORRECTIVE, AND RESPONSE ACTIONS AND OPERATIONS

This section describes any ongoing or planned remedial action or corrective actions, together with the schedule for the remedial or response actions. The Navy and the City have entered into an ETCA under which the City has assumed those responsibilities. The ETCA is presented in Appendix B.

5.1 INSTALLATION RESTORATION PROGRAM

Under the ETCA, the City will assume responsibility for achieving regulatory closure of all remaining IR sites (IR Sites 1, 3, and 4) in accordance with all applicable state and federal regulations. The City will be required to follow the schedule as set forth in the Site Cleanup Requirements Order between the City, Upstream, and the Water Board. The Site Cleanup Requirements Order is expected to require the types of activities and outcomes presented in the following sections.

5.1.1 IR Site 1 – Disposal Area 10

As described in Section 3.1.1, the former 1-acre landfill at IR Site 1 is now closed with a soil cover, gas venting system, and an OWS and filtration system. Monitoring results have shown a steady reduction in TPH detections in groundwater downgradient of the landfill, with results at concentrations below FPALs in 2006 and 2007. Continued actions for this site are limited to routine monitoring of groundwater and monitoring, inspection, and maintenance of the landfill cover, gas venting system, and OWS and filtration system.

5.1.2 IR Site 3 – Disposal Area 3

Remedial activities contemplated for IR Site 3 include excavation of shallower soils (less than 10 feet bgs) with contaminant concentrations exceeding industrial/commercial action levels and off-site disposal of contaminated soils at one or more approved landfills. Remediation of the deeper contaminated soils (below 10 feet bgs) will include excavation and off-site disposal of soils that contain more mobile fractions of TPH from various areas within IR Site 3. One alternative for remediation would include excavating a 100-foot-wide section of soils upgradient of the containment wall and replacing those soils with an adsorbent mix of silty sand and peat to capture any unexpected leachable petroleum that may have missed excavation. The Site Cleanup Requirements Order will provide for early implementation of the selected remedial action, followed by long-term monitoring of groundwater wells at the site.

5.1.3 IR Site 4 – Disposal Areas 5 and 13

Human health and ecological cancer risks and noncancer hazards for Disposal Area 5 (Drum Lot 2) were shown to be minimal; however, to comply with state policies, the Site Cleanup Requirements Order will require removal of the source for TCE at Disposal Area 5. Given the small source area in question, the costs of this approach are comparable with those costs anticipated to gain closure through additional risk evaluations. A remedial alternative has not yet been selected; however, it is anticipated that source removal activities can be completed by excavation and temporary dewatering, followed by groundwater monitoring. Remaining areas within IR Site 4 will be addressed through long-term monitoring of groundwater wells at the site.

5.2 CORRECTIVE ACTION PLAN PROGRAM ON PREVIOUSLY CONVEYED PROPERTY

All 20 large USTs located on the conveyed adjacent property were cleaned, certified, and structurally closed in 2005. In addition, recommendations presented in the basewide petroleum CAP (Tetra Tech 2002b) were implemented in 2005 to address free product at NFD Point Molate (Innovative Technical Solutions, Inc. 2005). The Navy also removed two additional large USTs (Tanks B and C) in 2005. Environmental tank reports are currently being submitted to the Water Board for all 22 large USTs (Tanks 1 through 20, B, and C). The Navy is requesting environmental closure of the tanks when appropriate, including Tanks B and C, which were removed. As of May 2008, the Water Board had granted environmental closure for 9 of 22 tanks (1, 7, 9, 10, 11, 14, 16, 17, and 20). The Site Cleanup Requirements Order will require the finalization of closure activities for the remaining 13 USTs. Routine maintenance and inspection of all 20 remaining large USTs will continue.

5.3 RESPONSE ACTION SCHEDULE

A response action schedule will be developed for sites that have not reached regulatory closure to ensure that early transfer will not delay any necessary response actions on the property. The Site Cleanup Requirements Order will establish the milestones for the early transfer property and will not substantially delay any necessary response actions at the property.

5.4 CONDITIONS FOR WHICH THE NAVY RETAINS RESPONSIBILITY

Responsibility for all of the known environmental conditions requiring regulatory closure is being transferred to the City, with accompanying appropriate funds to allow for completion of remaining regulatory obligations. As described in the ETCA (Appendix B), the Navy will retain (1) responsibility for unknown conditions not covered by the environmental insurance polices, which the City is required to purchase under the ETCA, and (2) responsibility for any condition associated with unexploded ordnance, military munitions, chemical, radiological or biological warfare agents, and radiological materials.

6.0 NOTICES, COVENANTS, EASEMENTS, AND USE RESTRICTIONS

The environmental documents listed in Section 9.0 were evaluated to identify environmental factors that may warrant notices, covenants, easements, and use restrictions to ensure that the intended use of the early transfer property is consistent with protection of human health and the environment during the deferral. The following sections discuss the notices, covenants, easements, and use restrictions related to the early transfer property. These notices, covenants, easements, and use restrictions apply to the footprint of the entire early transfer property unless specifically noted otherwise below.

6.1 NOTICES

This section presents notifications for the following environmental factors that will be provided in conjunction with the FOSET.

6.1.1 Hazardous Substances

As required by CERCLA § 120(h)(l) and codified at Title 40 CFR § 373.1, notification of hazardous substance storage or releases is required for transfer of federal property at which any hazardous substance was stored for 1 year or more, or was known to have been released or disposed of. Notification must include (1) the types and quantities of such hazardous substances; (2) the time at which such storage occurred; and (3) the types, quantities, and time periods associated with any releases or disposal of hazardous substances. Such information must be made available on the basis of a complete search of agency files.

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

Appendix A lists the hazardous substances in the early transfer property that require notification under CERCLA § 120(h).

6.1.2 Lead-Based Paint

A notification will be included in the deed that buildings and structures built before 1978 within the early transfer property are presumed to contain LBP because of their age. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. There is no known LBP on the appurtenance formerly used as a fueling pier (FWENC 2003). Transferee acknowledges receipt of available records and reports pertaining to LBP and/or LBP hazards.

6.1.3 Asbestos-Containing Material

A notification will be included in the deed that ACM may exist in wrapping and insulation on remaining portions of underground fuel and steam lines and on the appurtenance formerly used as a fueling pier (Tetra Tech 2003a; FWENC 2003). In the deed, the Transferee will acknowledge receipt of available records and reports pertaining to ACM.

6.1.4 Cultural Resources

A notification will be included in the deed that two known resources of cultural importance occur within Disposal Areas 3 and 5. Cultural resources include the Winehaven Historic District (site CA-CCO-422H) within Disposal Area 3 and a late 19th century Chinese shrimp fishing village (site CA-CCO-506-H) within Disposal Area 5 (Navy and City of Richmond 2002).

In 1978, the Winehaven Historic District was listed on the National Register of Historic Places as site CA-CCO-422H. The Winehaven Historic District occupies 71 acres, 27 of which make up a core historic area (see Figure 5). Within this 27-acre historic area are 35 historic buildings and 11 buildings that were built after the Navy acquired Winehaven. These 11 buildings do not contribute to the historic district and are considered "non-contributing." An additional 17 non-contributing structures are within the greater 71-acre Winehaven Historic District, some of which are within Disposal Area 3. No historic buildings are within Disposal Area 3.

The Navy, California State Historic Preservation Officer, and City have entered into a memorandum of agreement for the ongoing protection of cultural resources (Navy, City of Richmond, California State Preservation Officer, and Bay Miwok Band 2002).

6.2 COVENANTS, EASEMENTS, AND RESTRICTIONS

This section, in conjunction with Section 6.3, describes the covenants, easements, and restrictions that will be recorded in the deed of transfer for the early transfer property.

6.2.1 Remedial Obligation

The deed from the Navy to the City will include a covenant by the United States, made pursuant to the provisions of CERCLA § 120(h)(3)(A)(ii)(II), warranting that the United States will conduct any additional remedial action found to be necessary after the property has been transferred. The covenant will not apply in any case in which the person or entity to whom the real property is transferred is a potentially responsible party with respect to such property.

6.2.2 Right of Access

The deed from the Navy to the City will reserve and the City will grant to the United States an appropriate right of access to the early transfer property, pursuant to the provisions of CERCLA § 120(h)(3)(A)(iii), to enable the United States and others, including the State of California, to enter said parcels in the event any remedial or corrective action is found to be necessary after the date on which the property is transferred.

6.3 RESPONSE ACTION ASSURANCES

As part of the early transfer, CERCLA § 120(h)(3)(C)(ii) requires that the deed or other agreement shall contain the following assurances:

- Provide for any necessary restrictions on the use of the property to ensure the protection of human health and the environment.
- Provide that there will be use restrictions as necessary to ensure that required RIs, response actions, and oversight activities will not be disrupted.
- Provide that all necessary response actions will be taken, and identify the schedules for investigation and completion of all necessary response actions, as approved by the appropriate regulatory agency.
- Provide that the federal agency responsible for the property subject to transfer will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for the investigation and completion of all necessary response actions, subject to congressional authorizations and appropriations.

The following sections discuss the deed restrictions proposed to address assurances under the four categories listed above.

6.3.1 Restrictions Necessary to Protect Human Health and the Environment

As discussed in Section 4.2 of this FOSET, the only restrictions that the Navy has determined are necessary to protect human health are the restrictions required by the ROD for IR Site 1. Accordingly, the deed and the LUC described in Section 1.1 of this FOSET will require the Transferee to continue to implement the ICs at IR Site 1 to maintain the integrity of the soil cover; prohibit residential use and development of the site; and prohibit the extraction and use of groundwater for any purpose other than monitoring, remediation, or construction dewatering.

It is further understood that additional restrictions concerning IR Sites 1, 3, and 4 may be provided in the Site Cleanup Requirements Order. The Navy deed and LUC will include any restrictions provided in the Site Cleanup Requirements Order to further protect human health and the environment. The environmental restrictions will be binding on the City and future owners.

6.3.2 Disruption of Remedies

The Navy has determined that certain restrictions are necessary to ensure the required RIs, response actions, and oversight activities will not be disrupted. Specifically, the deed and LUC will include a prohibition against excavation and other activities that disturb soil or groundwater in specified areas still undergoing investigation or remediation unless such activities are approved by the Water Board. The LUC and deed will also specify that these restrictions are

released when the Water Board determines that NFA is required in those specified areas. The environmental restrictions will be binding on the City and future owners.

6.3.3 Response Action Assurances and Schedules for Investigation and Completion of Necessary Response Actions

The Navy's basis for ensuring all necessary response actions will be taken and identifying the schedules for investigation and completion of all necessary response actions is that the Site Cleanup Requirements Order between the City, Upstream, and Water Board (1) ensures that the City and Upstream will remediate any Known Conditions or Reasonably Expected Environmental Conditions at the site, and (2) establishes milestones for the response actions for sites that have not reached regulatory closure.

Under the ETCA (Appendix B), the Navy will provide one payment of $28.5 million to fund the environmental remediation efforts of the City and Upstream, so they can comply with the requirements of the Site Cleanup Requirements Order. The ETCA benefits the Navy and the City because it facilitates early transfer and immediate reuse by allowing the City to perform certain environmental remediation activities and simultaneously facilitates redevelopment. Under the ETCA, the City agrees to purchase an environmental insurance policy insuring against cost overruns for the known environmental conditions and paying for cleanup of previously undiscovered conditions.

6.3.4 Budget Requests

The ETCA obligates the Navy to provide $28.5 million to the City in exchange for environmental services to bring the known and unknown environmental conditions to regulatory closure. The Navy shall use its best efforts to ensure that all such funds are made available.

7.0 RESPONSIVENESS SUMMARY

This section in the [Final] FOSET summarizes the Navy responses to all State regulatory agencies' comments on the Draft FOSET and all public comments received on the Draft FOSET during the 30-day notice period. The comments and responses will be presented in Appendix C.

8.0 FINDING OF SUITABILITY FOR EARLY TRANSFER

The early transfer property has been assessed and evaluated for (1) the presence of hazardous substances and contamination thereon, (2) environmental impacts anticipated from the intended use thereof, and (3) the adequacy of LUCs to ensure that the required response actions are not delayed and that the proposed use of the early transfer property is consistent with the protection of human health and the environment. The assessment and evaluation have adequately demonstrated that the proposed use of the early transfer property by the City for the uses identified herein is consistent with protection of human health and the environment, subject to inclusion of and compliance with the covenants required by the Site Cleanup Requirements Order between the City and Water Board and the notifications in this document.

Deferral of the deed covenant required by CERCLA § 120(h)(3)(C) must be supported by a determination that the property is suitable for transfer, based on the following:

1. The property is suitable for transfer for the use intended by the transferee, and the intended use is consistent with the protection of human health and the environment;

2. The deed or other agreement proposed to govern the transfer contains response action assurances set forth in clause (ii) [sic] [CERCLA § 120(h)(3)(C)(ii)];

3. The Federal agency requesting deferral [sic] (Navy) has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of not less than 30 days after the date of the notice, written comments on the suitability of the property for transfer; and

4. The deferral and the transfer of the property will not substantially delay any necessary response action at the property.

The Navy finds the requirements of CERCLA § 120(h)(3)(C)(ii) have been adequately addressed and evaluated to ensure that the deed from the Navy to the City and the Site Cleanup Requirements Order contain assurances that:

1. Provide for any necessary restrictions on the use of the property to ensure the protection of human health and the environment.

2. Provide that there will be restrictions on use of the property as necessary to ensure that required RIs, response actions, and oversight activities will not be disrupted.

3. Provide that all necessary response actions will be taken and identify the schedules for investigation and completion of all necessary response actions, as approved by the appropriate regulatory agency.

4. Provide that the Navy will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for investigation and completion of all necessary response actions, subject to congressional authorizations and appropriations.

The Navy finds the property to be suitable for early transfer.

AUTHORIZING SIGNATURE

Signature: _____ Date: _____

Ms. Laura Duchnak
Director, BRAC Program Management Office West

9.0 SUPPORTING ENVIRONMENTAL DOCUMENTATION

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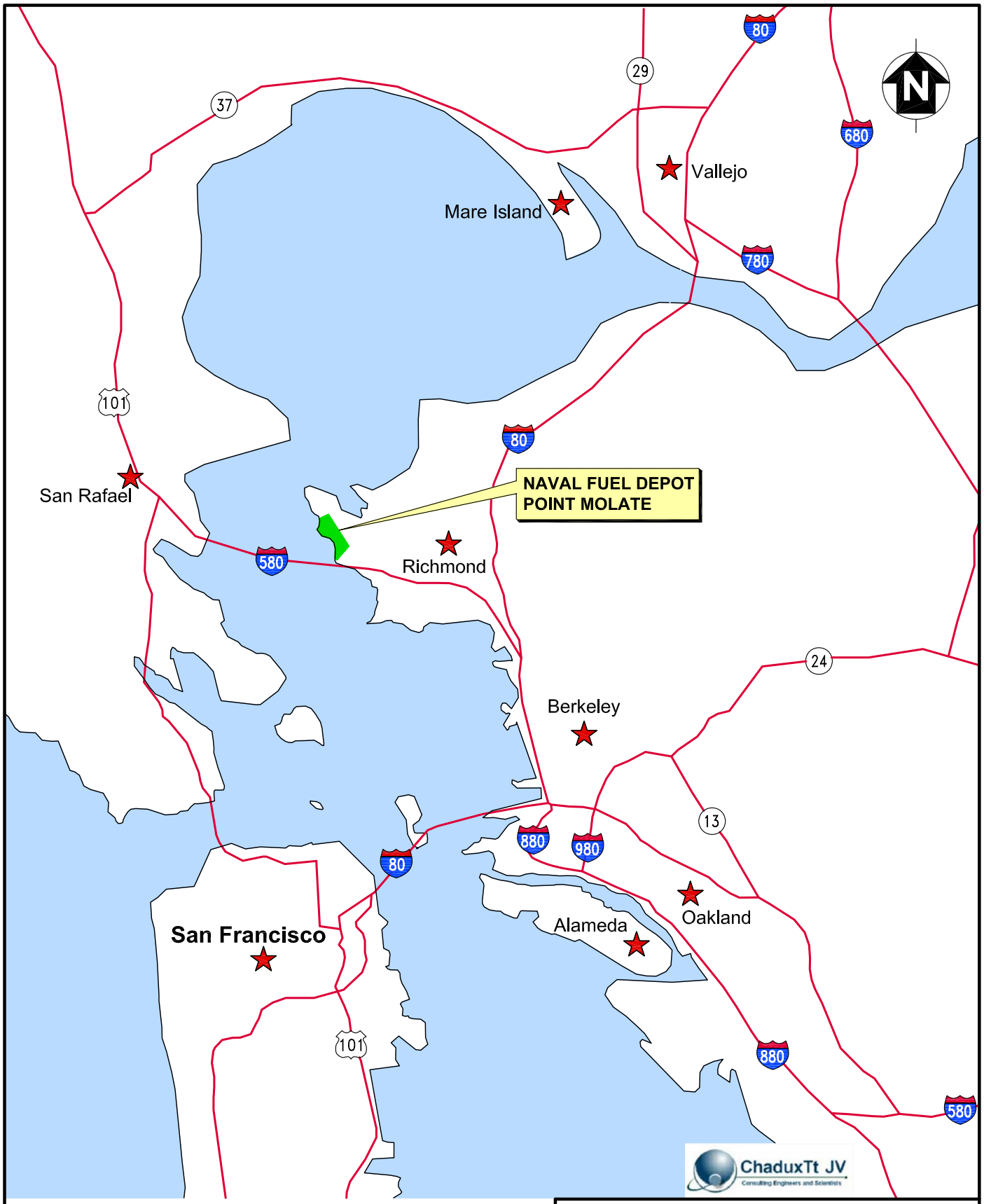
FIGURES



NOT TO SCALE

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 1
FACILITY LOCATION

Finding of Suitability for Early Transfer
Disposal Areas 3, 5, 10, and 13

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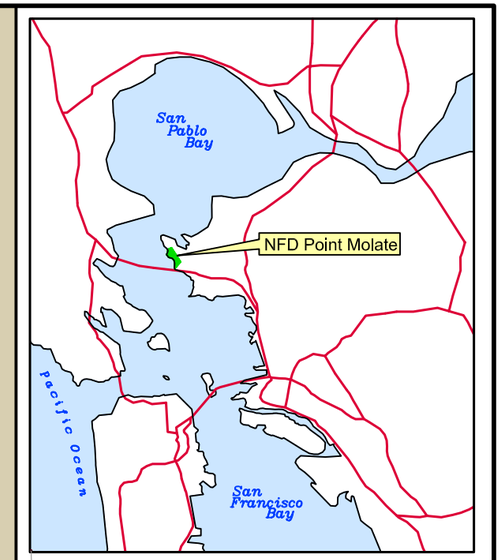

LEGEND

- Property Subject to FOSET (Labeled with EBS Parcel Number)
- Fuel Pier to be Transferred as an Appurtenance to EBS Parcel 32
- Previously Transferred Property to the City of Richmond
- Previously Transferred Offshore Property to the City of Richmond
- Chevron Corporation Refinery
- Underground Storage Tanks
- Building
- Road
- EBS — Environmental Baseline Survey
- FOSET — Finding of Suitability for Early Transfer

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 2
ENVIRONMENTAL BASELINE SURVEY PARCELS

Finding of Suitability for Early Transfer
Disposal Areas 3, 5, 10, and 13

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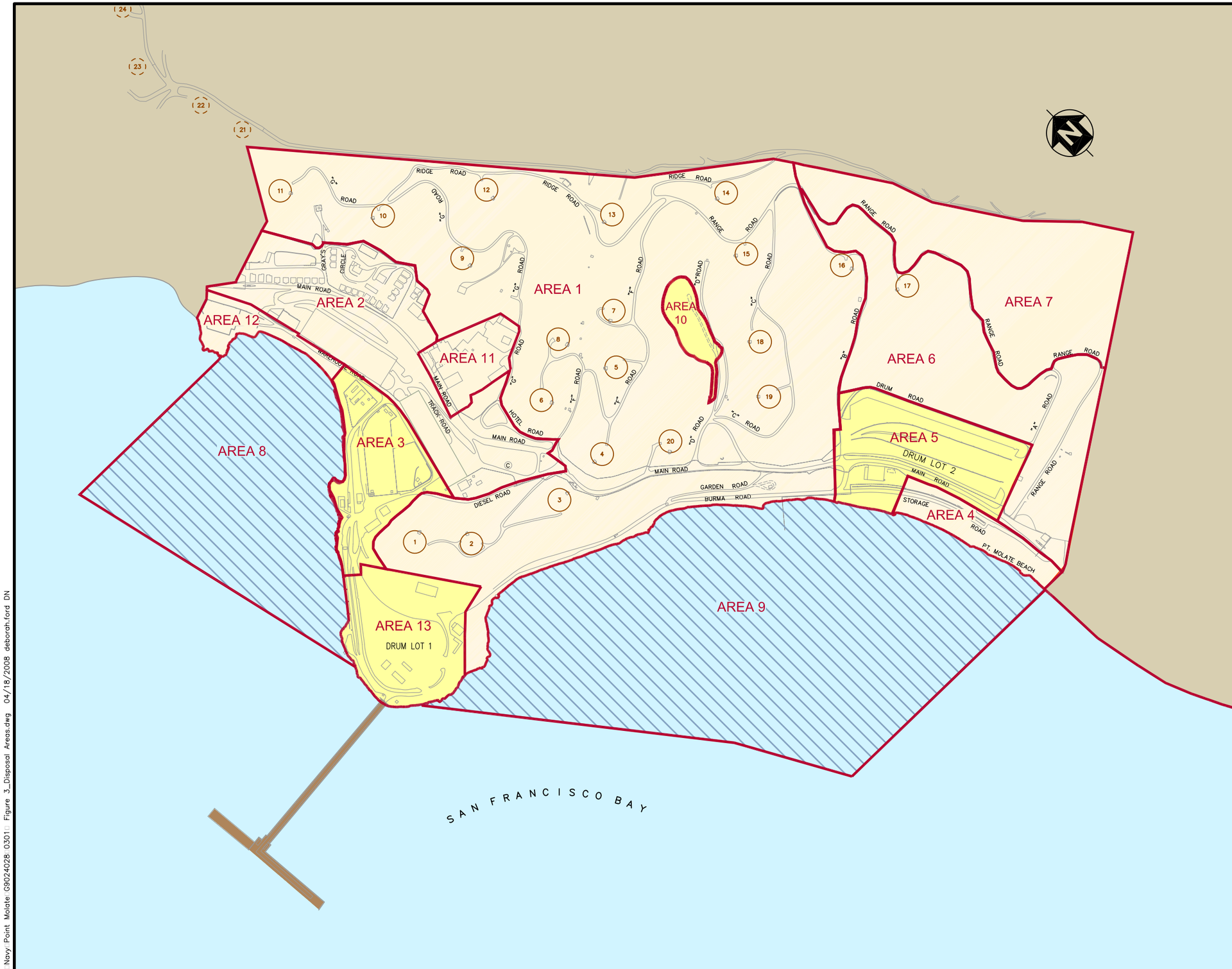

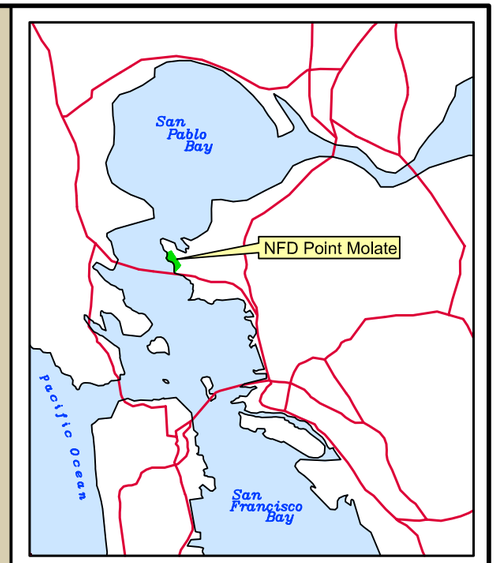

LEGEND

- Disposal Area Subject to FOSET
- Fuel Pier to be Transferred as an Appurtenance to Disposal Area 13
- Previously Transferred Disposal Area to the City of Richmond
- Previously Transferred Offshore Disposal Area to the City of Richmond
- Chevron Corporation Refinery
- Underground Storage Tanks
- Building
- Road
- FOSET — Finding of Suitability for Early Transfer

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 3
DISPOSAL AREAS

Finding of Suitability for Early Transfer
Disposal Areas 3, 5, 10, and 13

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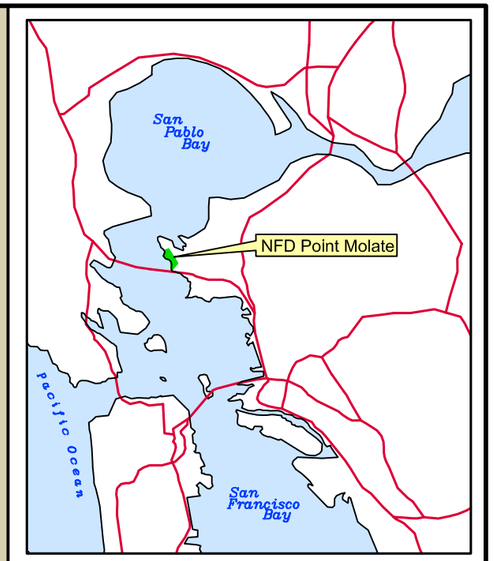

LEGEND

- IR Site 1
- IR Site 2
- IR Site 3
- IR Site 4
- Fuel Pier to be Transferred as an Appurtenance to Disposal Area 13
- Previously Transferred Property to the City of Richmond
- Previously Transferred Offshore Property to the City of Richmond
- Chevron Corporation Refinery
- Underground Storage Tanks
- Building
- Road
- IR Installation Restoration

300' 0 300' 600'

SCALE: 1" = 600'

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Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 4
INSTALLATION RESTORATION SITES

Finding of Suitability for Early Transfer
Disposal Areas 3, 5, 10, and 13

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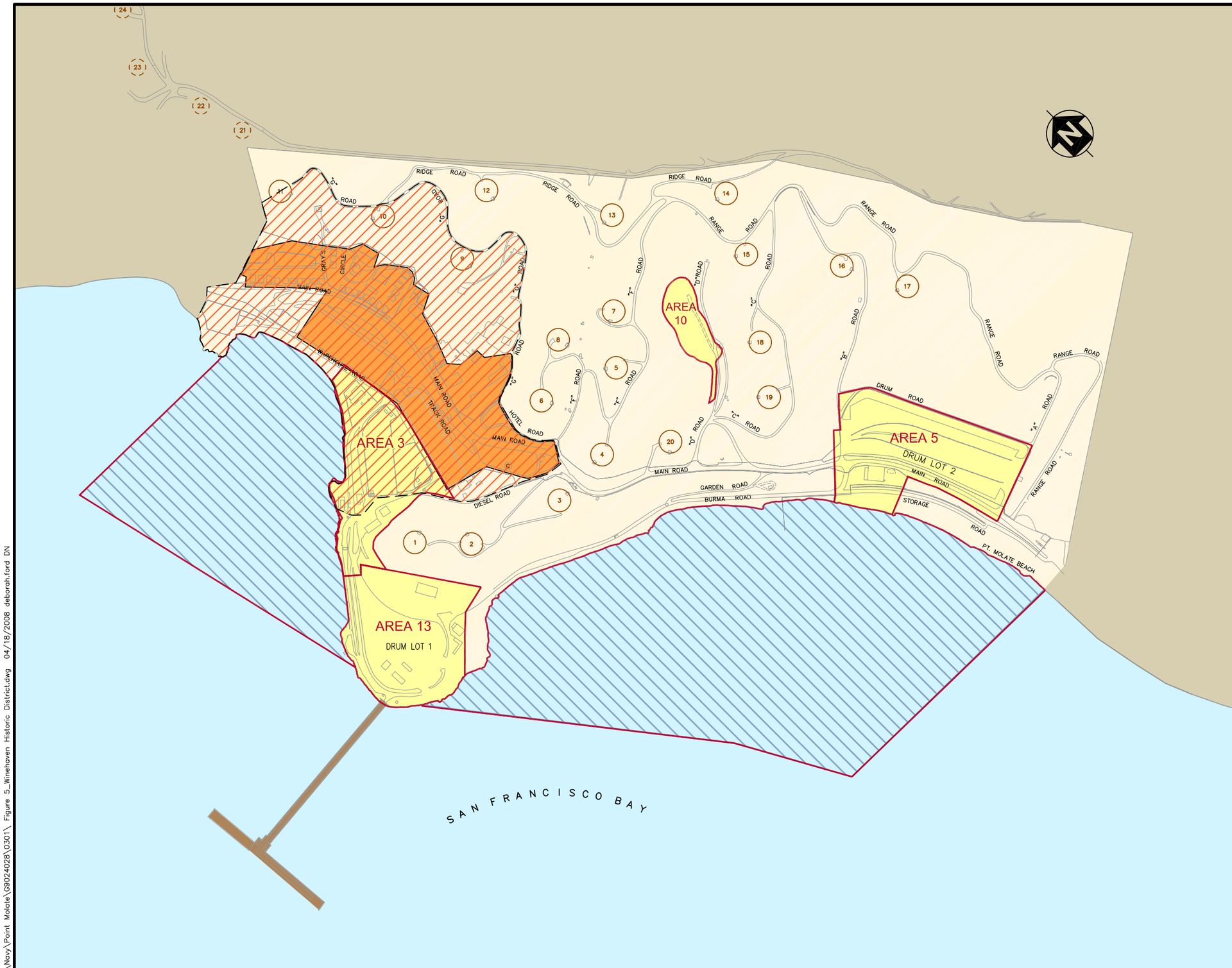

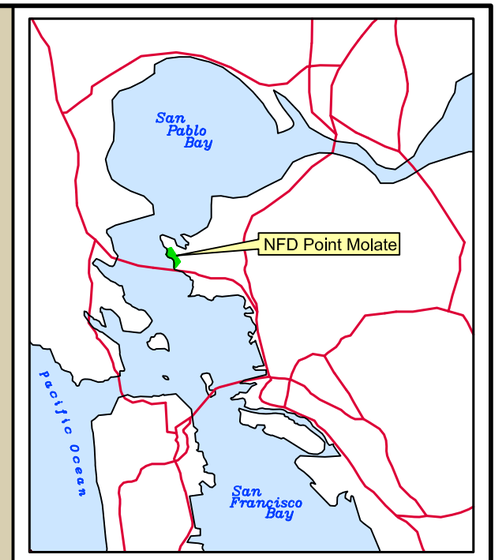

LEGEND

- Winehaven Historic District
- Core Historic District
- Disposal Area Subject to FOSET
- Fuel Pier to be Transferred as an Appurtenance to Disposal Area 13
- Previously Transferred Disposal Area to the City of Richmond
- Previously Transferred Offshore Disposal Area to the City of Richmond
- Chevron Corporation Refinery
- Underground Storage Tanks
- Building
- Road
- FOSET — Finding of Suitability for Early Transfer

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE 5
WINEHAVEN HISTORIC DISTRICT

Finding of Suitability for Early Transfer
Disposal Areas 3, 5, 10, and 13

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TABLES

TABLE 1: SUMMARY OF REMAINING ENVIRONMENTAL ISSUES AT DISPOSAL AREAS 3, 5, 10, AND 13
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Disposal Area	Site Name	Installation Restoration Program Sites	Petroleum Program Sites	Underground Storage Tanks and Pipelines	Aboveground Storage Tanks	PCBs	LBP	ACM	Radon	Pesticides	Adjacent Property
3	IR Site 3: Treatment Ponds Area	Residual TPH, PAHs, and BTEX present in soil. Metals are localized to soil near the former FRF. Draft FS Report evaluated impacts to soil from 0 to 10 feet bgs (Bechtel 2005a). Remedial alternatives evaluated included no action, excavation and off-site disposal of soils exceeding industrial action levels, and excavation and off-site disposal of soils exceeding residential action levels.	Residual TPH, PAHs, and BTEX present in soil. TPH and PAH contamination in groundwater, with localized VOCs in MW11-44. Draft CAP evaluated impacts to soil greater than 10 feet bgs and groundwater (Bechtel 2005b). TPH, PAHs, and limited VOC contamination in groundwater. Remedial alternatives evaluated included operation of containment wall and extraction trench, excavation of select areas of petroleum-impacted soils that are considered mobile, and excavation of an entire area of petroleum-impacted soil that is below the water table. Current groundwater monitoring results indicate levels of TPH and PAHs at the site are below FPALs.	--	Active: two OWS (ORS 1 and 2); one flow control tank Inactive: one AST with unknown contents near Building 125	--	--	--	--	--	Petroleum-impacted property located within adjacent Disposal Areas 1, 2, and 13; those areas are being addressed under basewide petroleum CAP.
5	IR Site 2: Sandblast Grit Area (Areas 2C and 2E)	None; NFA ROD signed by the Navy and Water Board in 2000 (Navy 1999c).	--	--	--	--	--	--	--	--	Sites are located on Drum Lot 2, under which lies a TCE plume. Building 87 is west of the sandblast grit areas; PAHs and residual pesticides present in soil.

TABLE 1: SUMMARY OF REMAINING ENVIRONMENTAL ISSUES AT DISPOSAL AREAS 3, 5, 10, AND 13 (CONTINUED)
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Disposal Area	Site Name	Installation Restoration Program Sites	Petroleum Program Sites	Underground Storage Tanks and Pipelines	Aboveground Storage Tanks	PCBs	LBP	ACM	Radon	Pesticides	Adjacent Property
5 (Continued)	IR Site 4: Drum Lot 2 and Building 87 Area	TCE plume located beneath Drum Lot 2 and extends west and downgradient towards Building 87. Continued monitoring was recommended based on the results of the 2002 HHRA (Tetra Tech 2002c). Groundwater monitoring continues at the site. Though stable to decreasing, recent concentrations of TCE are still elevated. Daughter products of TCE (vinyl chloride and cis-1,2-DCE) not detected in 2007 (Jonas 2007). Removal action conducted in 1999 to remove pesticides from surface soil and pesticides and PAHs from subsurface soil near Building 87. Elevated PAH concentrations still exist beneath drain pipe within Building 87. Water Board concurred with NFA based on the conclusion of the Removal Action Summary Report in 2002 (Tetra Tech 2002c; Water Board 2002).	--	--	Inactive: one propane storage tank	--	--	Nonfriable ACM present at Building 87	--	--	Petroleum-impacted property located within adjacent Disposal Area 1; the area is being addressed under basewide petroleum CAP.
10	IR Site 1: Waste Disposal Area	Selected remedy (engineered soil cover) installed over the 1-acre waste disposal area in 2002. OWS and filtration system installed at seep located at toe of landfill. Recent groundwater contaminant concentrations at or below nondetect levels, and are below the RAOs presented in the ROD (Navy 2005). The Navy will install a new monitoring well downgradient of the landfill that will meet Water Board's specifications for screening free-product.	Two seeps were recommended for continued monitoring in the basewide petroleum CAP (Tetra Tech 2002b). One seep is located above the landfill and is monitored per the IR Site 1 PMP (Tetra Tech 2002d). The other seep is located at the toe of the landfill and is monitored per IR Site 1 ROD (Navy 2005).	--	Active: one OWS tank; one equalization tank	--	--	--	--	--	Petroleum-impacted property located within adjacent Disposal Area 1; the area is being addressed under basewide petroleum CAP.

TABLE 1: SUMMARY OF REMAINING ENVIRONMENTAL ISSUES AT DISPOSAL AREAS 3, 5, 10, AND 13 (CONTINUED)
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Disposal Area	Site Name	Installation Restoration Program Sites	Petroleum Program Sites	Underground Storage Tanks and Pipelines	Aboveground Storage Tanks	PCBs	LBP	ACM	Radon	Pesticides	Adjacent Property
13	IR Site 4: Drum Lot 1 Area	Historical low to nondetect levels of VOCs in groundwater at MW11-80. HHERA conducted for Drum Lot 1 in 2003; no elevated risk (Tetra Tech 2003b). Water Board concurred with conclusion of NFA for soil but with continued monitoring of groundwater.	Free-product and PAHs may be present in soil along the former pipeline pathways. Areas of visible contamination were overexacavated during pipeline removal activities in 2000. Regardless, the areas of pipeline removal were further evaluated in the 2003 HHERA (Tetra Tech 2003b) to determine whether additional activities under a CAP were required for the site. The results of the HHERA indicated that risks were below or within the risk management range and Water Board concurred with NFA recommendation for soil (Water Board 2003). TPH was historically detected at concentrations above FPALs in groundwater at Drum Lot 1; thus, the 2003 HHERA recommended continued monitoring under the basewide groundwater monitoring program. Water Board concurred with the recommendation (Water Board 2003). Current groundwater monitoring results indicate concentrations of TPH and PAHs at the site have been detected below FPALs since 2006 (Jonas 2007).	--	Inactive: Five lube oil tanks at Building 89; one diesel fuel tank; two tanks used for ice inhibitor; one heating oil AST at Building 132	--	--	Nonfriable ACM present at Building 132	--	--	Disposal Area 2 contaminants of concern include TPH, PAHs, and free product. All pipelines were removed in 2000, and areas with visible contamination were overexcavated (Tetra Tech 1999b). Disposal Area 3 contaminants of concern include TPH, PAHs, and BTEX in soil and groundwater. The containment wall was extended south from IR Site 3 into IR Site 4 to prevent contaminant migration from IR Site 3. This containment wall extension is located at the boundary of Disposal Areas 3 and 13.

Notes:

-- No remaining environmental issue; environmental issue has either been removed or was never determined to be present at the site.

ACM Asbestos-containing materials
AST Aboveground storage tank
Bechtel Bechtel Environmental, Inc.
bgs Below ground surface
BTEX Benzene, toluene, ethylbenzene, xylenes
CAP Correction action plan
DCE Dichloroethene
FPAL Fuel product action level
FRF Fuel reclamation facility
FS Feasibility study
HHERA Human health and ecological risk assessment
HHRA Human health risk assessment
IR Installation restoration
Jonas Jonas and Associates, Inc.
LBP Lead-based paint
Navy Department of the Navy
NFA No further action
ORS Oil recovery system
OWS Oil/water separator
PAH Polycyclic aromatic hydrocarbon
PCB Polychlorinated biphenyl
PMP Postclosure maintenance and monitoring plan
RAO Remedial action objective
ROD Record of decision
TCE Trichloroethene
Tetra Tech Tetra Tech EM Inc.
TPH Total petroleum hydrocarbon
VOC Volatile organic compound
Water Board San Francisco Bay Regional Water Quality Control Board

TABLE 1: SUMMARY OF REMAINING ENVIRONMENTAL ISSUES AT DISPOSAL AREAS 3, 5, 10, AND 13 (CONTINUED)

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Sources:

Bechtel. 2005a. "Draft Soil Feasibility Study Report, Installation Restoration (IR) Site 3, Naval Fuel Depot (NFD) Point Molate, Richmond, California." May.

_____. 2005b. "Draft Corrective Action Plan (CAP), IR Program Site 3, NFD Point Molate, Richmond, California." June.

Navy. 2005. "Final Record of Decision (ROD), IR Site 1, NFD Point Molate, Richmond, California." June.

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Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), NFD Point Molate, Richmond, California." May 8.

Water Board. 2002. Letter Regarding Concurrence on Final Summary Report Supplemental Investigation Site Specific Phase II Environmental Baseline Survey, NFD Point Molate, Richmond, California, prepared by Tetra Tech EM, Inc., dated August 27, 2002. From Ms. Adriana Constantinescu, Project Manager. To Mr. Michael Bloom, Base Realignment and Closure Environmental Coordinator (BEC), Navy. December 3.

_____. 2003. Letter Regarding Concurrence on Responses to Comments on the Draft Site 4 Human Health and Ecological Risk Assessment (HHERA), IR Site 4, NFD Point Molate, Richmond, California", dated January 8, 2003, March 4, 2003 and March 5, 2003. From Ms. Adriana Constantinescu, Project Manager. To Mr. Michael Bloom, BEC, Navy. March 25.

Tetra Tech. 1999b. "Site 4 Pipeline Removal, Final Summary Report, NFD Point Molate, Richmond, California." November 30.

_____. 2002b. "Final CAP, NFD Point Molate, Richmond, California." March 4.

_____. 2002c. "Final Field Summary Report Supplemental Investigation, Site-Specific Phase II Environmental Baseline Survey, NFD Point Molate, Richmond, California." August 27.

_____. 2002d. "Final Postclosure Maintenance and Monitoring Plan, Site 1, Final Cover, NFD Point Molate, Richmond, California." August 30.

_____. 2003b. "Final HHERA, IR Site 4, NFD Point Molate, Richmond, California." March 24.

TABLE 2: NATURE AND EXTENT OF CONTAMINATION AT INSTALLATION RESTORATION SITES
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	IR Site/ Name	Site History	Human Health Risk Assessment Results	Ecological Risk Assessment Results	Media Impacted	Exposure Potential and Land Use Controls	Status
7b	10	IR Site 1/ Waste Disposal Area	IR Site 1 is a former waste disposal area. Waste disposal began between 1953 and 1957 and ceased by 1979. Approximately 20,000 cubic yards of waste was disposed of at the site (Tetra Tech 2001c). Waste discarded was primarily construction debris. Some oily waste, thought to be petroleum sludge from tank bottoms or petroleum-contaminated soil from valve box removals, had been observed. In addition to waste, historical fuel leaks and spills from the UST system at NFD Point Molate have affected soil and groundwater within and downgradient of IR Site 1. Contaminants of concern include TPH and PAHs in soil and groundwater.	Risks are within risk management range	Risks are within risk management range	Soil and groundwater	LUCs in the form of ICs are presently implemented to maintain the integrity of the soil cover, prohibit residential development and use of the site, and prohibit use and extraction of groundwater at IR Site 1 for any other purpose other than monitoring, remediation, or construction dewatering.	Continued operation of the OWS and filtration system, continued maintenance and monitoring of the landfill cover, and ICs.
29	5	IR Site 2/ Sandblast Grit Areas	Sandblasting was conducted at NFD Point Molate to prepare metal surfaces for painting. The leftover grit was primarily composed of silica particles, with trace amounts of metals. IR Site 2 consisted of five localized areas (Areas 2A, 2B, 2C, 2D, and 2E) of suspected historical sandblasting activities or sandblast grit disposal. Three areas of IR Site 2 (Areas 2A, 2B, and 2D) were transferred to the City of Richmond in 2003. The other two areas, Areas 2C and 2E, were located within the early transfer property (EBS Parcel 29 of Disposal Area 5, only). Of those two areas in Disposal Area 5, grit was found only in Area 2E; a human health risk-based screening evaluation confirmed that metals concentrations required further action to allow for unrestricted use. In 1997, the Navy excavated soil from Area 2E as part of a removal action and disposed of the soil at an appropriate disposal facility.	Risks are within risk management range	Risks are within risk management range	Soil	None	In 1998, the Navy prepared a project completion report to document the results of the removal action (Tetra Tech 1998). The results were also documented in a 1999 proposed plan that recommended NFA (Navy 1999a). A public meeting on the proposed plan was held, and no significant comments were received. After the public comment period ended in June 1999, the Navy prepared a NFA ROD for all five areas of IR Site 2; the NFA ROD was signed by the Navy on August 31, 2000, and by the Water Board on September 5, 2000 (Navy 1999c).
20 and 25	3	IR Site 3/ Treatment Ponds Area	Previous operations at IR Site 3 included a sump pond, disposal of industrial wastes, fuel transfer and reclamation operations, and treatment ponds that were a component of the UST french drain treatment system. The treatment ponds were removed and closure activities were completed in May 2004.	Risks are within risk management range	Risks are within risk management range	Soil and groundwater	Property use restrictions to ensure protection of human health and the environment are to be addressed as set forth in the Site Cleanup Requirements Order to be issued by the Water Board.	The need for additional action was evaluated in a Draft FS Report (Bechtel 2005a) and CAP (Bechtel 2005b). The Draft FS Report evaluated soil from 0 to 10 feet bgs, whereas the Draft CAP evaluated groundwater and fuel-saturated soils deeper than 10 feet bgs. Current features in the area include a groundwater containment wall and extraction trench and a groundwater treatment plant.

TABLE 2: NATURE AND EXTENT OF CONTAMINATION AT INSTALLATION RESTORATION SITES (CONTINUED)
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	IR Site/ Name	Site History	Human Health Risk Assessment Results	Ecological Risk Assessment Results	Media Impacted	Exposure Potential and Land Use Controls	Status
29, 30, and 32	5 and 13	IR Site 4/ Drum Lot 1 and Drum Lot 2/ Building 87	Drum Lot 1 was used to store fuel drums filled on site for transport off site. Underground pipelines were part of the fuel distribution system that was removed between 1998 and 2000. In 1994, floating free product was identified at the site. Drum Lot 2 was used to store fuel drums filled on site and drums for transport off site. At one time, the lot was used to store and maintain rail cars used by the Pacific Locomotive Association for recreation. Building 87 was used by the DVECC for storage of pesticides, repairs to pesticide application equipment, and pesticide application training in a classroom setting. Drum Lot 2 and Building 87 were identified as areas that required additional sampling and investigation. Soil and groundwater samples were collected at Drum Lot 2/Building 87, and sampling results identified areas where pesticide concentrations in soil around Building 87 and TCE concentrations in groundwater at Drum Lot 2/Building 87 exceeded risk-based screening levels. Surface soil from the Building 87 rinse area was excavated in 2001 to decrease highly elevated concentrations of pesticides.	Risks are within risk management range	Risks are within risk management range	Soil and groundwater	Property use restrictions to ensure protection of human health and the environment are to be addressed as set forth in the Site Cleanup Requirements Order to be issued by the Water Board.	The Navy prepared a Draft RATM for IR Site 4 that summarized the latest risk assessment results for Drum Lot 1 and Drum Lot 2/Building 87 (Sullivan 2005). The Draft RATM concluded that potential risks to human health or the environment from exposure to CERCLA contaminants were within risk management range (Sullivan 2005). NFA is anticipated for soil under the CERCLA program for Drum Lot 1 and Drum Lot 2/Building 87, and continued monitoring of VOCs in groundwater under the basewide groundwater monitoring program was recommended for Drum Lot 1 and Drum Lot 2/Building 87.

Notes:

Bechtel	Bechtel Environmental, Inc.
bgs	Below ground surface
CAP	Corrective action plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DVECC	Disease Vector Ecology and Control Center
EBS	Environmental baseline survey
FS	Feasibility study
IC	Institutional control
IR	Installation Restoration
LUC	Land use control
Navy	Department of the Navy
NFA	No further action
NFD	Naval Fuel Depot
OWS	Oil-water separator
PAH	Polycyclic aromatic hydrocarbon
RATM	Risk assessment technical memorandum
ROD	Record of decision
Sullivan	Sullivan Consulting Group
TCE	Trichloroethene
Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbon
UST	Underground storage tank
VOC	Volatile organic compound
Water Board	San Francisco Bay Regional Water Quality Control Board

Sources:

Bechtel. 2005a. "Draft Soil FS Report, IR Site 3, NFD Point Molate, Richmond, California." May.
_____. 2005b. "Draft CAP, IR Site 3, NFD Point Molate, Richmond, California." June.
Navy. 1999a. "Proposed Plan for Site 2, NFD Point Molate." Prepared by Engineering Field Activity, West. May.
_____. 1999c. "NFD Point Molate, Site 2, Final Record of Decision." December 30, 2000.
Sullivan. 2005. "Draft RATM, IR Site 4, NFD Point Molate, Richmond, California." January.
Tetra Tech. 1998. "Sandblast Grit Areas (IR Site 2), Removal Action, Final Project Completion Report, NFD Point Molate, Richmond, California." November 4.
_____. 2001c. "Final Design Basis Report, Site 1 Final Cover, NFD Point Molate, Richmond, California." August 10.

TABLE 3: INVENTORY AND STATUS OF UNDERGROUND STORAGE TANKS

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	UST Identification/Location	Capacity/Tank Material (gallons)	Contents/Year	Status
25	3	UST 110 / 18 feet northeast of Building 83	5,000 / Steel	Motor Gas Fuel, Contaminated Fuels, and F-76 / Unknown [a]	Removed in 1990
30	5	DVECC UST / 30 feet southwest of Building 87	1,000 / Fiberglass	Pesticides and Water / Unknown [a]	Removed in 1990

Notes:

a The years of operation are not available in historical documents.

DVECC Disease Vector Ecology and Control Center
EBS Environmental baseline survey
F-76 Marine diesel fuel
UST Underground storage tank

TABLE 4: INVENTORY AND STATUS OF ABOVEGROUND STORAGE TANKS
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	AST Identification/Location	Size (gallon)	Purpose	Status
7b	10	IR Site 1 OWS	804	OWS	Active
7b	10	Equalization Tank at IR Site 1	3,500	Holding tank for the OWS Filtration System	Active
20	3	Vertical Tube Coalescers 1 and 2	Unknown	Water and Oil Mixture Tanks	Removed
20	3	Tank E	420,000	Fuel Reclamation	Removed
25	3	ORS 1	Unknown	OWS	Inactive
25	3	ORS 2	Unknown	OWS	Inactive
25	3	IR Site 3	1,600	Flow-Control Tank	Active
25	3	Tank F	315,000	Fuel Reclamation	Removed
25	3	Along Shoreline	500	Groundwater Extraction Well Activities	Removed
25	3	Along Shoreline	500	Groundwater Extraction Well Activities	Removed
25	3	Along Shoreline	1,000	Groundwater Extraction Well Activities	Removed
25	3	Building 125	Unknown	Unknown	Inactive
25	3	CPS 1	Unknown	OWS	Removed
25	3	CPS 2	Unknown	OWS	Removed
25	3	Tank G	426,132	Fuel Reclamation	Removed
25	3	Treatment Ponds	1,000	Unknown	Removed
30	5	Building 87	1,000	Propane Storage	Inactive
32	13	North of Beach Tank	200	Diesel Fuel Tank	Inactive
32	13	DFP 1 – Building 89	12,000	Lube Oil Tank	Inactive
32	13	DFP 2 – Building 89	12,000	Lube Oil Tank	Inactive
32	13	DFP 3 – Building 89	12,000	Lube Oil Tank	Inactive
32	13	DFP 4 – Building 89	12,000	Lube Oil Tank	Inactive
32	13	DFP 5 – Building 89	12,000	Lube Oil Tank	Inactive

TABLE 4: INVENTORY AND STATUS OF ABOVEGROUND STORAGE TANKS (CONTINUED)
Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	AST Identification/Location	Size (gallon)	Purpose	Status
32	13	FSII System Tank	10,000	Storage Tank for Ice Inhibitor	Inactive
32	13	FSII System Tank	5,349	Used for Injection of Ice Inhibitor	Inactive
32	13	Building 132	1,000	Heating Oil Tank	Inactive
32	13	Drum Lot 1	Unknown	Portable Oil Fuel Tank	Removed
32	13	Beach Tank	4,620	Storm Water Collection	Removed

Notes:

AST	Aboveground storage tank
CPS	Corrugated plate separator
EBS	Environmental baseline survey
IR	Installation Restoration
Lube	Lubricant
ORS	Oil reclamation system
OWS	Oil-water separator

TABLE 5: BUILDINGS CONSTRUCTED BEFORE 1978

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	Building Number / Description of Use[1]	Year Built	Lead-Based Paint	Building Status[2]
20	3	Building 96 / Shed	After 1949	No	Standing
25	3	Building 72 / Operations	Prior to 1949	No	Demolished Between 1985 and 1988
25	3	Building 82 / Pump House #3	1944	No	Standing
25	3	Building 83 / Pump House #4	1944	No	Standing
25	3	Building 92 / Imhoff Building	Between 1959 and 1969	No	Demolished During Extraction Trench Construction in 1995
25	3	Building 94 / Truck Oil Loading Facility	Between 1959 and 1969; Building was updated in 1990s	No	Standing; Partially Demolished During Extraction Trench Construction
25	3	Building 125 / Sewage Treatment Plant	1973	Unknown (Not Surveyed)	Standing
25	3	Building 127 / Waste Treatment	Between 1975 and 1979	No	Standing
29	5	Building 84 / Jitney Shed	Prior to 1949	No	Demolished Between 1957 and 1959
30	5	Building 87 / DVECC Laboratory	Between 1949 and 1953	No	Standing
32	13	Building 69 / Pump House #1	1942	No	Standing
32	13	Building 70 / Gagers' Gear Locker	Prior to 1949	No	Standing
32	13	Pump House #6	After 1949	No	Demolished on October 22,1998 during IR Site 4 Pipeline Removal[3]
32	13	Building 71 / Drum Filling Plant	Prior to 1949	No	Demolished (Date Unknown)
32	13	Building 77 / Oil Spill Storage	1946	No	Standing
32	13	Building 89 / Drum Filling Shed	After 1949	No	Standing
32	13	Building 132 / POL Operations	Between 1985 and 1988	Unknown (Not Surveyed)	Standing

TABLE 5: BUILDINGS CONSTRUCTED BEFORE 1978 (CONTINUED)

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Notes:

1	Buildings are shown on Figure 3.
2	Building status information obtained from the 1996 EBS report (PRC Environmental Management, Inc. and Morrison Knudsen Corporation 1996).
3	Building status information obtained from the Site 4 pipeline removal report (Tetra Tech EM Inc. 1999b).
DVECC	Disease Vector Ecology and Control Center
EBS	Environmental baseline survey
POL	Petroleum, oils, and lubricants

Source:

PRC Environmental Management, Inc. and Morrison Knudson Corporation. 1996. "Basewide EBS, Final Report, NFD Point Molate, Richmond, California." November 21.

Tetra Tech EM Inc. 1999b. "Site 4 Pipeline Removal, Final Summary Report, NFD Point Molate, Richmond, California." November 30.

TABLE 6: NOTATION OF ASBESTOS-CONTAINING MATERIAL

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

EBS Parcel Number	Disposal Area Number	Building Number[1]	Status of Asbestos-Containing Material
25	3	Building 83	Abatement of Friable ACM Completed in August 1998; Nonfriable ACM is Present
30	5	Building 87	Nonfriable ACM is Present
32	13	Building 69	Abatement of Friable ACM Completed in August 1998
32	13	Building 132	Nonfriable ACM is Present

Notes:

1 Buildings are shown on Figure 3.

ACM Asbestos-containing material

EBS Environmental baseline survey

APPENDIX A
HAZARDOUS SUBSTANCES STORED, RELEASED, OR DISPOSED OF

1 page.

TABLE A-1: HAZARDOUS SUBSTANCES STORED, RELEASED, OR DISPOSED OF

Finding of Suitability for Early Transfer, Disposal Areas 3, 5, 10, and 13, Naval Fuel Depot Point Molate, Richmond, California

Notice is hereby given that the information provided below contains a notice of hazardous substances that have been stored, released, or disposed of on certain portions of the early transfer property at NFD Point Molate, and the approximate dates that such storage, release(s), or disposal took place. 40 Code of Federal Regulation Section 373.3(b) requires that the aforementioned statement be prominently displayed in this notice. The information contained in this notice is required under the authority of regulations promulgated under Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") Title 42 of the United States Code Section 9620(h).

EBS Parcel and Building Number	Disposal Area Number	Substance / Description of Use	CAS Number	Regulatory Synonym	RCRA Waste	Reportable Quantity (lb/kg)	Quantity Stored (lb/kg)	Quantity Released (lb/kg)	Quantity Disposed of (lb/kg)	Spill Date
EBS Parcel 25, Building 127	3	Chlorine / Sanitary Sewage Treatment	7782502	None	NA	10 / 4.54	>10 / 4.54	None	None	NA
EBS Parcel 30, Building 87	5	Chlorpyrifos (Product Name – Dursban) / Pesticide Storage	2921882	None	NA	1 / 0.454	40 / 18.16	None	None	NA
EBS Parcel 30, Building 87	5	Diazinon / Pesticide	333415	None	NA	1 / 0.454	1 / 0.454	None	None	NA
EBS Parcel 32, FSII	13	Ethylene Glycol / Fuel Additive as Ice Inhibitor	107211	None	NA	5,000 Gallons	10,000 Gallons	None	None	NA

Notes:

>	Greater than
CAS	Chemical Abstract Service
EBS	Environmental baseline survey
kg	Kilogram
lb	Pound
NA	Not applicable
NFD	Naval Fuel Depot
RCRA	Resource Conservation and Recovery Act

APPENDIX B
EARLY TRANSFER COOPERATIVE AGREEMENT BETWEEN THE DEPARTMENT OF THE NAVY AND THE CITY OF RICHMOND, CALIFORNIA

56 pages.

EARLY TRANSFER COOPERATIVE AGREEMENT COVERING PORTIONS OF NAVAL FUEL DEPOT POINT MOLATE

BETWEEN

THE UNITED STATES OF AMERICA DEPARTMENT OF THE NAVY AND THE CITY OF RICHMOND, CALIFORNIA

Cooperative Agreement Number N62474-08-2-0001

DRAFT

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EARLY TRANSFER COOPERATIVE AGREEMENT
COVERING PORTIONS OF
NAVAL FUEL DEPOT POINT MOLATE
BETWEEN
THE UNITED STATES OF AMERICA
DEPARTMENT OF THE NAVY
AND
THE CITY OF RICHMOND, CALIFORNIA

GENERAL PROVISIONS

This Early Transfer Cooperative Agreement ("Agreement") is made by and between the United States of America, acting by and through Naval Facilities Engineering Command ("Navy") and the City of Richmond, California ("City") recognized as the local redevelopment authority by the Office of Economic Adjustment on behalf of the Secretary of Defense and is also a local public authority legally empowered to enter into this Agreement.

The Federal Government, for and on behalf of the citizens of the United States of America, acts as the steward of certain real property on which it operates and maintains military facilities necessary for the defense of the United States of America. Certain military facilities are no longer required for that mission, and, in accordance with statutory authority, the Department of Defense ("DOD") closed and plans to dispose of real and personal property at those facilities. The Navy is authorized to dispose of real and personal property on Naval Fuel Depot Point Molate, Appendix 1, to the City in accordance with Section 2834 (b) of the Military Construction Authorization Act for Fiscal Year 1993 (division B of Public Law 102-484; 106 Stat. 2614), as amended; the National Defense Authorization Action Act for Fiscal Year 1996 (Sec. 2867 of Public Law 104-106 dated February 10, 1996).

Under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. Section 9620(h)(3)(C), Federal property may be transferred prior to the completion of all remedial action necessary to protect human health and the environment. Under this early transfer authority, the Navy intends to convey title to the remaining four (4) parcels consisting of approximately 41 acres of land, as shown in Appendix 2, of Naval Fuel Depot Point Molate to the City ("Early Transfer Property"). The City assumes responsibility for certain environmental response activities (hereinafter the "Environmental Services," as defined in Section 211 below) generally at the geographic area identified as the Area Covered by Environmental Services (hereinafter "ACES", as defined in Section 222 below), Appendix 3. The principal purpose of this Agreement is to facilitate early transfer and redevelopment by providing the vehicle under which the City will perform the Environmental Services in the ACES.

It is in the public interest and will be beneficial to the Navy and the City for the City to cause to be performed the Environmental Services at the ACES. This Agreement does not reduce or alter in any way the responsibilities of the United States under CERCLA. These responsibilities as between the parties are set forth below in Section 711 of this Agreement.

This Agreement benefits the Navy and the City because it facilitates early transfer and immediate reuse by allowing the City to cause to be performed certain environmental remediation activities and simultaneously facilitates redevelopment as defined herein. This Agreement, executed as part of an early transfer, facilitates provision to the City of access and control in conjunction with implementation of the City's reuse plan. In addition, early transfer will allow the Navy to convey title in compliance with CERCLA requirements at an earlier date than could otherwise be achieved. This Agreement is a Cooperative Agreement within the meaning of 31 U.S.C. Section 6305 and 10 U.S.C. Section 2701(d)(1).

In accordance with 42 U.S.C. 9620 (h)(3)(C)(iii), after all remedial action necessary to protect human health and the environment with respect to any substances remaining on the ACES on the date of transfer has been taken, the Navy will deliver to the City an appropriate document containing a warranty that all necessary response action has been taken.

The Navy and the City have entered into this Agreement for the purpose of establishing the terms and conditions necessary to obtain Regulatory Closure for the ACES and ensure the execution of Long-Term Obligations associated with Regulatory Closure. The Navy agrees to provide funds to the City in accordance with and subject to the provisions of this Agreement and to undertake and complete its obligations under Section 302 hereof. The City agrees to perform the Environmental Services in accordance with and subject to the provisions of this Agreement.

Article I
SCOPE AND PURPOSE

Section 101. Performance of Environmental Services

The City shall cause to be performed the Environmental Services in accordance with and subject to the provisions of this Agreement. The Environmental Services, to the extent required to be performed under this Agreement, shall satisfy the requirements of local and state regulatory agencies and CERCLA by satisfying the requirements of applicable State law ("Equivalent State Compliance") for the ACES as provided in the Water Board Order.

The Navy shall remain responsible for, if any, Navy-Retained Conditions.

Section 102. Performance Method

The Water Board Order establishes the process for obtaining Regulatory Closure within the ACES. By the execution of this Agreement, the Navy concurs with the process set forth in the Water Board Order, and all documents and approvals referenced therein. This concurrence in no way limits the City's responsibility to cause CERCLA, Resource Conservation and Recovery Act ("RCRA"), and Clean Water Act compliance for the ACES by satisfaction of Equivalent State Compliance requirements in the Water Board Order.

Article II
DEFINITIONS

Section 201. Cooperative Agreement

The term “Agreement” means this Cooperative Agreement.

Section 202. Navy’s Representative

The Navy’s representative for execution purposes is Naval Facilities Engineering Command, which is responsible to the office of the Secretary of the Navy for environmental remediation within the ACES, or its successor agency.

Section 203. City

The term “City” means the City of Richmond, a municipal corporation of the State of California, recognized as the local redevelopment authority by the Office of Economic Adjustment on behalf of the Secretary of Defense. The City is an entity that is within the meaning of the term “local government agency” as such term is used in 10 USC Section 2701(d)(1), with which the Navy is entitled to enter into “agreements on a reimbursable or other basis”.

Section 204. Naval Fuel Depot Point Molate

The terms “Naval Fuel Depot Point Molate” or “Point Molate” means the entirety of the real property at the former Naval Fuel Depot Point Molate shown on the map attached as Appendix 1 and incorporated herein by reference.

Section 205. Early Transfer Property

The term ”Early Transfer Property” means that portion of Naval Fuel Depot Point Molate identified as the “Early Transfer Property” on the map attached as Appendix 2 and incorporated herein by reference.

Section 206. Navy-Retained Conditions

The term “Navy-Retained Conditions” means any condition associated with Unexploded Ordnance, Military Munitions, chemical, radiological or biological warfare agents, Radiological Materials, and Unknown Uninsured Conditions.

Section 207. Water Board Order

The term “Water Board Order” means the Order that is issued by the Regional Water Quality Control Board (“Water Board”) regarding environmental investigation and remediation activities at the ACES.

Section 208. Regulatory Closure

The term “Regulatory Closure” means the issuance of a certification or closure approval letter, e.g., a “no further action” letter from the Water Board, with respect to the activities required by the Water Board Order. Such letter shall document that any necessary remedial action, with respect to the ACES, has been implemented subject to any requirement imposed by the Water Board to undertake any necessary Long-Term Obligations.

Section 209. Navy and Government

The terms “Navy” and “Government” are used interchangeably herein.

Section 210. Long-Term Obligations

The term “Long-Term Obligations” means any long-term review, monitoring, reporting and operation and maintenance requirements that are required in support of Regulatory Closure.

Section 211. Environmental Services

The term “Environmental Services” means activities, including obtaining necessary permits, with respect to Known Conditions and Unknown Insured Conditions necessary to obtain Regulatory Closure, and to provide for the performance of associated Long-Term Obligations. Environmental Services do not include the performance of Ineligible Work as defined in Section 218 below.

Section 212. Known Conditions

The term “Known Conditions” means those environmental conditions set forth in Appendix 4 to this Agreement. The term “Known Conditions” includes “Reasonably Expected Environmental Conditions” as defined herein. The term “Known Conditions” does not include “Navy-Retained Conditions” as defined above.

Section 213. Unknown Insured Conditions

The term “Unknown Insured Conditions” means those environmental conditions in the ACES that are not Known Conditions and for which, and to the extent, the City is insured and paid pursuant to the Environmental Insurance Policies. This term also includes a specific Unknown Condition that otherwise would have been an Unknown Insured Condition but coverage was denied by the insurance provider solely due to the failure of the City or named insured to comply with any Environmental Insurance requirements as set forth in the Environmental Insurance Policies . The inclusion of such Unknown Condition shall be limited to the specific costs which would have been funded by the Environmental Insurance Policies but for such failure of the City or the named insured.

Section 214. Unknown Uninsured Conditions

The term "Unknown Uninsured Conditions" means those environmental conditions in the ACES that are not Known Conditions and are not Unknown Insured Conditions. This term does not include any Unknowns for which the City or named insured is not paid by the Environmental Insurance because of any dishonest, fraudulent, specifically intentional or malicious act or those of a knowingly wrongful nature, or the intentional, willful or deliberate non-compliance with any statute, regulation, ordinance, administrative complaint, notice of violation, notice letter, executive order, or instruction of any government agency or body by or at the direction of an insured party. The term also does not include any naturally occurring substance on, at, under, or coming from the ACES, in its unaltered form, or altered solely through natural occurring processes or phenomena.

Section 215. Radiological Materials

The term "Radiological Materials" means those materials identified as being derived from the Navy's work on the following: nuclear propulsion plants for ships and submarines; Nuclear Regulatory Commission licensed radioactive material; nuclear devices and nuclear components thereof, and; radiographic and instrument calibration sources and various instrumentation and radioluminescent products manufactured for military applications. The term "Radiological Materials" does not include radioluminescent dials. The term "Radiological Materials" also does not include products manufactured for non-military applications such as radioluminescent signs, tungsten welding electrodes and household smoke detector components**.**

Section 216. Environmental Insurance Policies

The term "Environmental Insurance Policies" means the Cleanup Cost Cap Policy No. ____ ("Cost Cap Policy") and Pollution Legal Liability Select Insurance Policy No. ____ ("PLL Policy"), issued by _____ and attached hereto as Appendix 5. Prior to entering into this Agreement, the Navy and the City have reviewed and approved the terms, conditions and insurer as set forth in and identified by the Environmental Insurance Policies.

Section 217. (Reserved)

Section 218. Ineligible Work

The term "Ineligible Work" means the performance of any or more of the following work:

a) Cleanup of lead based paint ("LBP") and asbestos containing materials ("ACM") incorporated into building materials in their original location.
b) Cleanup of pesticides and herbicides applied in accordance with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and its

predecessors including, but not limited to, chlordane applied as a termiticide to wooden structures and their foundations.

c) Management and off-site disposal of Known Conditions associated with contaminants or solid waste excavated or generated during the course of Redevelopment Activity within any Site within the ACES for which a Regulatory Closure determination has been approved by the appropriate environmental regulatory agency or agencies, including the California Regional Water Quality Control Board.
d) Additional remediation necessary to implement a change in land use from the land uses set forth in the Reuse Plan.
e) Management and disposal of construction and demolition debris. For the purpose of this section, "construction and demolition debris" does not include soil, concrete, pavement, or portions of structures to the extent they were disturbed as a necessary part of a remedial or removal action undertaken pursuant to the Water Board Order.
f) Clean up of contaminants, within existing buildings and structures, that have not been released into the environment from; except the following shall not be Ineligible Costs: removal of liquids, solids, gases, sediments, and/or sludges from oil/water separators and other equipment and containment vessels within or beneath structures to the extent the equipment and vessels are not reasonably discoverable by visual inspection during a walk-through**.**
g) Cleanup of background levels of chemicals as defined by the environmental regulatory agencies previously described in sub-item (c.) and the Government.
h) Non-cleanup environmental compliance activities relating to redevelopment/construction following conveyance (e.g., compliance with air quality permit requirements for control of fugitive dust emissions that are not contaminated with hazardous substances or petroleum and NPDES stormwater discharge permit requirements regulating excavation/disturbance of soil that is not contaminated with hazardous substances or petroleum).
i) Any other work or activity that is not related to: (1) achieving "Regulatory Closure" for releases of hazardous substances or petroleum within the ACES or (2) performing associated "Long-term Obligations".
j) Reimbursement for Regulatory Enforcement Activities**.**

Section 219. Redevelopment Activity

The term Redevelopment Activity means activities undertaken after the Effective Date of this Agreement in furtherance of the development of the property, including, but not limited to, construction of roads, utilities, and structures and demolition and/or removal of "hardscape" such as roads, sidewalks, and building foundations**.**

Section 220. Reuse Plan

The term "Reuse Plan" means the Department of Housing and Urban Development-("HUD") approved Reuse Plan developed by the City and dated 1998.

Section 221. Reasonably Expected Environmental Conditions

The term "Reasonably Expected Environmental Conditions" means those environmental conditions that can be reasonably expected in consideration of the specific sources of the Known Conditions, customary uses on the ACES associated with Navy operations and resulting environmental conditions as set forth in Appendix 4. By way of example and not limitation, whether an environmental condition may be reasonably expected or not is illustrated as follows: Environmental conditions that are reasonably expected include (i) the concentration of a contaminant at a site is greater than the concentration for that respective contaminant identified at the site as of the date of this Agreement, (ii) a contaminant at a site is, based upon the state of scientific knowledge at the time that this Agreement is executed, a scientifically-accepted "break-down" constituent of, or associated with, a contaminant identified as of the date of this Agreement as being present at that respective site, (iii) the physical extent of a contaminant at a site is greater than the extent of that contaminant identified as of the date of this Agreement as being present at that respective site.

Section 222. Area Covered by Environmental Services

The term "Area Covered by Environmental Services" or "ACES" means that area identified on the map in Appendix 3. The ACES includes real property at Naval Fuel Depot Point Molate that is subject to the early transfer as well as real property previously transferred to the City in 2003.

Section 223. Unexploded Ordnance/ Munitions Explosive Concern

The term "Unexploded Ordnance" or "UXO" means Military Munitions that have been fired, dropped, launched, projected, or otherwise placed, abandoned or disposed of in such manner as to constitute a hazard to military or non-military operations, installations, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

Section 224. Military Munitions

The term "Military Munitions" means all ammunition products and components produced or used by or for DOD or the United States Armed Services for national defense and security, including military munitions under the control of DOD, the United States Coast Guard, the United States Department of Energy ("DOE") and National Guard personnel. The term "Military Munitions" includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term "Military Munitions" does not include wholly inert items and non-standard explosive devices made from either military or non-military materials

by non-military personnel. However, the term "Military Munitions" does include non-nuclear components of nuclear devices managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, 42 U.S.C. §§2011 *et seq*., have been completed.

Section 225. Navy Obligations

The term "Navy Obligations" means the obligations of the Navy as set forth in Section 302 hereof.

Section 226. Regulatory Oversight

The term Regulatory Oversight includes the following services provided by the Water Board or other regulatory agency for reimbursement:

Technical review of documents or data;
Identification and explanation of state or territorial applicable or relevant and appropriate requirements (ARARs);
Site visits;
Technical Review Committee (TRC) or Restoration Advisory Board (RAB) participation;
Administration of the Cooperative Agreement and applicable regulatory orders excluding any regulatory enforcement actions;
Technical review and comment on all documents and data regarding DoD prioritization of sites;
Determination of scope and applicability of agreements and assurance of satisfactory performance of Interagency Agreements, excluding any litigation costs against the U.S. Government;
Independent quality assurance/quality control samples.

Section 227. Regulatory Enforcement Activities

In accordance with 10 U.S.C. 2701(d)(3), regulatory enforcement costs are not reimbursable under this Agreement. The term "Regulatory Enforcement Activities" includes:

1) Activities associated with the City taking, or preparing to take, enforcement actions against third parties for alleged violations of laws or regulations associated with environmental protection, public health or safety; or

2) Activities associated with the Water Board or other State or Federal regulatory agency taking, or preparing to take, enforcement actions against the City or its contractors or agents for alleged violations of laws or regulations associated with environmental protection, public health or safety.

Article III
OBLIGATIONS OF THE PARTIES

Section 301. Obligations of the City

A. In consideration of the Navy's agreement to reimburse the City for costs allowable, in accordance with provisions of Title 32 of the Code of Federal Regulations and applicable Office of Management and Budget ("OMB") Circulars, in the amount specified in Section 302.A below for performing the Environmental Services, the City assumes responsibility for the Environmental Services in accordance with, and subject to, the terms of this Agreement. Subject to the provisions of Sections 302.A and 302.F hereof, the City agrees that it shall cause to be performed the necessary Environmental Services even if the costs associated therewith exceed the funds provided by the Navy hereunder. The exception to such City liability is when the increase in the cost of those Environmental Services is caused by anything for which the Navy is responsible under either this Agreement, or otherwise under applicable law. The City's obligation to perform Environmental Services is expressly conditioned upon the Navy providing funding for performing the Environmental Services in accordance with Section 302.A hereof, and upon the Navy's agreement to fulfill its obligations under Section 302.F hereof in a manner that will not unreasonably delay the City's performance of Environmental Services or the development activities contemplated by the City's Reuse Plan. However, to the extent that the Navy pays a portion of the funding set forth in Section 302.A hereof, but fails to pay the full amount set forth in that Section, or in the event that the Agreement terminates pursuant to Section 1003 hereof, the City's obligations shall be limited to only the portion of Environmental Services which have been performed by use of the funds actually provided by the Navy or the insurer as set forth in Section 712.B hereof. These conditions shall be subject to dispute resolution pursuant to Section 1001 hereof. The City shall make reasonable progress toward performing Environmental Services. The City shall conduct audits and shall provide performance and financial reports to the Navy in accordance with Section 301.C below. The City shall cause the performance of the Environmental Services in a manner that will not unreasonably delay the Navy's performance of its obligations under Section 302 hereof.

B. The City shall indemnify the Navy pursuant to the terms of Section 711.C hereof.

C. Non-Federal Audits, Performance Reporting & Financial Reports.

(1) The City is responsible for obtaining annual audits in accordance with the Single Audit Act Amendments of 1996 (31 USC 7501-7507) and revised OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations". The audits shall be made by an independent auditor in accordance with generally accepted government auditing standards covering financial audits. The costs of audits made in accordance with this section are allowable charges to this Agreement.

(2) The City is responsible for assuring compliance with applicable Federal requirements and that performance goals are being achieved. In accordance with 32 CFR 33.40, the City shall submit annual performance reports to the Navy.

(3) In accordance with 32 CFR 33.41, the City shall submit annual financial status reports to the Navy.

D. The City shall provide the Navy notice within thirty (30) calendar days of receiving notice of the existence of any condition from Federal, State or local regulators, or other third parties, at the ACES that suggests that an action is necessary for which the Navy is responsible under this Agreement. If the City is served with a complaint or written notice of a claim by the Federal, State or local regulators, the City shall provide the Navy with a copy of such document no later than seven (7) calendar days following the service of such document.

E. Within ninety (90) calendar days of receiving actual notice of any condition at or affecting the ACES that the City discovers, for which the Navy is responsible under Section 302 hereof, the City shall notify the Navy of such conditions. The exception to this duty is that the City shall notify the Navy of the discovery of any UXO, biological warfare agents, or radiological or chemical warfare agents within twenty-four (24) hours of any such discovery. The parties shall, within a reasonable period of time after such notification, meet and confer regarding the terms on which the Navy may provide funds to the City or the City's contractors in amounts sufficient to take any necessary actions.

F. Notwithstanding the provisions of the preceding Section 301.E hereof, but subject to Section 401 hereof, the City shall have the right, but not the duty, to take or cause to be taken the following actions within the ACES with respect to Navy-Retained Conditions:

(1) Investigation Activities. Any activity necessary to determine the existence, nature, character and extent of conditions that may constitute Navy-Retained Conditions.

(2) Imminent Threat. When an imminent threat to human health or the environment occurs, the City shall take any immediate action that is either: (a) required by a regulatory agency to address such threat, or; (b) in the City's reasonable judgment, necessary to address such threat. The City shall have a right to take action and seek reimbursement from the Navy where either: (a) notification cannot practicably be provided to the Navy before such action needs to be taken, or (b) notification is provided to the Navy before such action needs to be taken, and the Navy agrees to permit the City to take such action under terms agreed to by the parties. If the City provides such notification to the Navy before such action needs to be taken, but the Navy fails to provide a timely response to such threat, the parties shall exercise their rights to dispute resolution as provided for in Section 1001 hereof.

(3) The City shall notify the Navy as soon as practicable whenever the City takes or causes to be taken any action under Section 301.F.(1) or Section 301.F.(2) hereof. If the Navy disputes a City action taken under Section 301.F.(1) or Section 301.F.(2), the Navy may initiate dispute resolution procedures under Section 1001 hereof.

G. If the City discovers a condition in the ACES that the City reasonably believes is a Navy-Retained Condition other than a condition subject to Section 301.F.(2) hereof, the City shall seek to determine whether such condition is in fact a Navy-Retained Condition before incurring such costs or obligations. If, despite using its best efforts to avoid incurring such costs, the City incurs costs or obligations with respect to a Navy-Retained Condition, the City may seek reimbursement from the Navy. Any such request shall be subject to the dispute resolution provisions of Section 1001 hereof. Nothing in this Agreement shall be construed as authorizing the City to seek reimbursement from the Navy for costs solely associated with the initial investigation needed to determine whether a newly discovered condition is properly categorized as a Known Condition, Unknown Condition, or Navy-Retained Condition. Subject to the dispute resolution process as set forth in Section 1001, if said condition is determined to be in fact a Navy Retained Condition, the City's reasonable investigation costs may be reimbursed.

H. The City shall provide to the Navy all information obtained or developed by the City with respect to any Navy-Retained Conditions that the City discovers.

I. Reserved

Section 302. Obligations of the Navy

A. The maximum funding obligation of the Navy to the City for the term of this Agreement is $28,500,000.00 and shall be provided to the City in one advance payment. Payment shall be made upon conveyance of title from the Navy to the City of the Early Transfer Property. The Navy's obligation to pay hereunder is subject to the availability of appropriated funds and this payment schedule shall not be interpreted to require obligations or payments by the Navy in violation of the Anti-Deficiency Act (31 U.S.C. 1341).

B. Reserved.

C. Within a reasonable time after the City has provided the Navy with (1) the proper documentation establishing that Regulatory Closure has been obtained for the Early Transfer Property, and (2) a written request from the City to issue a warranty, the Navy shall issue to the City the warranty required under CERCLA, Section 120(h)(3)(C)(iii). The City shall bear the costs of preparing any new legal descriptions for the warranty to be recorded.

D. The City's potential or actual status as owner of the ACES, or portions thereof, shall not make the City a potentially responsible party, or relieve the Navy of its

obligations hereunder or under 42 U.S.C. Section 9620 (h). These terms will not apply if the City's activities or operations cause a release or a threatened release of a hazardous substance under CERCLA.

E. The Navy shall take all actions required hereunder and under applicable law with respect to Navy-Retained Conditions within the ACES. The Navy shall also take all actions required hereunder to fulfill its responsibilities under 42 U.S.C. Section 9620 (h), and Section 711.A hereof.

F. Within a reasonable period of time after receiving any notice from the City under above Section 301.D or 301.E hereof, the Navy shall confer with the City with regard to the Navy-Retained Conditions at issue. The exception to these terms is that the Navy shall confer with the City as soon as reasonably possible after receiving any notice concerning the presence of UXO, biological warfare agents, chemical warfare agents or Radiological Materials. The Navy and the City, in consultation with the appropriate regulatory agencies, shall endeavor to agree to any necessary actions to be taken by the Navy with respect to the Navy-Retained Conditions. Alternatively, the Parties shall attempt to agree on the funds to be provided by the Navy to the City to enable the City to take such actions. If the Parties cannot agree whether an environmental condition constitutes a Navy-Retained Condition, or disagree about the action required in response to any such condition, the matter may be submitted to dispute resolution under Section 1001. Consistent with the provisions of above Section 301.F, the City may take any actions deemed necessary, and seek reimbursement from the Navy for the costs associated with such actions.

G. If Navy-Retained Conditions are discovered, and if the actions necessary to address such conditions will interfere with the City's current or prospective Environmental Services, the Navy, subject to mutual agreement with the City, shall either:

(i) Subject to Section 401 hereof, provide the City with, or reimburse the City for, the funds necessary to enable the City to obtain Regulatory Closure on such Navy-Retained Conditions; or

(ii) Take all actions necessary to obtain Regulatory Closure on such Navy-Retained Conditions and the contamination for which the City has otherwise agreed to perform the Environmental Services.

To the extent that the Navy and the City mutually agree that the Navy shall take the action outlined in G.(ii) above with respect to matters for which the City would otherwise be responsible for under this Agreement, the Navy shall have the right to reimbursement of the reasonable costs of such action.

H. Any Navy liability for the death of or injury to any person, or the loss of or damage to any property, caused by Navy use of the ACES shall be determined in accordance with the applicable provisions of the Federal Tort Claims Act (28 U.S.C. Section 2671, et seq., as amended), or as otherwise provided by law.

I. The Navy will provide the City with electronic and paper copies of all project-related documents relating to Environmental Services, contained in the administrative record, and electronic and paper copies of all other documents and records in the possession of the Navy or its contractors concerning site conditions for the ACES that are reasonably necessary for the City to perform the Environmental Services. If the City believes it requires additional information concerning site conditions at the ACES not provided by the Navy within a reasonable period after conveyance, the City may request that the Navy provide such additional information concerning site conditions for the ACES. If the Navy can reasonably obtain such information without significant cost, and if the information may be released under applicable law, the Navy shall provide the City reasonable access to such requested information within a reasonable time of the City's written request.

J. Reserved.

K. The Navy will endeavor to take all reasonable action to perform Navy-Retained Conditions in a manner that will enable Regulatory Closure to be achieved without unreasonably delaying or unreasonably interfering with the City's performance of the Environmental Services or the City's Redevelopment Activities. Pursuant to Section 302.G. above, the Parties shall attempt to agree on the necessary action to be taken by the Navy with respect to Navy-Retained Conditions. To the extent the Parties disagree as to the timing of such action in response to a Navy-Retained Condition, the matter may be submitted to dispute resolution as provided for under Section 1001.

Article IV
FUNDING LIMITATION AND BUDGETING

Section 401. Navy's Funding Limitation

The maximum Navy funding obligation for the Environmental Services to be performed by the City under this Agreement is $28,500,000.00. Except as may otherwise be provided in this Agreement, the Navy will not pay any Environmental Service costs that exceed the amount described in Section 302.A hereof. The Navy's obligation to pay or reimburse any costs hereunder is subject to the availability of appropriated funds. Nothing in this agreement shall be interpreted to establish obligations or require payments by the Navy in violation of the Anti-Deficiency Act, 31 U.S.C. §§ 1341 *et seq*. The City incurs any additional costs, including any costs for services or activities determined to be defined as Ineligible Work, at its own risk. Any statements in this Agreement regarding the City's ability to seek reimbursement for any such additional costs, or to negotiate any additional amounts to be paid, do not create any Navy obligation to pay such costs or amounts.

Article V
PAYMENT SCHEDULE

Section 501. General

The City shall be paid in accordance with Section 302.A hereof.

Section 502. Payment

A. The amount provided by the Navy in accordance with Section 302.A is an advance payment to the City made in accordance with the advance payment requirements of 32 CFR §33.21(c), as follows:.

(1) The City shall maintain or demonstrate the willingness and ability to maintain procedures to minimize the time elapsing between the transfer of the funds and their disbursement by the City.

(2) Within a reasonable period of time after receiving the payment from the Navy, the City shall deposit all such funds with an independent third party payee such as an escrow agent, title company, or insurer. Such independent third party payee shall be responsible for making all payments to the party or parties, including a subsequent transferee and/or environmental contractor, with whom the City enters into an agreement to supervise the performance of the Environmental Services. Funds shall be considered disbursed by the City when the following has occurred:

(i). The City does not retain possession of the funds;
(ii). The City cannot get the funds back upon demand (this does not include allowable costs incurred by the City for which the City requests proper reimbursement from the independent third party payee);
(iii). The independent third party payee is an independent stakeholder for the City and the party or parties with whom the City enters into an agreement to supervise the performance of the Environmental Services and not the agent of the City;
(iv). The City receives something in exchange for the transfer of funds to the independent third party payee, such as a contractual promise to hold the funds and make payments in accordance with specified procedures.

(3) Any agreement by the City with an independent third party payee must also include the above provisions and satisfy the requirements of 32 CFR §33.21(c).

(4) Interest. Any interest earned on the advance payment by the City prior to the disbursement of those funds in accordance with Section 302.A. above must be returned to the Navy in accordance with 32 CFR §33.21(h)(2)(i). Interest earned on

those funds after disbursement from the City to the independent third party payee are considered funds to be utilized for the purposes of this Agreement.

(5) Regulatory Oversight costs, as outlined in Section 226 above, are allowable and reimbursable under this Agreement.

Article VI
PAYMENT

Section 601. General

Upon conveyance of title from the Navy to the City of the Early Transfer Property, the Navy shall pay the City as provided in this Agreement and in compliance with the provisions of 32 CFR Part 33, OMB Circular A-87 and OMB Circular A-102.

Section 602. Relation to Prompt Payment Act.

This Agreement is not a contract as defined under OMB Circular A-125, which implements the Prompt Payment Act of 1982 (31 U.S.C. Section 3901, *et seq*.). Accordingly, the Navy is not liable to the City for interest on any untimely payments under this Agreement.

Section 603. Direct Navy Payment of City Obligations

The Navy is not in privity with, and shall not directly pay any City contractors, employees, vendors, or creditors for any costs incurred by the City under this Agreement. The Navy assumes no liability for any of the City's contractual obligations that may result from any City performance of duties under this Agreement. The Navy assumes no liability hereunder for any City contractual obligations to any third parties for any reason. The City hereby agrees to defend and hold the Navy harmless from any such liabilities.

Article VII
GENERAL PROVISIONS

Section 701. Term of Agreement

Unless terminated under Section 1003 below, this Agreement shall remain in effect until Regulatory Closure within the ACES has been obtained. Only the following three terms of this Agreement shall survive such termination, and then only if the Agreement is not terminated as a result of the Navy's failure to provide the funds as specified in Section 302.A above or other Navy default: (i) City requirements to maintain compliance under the Water Board Order, and to comply with any applicable Long-Term Obligations; (ii) the City and the Navy's obligations under Section 711 below (including the relevant provisions of Sections 101, 102, 301.A, 302, 703, 706, 707, and 801 cross-referenced in Section 711), and; (iii) Section 715.

Section 702. Amendment of Agreement

Only a written instrument signed by the parties hereto may amend this Agreement.

Section 703. Successors and Assigns

All obligations and covenants made by the parties under this Agreement will bind and inure to the benefit of any successors and assigns of the respective parties, whether or not expressly assumed by such successors or assigns, and may not be assigned in whole or in part without the written consent of the other party.

Section 704. Entire Agreement

This Agreement constitutes the entire Agreement between the parties. All prior discussions and understandings on this matter are superseded by this Agreement.

Section 705. Severability

If any provision of this Agreement is held invalid, the remainder of the Agreement will continue in force and effect to the extent not inconsistent with such holding.

Section 706. Waiver of Breach

No Party shall be deemed to have waived any material provision of this Agreement upon any event of breach by the other party, and no "course of conduct" shall be considered to be such a waiver, absent the waiver being documented in a mutually signed writing.

Section 707. Notices

Any notice, transmittal, approval, or other official communication made under this Agreement will be in writing and will be delivered by hand, facsimile transmission, electronic mail, or by mail to the other party at the address or facsimile transmission telephone number set forth below, or at such other address as may be later designated:

Director
Department of the Navy
Base Realignment and Closure Management Office
1455 Frazee Road, Suite 900
San Diego, CA 92108

City Manager
City of Richmond
1401 Marina Way South
Richmond, CA 94804

Section 708. Conflict of Interest

The City shall ensure that its employees are prohibited from using their positions for a purpose that is, or gives the appearance of being, motivated by a desire for private gain for themselves or others.

Section 709. Access to and Retention of Records

The City shall afford any authorized representative of the Navy, DOD, the Comptroller General, or other officially concerned Federal Government agency access and the right to examine all City records, books, papers, and documents related to the City's performance under this Agreement. This includes all records in automated forms ("Records") that are within the City's custody or control, and that relate to its performance under this Agreement. This right of access excludes any attorney-client communications, attorney work product, or any other legally privileged documents. The City shall retain required records intact in their original form, if not the original documents, or in another form if the Navy approves. Such approval shall not be unreasonably withheld. City record retention requirements shall extend for at least three (3) years following the completion or the termination of this Agreement. The City shall allow the Navy access to the City's records during normal business hours. The Navy will give the City seventy-two (72) hours prior notice of its intention to examine the City's records, unless the Navy determines that more immediate entry is required by special circumstances. Any such entry shall not give rise to any claim or cause of action against the Navy by the City or any officer, agent, employee, or contractor thereof.

Section 710. Change of Circumstances

Each party will promptly notify the other party of any legal impediment, change of circumstances, pending litigation, or any other event or condition that may adversely affect such party's ability to perform this Agreement.

Section 711. Liability and Indemnity

A. The City Obligations and Limited Waiver of Statutory Rights

(1) In consideration of the Navy's payment to the City under Section 302 above, and the other applicable terms of this Agreement, the City agrees that it shall, upon receipt of payment of the award, indemnify the Navy for any of the following:

(a) any response cost claims for Known and Reasonably Expected Environmental Conditions in the ACES, including hazardous substances, pollutants and chemicals, petroleum, and petroleum derivatives, but only to the extent that such response cost claims result from, the performance of Environmental Services.

(b) oversight costs for any remedy implemented by the City to the extent that the City is responsible for any such costs under this Agreement;

(c) all claims for personal injury or property damage to the extent caused by the City or its contractors in the course of performing the Environmental Services;

(d) all natural resource damage claims pursuant to 42 U.S.C. Section 9607(a)(4)(C) pertaining to releases of hazardous substances, but only to the extent that such damages were caused, or contributed to, by the actions of the City, its contractors or its successors in interest;

(e) all costs arising from any faulty performance of the Environmental Services;

(f) all costs of additional remediation required on or within the ACES as a result of a change in land use from that upon which the initial remedial action selection decision was based when Regulatory Closure was completed;

(g) all costs associated with the correction of any failure of any Navy-selected remedy implemented by the City, but only to the extent such costs are directly attributable to the poor workmanship or negligence of the City or its contractors in the performance of said implementation; and

(h) all costs arising from the correction of any failure of any remedy selected and implemented by the City.

(2) With regard to the ACES, the Parties agree that the City has provided financial assurances reasonably acceptable by the Navy to meet the requirements of 42 U.S.C. Section 9620(h)(3)(C)(ii).

(3) Except as otherwise expressly provided by this Agreement, this Agreement shall not be construed to limit, expand or otherwise affect any right that the City may have, in the absence of this Agreement, to take legal action to require the Navy to act with respect to Navy-Retained Conditions, or to seek damages resulting from the Navy's performance or failure to perform any actions with respect to Navy-Retained Conditions. Except as otherwise expressly provided by this Agreement, this Agreement shall also not be construed to limit, expand or otherwise affect any right that the Navy may have, in the absence of this Agreement, to take legal action against the City.

(4) Notwithstanding Section 711(3) above, the City covenants not to sue, and hereby waives any potential claims against the Navy for consequential damages related to development delays caused by the Navy's performance of, or failure to perform, investigation or remediation activities of Navy-Retained Conditions.

Section 712. Liability and Insurance

A. The City shall either self-insure, or carry and maintain general liability insurance, to afford protection with limits of liability in amounts not less than $5,000,000.00 in the event of bodily injury or death to any number of persons in any one accident.

B. The City agrees to bind Environmental Insurance Policies acceptable to the Navy to afford protection for the risks set forth in Section 301 and Section 711 above. Such policies will provide that the insurer waive its right of subrogation against the Navy, its officers, agents, or employees. In no circumstances will the City be entitled to assign to any third party any rights of action that the City may have against the Navy under this Agreement, subject to the provisions of Section 711.A above. The Navy shall be listed as an Additional Insured with respect to the coverage provided in any Environmental Liability Policy for remediation of Unknown Conditions. The Navy shall not otherwise be deemed an insured of, nor have any rights with respect to, any other grant of coverage under any City Environmental Insurance Policies.

C. The City will either self-insure or carry and maintain worker's compensation or similar insurance in the form and amounts required by law. If an insurance policy is obtained, any such insurance policy will provide a waiver of subrogation of any claims against the Navy, its officers, agents, or employees. In no circumstances will the City be entitled to assign to any third party rights of action that the City may have against the Navy.

D. General Liability Policy Provisions: All general liability insurance which the City carries or maintains, or causes to be carried or maintained, under this Section 712 will be in such form, for such amounts, for such periods of time and with such insurers as the

Navy may approve. Such Navy approval shall not be unreasonably withheld or delayed. All policies issued for general liability insurance required by this Agreement will provide that no cancellation will be effective until at least thirty (30) days after the Navy receives written notice thereof. Any such policy shall also provide a waiver of subrogation of any claims against the Navy, and its officers, agents, or employees. In no circumstances will the City be entitled to assign to a third party any rights of action which the City may have against the Navy. The Navy acknowledges and accepts the City's self-insurance coverage for general liability, worker's compensation, or for any similar coverage.

E. Delivery of Policies: The City will provide the Navy with a certificate of insurance evidencing the insurance required for the City. At least thirty (30) days before any such policy expires, the City shall also deliver to the Navy a certificate of insurance evidencing each renewal policy covering the same risks.

Section 713. Reports

To assure that the Navy will receive from the City the appropriate documentation necessary for the Navy to execute the CERCLA covenant, the Navy may request that the City provide additional information concerning the environmental condition of the ACES. As soon as possible after any such request is made, if the City can reasonably obtain and release such information, the City shall provide the Navy access to any documents containing such requested information. In any event, the City agrees to provide the Navy such access within a reasonable time of the Navy's information request.

Section 714. Officials Not to Benefit

The City acknowledges that no member or delegate to the United States Congress, or Resident Commissioner, shall be permitted to share in any part of this Agreement, or receive any benefit that may arise therefrom.

Section 715. Representations

A. The Navy represents that:

(1) it is fully authorized to enter into this Agreement;

(2) the City may rely on the data provided to the City or its contractors by the Navy or the Navy's contractors for purposes of performing the Environmental Services and making any disclosures required under applicable law; and

(3) the information provided to the City by the Navy hereunder fairly and accurately represents the Navy's actual knowledge of the nature and extent of contamination within the ACES.

B. The City represents that:

(1) it is fully authorized to enter into this Agreement; and

(2) (a) it enters into this Agreement cognizant of the requirements and prohibitions set forth in the Anti-Deficiency Act , and that;

(b) any provision of this Agreement that states or implies that the Navy will reimburse the City for any costs incurred, or that the Navy will perform any actions with respect to Navy Obligations, are wholly subject to the Anti-Deficiency Act .

Section 716. Excess Funds

Funds, as provided for in Section 302 above, are only to be expended for the purposes for which they were awarded. In accordance with the procedures outlined in 32 CFR 33.50, if any funds paid to the City in excess of the amount to which the City is finally determined to be entitled remain, upon written demand by the Navy, the City must immediately refund to the Navy those additional excess funds.

Article VIII
APPLICABLE LAWS AND REGULATIONS

Section 801. Applicable Law

This Agreement is entered into incident to the implementation of a Federal program. Accordingly, as it may affect the rights, remedies, and obligations of the United States. Therefore, this Agreement will be governed exclusively by, and be construed only in accordance with Federal law.

Section 802. Governing Regulations

This Agreement shall be enforced and interpreted in accordance with the Federal laws and regulations, directives, circulars, or other guidance cited in this Agreement. This Agreement will be administered according to the following authorities: DoD Directive 3210.6; the Uniform Administrative Requirements for Grants and Cooperative Agreements; other applicable portions of Title 32 of the Code of Federal Regulations, and; pertinent OMB Circulars. If the provisions of this Agreement conflict with any such authorities, the authorities will govern.

Section 803. Environmental Protection

Each Party agrees that its performance under this Agreement shall comply with all applicable state, Federal and local environmental laws and regulations.

Article IX
PROCUREMENT

Section 901. City Contracts

The City's acquisition of goods and services to perform this Agreement will comply with the instructions and procedures contained in 32 CFR Section 33.36(b)(1) through (12). The City must not contract with any party that is debarred, suspended, or otherwise excluded from, or ineligible for, participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension," and applicable DOD regulations thereunder.

Section 902. Preference for local residents.

A. Preference allowed- In entering into contracts with private entities for services to be performed at a military installation that is affected by closure or alignment under a base closure law, the Secretary of Defense may give preference, consistent with Federal, State, and local laws and regulations, to entities that plan to hire, to the maximum extent practicable, residents of the vicinity of such military installation to perform such contracts. Contracts for which the preference may be given include contracts to carry out environmental restoration activities or construction work at such military installations. Any such preference may be given for a contract only if the services to be performed under the contract at the military installation concerned can be carried out in a manner that is consistent with all other actions at the installation that the Secretary is legally required to undertake.

B. Definition- In this section, the term `base closure law' means the following:

(1) The provisions of title II of the Defense Authorization Amendments and Base Closure and Realignment Act (Public Law 100-526; 10 U.S.C. 2687 note).

(2) The Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101-510; 10 U.S.C. 2687 note).

C. Applicability- Any preference given under subsection (A) shall apply only to contracts entered into after the base closure law was enacted.

Article X
TERMINATION, ENFORCEMENT, CLAIM AND DISPUTE RESOLUTION

Section 1001. Dispute Resolution

A. Except as otherwise provided in this Agreement, these dispute resolution provisions are the sole recourse of any Party with respect to disputes and the enforcement of any terms of this Agreement.

B. A dispute shall be considered to have arisen when one Party sends the other Party written notice of such dispute. Such written notice will include, to the extent available, all of the following information: the amount of monetary relief claimed or the nature of other relief requested; the basis for such relief, and; any documents or other evidence pertinent to the claim.

C. If a dispute arises under this Agreement, the Parties agree to attempt to resolve the dispute at the staff level. The Parties shall confer at the staff level within fifteen (15) days after a notice of dispute is received. Should staff-level discussions not resolve the dispute within such fifteen (15) day period (or longer, if agreed to by the Parties), the Parties agree to elevate the dispute to designated mid-level management. Mid-level management shall then attempt to resolve the dispute within thirty (30) days (or longer, if agreed to by the Parties) after receiving the dispute. If Mid-level management cannot timely resolve the dispute, the Parties agree to then raise the issue with their respective senior-level management. Senior-level management shall then attempt to resolve the dispute within thirty (30) days (or longer, if agreed to by the Parties) after receiving the dispute. Each Party shall have the discretion to determine the person(s) to represent it at any meeting convened under this section.

D. If the dispute cannot be resolved after exhausting the remedies under Section 1001 C. above, the dispute shall be appealed to the Director of the Base Realignment and Closure Office at the address indicated in Section 707 above. Such appeal must be written, and contain all of the documentation and arguments necessary for a decision. The Director shall render a decision in a timely manner. If the City disagrees with the Director's decision, the City may, by providing notice to the other Party, pursue whatever remedies that the City may have available at law or in equity.

E. Reserved.

Section 1002. Enforcement

Either party may enforce this Agreement according to its terms. Without limiting either party's enforcement rights, the Navy's enforcement rights for material breach by the City, in accordance with the terms of 32 CFR Section 33.43, Enforcement, shall include:

A. Temporarily withholding cash payments pending correction of the deficiency by the City or Sub-grantee or more severe enforcement action by the awarding agency;

B. Disallowing (denying both use of funds and matching credit for) all or part of the cost of the activity or action that is not in compliance;

C. Wholly or partly suspending or terminating the current award for the City's or the Sub-grantee's program. Any award termination will be conducted under Section 1003 below.

D. Withholding further awards under this Agreement; and

E. Taking other remedies that may be legally available.

Section 1003. Termination

A. This Agreement may terminate by its own terms under Section 701 above, or by a party under this Section 1003.

B. Reserved

C. Reserved.

D. If a Party materially breaches this Agreement, the non-breaching party, to preserve its right to terminate, must provide the breaching party with a notice of intent to terminate. The breaching party shall have thirty (30) days to cure the breach, unless a longer period is agreed upon, in writing, by the parties. If the breaching party fails to cure the breach within the thirty (30) day (or longer, if agreed upon) period, then the non-breaching party may, in its discretion, terminate this Agreement no sooner than sixty (60) days after the cure period has expired. The existence of a material breach shall be finally determined under the dispute resolution procedures specified in Section 1001 above.

E. If this Agreement is terminated for reasons other than those set forth in Section 701 above, the City shall immediately:

(1) Stop work;

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities;

(3) Terminate all subcontracts;

(4) With approval or ratification to the extent required by the Navy, settle all outstanding liabilities and termination settlement proposals arising from the termination of any subcontracts; any such approval or ratification will be final;

(5) Take any action that may be necessary to protect human health or the environment against imminent and substantial endangerment thereto, or to protect and preserve any Navy-owned property at the ACES, as the Grants Officer may direct; and

(6) Return or cause to be returned to the Navy any unexpended funds held by the City or any third party account holder.

The City agrees to insert such provisions in its contracts, and to require that such provisions be placed in any subsequent subcontracts between the City's contractors and their subcontractors, so as to effect the provisions above.

F. If this Agreement is terminated under this Section 1003, the status of the parties with respect to environmental conditions at the ACES shall revert to as the status that existed immediately preceding the effective date of this Agreement.

G. A party's right to terminate, and any determination of funds available for reimbursement, under this Section 1003 shall be subject to the dispute resolution procedures in Section 1001 above.

Section 1004. Effects of Suspension and Termination

(a) Any costs to the City resulting from obligations incurred by the City during a suspension, or after termination of payments, are not allowable unless the Navy expressly authorizes them in the notice of suspension or termination, or subsequently. Any other City costs incurred during suspension or after termination which are necessary and not reasonably avoidable are allowable only if:

(1) the costs result from obligations which were properly incurred by the City before the effective date of suspension or termination, are not in anticipation of it, and, in the case of a termination, cannot be cancelled; and

(2) the costs would be allowable if the Agreement were not otherwise suspended or expired at the end of the funding period in which the termination takes effect.

(b) The enforcement remedies specified in this section do not relieve the City or its subcontractors from compliance with 32 CFR Section 33.35, Subpart C, or 32 CFR Part 25, including the restrictions on entering into a covered transaction with any party which is debarred, suspended, or is otherwise excluded from, or ineligible for participation in, Federal assistance programs under Executive Order 12549, "Debarment and Suspension."

Article XI
LEGAL AUTHORITY

Section 1101. Legal Authority

The parties hereby represent and warrant that they are under no existing or reasonably foreseeable legal disabilities that would prevent or hinder them from fulfilling the terms and conditions of this Agreement. The parties will promptly notify each other of any legal impediment that arises during the term of this Agreement that may prevent or hinder the party's abilities to perform its duties under this Agreement.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the parties to this Agreement, by their authorized representatives, hereby cause this Agreement to be executed.

CITY OF RICHMOND

By _____

NAME:

TITLE: Director

Dated:

THIS AGREEMENT SHALL NOT BE VALID OR EFFECTIVE FOR ANY PURPOSE UNLESS AND UNTIL IT IS SIGNED BY THE CITY ATTORNEY

Approved as to form and legality, and as compliant with Section 1101, this ____ day of _____ 2008

_____
City Attorney
City Resolution No. _____

THE UNITED STATES OF AMERICA

By: _____

NAME: Mr. Robert M. Griffin

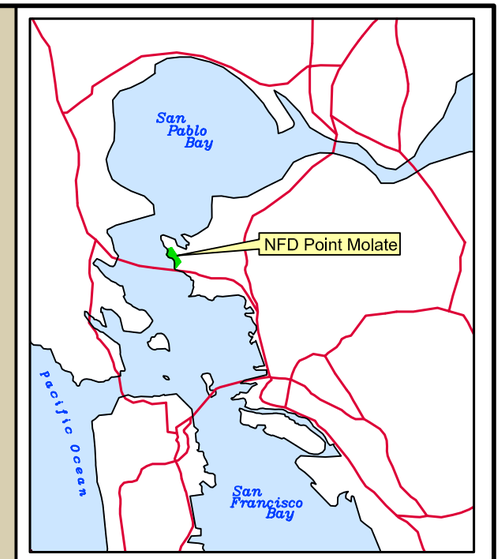
TITLE: Assistant Commander for Acquisition, Naval Facilities Engineering Command

Dated:

List of Appendices

Appendix 1: Map of the Naval Fuel Depot Point Molate
Appendix 2: Map of the Early Transfer Property
Appendix 3: Map of the Area Covered by Environmental Services
Appendix 4: Known Conditions
Appendix 5: Environmental Insurance Policies

Appendix 1: Map of the Naval Fuel Depot Point Molate



LEGEND

- Naval Fuel Depot Point Molate
- Naval Fuel Depot Point Molate Offshore Property
- Underground Storage Tanks
- Building
- Road / Site Feature

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

APPENDIX 1
NAVAL FUEL DEPOT POINT MOLATE

Early Transfer Cooperative Agreement

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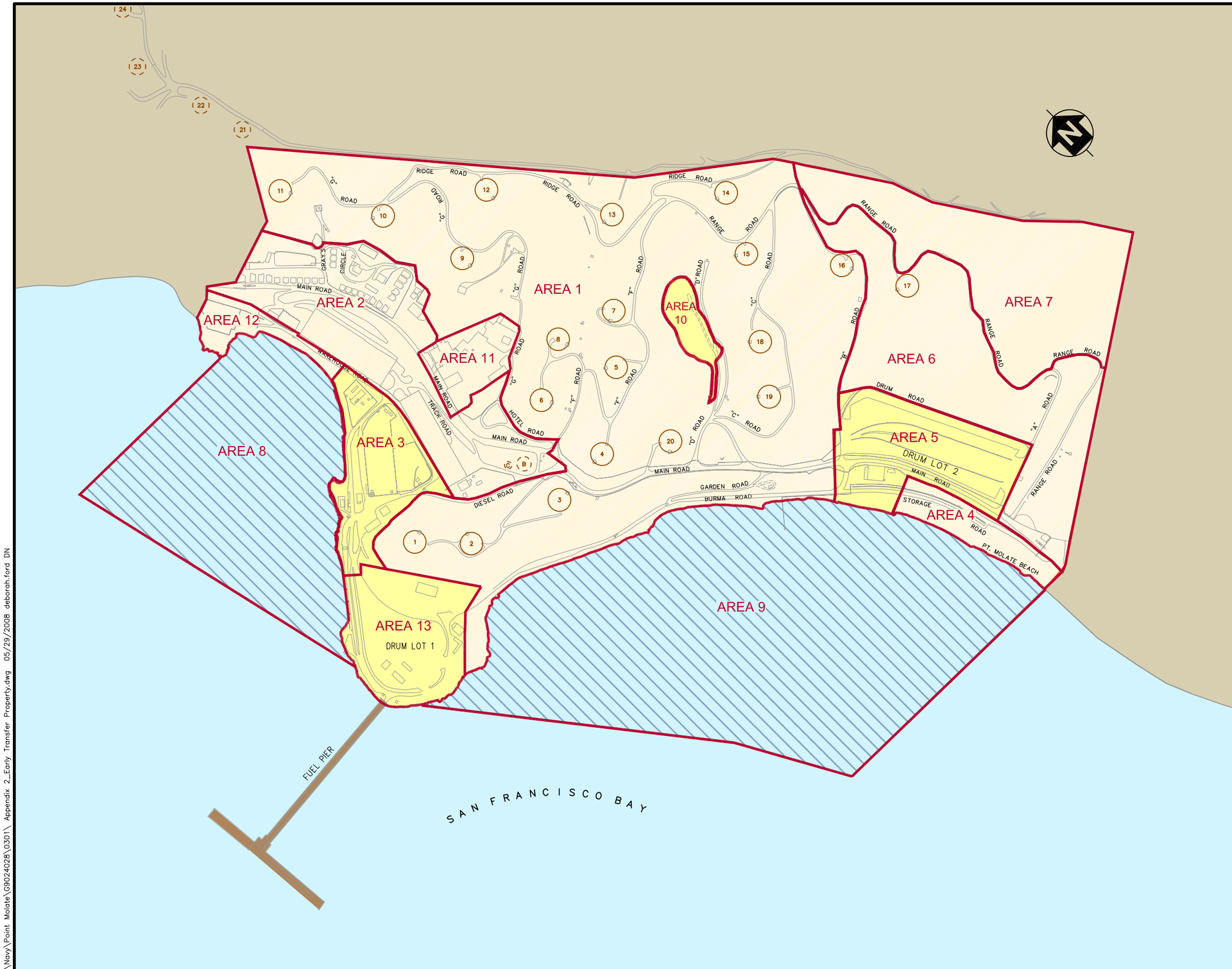
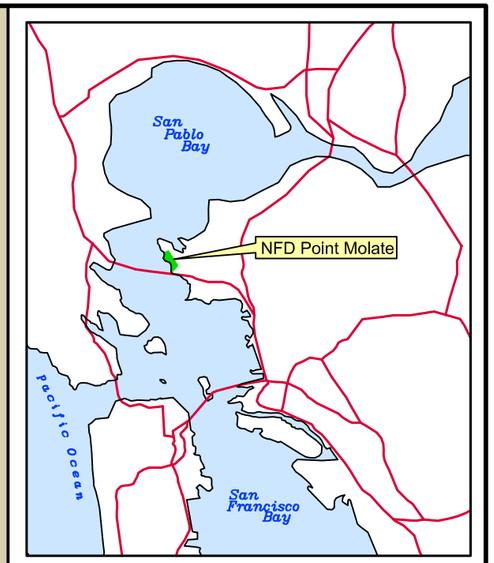
Appendix 2: Map of the Early Transfer Property





LEGEND

- Disposal Area Subject to FOSET
- Fuel Pier to be Transferred as an Appurtenance to Disposal Area 13
- Previously Transferred Disposal Area to the City of Richmond
- Previously Transferred Offshore Disposal Area to the City of Richmond
- Chevron Corporation Refinery
- Underground Storage Tanks
- Building
- Road / Site Feature
- FOSET — Finding of Suitability for Early Transfer

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

APPENDIX 2
EARLY TRANSFER PROPERTY

Early Transfer Cooperative Agreement

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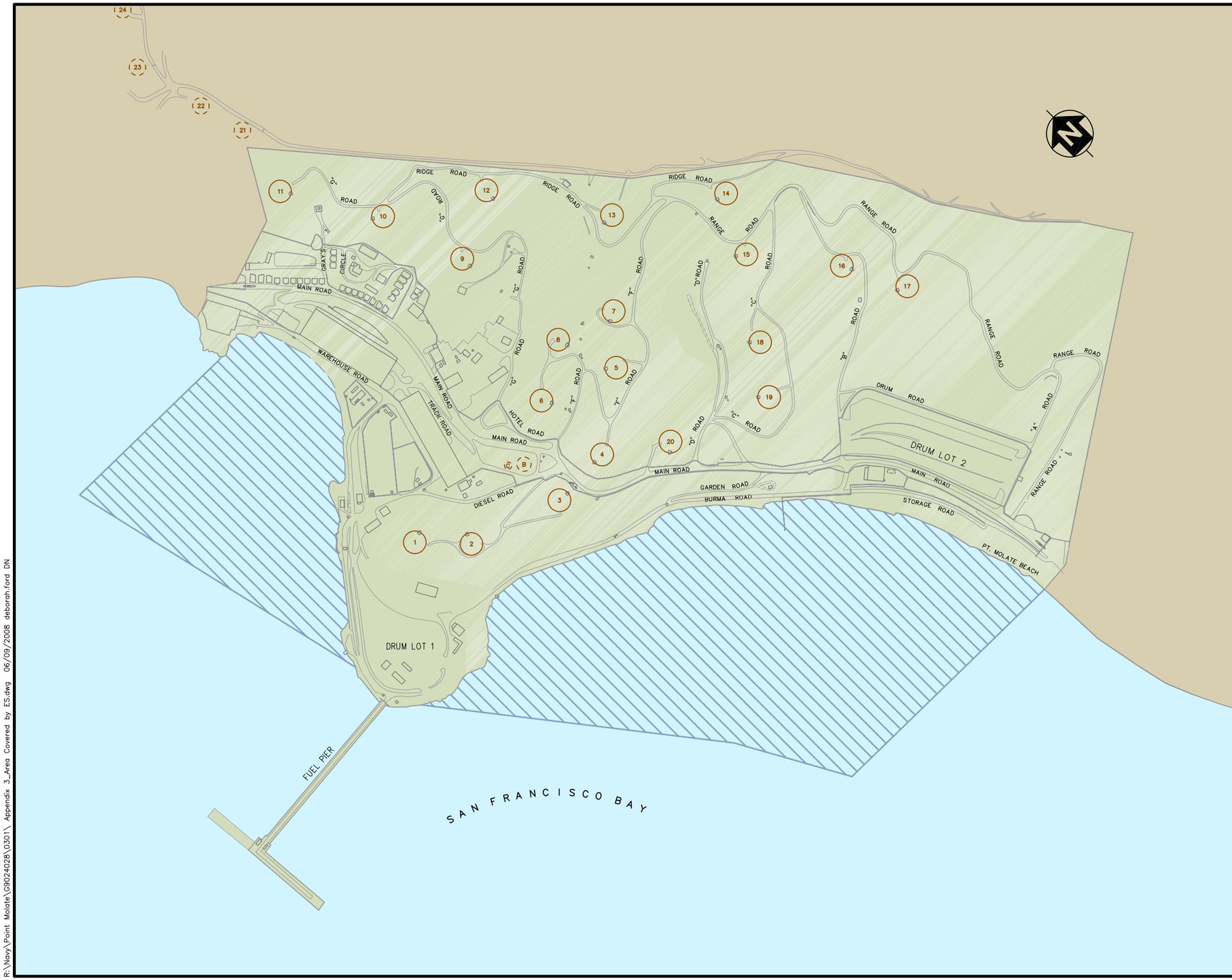
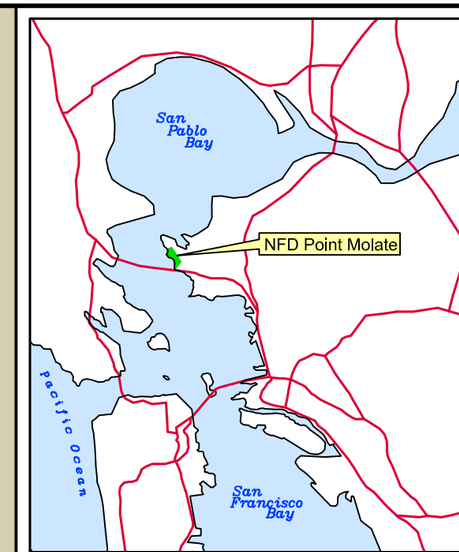
Appendix 3: Map of the Area Covered by Environmental Services





LEGEND

- Area Covered by Environmental Services
- Naval Fuel Depot Point Molate Offshore Property
- Underground Storage Tanks
- Building
- Road / Site Feature

300' 0 300' 600'

SCALE: 1" = 600'

ChaduxTt JV
Consulting Engineers and Scientists

Naval Fuel Depot Point Molate, Richmond, CA
Department of the Navy, BRAC PMO West, San Diego, CA

APPENDIX 3
AREA COVERED BY ENVIRONMENTAL SERVICES

Early Transfer Cooperative Agreement

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Appendix 4: Known Conditions

NAVAL FUEL DEPOT POINT MOLATE
Summary of Known Conditions

IR Site 1: Waste Disposal Area — *Disposal Area 10*

Site Description:	1-acre waste disposal area; about 20,000 cubic yards of waste (primarily construction debris and some oily wastes) were disposed
Site Location:	Near the center of the installation within a steep-sided ravine (Disposal Area 10)
Operations:	Former waste disposal area; currently closed as a landfill with only ongoing monitoring and maintenance activities; releases of petroleum from adjacent USTs have impacted soil and groundwater at Site 1

CHEMICALS OF POTENTIAL CONCERN

Soil

Primary chemicals of concern include TPH and PAHs. JP-5 found widespread across site (resulting from leaks at former upgradient valve boxes 7, 8, 9, and an overfill at Tank 19). VOCs detected below FPALs and PRGs levels; found sporadically within and downgradient of disposed material. Most SVOCs detected (including PAHs) were identified as fuel constituents. Localized areas of metals (copper, zinc, and lead) above background are considered to indicate presence of disposed sludge and not fuel since highest areas of JP-5 had low metals detections. Sludge like material was found buried in center of waste disposal area during the Phase II RI (2000).

Chemical	Range of Detected Concentrations		Soil FPAL (mg/kg)	
	1992 Site Investigation (mg/kg)	1994 - 2000 Phase I and II RIs (mg/kg)	Recreational User	Industrial Worker
TPH as gasoline	ND	2 – 12,000	2,400	5,900
TPH as JP-5	307 – 15,100	550 – 9,400	3,200	6,700
TPH as diesel	513 – 64,800	120 – 910	3,200	6,700
TPH as motor oil	122 – 21,900	37 – 1,400	4,500	9,400
TPH as bunker fuel	NS	ND	4,500	9,400
Benzo(a)anthracene	5.74 – 1,600	0.18 – 3.1	1.0	1.5
Benzo(a)pyrene	3.83 – 394	0.18 – 0.62	0.10	0.15
Benzo(b)fluoranthene	4.69 – 893	0.27 – 1.0	1.0	1.5
Naphthalene	16.1 – 446	0.078 – 43.0	1.1	2.3

Methane

Methane is monitored at four passive vents within the landfill boundary and at three soil gas wells at the perimeter of the landfill. The action level of 5.0 percent (where 1 percent = 10,000 ppm) is based on CCR Title 27 for allowable percent methane in air at the landfill boundary. The highest historical detection from the perimeter wells is 0.28 percent (SG02-06, July 2003), which does not exceed the action level of 5.0 percent. The highest detection from the center of landfill was 9.6 percent (GV02-03, July 2005); however, there is no action level set for vents placed in the center of the landfill.

Groundwater

TPH and PAHs are primary concerns in groundwater; attributed to historical fuel releases from sources associated with the UST fuel system upgradient of Site 1 and from wastes contained within the landfill.

Groundwater (Continued)

Chemical	Historical Maximum (since 1994) (µg/L)	Maximum (2002 to present) (µg/L)	Maximum in Last Four Rounds (µg/L) (2005, 2006)			
			02/2005	08/2005	05/2006	10/2006
TPH as gasoline	2,180 (2000, MW02-06)	110 (2002, MW02-06R)	*Not detected in 2003, 2004; not sampled for in 2005, 2006*			
TPH as diesel	2,770 (1998, MW02-06)	830 (2003, MW02-06R)	*ND*	190	*ND*	*ND*
TPH as motor oil	1,000 (2000, MW02-06)	400 (2003, BR02-18)	200	50	*ND*	*ND*
TPH as bunker fuel	4,460 (1997, MW02-06)	940 (2002, MW02-06R)	500	*ND*	*ND*	*ND*
TPH as JP-5	10,000 (2001, MW02-06)	350 (2004, MW02-21)	190	*ND*	*ND*	*ND*
Benzo(a)pyrene	1.0 (2001, MW02-06)	*ND*	*ND*	*ND*	*ND*	*ND*

OWS Effluent

TPH and PAHs are primary concerns in OWS effluent. Surface water seep SW02-04 at toe of landfill was replaced by the seep collection drain (March 2002), which was later replaced by the OWS (December 2002). Filtration system installed in early 2006 as part of the CERCLA ROD to remove dissolved TPH from the OWS effluent. Another seep, at top of landfill, SW02-05, is monitored in accordance with the PMP, but is not affected by the landfill.

Chemical	Seep Collection Drain (µg/L)	Oil/Water Separator Effluent (µg/L)						Filtration System Installed (µg/L)	
	10/2002	07/2003	10/2003	01/2004	04/2004	01/2005	07/2005	05/2006	09/2006
TPH as gasoline	99,000	320	130	*ND*	*ND*	*Consistently not detected; removed from further monitoring events*			
TPH as diesel	5,100,000	950	630	730	550	780	*ND*	*ND*	*ND*
TPH as motor oil	55,000 J	90 J	*ND*	*ND*	0.1 J	0.1 J	*ND*	*ND*	*ND*
TPH as bunker fuel	8,300,000	*ND*	*ND*	*ND*	*ND*	*ND*	1,500	*ND*	*ND*
TPH as JP-5	5,700,000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Ethylbenzene	ND	31	20	*ND*	0.7	*ND*	3.4	*ND*	*ND*
Xylenes	ND	78	32	1 J	2	*ND*	4.8	0.3 J	0.2 J

Note: Free-product observed in seep collection drain in October 2002.

Sources:

Jonas and Associates, Inc. (Jonas). 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

U.S. Department of the Navy (Navy). 2001. "Site 1, Final Action Memorandum, Naval Fuel Depot Point Molate, Richmond, California." June 12.

Navy. 2005. "Final Record of Decision, Installation Restoration Site 1, Naval Fuel Depot Point Molate, Richmond, California." June.

PRC Environmental Management, Inc. 1994. "Waste Disposal Area, Draft Phase I Remedial Investigation Report, Naval Fuel Depot Point Molate, Richmond, California." October 7.

Tetra Tech EM Inc. (Tetra Tech). 2000. "Final Phase II Remedial Investigation Report for Naval Fuel Depot Point Molate, Richmond, California." June 2.

Tetra Tech. 2002. "Final Postclosure Maintenance and Monitoring Plan, Site 1, Final Cover, Naval Fuel Depot Point Molate, Richmond, California." August 30.

IR Site 3: Treatment Ponds Area — *Disposal Area 3*

Site Description:	Approximately 11-acre site impacted as a result of former sump pond, disposal of industrial wastes, and fuel transfer and reclamation operations.
Site Location:	Near the center of NFD Point Molate on a flat, filled area, adjacent to San Francisco Bay (Disposal Area 3)
Operations:	Former sump pond (waste oil pond), disposal of industrial wastes, and fuel transfer and reclamation operations; treatment ponds for collection and processing of oily water from hillside USTs; a containment wall and extraction trench was constructed in 1995 to prevent floating free product from migrating to San Francisco Bay and near-shore sediments, groundwater treatment activities associated with trench are ongoing

CHEMICALS OF POTENTIAL CONCERN

Soil

Metals in soil at the former Fuel Reclamation Facility (FRF) and metal debris disposal area. One boring (SB11-101) at the FRF yielded the highest concentrations of antimony, arsenic, cadmium, copper, lead, manganese, mercury, molybdenum, selenium, thallium, and zinc.

PAHs and TPH-e (diesel and bunker fuels) detected in soil across Site 3. Contamination attributed to sump pond and treatment pond activities, as well as releases along the former fuel pipelines.

Chemical	Soil Depth (feet)	Exposure Point Concentration (mg/kg)	Maximum Detection (mg/kg)	Location of Maximum Detection
Arsenic	0 to 3	16.2	24.5	SB11-101 (0 to 3 feet)
	0 to 10	11		
Manganese	0 to 3	11,686	22,800	SB11-101 (0 to 3 feet)
	0 to 10	5,835		
Lead	0 to 3	977	1,790	SB11-101 (0 to 3 feet)
	0 to 10	462		
Benzo(a)pyrene	0 to 10	0.11	0.65	P2-47-06 (confirmation sample)
Dibenzo(a,h)anthracene	0 to 3	0.61	4.7	SB11-102 (0 to 3 feet)
	0 to 10	0.38		

Groundwater

TPH-e detected site-wide (mostly diesel and motor oil), with concentrations of diesel fuel higher near the extraction trench. BTEX is detected site-wide in groundwater due to TPH contamination, but chlorinated VOC contamination is limited to MW11-44. Chlorinated VOC contamination attributed to localized VOCs in soil; other well data confirms that there is no site-wide chlorinated VOC contamination.

IR Site 3: Treatment Ponds Area (Continued) *Disposal Area 3*

Groundwater (continued)

Chemical	Historical Maximum (since 1992) (µg/L)	Maximum (2003 to present) (µg/L)	Maximum in Last Four Rounds (µg/L) (2005, 2006)			
			02/2005	08/2005	05/2006	1/2007
TPH as gasoline	2,770 (2001, MW11-106)	1,220 (2004, MW11-44)	*Not sampled for in 2005-2007*			
TPH as diesel	648,000 (2001, MW11-54)	10,500 (2004, MW11-94)	2,330	3,260	*ND*	*ND*
TPH as motor oil	70,000 (2001, MW11-104)	310 (2004, MW11-94)	1,300	600	*ND*	*NS*
TPH as bunker	730,000 (2001, MW11-105)	21,000 (2005, MW11-100A)	*ND*	21,000	*ND*	*NS*
TPH as JP-5	41,000 (1992, MW11-93)	*ND*	*ND*	*ND*	*ND*	*NS*
Benzo(a)pyrene	0.3 (1992, MW11-09)	0.074 (2007, MW11-118)	*0.06*	*ND*	*0.051*	*0.074*
Chrysene	3.0 (2001, MW11-100A)	1.0 (2005, MW11-100A)	0.1 J	1 J	0.14	0.11
1,2-DCE (cis-)	383 (2001, MW11-44)	1,580 (2004, MW11-44)	*ND*	1,390	1.2	0.37 J
Trichloroethene	52 (1992, MW11-44)	15 (2003, MW11-44)	*ND*	5.9	*ND*	0.89
Vinyl chloride	260 (1992, MW11-44)	792 (2004, MW11-44)	*ND*	585	7.2	0.31 J

Sources:

Bechtel Environmental, Inc. (BEI). 2005a. "Draft Soil Feasibility Study Report, IR Site 3, Naval Fuel Depot Point Molate, Richmond, California." May.

BEI. 2005b. "Draft Corrective Action Plan, Installation Restoration Program Site 3, Naval Fuel Depot Point Molate, Richmond, California." June.

BEI. 2007. "Final Technical Memorandum, Additional Study in Support of the Corrective Action Plan for Installation Restoration Site 3, Naval Fuel Depot Point Molate, Richmond, California." May.

Entrix, Inc. and Tetra Tech. 1999. "Final Off-shore ERA for Naval Fuel Depot Point Molate, Richmond, California." November 24.

Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

Naval Facilities Engineering Command, Southwest Division (SWDIV) and City of Richmond. 2002. "Environmental Impact Statement/Environmental Impact Report [EIS/EIR] for the Disposal and Reuse of FISCO, Naval Fuel Depot Point Molate, Richmond, California." February.

Navy. 2002. "Record of Decision for Disposal and Reuse of the Fleet Industrial Supply Center, Naval Fuel Depot Point Molate, California." June.

IR Site 4: Drum Lot 1 — *Disposal Area 13*

Site Description:	Former drum lot (Drum Lot 1)
Site Location:	Concrete paved lot at head of pier (Disposal Area 13)
Operations:	Former fuel storage and transfer operations

CHEMICALS OF POTENTIAL CONCERN

Soil

Extractable-range TPH and PAHs detected in soil along locations of former fuel pipelines. VOCs are also detected in soil, but at concentrations below human health and ecological soil screening levels.

Chemical	Soil Depth (feet)	Exposure Point Concentration (mg/kg)	Maximum Detection (mg/kg)	Location of Maximum Detection
TPH as diesel	0 to 3	264	1,000	SB11-125 (0 to 3 feet)
	0 to 10	162		
TPH as motor oil	0 to 3	1,017	2,050	SB11-120 (0 to 3 feet)
	0 to 10	715		
Benzo(a)pyrene	0 to 3	0.22	0.66	SB11-132 (3 to 10 feet)
	0 to 10	0.20		
Dibenzo(a,h)anthracene	0 to 3	0.46	3.0	SB11-132 (3 to 10 feet)
	0 to 10	0.46		

Groundwater

Extractable-range TPH and PAHs detected in groundwater. Trichloroethene and vinyl chloride also detected sporadically at the site.

Chemical	Historical Maximum (since 1992) (µg/L)	Maximum (2003 to present) (µg/L)	Maximum in Last Four Rounds (µg/L) (2005, 2006)			
			02/2005	07/2005	05/2006	09/2006
TPH as gasoline	5,030 (2001, MW11-88)	2.6 (2003, MW11-19)	*Not sampled for in 2005, 2006*			
TPH as diesel	10,000 (1996, PZ11-76)	4.29 (2003, MW11-81)	1.1	0.9	*ND*	*ND*
TPH as motor oil	2,400 (2002, PZ11-72)	0.8 (2005, MW11-81)	0.8	0.3	*ND*	*ND*
TPH as bunker	28,000 (1994, MW11-57)	*ND*	*ND*	*ND*	*ND*	*ND*
TPH as JP-5	13,800 (1998, PZ11-76)	1.9 (2004, MW11-81)	*ND*	0.82	*ND*	*ND*
1,2-DCE (cis-)	9.4 (2004, MW11-57)	9.4 (2004, MW11-57)	*ND*	0.5	*ND*	*ND*
Trichloroethene	1.2 (2004, MW11-80)	1.2 (2004, MW11-80)	0.9	0.9	0.62	0.4
Vinyl chloride	19.0 (1994, MW11-57)	8.1 (2004, MW11-57)	*ND*	*ND*	*ND*	*ND*

Sources:

Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

Navy. 2002. "Record of Decision for Disposal and Reuse of the Fleet Industrial Supply Center, Naval Fuel Depot Point Molate, California." June.

Sullivan Consulting Group (Sullivan) and Tetra Tech. 2005. "Draft Risk Assessment Technical Memorandum, Installation Restoration Site 4, Naval Fuel Depot Point Molate, Richmond, California." January.

SWDIV and City of Richmond. 2002. "EIS/EIR for the Disposal and Reuse of FISCO, Naval Fuel Depot Point Molate, Richmond, California." February.

Tetra Tech. 2003. "Final Human Health and Ecological Risk Assessment, Installation Restoration Site 4, Naval Fuel Depot Point Molate, Richmond, California." March 24.

IR Site 4: Drum Lot 2 and Building 87 — *Disposal Area 5*

Site Description:	– Former drum lot (Drum Lot 2) – Quonset hut (Building 87) used for former maintenance activities and pesticide storage
Site Location:	Near the southern portion of the facility and Beach Park
Operations:	– Former drum lot fuel storage and transfer operations, suspected isolated TCE use; sandblasting to prepare metal surfaces for painting, sandblasting contractor staging areas (sandblasting activities were investigated under IR Site 2) – Former industrial supply warehouse and equipment repair, locomotive maintenance, pesticide application training facility (classroom only), pesticide storage area

CHEMICALS OF POTENTIAL CONCERN

Soil

Chemicals of concern were pesticides in surface soil at the former rinse pad (south corner of Building 87) and a removal action was conducted in 2002. PAHs and pesticides are detected in subsurface soil at Building 87. The highest detections of PAHs are located at SB30-01 (collected at a former drain within Building 87) and also along the former drain pipe leading away from Building 87 towards the shore.

Chemical	Soil Depth (feet)	Exposure Point Concentration (mg/kg)	Maximum Detection (mg/kg)	Location of Maximum Detection
Benzo(a)anthracene	0 to 2	0.71	12.0	SB30-01 (4 to 5 feet)
	0 to 10	2.11		
Benzo(a)pyrene	0 to 2	1.20	16.0	SB30-01 (4 to 5 feet)
	0 to 10	2.89		
Benzo(b)fluoranthene	0 to 2	0.83	14.0	SB30-01 (4 to 5 feet)
	0 to 10	2.32		
Dibenzo(a,h)anthracene	0 to 2	0.40	0.61	SB30-01 (4 to 5 feet)
	0 to 10	0.20		
Dieldrin	0 to 2	0.007	4.70	EXCV31-07 (2.5 to 3 feet)
	0 to 10	0.37		

Groundwater

Maximum detected concentrations of TCE at Drum Lot 2 have been collected consistently from MW29-01. Plume extends from around MW29-01 southwest towards the shoreline (MW31-01 is at leading edge of plume).

Groundwater (Continued)

Chemical	Historical Maximum (since 1999) (µg/L)	Maximum (2003 to present) (µg/L)	Maximum in Last Four Rounds (µg/L) (2005, 2006)			
			02/2005	07/2005	05/2006	09/2006
Benzo(a)pyrene	0.2 (2005, MW10-11)	0.2 (2005, MW10-11)	0.2 J	*ND*	*ND*	*ND*
Dibenzo(a,h)anthracene	0.1 (2005, MW10-11)	0.1 (2005, MW10-11)	0.1 J	0.04 J	*ND*	*ND*
Trichloroethene	770 (2001, MW29-01)	692 (2003, MW29-01)	262	518	280	350
Vinyl chloride	16.0 (1999, MW30-08)	10.0 (2004, MW30-08)	8	5.7	0.76 J	*ND*

SANDBLAST GRIT AREAS WITHIN IR SITE 4

Portions of Drum Lot 2 were used for staging equipment and metal cleaning by a sandblasting contractor (IR Site 2 Areas 2C and 2E). Sandblasting was used to prepare metal surfaces for painting; though, sandblasting of painted surfaces was not known to have occurred. The sandblasting areas were investigated under IR Site 2. Area 2C was located at the northwest corner of Drum Lot 2 and did not have visible sandblast grit; however, equipment was staged in the area. Area 2E had visible sandblast grit in the grass and brush adjacent to the concrete paved lot; approximately 3 cubic yards of visible sandblast grit was removed in this area.

Sandblast Grit Indicator Metals: antimony, cadmium, trivalent chromium, cobalt, copper, lead, nickel, thallium, and zinc. Hexavalent chromium was also sampled for, but was not detected at any area.

After the IR Site 2 removal action, all indicator metals were present at levels below cleanup goals (1998 EPA Region 9 PRGs). Lead was detected below the 1998 DTSC residential lead cleanup goal of 130 mg/kg at both Areas 2C and 2E.

Investigations related to the sandblast grit areas are complete. All actions necessary for site closure have been completed and documented in a No Action Record of Decision.

Sources:

Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

Navy. 1999. "Naval Fuel Depot Point Molate, Site 2, Final Record of Decision." December 30. Signed by the Navy on August 31, 2000 and by the Water Board on September 5, 2000.

Navy. 2002. "Record of Decision for Disposal and Reuse of the Fleet Industrial Supply Center, Naval Fuel Depot Point Molate, California." June.

Sullivan and Tetra Tech. 2005. "Draft Risk Assessment Technical Memorandum, Installation Restoration Site 4, Naval Fuel Depot Point Molate, Richmond, California." January.

SWDIV and City of Richmond. 2002. "EIS/EIR for the Disposal and Reuse of FISCO, Naval Fuel Depot Point Molate, Richmond, California." February.

Tetra Tech. 1998. "Sandblast Grit Areas (IR Site 2), Removal Action, Final Project Completion Report, Naval Fuel Depot Point Molate, Richmond, California." November 4.

Tetra Tech. 2002. "Final Field Summary Report Supplemental Investigation, Site-specific Phase II Environmental Baseline Survey, Naval Fuel Depot Point Molate, Richmond, California." August 27.

Underground Storage Tanks (Not Part of Large ORS System) *Disposal Areas 3, 5*

UST Identification	Tank Status	Capacity (Gallons)	Contents	Closure Status	Closure Document
UST 110	Removed	5,000	Motor Gas Fuel, Contaminated Fuels, and F-76 Marine Diesel Fuel	Closed (1990)	
DVECC UST	Removed	1,000	Pesticides and Water	Closed (1990)	

Note: DVECC – Disease Vector Ecology and Control Center

Underground Storage Tanks and Hillside Pipelines *Disposal Areas 1, 2, 6*

Site Description:	Twenty 2.1 million gallon USTs, and associated pipelines; removal of two smaller tanks (B and C) in 2004 having capacities of 580,000 gallons and 100,800 gallons
Site Location:	Throughout hillsides (Disposal Areas 1, 2, and 6 [already transferred])
Operations:	Former fuel storage and transfer

CHEMICALS OF POTENTIAL CONCERN

Chemicals of potential concern in soil for the UST and pipelines include TPH as diesel, JP-5, bunker fuel and fuel-related constituents (PAHs and BTEX). In groundwater, chemicals of potential concern include TPH as diesel and JP-5.

Tank Number	Environmental Closure Status	Capacity	Contents	Closure Status
1	Closed	50,000 bbls	NSFO, F-76, JP-5, F-76	Closed Aug 2006
2	Open	50,000 bbls	NSFO, F-76, JP-5, F-76	
3	Open	50,000 bbls	NSFO, F-76, JP-5	
4	Open	50,000 bbls	NSFO, F-76, JP-5	Undergoing Water Board Review
5	Open	50,000 bbls	NSFO, F-76, JP-5, F-76	
6	Open	50,000 bbls	NSFO, F-76, JP-5, F-76	
7	Closed	50,000 bbls	NSFO, NDF, F-76	Closed Dec 2007
8	Open	50,000 bbls	NSFO, NDF, F-76	
9	Closed	50,000 bbls	NSFO, Distillate, F-76	Closed Oct 2007
10	Closed	50,000 bbls	NSFO, Distillate, F-76, JP-8	Closed Jan 2008
11	Closed	50,000 bbls	NSFO, AVGAS 115/145, JP-5, F-76	Closed Feb 2008
12	Open	50,000 bbls	NSFO, NDF, F-76	
13	Open	50,000 bbls	NSFO, NDF, F-76	
14	Closed	50,000 bbls	NSFO, F-76, JP-5	Closed Mar 2008
15	Open	50,000 bbls	NSFO, F-76, JP-5	
16	Closed	50,000 bbls	NSFO, F-76, JP-5	Closed Dec 2007
17	Closed	50,000 bbls	NSFO, F-76, JP-5	Closed Dec 2007
18	Open	50,000 bbls	NSFO, F-76, JP-5	
19	Open	50,000 bbls	NSFO, F-76, JP-5	
20	Closed	50,000 bbls	NSFO, BS&W	Closed Aug 2006
B	Open	13,800 bbls	Bilge/Ballast	Removed 2005
C	Open	2,400 bbls	Sludge	Removed 2005

Note: USTs 1 through 20 have been structurally closed.

Underground Storage Tanks and Hillside Pipelines (Continued) *Disposal Areas 1, 2, 6*

Sources:

Innovative Technical Solutions, Inc. 2005. "Final Post-Construction Summary Report Closure of the UST, Pipeline, and Valve Box Systems, Former Naval Fuel Depot Point Molate, Richmond, California." November.

Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

Tetra Tech. 2001. "Characterization of USTs and Fuel Pipelines, Final Report, Naval Fuel Depot Point Molate, Richmond, California." September 28.

Tetra Tech. 2002. "Final Corrective Action Plan, Naval Fuel Depot Point Molate, Richmond, California." March 4.

Shoreline and Flat-Lying Area Underground Fuel Pipelines *Disposal Areas 1, 2, 3, 12, 13*

Site Description:	Underground fuel pipelines in flat-lying and near-shore areas
Site Location:	North and South Shoreline, Drum Lot 1, Treatment Ponds Area (Disposal Areas 1, 2, 3, 12, and 13 had pipelines removed [1, 2, and 12 already transferred])
Operations:	Former fuel transfer

CHEMICALS OF POTENTIAL CONCERN

Chemicals of potential concern in soil for pipelines include TPH as diesel, JP-5, motor oil, and bunker fuel and fuel-related constituents (PAHs and BTEX). Groundwater chemicals of potential concern include TPH and PAHs; no detections of TPH or PAHs exceeded groundwater FPALs in the South Shoreline since 2002 and in the North Shoreline since 2005.

IMPLEMENTATION OF CORRECTIVE ACTION PLAN

Free Product (South Shoreline)

Two areas along the South Shoreline were identified as having localized fuel releases (unrelated to releases from upgradient USTs): area between Valve Boxes 1 and 2; and area east of Valve Box B.

An excavation at former soil boring SB10-24 (between former Valve Boxes 1 and 2) was conducted to 3 feet deep. Confirmation samples from bottom and sidewalls exceeded FPALs. However, closure was recommended, and granted by Water Board in an email dated November 24, 2004, based on the following: no PAH FPALs were exceeded; no observed free-product; excavation was backfilled with clean soil; subsurface FPAL for TPH-residual was not exceeded; subsurface FPAL for TPH-diesel slightly exceeded in one sample; and only isolated discoloring existed in the floor of the excavation.

Area east of Valve Box B (intersection of former beach tank pipes with shoreline pipelines) was recommended for additional evaluation and free-product recovery if necessary. Three new wells were installed nearby and were monitored for 4 months; however, no product was detected. No further removal action activities were conducted at this former valve box.

Sources:

Jonas. 2007. "Final Base-Wide Groundwater Monitoring Report Dry-Season 2006 Sampling Event (September 2006 to January 2007), Naval Fuel Depot Point Molate, Richmond, California." May 8.

Tetra Tech. 2002. "Final Corrective Action Plan, Naval Fuel Depot Point Molate, Richmond, California." March 4.

Tetra Tech. 2003. "Final Human Health and Ecological Risk Assessment, Installation Restoration Site 4, Naval Fuel Depot Point Molate, Richmond, California." March 24.

Appendix 5: Environmental Insurance Policies
[forthcoming]

APPENDIX C
RESPONSIVENESS SUMMARY [FORTHCOMING]

[X] pages.