



Department of Toxic Substances Control



Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

June 2, 2000

Southwest Division
Naval Facilities Engineering Command
BRAC Office
Attn: Mr. Michael McClelland (Code 06CA.MM)
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

FINAL REMOVAL ACTION WORKPLAN AND NEGATIVE DECLARATION FOR MARSH CRUST AT THE EAST HOUSING AREA, ALAMEDA POINT

Dear Mr. McClelland:

The Department of Toxic Substances Control (DTSC) is forwarding for the Navy's files four copies of the Final Removal Action Workplan and Negative Declaration for Marsh Crust at the East Housing Area, Alameda Point.

Please contact me at (510) 540-3767 if you have any questions regarding this letter.

Sincerely,

Mary Rose Cassa, R.G.
Engineering Geologist
Office of Military Facilities

enclosures

cc: see next page

4 COPIES FORWARDED
TO GFD/...
...
WJ 6/15

Mr. Michael McClelland

June 2, 2000

Page 2

cc: Mr. Phillip Ramsey (SFD-8-2)
U. S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Mr. Brad Job
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Ms. Dina Tasini
City of Alameda Community Development Department
950 West Mall Square
Alameda, CA 94501

FINAL NEGATIVE DECLARATION
for
Removal Action Workplan for Parcels 170 and 171, former Alameda Naval Air Station

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Negative Declaration

Initial Study

Comments on Draft Negative Declaration and Draft Removal Action Workplan

Responses to Comments

FINAL NEGATIVE DECLARATION
for
Removal Action Workplan for Parcels 170 and 171, former Alameda Naval Air Station

Project Proponent:

U.S. Navy
Southwest Division, Naval Facilities Engineering Command

Contact: Michael McClelland
BRAC Environmental Coordinator, Alameda Point
Southwest Division, Naval Facilities Engineering Command
BRAC Office (Code 06CA.MM)
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517
619-532-0965

Project Description:

The project is adoption of a *Removal Action Workplan* (RAW) that would establish a remedy for hazardous substances found under Parcels 170 and 171 of the former Alameda Naval Air Station, as shown in Exhibit 2. This remedy establishes restrictions on future excavation, and would bind all future property owners to these restrictions by recordation of a covenant on these parcels. The remedy addresses a portion of a deep layer of historical contaminated sediment known as “marsh crust” which extends across approximately 584 acres of the former Alameda Naval Air Station. The marsh crust was excluded from the National Priorities List (NPL). As such, approval is being taken by the Department of Toxic Substances Control (DTSC) under authority provided in Chapter 6.8 of the California Health and Safety Code (H&SC). This Initial Study is being prepared by DTSC pursuant to the requirements of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq) and accompanying Guidelines (Code of California Regulations, Section 15000 et seq).

Background

Approval of this project and execution of the covenant in themselves constitute a decision, but do not specifically grant a permit for any physical action. It does require that any person proposing to excavate soil in the marsh crust secure approval (in effect a “permit”) from DTSC, except where the covenant allows for the City of Alameda to permit excavation. Such approval from DTSC will be based solely on a demonstration that the soil in question does not contain PAHs above the California Modified USEPA Region IX Preliminary Remediation Goals in effect at the time of the request for approval, or upon demonstration that the soil will be disposed at a facility

authorized to accept such waste for disposal.

The remedy addresses a deep layer of historical contaminated sediment known as "marsh crust" at parcels 170 and 171 which encompass approximately 63 acres of the former Alameda Naval Air Station. Alameda Naval Air Station closed in 1997. The base was renamed Alameda Point by the City of Alameda, which is negotiating a conveyance of the property to the city from the Navy. While Marsh Crust exists beyond the boundary of Parcels 170 and 171, and indeed beyond the boundary of Navy-owned property, this remedy applies only to marsh crust under Parcels 170 and 171.

Manufactured gas plants and an oil refinery which were located near the future location of these parcels operated from the late 1800s into the 1920s. These facilities are believed to have discharged petroleum waste to adjacent marshlands during their operation. The discharge was rich in semivolatile organic compounds, including polynuclear aromatic hydrocarbons (PAH). The waste spread over much of the surface of the surrounding marsh and was deposited on the marsh surface through tidal actions, leaving a layer of contaminated sediment under what would later become the Alameda Naval Air Station. Fill material, dredged during improvement of the Oakland Inner Harbor and surrounding San Francisco Bay sediments, was placed as fill beginning in 1887, and encapsulated the former marsh crust under the fill (IT Corporation, 1999a. *Environmental Baseline Survey Comprehensive Guide: History of NAS Alameda and Alameda Point* (March, 1999)).

Borings drilled at the former Alameda Naval Air Station and the adjacent Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex have encountered marsh crust and related deposits over a large geographic area that exceeds 700 acres (TetraTech EM Inc., 1999, *Operable Unit 1 Remedial Investigation Report*; IT Corporation, 1999a, *Environmental Baseline Survey Comprehensive Guide: History of NAS Alameda and Alameda Point*). Concentrations of PAH in the soil such as benzo(a)pyrene, a highly carcinogenic compound, commonly exceed the residential preliminary remediation goal of 0.056 mg/kg by several orders of magnitude. Based on the conceptual model of how the marsh crust was deposited, the marsh crust is believed to exist throughout the area in a reasonably predictable, planar zone, but it may not exist as a continuous layer because of the presence of tidal channels and other phenomena affecting the original deposition. The interface between fill material and the historic surface of the marsh or subtidal deposits is inferred to be present at depths of four to fifteen feet below ground surface at Parcels 170 and 171. Marsh crust as originally deposited may therefore be present at depths of four to fifteen feet. The remedy assumes that this is the case.

DTSC believes that there is no set of rational investigation objectives that can be identified which would lead to a conclusive data set. DTSC therefore believes that it is impractical to further investigate the marsh crust for the purpose of more precisely delineating the areas where marsh crust is or is not present in Parcels 170 and 171.

It is also possible that some soils from the historic marsh or the subtidal areas were disturbed during fill or other unknown activities, and may have been deposited at depths other than that of the historic marsh or subtidal soil surface. This possibility cannot be reliably proved or rationally

investigated, as there are no criteria for sampling locations or depths upon which a sampling plan could be based. However, since marsh crust has not been detected at depths inconsistent with the depositional model, DTSC considers the likelihood of substantial marsh crust or subtidal soil deposits at depths different from those of the original marsh crust or subtidal surface to be minimal. DTSC therefore is not proposing to include soil at other depths in the restrictive part of this remedy.

Other chemicals present at the site include polynuclear aromatic hydrocarbons (PAH) and pesticides, which may have been present in the fill as dredged, or may have been introduced after the fill was placed. Many PAH compounds are carcinogenic, but are present at Parcels 170 and 171 at an average equivalent concentration of 0.49 mg/kg, which is consistent with ambient levels found throughout the fill, and are within the acceptable risk range as defined by U. S. EPA Region IX (Environmental Resources Management, July 20, 1999). DTSC therefore believes that these chemicals in the fill do not warrant a remedy. Similarly, concentrations of pesticides are also below concentrations of concern.

A human health risk assessment (HHRA) was conducted during the remedial investigation for sites at the Alameda Naval Air Station that are affected by marsh crust (TetraTech EM Inc., 1999). Consistent with U.S. EPA and DTSC guidelines for conducting HHRA, the risk assessment found that there is no pathway to humans from the PAH in the marsh crust because of its depth. The HHRA determined that workers could be exposed to possible PAH contamination during construction of building foundations and utility work. However, DTSC has concluded that such exposures are unlikely to result in significant risk. The PAH may pose an unacceptable risk to human health and the environment if excavated marsh crust materials are brought to the ground surface and handled in an uncontrolled manner (e.g., if contaminated marsh crust soil is placed at the surface as a result of construction activities, thus creating an exposure pathway).

Qualitative and quantitative ecological risk assessments conducted as part of the remedial investigation (PRC Environmental Management, Inc., 1996) found that there are no potential risks to terrestrial or aquatic receptors because the area has (1) limited and unsuitable habitat; (2) contaminants found in deep soils (marsh crust) have limited potential for exposure to terrestrial biota (deeper than most animal burrows); and (3) PAH compounds are not highly soluble, and, based on fate and transport modeling, have a low probability for transport to adjacent surface waters.

The proposed remedy to address and control possible releases of PAH from the marsh crust to the surface is a covenant, to restrict specific use of the property (environmental restrictions), between the City of Alameda as the future owner of the property, and DTSC. The restriction involves controls on excavation and management of soil excavated from the subsurface marsh crust layer and brought to the surface through construction or other activities. Pursuant to California Civil Code section 1471(c), DTSC has determined that the covenant is reasonably necessary to protect present or future public health and safety or the environment. DTSC therefore intends that excavation of contaminated soil be restricted. The restrictions shall run

with the land, pass with each and every portion of the property, and be enforceable by DTSC. The restrictions shall be incorporated by reference in each and all deeds, leases and subleases of any portion of the property. This restriction is not intended, nor is it likely to restrict, induce, or otherwise affect general land uses, but rather applies to the marsh crust irrespective of any and all future land uses.

The covenant will prohibit engaging in any excavation below a threshold depth that is not performed in accordance with a permit approved and issued pursuant to the City of Alameda excavation ordinance. If the excavation ordinance is repealed, DTSC approval will be required for all excavation. The covenant will be executed by the City of Alameda and DTSC and shall be recorded by the City of Alameda.

A covenant to restrict specific use of property is an institutional control that is recognized in the H&SC Sections 25222.1 and 25355.5 as an appropriate remedy when more active response actions are determined not to be practical. The H&SC requires that when evaluating institutional controls as remedial alternatives, the adequacy and reliability of the controls must be evaluated. Further, as with all remedies implemented pursuant to the H&SC, 5-year review is required to verify maintenance of the institutional control.

The purpose of this project is solely for the implementation of institutional controls as a remedy for Parcels 170 and 171. Any environmental impacts associated with future development are addressed in the Catellus Mixed Use Development Draft Environmental Impact Statement (December 1999) and the Final Environmental Impact Report for the Reuse of Naval Air Station Alameda and the Fleet and Industrial Supply Center, Alameda Annex and Facility (March 2000).

Project Location:

The project is located on the former Alameda Naval Air Station, on Parcels 170 and 171, near the intersection of Atlantic Avenue and Main Street (see Attachments 1 and 2).

Findings of Significant Effect on Environment:

The Department has determined that the proposed project could not have a significant effect on the environment. This finding is supported by the Special Initial Study prepared by the California Environmental Protection Agency, Department of Toxic Substances Control (attached).

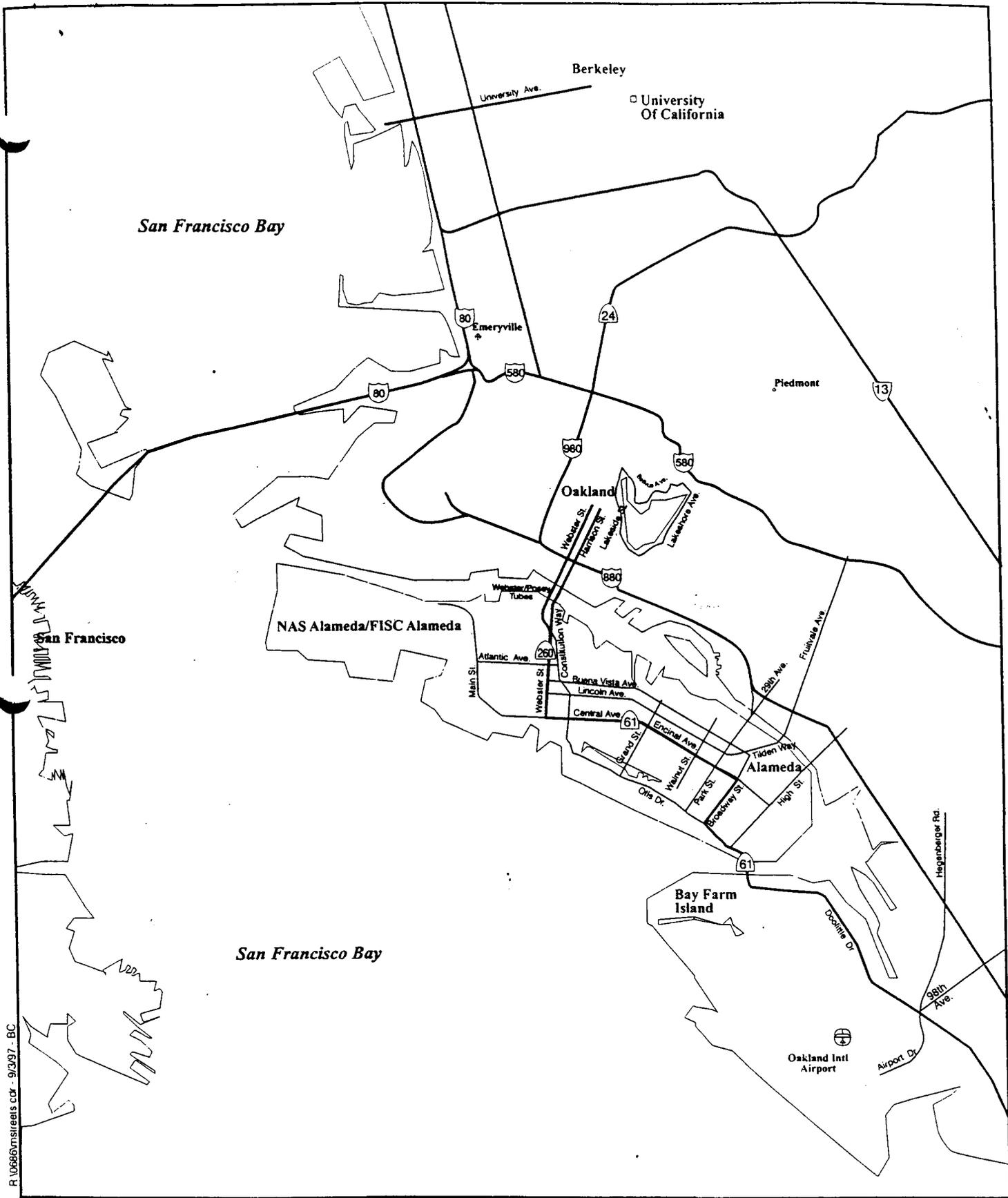
Mitigation Measures:

No mitigation measures have been added. The proposed remedy to address and control possible releases of PAH from the marsh crust to the surface is a covenant, to restrict specific use of the

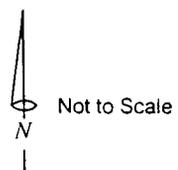
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Signature Mary Rose Ciccia Date May 25, 2000
Project Manager

Signature R. J. Landis Date 5-25-00
Branch Chief



R:\0686\mstreets.cdr - 9/3/97 - BC



Not to Scale

EXHIBIT 1: SITE LOCATION MAP

NAS Alameda/FISC Alameda
 Alameda, California
 Removal Action Workplan for Parcels 170 and 171
 Alameda, Naval Air Station

Source: Tetra Tech and Dowling Associates 1997

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SPECIAL INITIAL STUDY

For

Removal Action Workplan for Parcels 170 and 171, Former Alameda Naval Air Station

The Department of Toxic Substances Control (DTSC) has completed the following Special Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§ 15000 et seq., Title 14, California Code of Regulations). This Special Initial Study has also been used to satisfy the requirements of § 711.4, Fish and Game Code and § 753.5, Title 14, Code of California Regulations relating to filing of environmental fees.

I. PROJECT INFORMATION

Project Name: Removal Action Workplan for Parcels 170 and 171, former Alameda Naval Air Station

Site Location: City of Alameda, Alameda County (see Exhibit 1, Site Location)

Contact Person/ Address/ Phone Number: Michael McClelland / Southwest Division, Naval Facilities Engineering Command / BRAC Office (Code 06CA.MM) / 1220 Pacific Highway San Diego, CA 92101-5190 / 619-532-1965

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Remediation Goals in effect at the time of the request for approval, or upon demonstration that the soil will be disposed at a facility authorized to accept such waste for disposal.

The remedy addresses a deep layer of historical contaminated sediment known as "marsh crust" at parcels 170 and 171 which encompass approximately 63 acres of the former Alameda Naval Air Station. Alameda Naval Air Station closed in 1997. The base was renamed Alameda Point by the City of Alameda, which is negotiating a conveyance of the property to the city from the Navy. While Marsh Crust exists beyond the boundary of Parcels 170 and 171, and indeed beyond the boundary of Navy-owned property, this remedy applies only to marsh crust under Parcels 170 and 171.

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crust or subtidal soil deposits at depths different from those of the original marsh crust or subtidal surface to be minimal. DTSC therefore is not proposing to include soil at other depths in the restrictive part of this remedy.

Other chemicals present at the site include polynuclear aromatic hydrocarbons (PAH) and pesticides, which may have been present in the fill as dredged, or may have been introduced after the fill was placed. Many PAH compounds are carcinogenic, but are present at Parcels 170 and 171 at an average equivalent concentration of 0.49 mg/kg, which is consistent with ambient levels found throughout the fill, and are within the acceptable risk range as defined by U. S. EPA Region IX (Environmental Resources Management, July 20, 1999). DTSC therefore believes that these chemicals in the fill do not warrant a remedy. Similarly, concentrations of pesticides are also below concentrations of concern.

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executed by the City of Alameda and DTSC and shall be recorded by the City of Alameda.

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The purpose of this project is solely for the implementation of institutional controls as a remedy for Parcels 170 and 171. Any environmental impacts associated with future development are addressed in the Catellus Mixed Use Development Draft Environmental Impact Statement (December 1999) and the Final Environmental Impact Report for the Reuse of Naval Air Station Alameda and the Fleet and Industrial Supply Center, Alameda Annex and Facility (March 2000)

Other Agencies Having Jurisdiction Over the Project/ Types of Permits Required:

City of Alameda - Execution of the Covenant between the City of Alameda and DTSC is a decision, but does not specifically grant a permit for any action. Rather, it establishes soil excavation restrictions on the City as the property owner, and allows DTSC to rely on a City ordinance to ensure that the restrictive provisions and intent of the covenant are met. Approval of excavation requires a permit from the City as long as the excavation ordinance is in effect and is consistent with the provisions of the covenant.

US Navy - The Navy must approve a decision document pursuant to the federal CERCLA that provides for institutional controls similar to the decision proposed by DTSC. Among other things, the decision may be used by the Navy to support a Finding of Suitability for Transfer (FOST) for Parcels 170 and 171. In the FOST, the Navy must certify that all remedial actions have been taken, and they could support this determination in full or in part by implementing the remedy described in their decision document. DTSC has no approval authority over the FOST, but may offer comments on it. The Navy is required to place a media notice inviting public comment on a FOST. DTSC's decision is not dependent on the Navy's decision or on completion of the FOST, as the remedy is necessary under State law irrespective of the Navy's decision in this instance or of who owns the property.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- | | |
|--|---|
| <input type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Removal Action Plan |
| <input type="checkbox"/> Permit Renewal | <input checked="" type="checkbox"/> Removal Action Workplan |
| <input type="checkbox"/> Permit Modification | <input type="checkbox"/> Interim Removal |
| <input type="checkbox"/> Closure Plan | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Regulations | _____ |

Program/ Region Approving Project: Office of Military Facilities, Site Mitigation Branch, Berkeley Office

Contact Person/ Address/ Phone Number: Mary Rose Cassa/ 700 Heinz Ave., Ste. 200, Berkeley CA 94122/
510-540-3767

III. ENVIRONMENTAL CONDITIONS POTENTIALLY AFFECTED

The boxes checked below identify environmental factors which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigated".

- | | | |
|--|--|--|
| <input type="checkbox"/> Earth | <input type="checkbox"/> Risk of Upset | <input type="checkbox"/> Aesthetics |
| <input type="checkbox"/> Air | <input type="checkbox"/> Transportation/ Circulation | <input type="checkbox"/> Cultural/ Paleontological Resources |
| <input type="checkbox"/> Surface and Groundwater | <input type="checkbox"/> Public Services | <input type="checkbox"/> Cumulative Effects |
| <input type="checkbox"/> Plant Life | <input type="checkbox"/> Energy | <input type="checkbox"/> Population |
| <input type="checkbox"/> Animal Life | <input type="checkbox"/> Utilities | <input type="checkbox"/> Housing |
| <input type="checkbox"/> Land Use | <input type="checkbox"/> Noise | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Natural Resources | <input type="checkbox"/> Public Health and Safety | <input checked="" type="checkbox"/> None identified |

IV. ENVIRONMENTAL SETTING/ IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental conditions which exist within the area affected by the proposed project and an analysis of whether or not those conditions will be potentially impacted by the proposed project. Preparation of the Environmental Setting and Impact Analysis sections follows guidance provided in the DTSC's Workbook For Conducting Initial Studies Under the California Environmental Quality Act (CEQA), May 1994 (Workbook).

This Special Initial Study also contains evidence to support the claim that this project will have absolutely no adverse impact on fish or wildlife or the habitat that on which the fish or wildlife depend pursuant to the provisions of Title 14, CCR § 753.5 (d). Areas of special concern to fish and wildlife are highlighted within the appropriate environmental factor in the following section. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each environmental factor discussed below.

1. Earth (Workbook; page 11)

Description of Environmental Setting:

Surface materials at the site are artificial fill consisting of sands, some clay, minor gravels, and organic matter approximately 10 feet thick overlying blue-gray muds and fine sands to depth greater than 20 feet at the site. The underlying muds, sands, and organic matter originated from the historic intertidal deposits adjacent to the north shore of Alameda Island prior to placement of fill.

Marsh Crust is a term applied to former "encrusted" tidal marsh deposits which existed prior to placement of fill at the margins of San Francisco Bay. Environmental investigations have demonstrated that the former tidal marsh deposits located at the interface between the native bay margin sediments and the artificial fill are contaminated with SVOC and TPH compounds. These compounds are thought to be related to discharges from industrial activities in the area (e.g., oil refining, gas manufacturing) which became intermingled with the marsh deposits as a result of tidal action. It is thought that contaminated marsh crust deposits are located within the former tidal zone; i.e., contaminated deposits are not anticipated to be found at a level higher than the original high tide level (mean higher high tide). The East Housing property was constructed on top marshlands adjacent to San Francisco Bay, interlaced with numerous tidal channels. Borings drilled at the former Alameda Naval Air Station and the adjacent Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex have encountered marsh crust over a large geographic area that exceeds 700 acres. Concentrations of benzo(a)pyrene, a highly carcinogenic compound, commonly exceed the residential preliminary remediation goal of 0.056 mg/kg by several orders of magnitude. Based on the conceptual model of how the marsh crust was deposited, the marsh crust is believed to exist throughout the area in a reasonably predictable, planar zone, but it may not exist as a continuous layer because of the presence of tidal channels and other phenomena affecting the original deposition. The interface between fill material and the historic surface of the marsh or subtidal deposits is inferred to be present at depths of four to fifteen feet below ground surface at Parcels 170 and 171. Marsh crust as originally deposited may therefore be present at depths of four to fifteen feet.

Other chemicals present at the site include polynuclear aromatic hydrocarbons (PAH) and pesticides, which may have been present in the fill as dredged, or may have been introduced after the fill was placed. Many PAH compounds are carcinogenic, but are present at Parcels 170 and 171 at an average equivalent concentration of 0.49 mg/kg, which is consistent with ambient levels found throughout the fill, and are within the acceptable risk range.

Ref: (a) Bay Mud Developments and Related Structural Foundations; (b) Operable Unit 1 Remedial Investigation Report; (c) Final Remedial Investigation Report, Fleet and Industrial Supply Center; (d) Transmittal of Data Summary Tables, Alameda Point East Housing Area, Alameda California.

Analysis of Potential Impacts:

[Analysis must include the following concerns: 1) Changes to any riparian land or wetlands under state or federal jurisdiction?; 2) Changes to soil required to sustain habitat for fish and wildlife?]

It is possible that some soils from the historic marsh or the subtidal areas were disturbed during fill or other unknown activities, and may have been deposited at depths other than that of the historic marsh or subtidal soil surface. This possibility cannot be reliably proved or rationally investigated, as there are no criteria for sampling locations or depths upon which a sampling plan could be based. However, since marsh crust has not been detected at depths inconsistent with the conceptual model, DTSC considers the likelihood of substantial marsh crust or subtidal soil deposits at depths different from those of the original marsh crust or subtidal surface to be minimal. DTSC therefore is not proposing to include soil at other depths in the restrictive part of this remedy.

Because the action is the adoption of an institutional control, no direct actions involving the movement of soil would take place. The site does not contain or adjoin riparian land, wetlands, or soils required to sustain habitat for fish and wildlife. No effects are anticipated.

Ref: (a) Removal Action Workplan; (b) Operable Unit 1 Remedial Investigation Report; (c) Final Remedial Investigation Report, Fleet and Industrial Supply Center; (d) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. Air (Workbook; page 13)

Description of Environmental Setting:

a) Region

The San Francisco Bay Region experiences one of the mildest climates in North America. Winters are characterized by prevailing cool winds from the northwest moderated by the Pacific Ocean, so temperatures rarely reach freezing. The Bay Area is a large shallow air basin ringed by hills which taper into a number of sheltered valleys around the perimeter. Two primary atmospheric outlets exist. One is through the strait known as the Golden Gate, which is a direct outlet to the ocean. The second extends to the northeast, along the west delta region of the Sacramento and San Joaquin Rivers.

b) Project Site Vicinity

The project site is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. The BAAQMD's Bay Area Clean Air Plans (CAPs) contain district-wide control measures to reduce carbon monoxide and ozone precursor emissions. The State standards for these pollutants are more stringent than the national standards. There is currently no activity at the site generating either mobile or stationary air emissions. The site is occupied by former Navy housing units which have been vacant since 1997.

Ref: *Catellus Mixed Use Development Draft Environmental Impact Statement*, December 1999, City of Alameda

Analysis of Potential Impacts:

[Analysis must address the following concerns: Degradation of any air resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air?]

The proposed institutional controls will not authorize excavation into contaminated soil and therefore will not create impacts to air quality. The covenant restrictions include preparation of a health and safety plan by a certified industrial hygienist to protect workers at the excavation site and the general public, and conducting all excavation and materials handling activities in accordance with applicable Best Management Practices.

No degradation of air resources is anticipated. No emissions from mobile or stationary sources will result from the adoption of the institutional control proposed by DTSC, and no earthmoving will take place.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3. Surface and Ground Water (Workbook; page 17)

Description of Environmental Setting:

Based on available data, shallow groundwater occurs at depths ranging from 2 to 15 feet below the ground surface in fill materials and Bay Mud. The Alameda aquifer occurs below the site at a depth ranging from 100 to 2000 feet below the ground surface. The hydrogeology at the project site is characterized by five hydrostratigraphic units that include the water-bearing Merritt Sand and Posey formations (which underlie the fill), Bay Mud formation, and the deeper Alameda formation. The Alameda formation aquifer is separated by a silty-clay unit, the San Antonio Formation. Because of its high silty-clay content, the Bay Mud formation likely provides hydrologic separation of the fill from the underlying Merritt Sand and Posey formations. Tidal influence has been detected close to the existing shoreline, but little or no tidal influence is anticipated at the project site, located at least 0.4 mile from the nearest shoreline. Surface runoff from the project site is largely controlled by a storm drain system which mainly discharges into San Francisco Bay. A jurisdictional wetland of the United States has been delineated by the U.S. Army Corps of Engineers approximately 120 feet west of the site.

There is no indication that shallow groundwater beneath the site contains any contamination exceeding background concentrations or at concentrations that would pose a health threat through inhalation of volatile compounds. A benzene plume detected at IR Site 02 at the adjacent Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex has been demonstrated in the FISC Annex remedial investigation studies to be migrating northwest, away from Parcels 170 and 171. The southernmost detection of volatile compounds in groundwater is about 200 feet north of Parcel 171. The shallow groundwater gradient is north-northwest.

Ref: (a) Removal Action Workplan; (b) IT Corporation, 1999b. *Environmental Baseline Survey/Phase 2B Sampling Draft Final Parcel-specific Data Evaluation Summaries, Zone 16: The Housing Zone* (March 1999); (c) Final Remedial Investigation Report, Fleet and Industrial Supply Center; (d) Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Changes to riparian land, rivers, streams, watercourses and wetlands under state and federal jurisdiction?; or 2) Changes to any water resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that water?]

The proposed institutional controls will not authorize excavation into groundwater or extraction of groundwater. The proposed controls are intended to prevent pollution of surface waters by runoff from contaminated soil that is excavated. No changes to riparian land, rivers, streams, watercourses or wetlands would result from the proposed action. No effects on water resources are anticipated to take place as a result of this action.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4. Plant Life (Workbook; page 20)

Description of Environmental Setting:

The project area consists of paved roadways, residential structures, and landscaped areas. The area provides no substantial habitat features that would attract or sustain wildlife, other than those few highly adaptable common species able to exist in developed areas. Vegetation in the project area consists of lawn grass surrounding the individual buildings and various ornamental trees and shrubs, including acacia (*Acacia* sp.), eucalyptus (*Eucalyptus* sp.), and bottle brush (*Callistemon citrinus*). Numerous Monterey pine (*Pinus radiata*) and California buckeye (*Aesculus californica*) exist on the sites. No coast live oaks (*Quercus agrifolia*) exist on the project site. No endangered or threatened species reside on the project site or are dependent upon the project site.

Ref: Catellus Mixed Use Project Draft EIR

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Any adverse effect to native and non-native plant life?; 2) Effects to rare and unique plant life and ecological communities dependent on plant life?; 3) Any adverse effect to listed threatened and endangered plants?; 4) Effects on habitat in which listed threatened and endangered plants are believed to reside?; 5) Effects on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 6) Effects on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

The proposed institutional controls will not result in disruption of the developed area; therefore no plants will be affected.

Ref: Removal Action Workplan

Findings:

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5. Animal Life (Workbook; page 22)

Description of Environmental Setting:

The project area consists of paved roadways, residential structures, and landscaped areas. The area provides no substantial habitat features that would attract or sustain wildlife, other than those few highly adaptable common species able to exist in developed areas. One Cooper's hawk, a State species of special concern, was observed during a survey of the site in 1999. Other animals are typical of urbanized, landscaped areas. There are no sensitive or endangered species on or adjacent to the site.

Ref: Catellus Mixed Use Project Draft EIR

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Effects on listed threatened or endangered animals?; 2) Effects on habitat in which listed threatened and endangered animals are believed to reside?; 3) Effects on species of animals listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 4) Effects on marine and terrestrial animal species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

The proposed institutional controls will not involve disruption of the developed area. No habitat will be removed. There will be no effect on the Cooper's hawk or its habitat.

Ref: Removal Action Workplan

Findings:

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6. Land Use (Workbook; page 24)

Description of Environmental Setting:

The site, Navy parcels 170 and 171, is covered by approximately 100 two-story structures with a total of 590 multi-family dwelling units which have been vacant since 1997. The current city of Alameda zoning for the site is AG-Government Overlay, though the site is currently proposed for redevelopment for single-family housing under a plan proposed by the Catellus Corporation and currently under review in a Draft Environmental Impact Report.

The surrounding land uses are:

North -- Abandoned military warehouses.

East -- College of Alameda athletic fields, parking, and educational facilities.

South -- Abandoned railroad right-of-way immediately south of Atlantic Boulevard, with multi-family housing and a small commercial structure south of that. The neighborhood to the south contains three schools.

West -- commercial and industrial structures, some of which are occupied, in the boundaries of the former Naval Air Station. Another abandoned railroad right-of-way between the site and Main Street has been acquired by the City of Alameda for use as a landscaped greenbelt park.

Ref: Catellus Mixed Use Project Draft EIR

Analysis of Potential Impacts:

The project as proposed is the implementation of institutional controls which will not alter proposed or existing land use. The proposed remedy to address and control possible releases of PAH from the marsh crust to the surface is a covenant, to restrict specific use of the property (environmental restrictions), between the City of Alameda as the future owner of the property, and the Department of Toxic Substances Control. The restriction involves controls on excavation and management of soil excavated from the subsurface marsh crust layer and brought to the surface through construction or other activities. Pursuant to California Civil Code section 1471(c), DTSC has determined that the covenant is reasonably necessary to protect present or future public health and safety or the environment. DTSC therefore intends that excavation of contaminated soil be restricted. The restrictions shall run with the land, pass with each and every portion of the property, and be enforceable by DTSC. The restrictions shall be incorporated by reference in each and all deeds, leases and subleases of any portion of the property. This restriction is not intended, nor is it likely to restrict, induce, or otherwise affect general land uses, but rather applies to the marsh crust irrespective of any and all future land uses.

No impacts to existing or surrounding land uses or policies are anticipated. The property is currently residential, and is proposed to remain so. Cleanup goals under the proposed remedy are consistent with residential use.

Ref: Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7. Natural Resources (Workbook; page 25)

Description of Environmental Setting:

The site is an urbanized area consisting of multi-family residential units with landscaping surrounding the buildings. The site was formerly marshland/tidal flats, and was filled in the early 1900's in a series of fill events using dredge spoils predominately from the Oakland Estuary.

Ref: Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

No physical changes to the site will result from the adoption of the proposed institutional controls as a remedy; therefore, the proposed remedy will not contribute to any significant depletion of natural resources.

Ref: Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

8. Risk of Upset (Workbook; page 26)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. The units were vacated prior to base closure and remain unoccupied.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Environmental Baseline Survey

Analysis of Potential Impacts:

The marsh crust is anticipated to lie two to fifteen feet below the surface. The contaminants in the marsh crust are not highly soluble. The proposed institutional controls are intended to minimize potential routes of exposure the hazardous constituents in the marsh crust, and will not result in disruption of utilities. Although actions taken in violation of the covenant at the heart of this project could result in release of hazardous substances to the surface environment, such an outcome is considered to be unlikely. No physical change to the site will take place as a result the proposed removal action workplan, therefore, risk of upset is insignificant.

Ref: Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

9. Transportation/Circulation (Workbook; page 29)

Description of Environmental Setting:

Local access to the project site is provided by Atlantic Avenue and Main Street. Transit service consists mainly of AC Transit busses. Bikeways have been developed along Main Street and Atlantic Avenue. Sidewalks exist throughout Parcels 170 and 171 and along Main Street and Atlantic Avenue. The residential units on the site are currently unoccupied and the street system is gated and inaccessible.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

The proposed institutional controls will not require transportation of materials or equipment to or from the site. Existing traffic and circulation patterns will not be affected.

Ref: Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. Public Services (Workbook; page 31)

Description of Environmental Setting:

The project site falls under the jurisdiction of the City of Alameda Police Department which assumed law enforcement responsibility from the Navy on April 30, 1997. The City of Alameda Police Station is located at 1555 Oak Street, roughly 3 miles east of the project site. Currently the project site is not open to the public, and as a result, there is very little crime. Trespassing and vandalism are the main law enforcement problems.

Fire services are provided to the project site by the Alameda Fire Department. Five fire stations are located throughout the City of Alameda; administrative headquarters are located at 1300 Park Street, and a fire prevention office is located at 950 West Mall Square. The project site is located near the City of Alameda No. 2 Fire Station at 635 Pacific Avenue and the City of Alameda No. 5 Fire Station at 950 West Ranger Avenue.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

The proposed institutional controls will not require any fire or police services. The City of Alameda has elected to implement an ordinance controlling excavation into the marsh crust, and this ordinance will be relied upon by DTSC to ensure that the intent of the covenant is met for as long as the City maintains the ordinance in force and effect in such a way that the intent of the covenant is met. The ordinance will require administration by City personnel.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

11. Energy (Workbook; page 32)

Description of Environmental Setting:

Alameda Power and Telecom (AP&T) (formerly the City of Alameda Bureau of Electricity) provides electric power to the project site. The primary natural gas supply for the western end of Alameda is a 12-inch diameter transmission main that crosses the Estuary from Oakland and runs south along Webster Street. An 8-inch diameter high pressure branch line runs west on Atlantic Avenue. Two 4-inch diameter metered connections off this line feed the existing East Housing area distribution system. The California Public Utility Commission has directed that all out-of-compliance conditions in the former Navy distribution system be corrected. The site currently is developed with residences and is unoccupied; it therefore has no current energy usage.

Ref: Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

The proposed institutional controls will not require use of any energy or fuel; hence the project will have no significant impact on energy use.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12. Utilities (Workbook; page 32)

Description of Environmental Setting:

Utilities infrastructure for water, wastewater and natural gas and electric exists at the site, although it is currently unused and may not meet current code requirements. Telephone service to the project site is provided by Pacific Bell. Overhead cable TV service exists at the project site.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Alameda Point Administration, City of Alameda

Analysis of Potential Impacts:

No additional service from utility providers would be required as a result of the adoption of the removal action workplan for parcels 170 and 171. Therefore, no significant impact to utilities is anticipated.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

13. Noise (Workbook; page 32)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. The units were vacated prior to base closure and remain unoccupied.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Environmental Baseline Survey

Analysis of Potential Impacts:

No additional noise would be generated at or from the site by the adoption of the removal action workplan. No impact is anticipated.

Ref: (a) Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

14. Public Health and Safety (Workbook; page 34)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. The units were vacated prior to base closure and remain unoccupied.

A human health risk assessment (HHRA) was conducted during the remedial investigation for sites at the Alameda Naval Air Station that are affected by marsh crust (TetraTech EM Inc., 1999). Consistent with U.S. EPA and DTSC guidelines for conducting HHRA, the risk assessment found that there is no pathway to humans from the PAH in the marsh crust because of its depth. The HHRA determined that workers could be exposed to possible PAH contamination during construction of building foundations and utility work. However, DTSC has concluded that such exposures are unlikely to result in significant risk. The PAH may pose an unacceptable risk to human health and the environment if excavated marsh crust materials are brought to the ground surface and handled in an uncontrolled manner (e.g., if contaminated marsh crust soil is placed at the surface as a result of construction activities, thus creating an exposure pathway).

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Environmental Baseline Survey; (c) Operable Unit 1 Remedial Investigation Report

Analysis of Potential Impacts:

The human health risk assessment conducted for the site concluded there is no risk to human health because no pathway exists for the contamination. The adoption of the removal action workplan will not cause the contamination be exposed. The proposed remedy would be effective in the long term because its implementation would become part of DTSC's ongoing governmental regulatory system. The land-use covenant will be in the chain-of-title, which will put all future owners on notice. This type of recorded covenant has more "permanence" because the institutional control would reduce the probability that future occupants will excavate the marsh crust without taking proper precautions. Should the City of Alameda decide to change or eliminate the excavation ordinance, the covenant would require DTSC to approve any projects involving excavation into the marsh crust.

Ref: (a) Operable Unit 1 Remedial Investigation Report; (b) Removal Action Workplan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

15. Aesthetics (Workbook; page 38)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. The units were vacated prior to base closure and have remain unoccupied since 1997.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Environmental Baseline Survey

Analysis of Potential Impacts:

No physical effects will result from the adoption of the removal action workplan. Therefore, no impacts to the aesthetics of the site will occur.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

16. Cultural/ Paleontological Resources (Workbook; page 39)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. A number of cultural resources surveys for both historical and archaeological resources have been conducted in the last few years for the environmental documentation for transfer and disposal of the site by the Navy. No resources have been identified on the site by these surveys of the site and records searches. Because the site consists of approximately 20 feet of fill, no Paleontological resources are expected to exist at the site.

Ref: PAR Environmental Services, Inc. *An Archaeological Evaluation of the Fleet Industrial Supply Center - Alameda Annex/Facility, and US Navy Alameda Family Housing*, June 1996. As cited in City of Alameda, *Catellus Mixed Use Development Draft Environmental Impact Statement*, December 1999.

Analysis of Potential Impacts:

No impacts to cultural or Paleontological resources would occur as a result of the adoption of the proposed removal action workplan.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

17. Cumulative Effects (Workbook; page 42)

Description of Environmental Setting:

The city of Alameda is currently considering a development proposal on the project site and the adjoining Fleet Industrial Supply Center, Alameda Annex, that would redevelop the area for single family housing.

Ref: (a) Alameda Point Administration, City of Alameda; (b) Catellus Mixed Use Project Draft EIR

Analysis of Potential Impacts:

The cumulative impact of the adoption of the proposed removal action workplan and the proposed development project on the site could result in impacts to human health from exposure to the marsh crust layer during excavation of the site in preparation for construction. These potential impacts would be mitigated by the covenant proposed as part of this removal action workplan which requires approval from DTSC or the City of Alameda for the excavation of soil at the site. The permit would require controls on the management of soil excavated from the subsurface marsh crust layer in order to limit human exposure during construction activity at the site, and would reduce the potential impact to less than significant.

DTSC has conducted CEQA reviews for past site mitigation-related projects which concluded that impacts associated with those projects were insignificant both from an individual and cumulative perspective. The project analysis in this Initial Study also shows impacts to be insignificant when institutional controls are imposed. These controls would restrict any physical disturbance of soils within certain parameters to avoid significant impacts to human health and the environment.

DTSC also examined the Draft Environmental Impact Report for the Catellus Mixed Use Development Project that concluded future impacts associated with development of the subject site would also be insignificant when mitigation measures were imposed, including imposition of the mentioned institutional controls which limit human exposure to hazardous waste. As such, DTSC finds that cumulative impacts from this project when viewed against related past and future projects would be insignificant.

Ref: (a) Removal Action Workplan; (b) Catellus Mixed Use Project Draft Environmental Impact Report; (c) City of Alameda Final Environmental Impact Report for the Reuse of Naval Air Station Alameda and the Fleet and Industrial Supply Center, Alameda Annex and Facility; (d) Negative Declaration for IR Sites 15 and 16 Removal Action; (e) Negative Declaration for Radiological Removal Action at IR Sites 1, 2, 5, and 10

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

18. Population/Housing/Recreation (Workbook; page 43)

Description of Environmental Setting:

Parcels 170 and 171 are developed with multifamily residential units with surrounding landscaping. The units were vacated prior to base closure and remain unoccupied. The area is proposed for residential development in the future. However, this project would be necessary irrespective of proposed future land use, and therefore does not drive future land use of any particular type.

Ref: (a) Catellus Mixed Use Project Draft EIR; (b) Environmental Baseline Survey

Analysis of Potential Impacts:

The adoption of the proposed removal action workplan would have no effect on population, housing or recreation because no physical change would take place as a result of the covenant.

Ref: (a) Removal Action Workplan; (b) Alameda Point Administration, City of Alameda

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

19. Mandatory Findings of Significance (Workbook; page 44)

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. DETERMINATION OF DE MINIMIS

On the basis of this Special Initial Study:

- I find that there is no evidence before the Department that the proposed project will have a potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depend. A NEGATIVE DECLARATION with a DE MINIMIS IMPACT FINDING will be prepared.

VI. DETERMINATION OF SIGNIFICANT EFFECT

On the basis of this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project which would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.
- I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

MARY ROSE CASSA, R.G.
Name of Preparer

HAZARDOUS SUBSTANCES ENGINEERING
Title
GEOLOGIST

Mary Rose Cassa
Signature of Preparer

3/17/00
Date

ATTACHMENT A

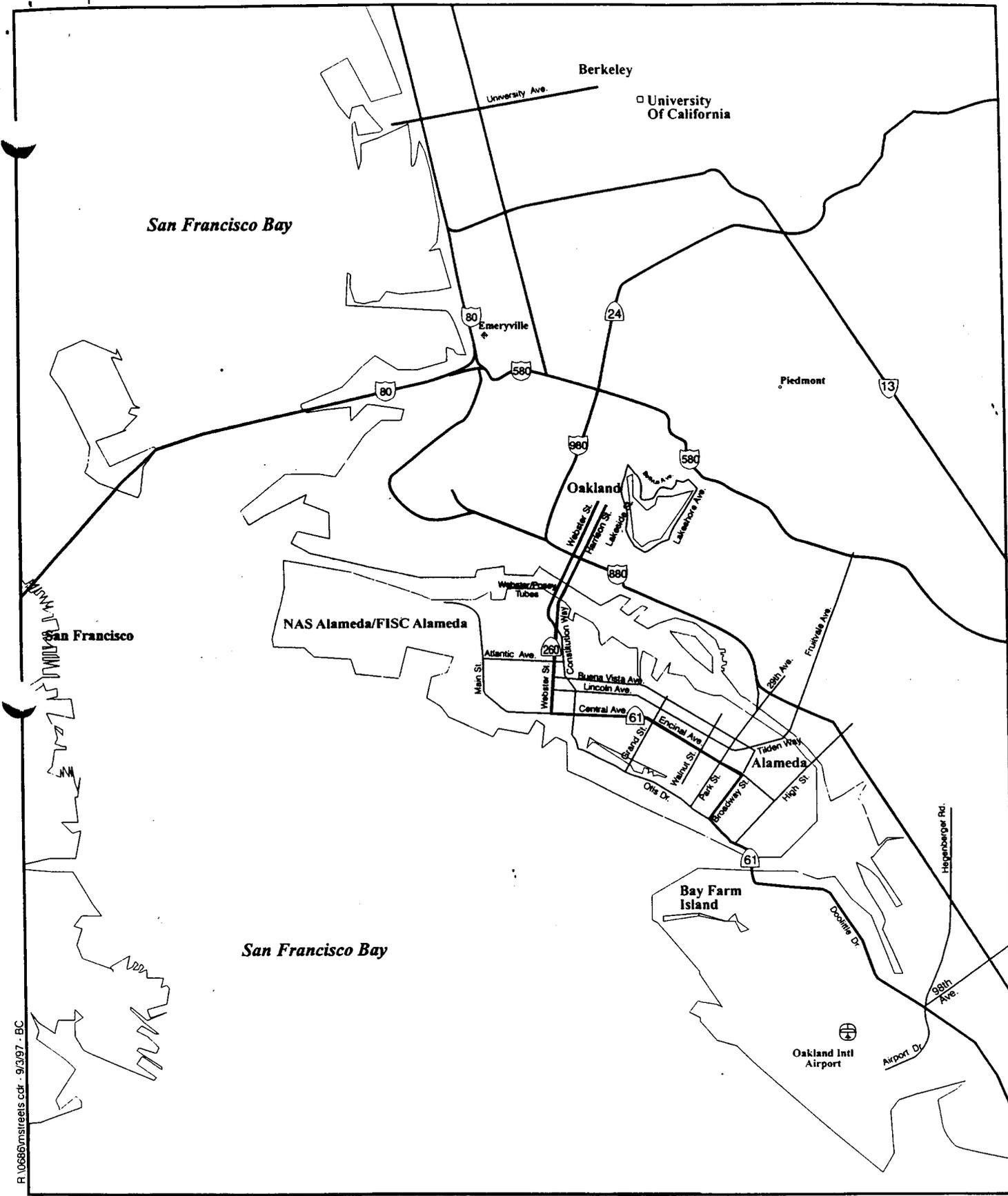
SPECIAL
INITIAL STUDY
REFERENCE LIST
for

Removal Action Workplan for Parcels 170 and 171, Former Alameda Naval Air Station

1. Alameda Point Administration, City of Alameda
2. *Catellus Mixed Use Development Draft Environmental Impact Statement*, December 1999, City of Alameda
3. PAR Environmental Services, Inc.: An archaeological Evaluation of the Fleet Industrial Supply Center - Alameda Annex/Facility, and US Navy Alameda Family Housing, June 1996. As cited in City of Alameda, *Catellus Mixed Use Development Draft Environmental Impact Statement*, December 1999
4. U.S. Naval Facilities Engineering Command, 1988, Master Plan for Navy Supply Center Oakland, CA
5. *Removal Action Workplan for Marsh Crust at the East Housing Area, Alameda Point, Alameda, California*, March, 2000, Department of Toxic Substances Control
6. IT Corporation, 1999a. *Environmental Baseline Survey Comprehensive Guide: History of NAS Alameda and Alameda Point* (March, 1999)
7. IT Corporation, 1999b. *Environmental Baseline Survey/Phase 2B Sampling Draft Final Parcel-specific Data Evaluation Summaries, Zone 16: The Housing Zone* (March 1999).
8. TetraTech EM Inc., 1999. *Operable Unit 1 Remedial Investigation Report* (March, 1999)
9. PRC Environmental Management, Inc., 1996. *Final Remedial Investigation Report, Fleet and Industrial Supply Center, Oakland Alameda Facility/Alameda Annex Site, Alameda, California* (January, 1996)
10. Environmental Resources Management, 1999. *Transmittal of Data Summary Tables, Alameda Point East Housing Area, Alameda California*. Letter to Mr. Steven Edde, July 20, 1999.
11. Lee, C. H., and Praszker, M., 1969. *Bay Mud Developments and Related Structural Foundations in Geologic and Engineering Aspects of San Francisco Bay Fill*, California Division of Mines and Geology Special Report 97, p. 43-85.
2. *Final Environmental Impact Report for the Reuse of Naval Air Station Alameda and the Fleet and Industrial Supply Center, Alameda Annex and Facility*, March 2000, City of Alameda

Cal/EPA Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721
510-540-3767

13. Negative Declaration for IR Sites 15 and 16 Removal Action (DTSC, 1997)
14. Negative Declaration for Radiological Removal Action at IR Sites 1, 2, 5, and 10 (DTSC, 1998)



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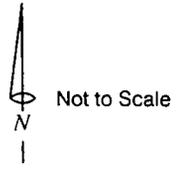


EXHIBIT 1: SITE LOCATION MAP

NAS Alameda/FISC Alameda
 Alameda, California
 Removal Action Workplan for Parcels 170 and 171
 Alameda, Naval Air Station

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CLEARWATER REVIVAL COMPANY
▼▼▼◆◆▼▼▼◆◆▼▼▼◆◆▼▼▼

95-3013-01

April 19, 2000

Mary Rose Cassa
California Environmental Protection Agency
Department of Toxic Substance Control
700 Heinz Avenue, Suite 300
Berkeley, CA 94710

305 Spruce Street
Alameda, CA 94501

(510) 522-2165

FAX (510) 522-8520

email: clearwater@toxicspot.com

Negative Declaration/Removal Action Workplan
East Housing Parcels 170 and 171
Alameda Point Naval Air Station Superfund Site
Alameda, California

Dear Ms. Cassa:

The following comments address the Initial Study, Negative Declaration and Removal Action Workplan for the marsh crust contamination at East Housing, Alameda Naval Air Station Parcels 170 and 171. The proposed marsh crust remedy, a threshold depth map, is similar to the precautions taken over 30 years ago during development of a hazardous waste landfill in Love Canal, New York. These types of remedies do not work.

1. Conclusions of CEQA Studies Inconsistent

The Environmental Impact Report (EIR) for the Catellus Mixed Use Development (LSA Associates, Inc., December 1999) identified the Marsh Crust Ordinance and the Covenant with DTSC as mitigation measures necessary to reduce a significant environmental impact to insignificance. To the contrary DTSC's Initial Study states that the marsh crust contamination has no environmental impacts, and the Negative Declaration proposes no mitigation measures.

DTSC's Initial Study contradicts not only this EIR but also a March 23, 1999, letter from DTSC to the US Navy, wherein the marsh crust is identified as a significant impact if brought to the surface. In the March 23, 1999, letter DTSC wrote:

"Any statement that dismisses the potential for exposure to subsurface contamination that may be raised to the surface during construction activities may lead future property owners and regulatory agency representatives to misunderstand the nature of this very real risk. All statements that dismiss the potential for this risk must be removed from the document."

In fact, DTSC's Removal Action Workplan and Initial Study make statements that dismiss this very real risk and such statements should be removed from these documents. In addition, the covenant and marsh crust ordinance should be identified in CEQA documents as necessary mitigations.

2. Marsh Crust Ordinance Inconsistent with CERCLA Permit Waiver

Under CERCLA Section 121(e) no federal, state, or local permits are required for on-site CERCLA response actions. The Navy's, DTSC's and Alameda's attempt to require a local permit to excavate the marsh crust contamination is therefore unenforceable.

3. Marsh Crust Ordinance Inconsistent with CUPA Program

Under the Covenant, DTSC will step in to approve excavations into the marsh crust if the City of Alameda repeals its marsh crust ordinance. The covenant therefore has the affect of appropriating DTSC's discretionary regulatory authority to the City of Alameda with respect to marsh crust contamination.

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Chapter 6.11 Health and Safety Code Section 25404 et al.) describes the procedures for, and the limits to, delegating DTSC regulatory authority to a Certified Unified Program Agency (CUPA). Has the Secretary of the Environment qualified the City of Alameda as a CUPA? Does state law allow DTSC to delegate their regulatory authority with respect to removal actions to a CUPA?

4. Failure to Characterize the Marsh Crust at East Housing

No evidence of the marsh crust contamination has been found at the subject site. The threshold depth for the marsh crust has been arbitrarily established. No information is available on the fate and transport of groundwater contamination at the site. No evidence is available on landfill gas generation and the potential for explosion hazards caused by decaying hazardous wastes.

The only site specific information referenced by DTSC was the Navy Environmental Baseline Survey which did not test for PAHs, and a July 1999 letter from ERM-West, which reported PAH sample results without certified analytical reports, evaluated risks using average rather the 95 percent confidence limit values, and did not report sample results from a depth consistent with the marsh crust.

In proceeding with a remedy for East Housing, how can DTSC be satisfied with the level of site investigation that has been performed? How can DTSC prepare an Initial Study without the data normally found in a Remedial Investigation Report?

5. Failure to Test Marsh Crust Hypothesis

DTSC claims that the marsh crust is the result of sediment contamination by pre-World War II industries. How do PAH concentrations found in the marsh crust compare to the maximum concentrations of PAHs found in bay sediments?

6. Water Quality Impacts

Within the 700 plus acre marsh crust area that borders San Francisco Bay, have PAHs (total of all PAHs by EPA Method 610) been found in groundwater samples above the water quality control plan limit of 15 µg/L?

7. RAW Remedy Flawed

The Initial Study, Negative Declaration and RAW propose the same type of remedy that was used at Midway Village, in Daly City, California, to address PAH contamination in soils. Residents of this housing project now report chromosome abnormalities in addition to other health affects. The County of San Mateo is discussing relocation of residents and demolition of Midway Village. What has DTSC learned from their mistake at Midway Village that is being applied to East Housing?

8. Piece-meal Review

CEQA decisions frown on piece-meal review of environmental impacts such as this Initial Study and Negative Declaration.

If DTSC is under the opinion that filled marshlands beyond the Naval Air Station contain similar contamination at shallower depths; and, developments on these filled marshlands include elementary schools, day care centers, and residential housing; and, the marsh crust contamination represents a "very real risk" if brought to the surface; why has DTSC excluded this area of the marsh crust from the proposed remedy? Why has DTSC taken no action to notify property owners within the marsh crust boundaries of the potential human health risks?

As of January 2000, East Housing was included within the scope of a Feasibility Study/Remedial Action Plan proposed for the US Navy owned marsh crust. The decision to prepare a separate RAW for Parcels 171 and 172

needlessly increases the burden on the public and regulators to review these documents. A separate RAW also reduces public input to the remedy decision. The RAW delays the Navy's responses to comments it has received from the public on the marsh crust remedy.

A single document should be prepared to address the marsh crust contamination in its entirety. DTSC's piece-meal approval of a RAW based on property lines rather than the extent of contamination demonstrates that DTSC is driven by developers, and not by a duty to protect public health and the environment.

9. Cumulative Impacts

The Initial Study, Negative Declaration and RAW address 60 acres of an over 700 acre hazardous waste site. DTSC has failed to consider the cumulative impacts from such an extensive area of contamination on San Francisco Bay.

10. Environmental Justice

The Marsh Crust Ordinance and East Housing Removal Action Work Plan are an attempt to use a cleanup plan and local laws within an area of the City of Alameda to prevent state and federal environmental standards from being applied. This is a disparate environmental impact not only for the future residents of East Housing, but also on the surrounding community.

Closing

Disposal of hazardous wastes by the US Navy is solely responsible for the observed marsh crust contamination. DTSC should forego any remedy that does not address the entirety of the US Navy's hazardous waste disposal site, and establishes such a low standard of accountability for hazardous waste generators.

Respectively Submitted,



Patrick G. Lynch, P.E.
Civil/Chemical Engineer

Arc Ecology

Peace ♦ ♦ ♦ Environment ♦ ♦ ♦ Economy ♦ ♦ ♦ Society

April 19, 2000

Ms. Mary Rose Cassa, R.G.
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2721

Dear Ms. Cassa:

Please find enclosed, Arc Ecology's technical comments on the Draft Removal Action Workplan and the Negative Declaration for the East Housing Area at Alameda Point. Also included as an attachment, is a letter that Eve Bach of our office wrote in conjunction with Mr. Bill Smith and Mr. Patrick Lynch, which outlined our criticisms of the Alameda Marsh Crust ordinance, and which was submitted to the Mayor and City Council of Alameda earlier this year.

We hope that these comments and the attached letter help the DTSC in its environmental decision-making process for the East Housing area.

If you have any questions regarding this correspondence, please do not hesitate to call me at the Arc office.

Best Regards,



Ken Kloc
Environmental Analyst

p.s. Thanks for sending the ground water data.

**Arc Ecology's Comments on the California DTSC's Draft Removal Action Workplan and Negative Declaration for the East Housing Area (Parcels 170 & 171)
Alameda Point, Alameda, California**

A. Comments on the Draft Removal Action Workplan for Marsh Crust at the East Housing Area, Alameda Point, Alameda, California

1. Section 2.1.1, Marsh Crust Conceptual Model

a. In the first part of Section 2.1.1, the DTSC presents its general Marsh Crust Conceptual Model, which is equivalent to the conceptual model developed by the U.S. Navy. This conceptual model is flawed in at least two ways. First, it is based upon an insufficiency of subsurface soil data. Because of the lack of data, the lateral extent of contaminated soil remains inadequately characterized. The DTSC is thus forced to speculate that a large area in the former Marsh Crust and Subtidal Zone is contaminated, even though there is a reasonable probability that only a portion of this zone may have been affected. For example, in the first paragraph of this Section, the DTSC states without supporting evidence that, "The waste spread over much of the surface of the surrounding marsh..." While the DTSC's theory of contaminant transport through the historical marsh area is not unreasonable, it nonetheless needs to be supported by a more thorough investigation.

Second, in proposing the Marsh crust hypothesis, the DTSC has ignored soil data indicating that, at least in some areas, Marsh crust contaminants can be found closer to the surface than would otherwise be indicated by the depth of the Marsh crust soil layer. For example, shallow and surface soils at Alameda Point IR Site 25 were found to contain high levels of Marsh crust-like contaminants even though the Marsh crust soil layer was not encountered in Site 25 soil samples. In addition, more limited data at the College of Alameda indicates that Marsh crust-like contamination is present in the College area at depths as shallow as 2.5 feet below ground surface (bgs). Had the DTSC considered this information in creating its conceptual model, it would not be able to claim that marsh crust contamination exists largely in a "predictable planar zone" located in the "marsh crust as originally deposited." Had the DTSC considered all the available data, it would then be forced to admit that marsh crust-like contamination may be found in shallow soils, and that more site characterization is necessary in order to fashion a health protective remedy for parcels above the Marsh crust zone, including parcels 170 & 171.

b. In the latter part of Section 2.1.1, the DTSC specifically addresses the Marsh crust problem at parcels 170 and 171, and states that, "there is no set of rational investigation objectives that can be identified that would lead to a conclusive data set. The DTSC therefore believes that it is impractical to further investigate the marsh crust." However, the DTSC provides no justification, statistical or otherwise, for these unusual claims. Arc Ecology maintains that DTSC should have required both the Navy and Catellus, Inc. to obtain deep samples during previous soil investigations at Parcels 170 and 171. In general, we recommend further characterization of all the Marsh Crust and Subtidal Zone parcels. Adequate characterization at the subject parcels would consist of sampling between 2 feet bgs and the depth of the marsh crust soil layer.

c. In the last paragraph of the section, the DTSC states that marsh crust contamination, "has not been detected at depths inconsistent the depositional model." As noted in comment A.1.a, this assertion is incorrect based upon data at IR Site 25 and the College of Alameda, as well as, hot-spot data at the Coast Guard Housing area.

2. Remedial Alternative 2 - Institutional Controls

The DTSC has chosen institutional controls as its preferred alternative removal action. According to the RAW, "the institutional controls would be directly implemented by the City of Alameda pursuant to the Marsh Crust Ordinance..." Arc has previously criticized the Alameda Marsh Crust Ordinance and we now attach, as part of this commentary, a letter from Eve Bach, et. al. to the Mayor and the City Council of Alameda which contains our critique of the ordinance in more detail .

Arc wishes to underscore that the main problems with the institutional controls proposed by the DTSC in the RAW (i.e., the restrictive covenant and the Alameda excavation ordinance) are that the controls:

- Do not achieve sufficient layering of multiple government agencies to implement, monitor, and enforce the provision of the covenant
- Need to include centralized information systems to track the controls
- Do not provide for dependable enforcement mechanisms, especially in the case of individual home owners and renters, who are likely to be unaware or forgetful of the controls, or else may not understand how to follow them correctly
- Do not provide for long-term sources of funding for implementation, monitoring, and enforcement, and for ongoing notification of property users in addition to property owners

We recommend that DTSC revise its institutional controls to be more consistent with the latest available standards and guidance.

3. Appendix B, Figure B-1.

Figure B-1 is included in the Removal Action Workplan as part of the City of Alameda Marsh Crust Ordinance. The figure indicates depths to the "Marsh Crust Threshold" at parcels 170 & 171, and we assume that this figure indicates the depth below which a permit will be required by the ordinance.

The threshold depths shown in Figure B-1 appear to be based solely upon the location of the Marsh crust soil layer. As such, this threshold map suffers from the same two flaws that we discussed in our criticism of the DTSC's marsh crust conceptual model. These flaws make the threshold depths in Figure B-1 insufficiently protective of future public health.

The large majority of soil samples obtained at parcels 170 & 171 were taken in the soil layer between 1 to 2 feet bgs, and there is little information on the PAHs in soil between 2 feet bgs and the marsh crust soil layer. By adopting Figure B-1 in the Removal Action Workplan, the DTSC would allow nonpermitted

excavations deeper than six feet over more than half of the site, and in some cases, would allow nonpermitted excavations as deep as 10 feet bgs. Arc Ecology believes that this decision is not based upon an adequate level of information about potential contamination in these subsurface soils.

We would, once again, point out that soil data at Alameda Point IR Site 25 and other areas indicates that the depth of the Marsh crust soil layer is not a consistently accurate determinant of the depth at which Marsh crust-like contamination will be found.

B. Comments on the Draft Negative Declaration for the Removal Action Workplan for Parcels 170 and 171, former Alameda Naval Air Station

1. Project Description-Background Section of the Negative Declaration, and Pages 1 through 8 of the "Special Initial Study"

Both of these items repeat numerous statements that were made in the Removal Action Workplan (RAW) for the subject parcels. Arc therefore repeats the relevant comments here. The following table indicates the specific statement in the Negative Declaration and Special Initial Study, and refers the reader to our original RAW comment.

Statement in the Negative Declaration	RAW Comment relevant to the Negative Declaration
1. "the waste spread over much of the surface of the surrounding marsh..."	See RAW Comment A.1.a
2. "the marsh crust is believed to exist throughout the area in a reasonably predictable, planar zone..."	See RAW Comment A.1.a
3. "DTSC believes that there is no set of rational investigation objectives that can be identified which would lead to a conclusive data set."	See RAW Comment A.1.b
4. "since marsh crust has not been detected at depths inconsistent with the depositional model, DTSC considers the likelihood of substantial marsh crust or subtidal soil deposits at depths different from those of the original marsh crust or subtidal surface to be minimal"	See RAW Comment A.1.a and A.1.c

2. Findings of Significant Effect on the Environment

a. Arc disagrees with the DTSC's finding of no significant effect on the environment, and we maintain that potentially significant impacts could result from implementation of the RAW at the subject parcels. As we have discussed in our RAW comments, the DTSC has based its findings upon an insufficient level

of site characterization, and has also developed a conceptual model for the marsh crust zone that is inadequate for health protective decision-making at the site.

As we have already pointed out, uncharacterized deep soils above the marsh crust threshold depth may contain unacceptable levels of PAH contamination. However, with the implementation of the RAW, the DTSC plans to allow nonpermitted excavation of these soils. Uncontrolled excavation of potentially contaminated soils could produce significant impacts to public health and safety, surface water, air, plant life, and animal life.

Arc therefore recommends further characterization at both the subject parcels, as well as, throughout the marsh crust and subtidal zones, in order to fill the current data gaps and to refine the marsh crust hypothesis.

b. The DTSC has also failed to completely analyze the potential impact to public services resulting from implementation of the RAW. For example, although DTSC has accepted the Alameda City excavation ordinance as an important component of the RAW, it has not analyzed the City's capacity to take on the environmental protection responsibilities entailed in the ordinance. Arc questions whether the City of Alameda has the capacity to successfully carry out a program of institutional controls at the subject parcels. For example, is the City of Alameda part of the State's "Certified Unified Program"?

3. Mitigation Measures

Consistent with our criticisms of the RAW, we also disagree with the DTSC's decision to forgo mitigation measures in implementing the RAW. Neither the restrictive covenant nor the City's excavation ordinance provide for a full set of institutional control mechanisms that would insure no significant environmental effects at the site well into the future. For example, the RAW does not provide any mechanism for ongoing notification to parcel occupants, regarding the land-use controls stipulated in the covenant and the ordinance. In this particular instance, Arc recommends the use of signage and yearly notification letters as an appropriate mitigation. We have also attached, as part of our comments, a more extensive discussion of the deficiencies in the excavation ordinance, which includes a section on the development of effective institutional controls (see: Letter from Eve Bach, et. al. to the Mayor and City Council of Alameda).

**Attachment to Arc Ecology's Comments on the California DTSC's Draft Removal Action
Workplan and Negative Declaration for the East Housing Area (Parcels 170 & 171) , Alameda
Point, Alameda, California**

**Letter from Eve Bach, Bill Smith, and Patrick Lynch
to the Mayor and City Council of Alameda
February 15, 2000**

February 15, 2000

To: Mayor and Members of the City Council

From Eve Bach Arc Ecology
 Dr. Bill Smith Sierra Club
 Patrick Lynch Clearwater Revival Company

RE: Marsh Crust Excavation Ordinance

SUMMARY

Public comments at your meeting of January 18 pointed out that the Marsh Crust Excavation Ordinance suffers from two types of problems: the Ordinance is too sweeping and strict, and at the same time it is too lax and fails to protect human health and the environment.

It will probably surprise you to know that we agree with both positions. We ask you to reconsider your support for the second reading of the Ordinance.

THE NAVY'S THEORY OF MARSH CRUST CONTAMINATION

As you know, the Marsh Crust is a former wetland that was used as a dump before it was acquired and filled by the Navy. The Navy's theory is that current contamination problems (primarily polyaromatic hydrocarbons, including cancer-causing benzo(a)pyrene) were caused by wastes deposited in the marsh by the Pacific Coast Oil Works plant and two gasification plants on the Oakland side of the Estuary. (See Map 1) If the Navy's theory is correct, it would mean that the property had been contaminated when it was under City, not Navy control.

The Navy's theory is not an unreasonable starting point for an investigation of the site. But like all theories, it needs to be verified or modified by factual evidence. The normal way to test this theory would be to sample soil at the depth of the old marsh, starting at the suspected source of the problem, continuing outwards to determine how far and in what directions the contamination had migrated. If the contamination levels were consistently lower in samples taken further away from the suspected source, the Navy's theory would be validated.

Unfortunately the NAS and FISC cleanup programs have not attempted to verify the Navy's theory. There has been little deep sampling within the Marsh Crust area, and none whatsoever at East Housing. Cleanup remedies proposed so far are based on the assumption that the Navy's theory is valid, without any confirming evidence. The cleanup remedy that has been proposed for East Housing and FISC is a prohibition against digging deeper than 5 feet on the former bases (except for the areas in federal ownership) without a City permit. The prohibition would be delivered as a covenant attached to the property deed; the Ordinance establishes the program that would issue excavation permits.

THE MARSH CRUST EXCAVATION ORDINANCE IS TOO SWEEPING AND DRACONIAN.

The restrictions on digging that will apply to future property owners (including East Housing homeowners) are based on the *assumption* that all of the marsh crust and subtidal areas are

contaminated. The key word is "assumption." Since the Navy's cleanup program that was supposed to investigate contamination on the bases never took deep samples at East Housing or on most of the FISC, there is no evidence that the marsh crust contamination has spread to those locations.

Even though there is no evidence that the entire marsh crust is contaminated, future property owners will be burdened with very expensive requirements if they decide to dig deeper than five feet. Homeowners and businesses will be required to

- sample and test the soil or assume soil is hazardous;
- hire a registered engineer or geologist to develop a construction site management plan and oversee compliance;
- hire a certified industrial hygienist to develop a health and safety plan
- potentially put up a performance bond
- comply with all laws and regulations pertaining to hazardous wastes, including disposal at a toxic waste dump site.

IF CONTAMINATION IS LESS THAN ASSUMED, THE CITY WILL LOSE AND THE DEVELOPER WILL GAIN.

Theoretically the City's Ordinance will shift the responsibility and costs of soil sampling and testing from the Navy to the future owners: to the City (who will excavate the site to install new infrastructure), to developers (who will excavate during construction), and to the future homeowners and businesses that Alameda is trying to attract to the former bases.

In reality, however, by the time homeowners and businesses purchase Marsh Crust properties from the developer, more information about the extent of contamination will be available. The City will do extensive excavation to install new infrastructure before construction, and will be obligated by the Ordinance to test the soil. It is likely that the prices that the homeowner and business pay will incorporate information provided by the tests about the property's environmental condition. A parcel that is contaminated will cost less than one that turns out, after its soil has been tested, to be clean.

It is also likely that developers will be protected from unanticipated costs, because the price they pay to the City will be based on the assumption that the property is contaminated. The City intends to acquire base properties and immediately reconvey them to the developer. It is predictable that the price the developer will pay will reflect a worst case assumption; that is, the price will incorporate the assumption that the entire property is contaminated. The price the developer pays will discount the maximum costs of complying with the excavation restrictions.

Ironically, the City stands to lose substantially if the property turns out to be less contaminated than assumed. By federal law, the City will acquire base properties at no cost, whether they are contaminated or clean. It appears that the City will negotiate a sale price before it is known to what extent this assumption is valid. **If the property is cleaner than assumed, the City will have sold the property to the developer for less than it is actually worth.**

THE MARSH CRUST ORDINANCE IS NOT STRICT ENOUGH; IT DOES NOT PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

For areas within the Marsh Crust that actually *are* contaminated, the Ordinance does not provide sufficient protection. When the City Council adopted the Ordinance on first reading, a map of threshold depths had not yet been prepared. Now a map has been proposed that *assumes* that all contamination is deeper than five feet; i.e., that all soil down to five feet is clean.

If the land fill in the marsh crush had never been disturbed over the last eighty years, this assumption might be reasonable. However, that is not the case. In the past, utility lines have been laid; construction and demolitions have occurred, with likely regrading of the site. Without sampling it is not possible to know locations where contamination that was originally at the bottom of the fill has been brought closer to the surface than five feet. Estuary Park is an example of one site where contamination was found at surface levels (and ignored until citizen complaints forced fencing of the area).

The Ordinance and the Covenant are also too lax for areas of the site where there actually is contamination because they do not meet emerging standards for institutional controls. Alameda recently had a study prepared by Ellen Garber of Shute, Mihaly & Weinberger, that concluded that institutional controls (of which the Covenant and Ordinance is an example)

- (a) should involve layers of multiple government agencies to implement, monitor, and enforce the provisions;
- (b) need centralized information systems;
- (c) require dependable enforcement mechanisms; and
- (d) long term sources of funding for mplementation, monitoring, and enforcement.

Alameda's Ordinance does not measure up to these recommended criteria:

- (a) **Layering** - For all practical purposes, the Covenant-Ordinance scheme that Alameda intends to use relies almost exclusively on the City of Alameda for implementation, monitoring, and enforcement. A DTSC official agrees with our assessment that the State *delegates* implementation of the restrictions to the City through the Covenant, rather than layering City efforts as a supplement to State efforts.
- (b) **Information systems** - There is no requirement to establish an information system in the Ordinance. When the Ordinance was presented for first reading, there was no recommendation or notice by the staff that the additional expense of such a system will be incurred to implement the Ordinance
- (c) **Dependable enforcement mechanisms** - Enforcement of the Ordinance relies on an infraction process that trivializes violations. There is no provision in the Ordinance for stop work orders, or declaring a public health hazard when violations occur. There is no provision for city officials to gain entry to a property where a violation is suspected.
- (d) **Long term funding** - The Ordinance provides for a permit application fee. In California, the fee can only apply to the costs associated with the individual permit.

There is no provision for monitoring and enforcement, or for public education about the permit requirements.

TIMING OF THE ORDINANCE

When the Marsh Crust Excavation Ordinance came before you for first reading, the Council and the public were told that DTSC was urging the City to adopt this Ordinance immediately. In a meeting with DTSC, we learned that they are puzzled why the City is in such a hurry to adopt this Ordinance now since the Covenant is not yet in final form.

It was clear from the Council's January 18th discussion that the Council does not fully grasp the content or long term implications for the City of adopting this Ordinance. That is not surprising since the topic of institutional controls is new, controversial, and technical. Nonetheless, questions and concerns raised by the public need to be addressed with substantive, accurate responses rather than dismissed as inconvenient annoyances.

The Council would do well to delay the second reading until their questions and the public's concerns have been fully explored.

ENVIRONMENT REVIEW

The City's asserts that this Ordinance is not a project under CEQA because it is certain that adoption of the permitting program "will not involve or require any physical activities other than optional testing of excavated materials and, ...because there is no possibility that the enactment of the ordinance may have a significant effect on the environment."

This assumption is inconsistent with the facts.

- First, the Ordinance permits excavation above the five foot threshold depth even though soil mixing from previous disturbance of the Marsh Crust fill could have caused contamination at a depth less than five feet.
- Second, the Ordinance establishes a program with the authority to make ministerial decisions to issue excavation permits. Council approval of this program in effect approves future permits. No subsequent opportunities will exist for the City to exercise discretion in its review of specific permit applications. There will be no opportunities for public review, even if a future homeowner is concerned about an adjacent neighbor's plans to excavate sequestered hazardous wastes.

Subjecting this Ordinance to environmental review would provide the public dialog that could cure its numerous flaws.

CONCLUSION

We strongly recommend that the Council table the second reading of this Ordinance. Council members need to consider the views of the public, including those willing to share their expertise about institutional controls. The Restoration Advisory Board is the only group to review this Ordinance prior to its appearance on the Council agenda. They have expressed serious reservations about the Ordinance. An Ordinance that has been subjected to public scrutiny will better serve the City's financial as well as environmental interests.

**RESPONSE TO COMMENTS ON DRAFT NEGATIVE DECLARATION AND
DRAFT REMOVAL ACTION WORKPLAN FOR PARCELS 170 AND 171 (EAST HOUSING),
FORMER ALAMEDA NAVAL AIR STATION (ALAMEDA POINT), ALAMEDA, CALIFORNIA**

Comments were received from Arc Ecology (AE) and Clearwater Revival Company (CRC). The specific comments are referenced with each response.

Marsh Crust Characterization

Lack of data; insufficient investigation (AE-A.1a; AE-A.1.b; AE-B.1.; CRC4; CRC5)
DTSC believes that further characterization would not reduce the extent of the institutional control remedy sufficiently to justify the effort. DTSC agrees that there is a reasonable probability that only a portion of the area within the conceptual model boundary of the marsh crust is actually contaminated. However, the precise locations of marsh crust areas not affected by contamination cannot be identified in any reasonable investigation scenario adequately to allow for reduction of the restriction contained in the proposed remedy. In the conceptual model, the marsh crust has a finite edge that can be found with sufficient data, but additional data within the marsh crust area would not provide sufficient evidence of lack of marsh crust in specific places to warrant limiting the scope of the restrictions for the interior portion of the marsh crust at this time.

Based on the conceptual model for the deposition of the marsh crust, the contamination at Parcels 170 and 171 and much of the FISC Annex and former Alameda Naval Air Station pre-dates Navy presence at Alameda Point. Nevertheless, the Navy as landowner has accepted responsibility for evaluating and proposing necessary remedies for the contamination. DTSC will continue to oversee the Navy's remediation of marsh crust contamination at the FISC Annex and the remainder of the Alameda Naval Air Station to ensure the nature and extent are adequately characterized and that appropriate standards for protection of public health and the environment are met.

DTSC does not agree that Catellus or any agent other than the Navy is required to carry out investigations of Navy property. To the extent that information and data have been generated by other agents, and only to the extent that such information and data are determined to be properly applicable to the decision before DTSC, such information may be used.

DTSC does not agree that the threshold depth for marsh crust has been arbitrarily established. Rather, that depth is based on data presented or cited in the Draft Removal Action Workplan. Potential groundwater contamination has been evaluated using information regarding gradient, and using data obtained by Catellus. Soil gas surveys in areas known to have highly contaminated marsh crust at depth have not yielded any indication of potential hazards from decaying organic matter; therefore, it is not expected that such hazards would exist at Parcels 170 and 171.

RESPONSE TO COMMENTS - ALAMEDA POINT PARCELS 170 AND 171

DTSC's evaluation of PAH data at Parcels 170 and 171 did not rely solely on risk calculations. Measured concentrations at each sample location were evaluated. Screening-level data was deemed appropriate for determining that potential unacceptable risks do not exist. DTSC believes that the data present a rational basis for the decision.

Comparison of PAH concentrations found in marsh crust to those found in San Francisco Bay sediments are not relevant. DTSC's presumption that the marsh crust contamination is associated with industrial contamination in Bay sediments is merely informational. The decision rests on DTSC's analysis of the presence and present location of the marsh crust.

Contamination in soil above the marsh crust (AE-A.1.a; AE-A.1.c; AE-B.1)

In the conceptual model, the marsh crust is a discrete depositional layer of a unique and definable soil type. In the model, some areas within this definable layer are contaminated. The processes that resulted in the marsh crust layer, and the processes that resulted in contamination in some regions of the marsh crust, are distinct from processes that resulted in the presence of other soil layers and processes that may have resulted in contamination of those other soil layers. Because the marsh crust layer, with its associated contamination, is unique and independent in extent, location, and deposition, DTSC believes that evaluation of a remedy addressing only marsh crust is warranted.

DTSC agrees that data indicate PAH contamination may be present throughout the layer soil column and distinct from contamination associated with marsh crust. Studies conducted at the College of Alameda and IR Site 25 at Alameda Point are not relevant to Parcels 170 and 171. DTSC evaluated data for Parcels 170 and 171 which were generated by the Navy and by Catellus and concluded that the data, (including data which were obtained for purposes other than our decision making) were sufficient for screening purposes. DTSC further concluded, based on these data, that no further investigation or remediation is necessary at Parcels 170 and 171 for purposes other than marsh crust.

Threshold depths (AE-A.3)

The proposed removal action is not intended to satisfy cleanup requirements for marsh crust outside of Parcels 170 and 171. The map that is part of the ordinance addresses a larger area than depicted for the remedy under consideration here. DTSC relied on visual observation of subsurface cores from Parcels 170 and 171 to assess the depth to the base of fill (where marsh crust would be expected to occur). Data from areas other than Parcels 170 and 171 at Alameda Point and the FISC Annex indicate that elevated concentrations of PAH within the fill are associated with elevated concentrations near the surface. DTSC believes adequate characterization was completed at Parcels 170 and 171.

RESPONSE TO COMMENTS - ALAMEDA POINT PARCELS 170 AND 171

The commenter is correct in observing that approvals are not required for excavation to depths where marsh crust may not be encountered. Because DTSC has determined that contamination is unlikely to exist at Parcels 170 and 171 anywhere other than the marsh crust, DTSC has determined that additional controls are not necessary.

PAH in Groundwater (CRC6)

Occurrences of PAH in groundwater at locations outside Parcels 170 and 171 that exceed water quality control plan limits are not relevant at Parcels 170 and 171. Analytical results from Parcels 170 and 171 indicate there are no exceedences.

Institutional Controls as the Preferred Alternative (AE-A.2; CRC7)

The land use covenant is the enforcement mechanism for the proposed remedy. DTSC is using available local government action to buttress the underlying remedy. DTSC may not compel the City to adopt or enforce any ordinance, including the one regulating excursion into the marsh crust. DTSC is, therefore, not relying on the City ordinance as a means to enforce the remedy that will ensure that the controls remain in force and in effect, should the City rescind its ordinance or amend it in a manner that is inconsistent with the remedy. Yearly review of City-approved projects is sufficient, as long as the ordinance is in effect.

Pursuant to Assembly Bill 871, which became effective on January 1, 1999, DTSC is required to maintain a list of all land use restrictions recorded pursuant to Health and Safety Code sections 25200, 25200.10, 25202.5, 25222.1, 25229, 25230, 25355.5, and 25398.7. At a minimum, this list must provide the street address, or if a street address is not available, an equivalent description of location for a rural location or the latitude and longitude of each property. DTSC is also required to update the list as new land use restrictions are recorded, and make the list available to the public, upon request, and place the list on the DTSC Internet website. DTSC is evaluating our system for tracking the effectiveness of institutional controls, but this evaluation should not delay such remedies, including the one before us. Alternatives to institutional controls, such as excavation of marsh crust, are infeasible. The contaminated layer at depth cannot be removed without incurring onerous and unnecessary cost and disruption to the community. The only other alternative is complete prohibition of any residential use.

The land-use covenant will be recorded and will run with the land. The restrictions must be incorporated into all subsequent deeds and leases. DTSC does not agree that comparison to Midway Village is relevant. At Midway Village high levels of PAH contamination were found at the surface and remediated; investigations at Alameda Point Parcels 170 and 171 have indicated only the possibility of contamination at depth. The available evidence indicates that all exposure pathways for the marsh crust are incomplete (hence, no unacceptable risk to human

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health and the environment), with the exception of excavation or intrusive subsurface activities.

Finding of No Significant Effect (AE-B.2)

DTSC believes that the decision with regard to marsh crust is protective with a significant margin of safety, including that it applies across the whole site and requires testing of soil to demonstrate that it is clean

Mitigation Measures (AE-B.3)

Notification is included in the proposed land-use covenant. Notification is an integral part of the remedy, and is not a mitigation measure, because it is necessary to protect public health and the environment.

Relationship to Other CEQA Studies (CRC1)

The City's EIR concerns a proposed development project (the Catellus Mixed Use Development) which, should the project proceed without controls on excavation into the marsh crust, could pose a threat to public health and the environment. The project evaluated in DTSC's negative declaration is a remedy for the marsh crust. DTSC has determined, based on available evidence, that the restrictive covenant remedy will have no significant effects on the environment. DTSC commented in a March 23, 2000 letter to the Navy that the Navy's position that no remedy was required for marsh crust was untenable. Our decision to implement the proposed remedy is based on our determination that a remedy is required. DTSC does not believe that the Draft Removal Action Workplan or the Draft Negative Declaration dismisses risks posed by marsh crust, but rather addresses those risks directly.

Marsh Crust Ordinance and CERCLA Permit Waiver (CRC2)

The proposed remedy does not involve a local permit to remediate marsh crust soils. DTSC is using available local government action to buttress the underlying remedy. DTSC may not compel the City to adopt or enforce any ordinance, including the one regulating intrusion into the marsh crust.

Marsh Crust Ordinance and CUPA Program (CRC3)

The City of Alameda is not a CUPA, and even if it were, it is not enacting the Marsh Crust Ordinance in its role as a CUPA. The Ordinance is not a delegation of authority from DTSC to the City. The City is enacting the Ordinance pursuant to its constitutional municipal powers.

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CUPAs already have authority to issue orders under HSC section 25187 to require removal and remedial action necessary to address imminent and substantial endangerment. If there is no imminent and substantial endangerment, HSC section 25404.1 prohibits a CUPA from issuing a clean-up order unless DTSC has determined the CUPA is qualified pursuant to regulations. Those regulations have not been promulgated, and thus no CUPAs have been deemed qualified. HSC section 25404 also prohibits CUPAs from issuing removal and remedial action orders for many types of sites that are already subject to clean-up actions under the jurisdiction of other agencies such as DTSC and/or regional water quality control boards.

Coherent Review (CRC8)

While DTSC generally agrees that separate CEQA documents are not desirable, it is also important to provide timely opportunities for public comment, especially on controversial issues. This determination for Parcels 170 and 171 clearly identifies the intersection between DTSC's duty to protect human health and the environment and the community's stated need for reuse. In an effort to facilitate reuse, this determination can be accomplished separately from determinations regarding marsh crust in areas of Alameda Point and the FISC Annex other than Parcels 170 and 171, while still fulfilling DTSC's obligations under CEQA to analyze significant effects on the environment from the proposed remedy. As to the issue of potential contaminated Marsh Crust underlying adjacent non-Navy property, DTSC will consider such contamination in the future.

Cumulative Impacts (CRC9)

The project site is not adjacent to San Francisco Bay, and contaminant fate and transport studies do not indicate the potential for adverse impacts to the Bay. Therefore, DTSC does not believe the proposed remedy poses any cumulative impacts to San Francisco Bay.

Federal Environmental Justice Policy (CRC10)

State law (California Health and Safety Code including the National Contingency Plan, California Civil Code, and applicable regulations), are being applied at this site. Comments regarding implementation of federal law should be addressed to the Navy.