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Engineering Command
To: Distribution

Subj: TRANSMITTAL OF THE ADMINISTRATIVE MEMORANDUM, CHANGES TO
REMOVAL ACTION AT SITE 15, NAVAL AIR STATION (NAS), ALAMEDA, CA

Encl: (1) Administrative Memorandum, Changes to Removal Action at Site 15,
NAS Alameda

1. Enclosure (1) is provided for your record. A public notice to address the changes to the removal action at Site 15 will appear on Alameda Time Star and Oakland Tribune on 31 October 1995.
2. If you have any questions regarding this matter, I can be reached at (415) 244-2526.

Original signed by:

DENNIS WONG
By direction of
the Commanding Officer

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**ADMINISTRATIVE MEMORANDUM
CHANGES TO REMOVAL ACTION AT SITE 15
NAVAL AIR STATION ALAMEDA**

25 October 1995

ENCLOSURE (1)

**ADMINISTRATIVE MEMORANDUM
CHANGES TO REMOVAL ACTION AT SITE 15
NAVAL AIR STATION ALAMEDA**

INTRODUCTION

The U.S. Navy, as the lead response agency, is conducting a removal action in cooperation with the California Department of Toxic Substances Control (DTSC), at Naval Air Station (NAS) Alameda, Site 15, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A CERCLA removal is a cleanup activity that addresses immediate threats to human health, welfare and the environment. The Navy prepared several documents to support its removal activities at Site 15, and the DTSC, as lead regulatory agency, provided concurrence on these documents. These documents were prepared to meet the requirements of the National Oil and Hazardous Substances Pollution Contingency Plan, Section 300.415. They include:

- An engineering evaluation/cost analysis to evaluate the alternatives and costs for treatment and disposal of soils at Site 15
- An action memorandum to document the activities to be performed during the removal

Since the removal activities began, several unanticipated events have occurred. As a result, the Navy will implement some additional activities that were not described in the action memorandum. The purpose of this administrative memorandum is to record in the administrative record the changes in the removal activities to include interim storage of soil excavated from Site 15. This administrative memorandum explains the need for this change and describes the soil storage area and operation.

This administrative memorandum is part of the administrative record for Site 15. Copies of the administrative record documents are on file and available for public review at the following location:

Alameda Public Library
Main Branch
2264 Santa Clara Avenue
Alameda, CA 94501
Phone: 510/748-4661

Hours: Call for current hours

An additional library exists at:

Environmental Information Repository Room, 2nd Floor
Building 1
Naval Air Station Alameda
Alameda, CA 94501-5000
Phone: 510/263-3724 Hours: Call for current hours

The removal activities for Site 15 included excavation of soils impacted by lead and polychlorinated biphenyls (PCB), followed by treatment and backfill of the soils on site. The on-site treatment consisted of an innovative technology for soil washing that had been demonstrated at bench scale as part of the U.S. Environmental Protection Agency's Superfund Innovative Technology Evaluation (SITE) program. These planned activities were described in the action memorandum, which was signed on December 14, 1994.

The Navy began the removal action in early 1995 with a scheduled completion date in July. However, unanticipated site conditions and delays experienced during excavation and preliminary treatment stages have created a need to relocate the soil for storage and treatment. It is necessary to clear Site 15 for an Army Corps of Engineers' (ACOE) project to lower and enlarge an existing sewer main which is located within the site boundaries. The use of a Temporary Storage and Treatment Area (TSTA) will ensure cost effective and successful treatment of contaminated soils from Site 15 while remaining protective of human health and the environment.

SUMMARY OF SITE 15 REMOVAL ACTIVITIES

Site 15 is located at the west end of Alameda Island, in the northern portion of NAS Alameda, north of Runway 7-25 and Perimeter Road and approximately 250 feet south of the Oakland Inner Harbor, as shown on Figure 1. In 1994, this site consisted of Building 283, Building 301, the concrete foundation of former Building 389, and the associated grounds of all three buildings. Buildings 283 and 301 were used for storage of electrical equipment, oil-filled electrical transformers, and old, unused machinery. Before Building 389 was demolished, it was used to store electrical transformers.

A removal site evaluation conducted prior to the removal action concluded that surface soils at Site 15 were impacted by lead and PCBs at depths ranging from the ground surface to 2 feet below ground surface. The Navy completed an engineering evaluation/cost analysis on August

22, 1994, which established the goals for the removal cleanup activities, evaluated various alternatives for removing, treating, and disposing of the impacted surface soils, and identified the Navy's preferred alternative. The engineering evaluation/cost analysis was made available to the public during a 30-day comment period, and the project was discussed at various meetings of the Restoration Advisory Board for NAS Alameda. The Navy completed an action memorandum on December 14, 1994, that documented the decision to remove and treat the contaminated soils at Site 15.

The action memorandum selected the following activities for Site 15:

- Excavation of soils with concentrations of lead and PCBs exceeding cleanup levels
- On-site soil washing with the innovative technology developed under EPA's SITE program
- On-site disposal of treated soils

Excavation and treatment of the soils started on June 9, 1995. The Navy encountered unanticipated conditions during soil washing, making it impossible to complete treatment of all the soils before the ACOE sewer relocation project needed the site. Therefore, the excavated soils must be relocated and stored while a treatment system is implemented near the TSTA.

DESCRIPTION OF SOIL STORAGE ACTIVITIES

The Navy will construct and operate a TSTA that will contain approximately 5,000 cubic yards of soil excavated from Site 15. This storage area will be maintained in compliance with all applicable or relevant and appropriate requirements (ARAR), to the extent practicable, as required by CERCLA. The TSTA will be located in an area near Site 15, as shown on Figure 1. This area was formerly occupied by several buildings that were demolished in 1995. The area was used for general industrial activities, including operations by the Naval Construction Battalion and the Alameda Naval Aviation Depot (NADEP). An environmental baseline survey has been conducted at the proposed storage location as part of base closure activities. The Navy performed several maintenance activities in 1995 to remove visual surface stains and accumulations of sand blast grit. There are indications that areas of the proposed soil storage site may be impacted by PCBs, lead, and petroleum hydrocarbons, including motor oil.

Figure 2 shows the site layout of the TSTA. The TSTA will consist of a bermed containment unit, lined and covered with liner material, with a sump and temporary tank for collection of any water runoff, in the unlikely event the cover liner might fail (accidentally ripped, torn or blown off). The bermed containment unit will be approximately 17,000 square feet in area, with a maximum design capacity of 7,000 cubic yards of soil. The base of the containment unit will consist of perimeter berms constructed from hay bales or similar material, with the entire containment unit covered with 2 layers of synthetic liner material, as shown on Figure 3. After the soil has been placed within the berms, it will be covered with the same type of liner and weighted down with sand bags within the bermed perimeter. An impermeable landfill cover will then be placed over the entire unit, anchored along the outside perimeter of the berm.

The interior of the containment unit will have perimeter drainage trenches filled with pea gravel and covered with woven geotextile material. The drainage trenches will be located just inside the straw bales and will be sloped toward the sump (Figure 3). The interior of the area will be graded to create a crown in the center approximately one foot above existing grade. The crown will be sloped to the perimeter drainage trenches in all directions. This will promote positive drainage toward the sump. The sump will be constructed at that corner of the containment unit. An ancillary tank will be located nearby to provide temporary storage of any water runoff.

Soil will be transported from Site 15 to the TSTA using dump trucks or similar transport vehicles. Since all transportation will occur within the boundaries of NAS Alameda, manifests and other shipping documents are not required. A front end loader at Site 15 will place soil into transport vehicles. All vehicles will be decontaminated before exiting Site 15. An unloading area will be provided at the TSTA, where soils will be deposited into the bermed area. A front end loader at the TSTA will stockpile the soils. All equipment operated within Site 15 and the TSTA will be decontaminated after operations have been completed.

The impermeable landfill cover will be installed in such a way as to shed rain water off the area without allowing the water runoff to enter the bermed area. Any rain water that might enter under the stockpile cover (e.g. blown in under unusually high wind conditions) will drain to the perimeter trenches and be collected in the sump at the perimeter of the containment unit. The water will be pumped from the sump into the temporary tank. Inspections will ensure that the stockpile coverings are secure and impermeable so as to prevent rain and storm water from contacting the stockpiled soil. If inspections indicate that the cover has shifted or developed a

hole or tear, then the runoff water will be held in the temporary tank until it is tested and approved for discharge or treatment.

After the Navy has implemented a treatment system for the Site 15 soils, all soil will be removed from the TSTA for treatment. When these activities have been completed, the soil storage area will be closed. Closure of the area will include removal of all soils, decontamination and removal of all ancillary equipment (such as tanks, loaders, pumps, and hoses), and removal and disposal of the liners and berm material. The site will be restored to the same condition as before construction of the soil storage area. The liners and berm material will be characterized according to waste management regulations and disposed of at an appropriate off-site facility.

The TSTA will be inspected to ensure that it is constructed, operated, and closed in a manner which minimizes the potential releases of hazardous waste to the environment. A preconstruction inspection will document the physical conditions at the site prior to placement of the berms, stockpile, cover, and ancillary equipment. Inspections during construction of the soil storage area will ensure that design specifications are met and that the liner and berms are properly placed and maintained. During operation of the TSTA, weekday inspections will be conducted to assess and document the condition of the:

- Berms, to ensure that berms retain structural integrity and are not impacted by operation of loading equipment
- Water runoff collection system, including sumps, pumps, hoses, and tanks, to ensure that excess water is not accumulating in the containment unit and that water is being transferred to tanks and discharged
- Ground surface areas surrounding the TSTA, including loading and unloading areas, to ensure that impacted soil is not present outside the containment unit

Once the project has been completed, inspections during closure of the TSTA will ensure that all soil is removed from the containment unit and ancillary equipment. A final inspection will be made of the TSTA after the containment unit is removed to ensure that final closure has been accomplished and that the site has been restored to the same condition observed during the preconstruction inspection.

The TSTA will be operated and maintained in accordance with all applicable or relevant and appropriate requirements (ARAR). Applicable requirements for the TSTA include the corrective

action management unit (CAMU) regulations promulgated by the U.S. Environmental Protection Agency under the Resource Conservation and Recovery Act and adopted by the California Environmental Protection Agency under the California Hazardous Waste Control Law. These regulations are found in Title 40 of the Code of Federal Regulations (CFR) Section 264.552 and Title 22 of the California Code of Regulations (CCR) Section 66264.552 and specify performance standards and technical standards for operation of CAMUs.

The following table presents each performance and technical standard required by the CAMU regulations, and a description of how the TSTA is designed and operated to meet each CAMU standard.

CAMU PERFORMANCE AND TECHNICAL STANDARDS (As applied to the NAS Alameda TSTA)	
Regulatory Standard	Response
The CAMU must facilitate implementation of a reliable, effective, protective, and cost-effective remedies.	Providing temporary storage for Site 15 soils will allow the Navy to identify and implement an on-site treatment technology that is consistent with removal objectives and protects human health, welfare and the environment.
Waste management activities associated with the CAMU must not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents.	The TSTA will be engineered to prevent releases to groundwater, surface water, and air. It will be located in a secure area well away from general public activities. Loading and unloading activities will be conducted in contained areas.
A CAMU may include uncontaminated areas only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility.	Since Site 15 is not available for use as a soil storage area, a suitable nearby area was chosen. Preliminary environmental baseline data show that the TSTA site has already been impacted by petroleum hydrocarbons, heavy metals, and PCBs. The area will be evaluated fully prior to any transfer to the public or reuse.

Regulatory Standard	Response
<p>Areas within the CAMU, where waste will remain after closure, must be managed and contained so as to minimize future releases to the extent practicable.</p>	<p>All soils and temporary structures will be removed after storage, and the TSTA will be closed in the same condition as before construction. Inspections prior to construction and after closure will ensure that all soil is removed from the TSTA after completion of the project.</p>
<p>The CAMU shall expedite the timing of remediation activity implementation when appropriate and practicable.</p>	<p>The removal action will be expedited by providing on-site (within the NAS facility) storage while the preferred treatment is improved or an alternative treatment technology is identified.</p>
<p>The CAMU should allow the use, when appropriate, of treatment technologies (including innovative treatment technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU.</p>	<p>Storage of Site 15 soils is intended to allow implementation of an innovative treatment technology for management of the soils on site instead of at an off-site facility. All waste will be removed from the TSTA at closure.</p>
<p>The CAMU should, to the extent practicable, minimize the land area of the facility upon which wastes will remain after closure of the CAMU.</p>	<p>All wastes will be removed from the TSTA prior to closure. The containment unit cover, liner, and berms will also be removed and disposed of after completion of storage activities.</p>
<p>Groundwater must be monitored sufficiently for detection and characterization of the nature, extent, concentration, direction, and movement of existing hazardous constituents in the groundwater from sources within the CAMU.</p>	<p>The TSTA will be inspected weekdays during construction and operation to ensure that no releases to groundwater occur during operation of the unit. An impermeable synthetic liner, in conjunction with collection of runoff from the containment unit, will be used to prevent and mitigate migration of liquids outside the TSTA. Monitoring of groundwater is not proposed unless the regular inspections indicate that a release has taken place. In the event of a release, a groundwater monitoring plan will be developed.</p>

Regulatory Standard	Response
Groundwater must be monitored sufficiently to allow detection and subsequent characterization of possible releases of hazardous constituents to groundwater from areas of the CAMU in which wastes will remain after closure of the unit.	Not applicable, since wastes will not remain in the TSTA after closure.
The CAMU must be closed to meet the hazardous waste closure performance standard.	Closure of the TSTA will not require further maintenance, since all wastes and temporary structures will be removed. All equipment used in the TSTA will be decontaminated to remove waste materials or disposed of according to hazardous waste regulations. All temporary structures will be removed and either decontaminated, recycled, or disposed of in accordance with hazardous waste regulations.
The CAMU must be capped where wastes will remain in place after closure.	Not applicable, since wastes will not remain in the TSTA after closure.

PUBLIC PARTICIPATION ACTIVITIES

A notice of the availability of this administrative memorandum and a brief explanation of its contents is being published in local newspapers concurrently with its release. A copy of this administrative memorandum will be included in the administrative record file.

FIGURES

FIGURE 1: Location of Site 15 and of the Temporary Storage and Treatment Area (TSTA)

FIGURE 2: Site Layout of the Temporary Storage and Treatment Area (TSTA)

FIGURE 3: Plan and Cross Section View of the Temporary Storage and Treatment Area (TSTA)

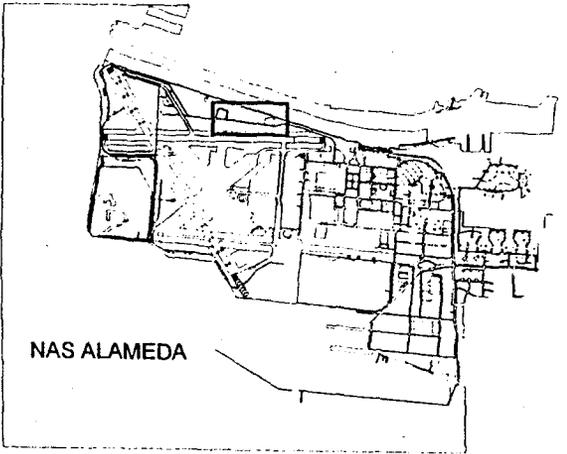
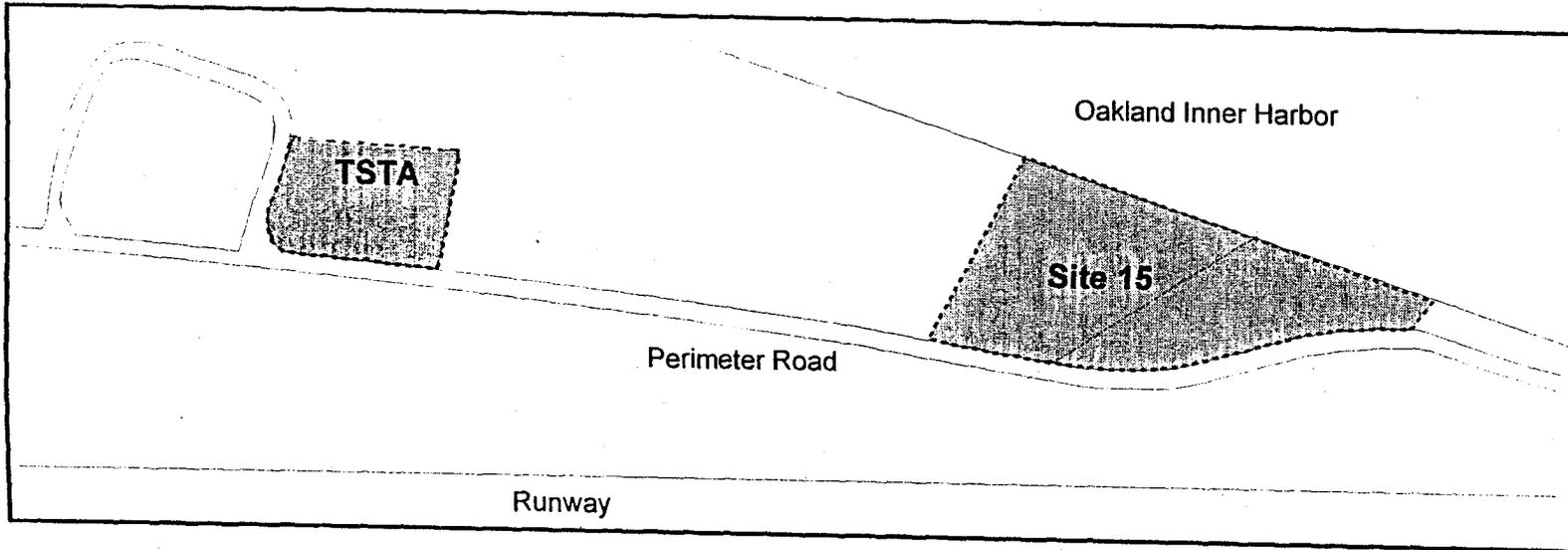


Figure 1: Location of Site 15 and the Temporary Storage and Treatment Area (TSTA).

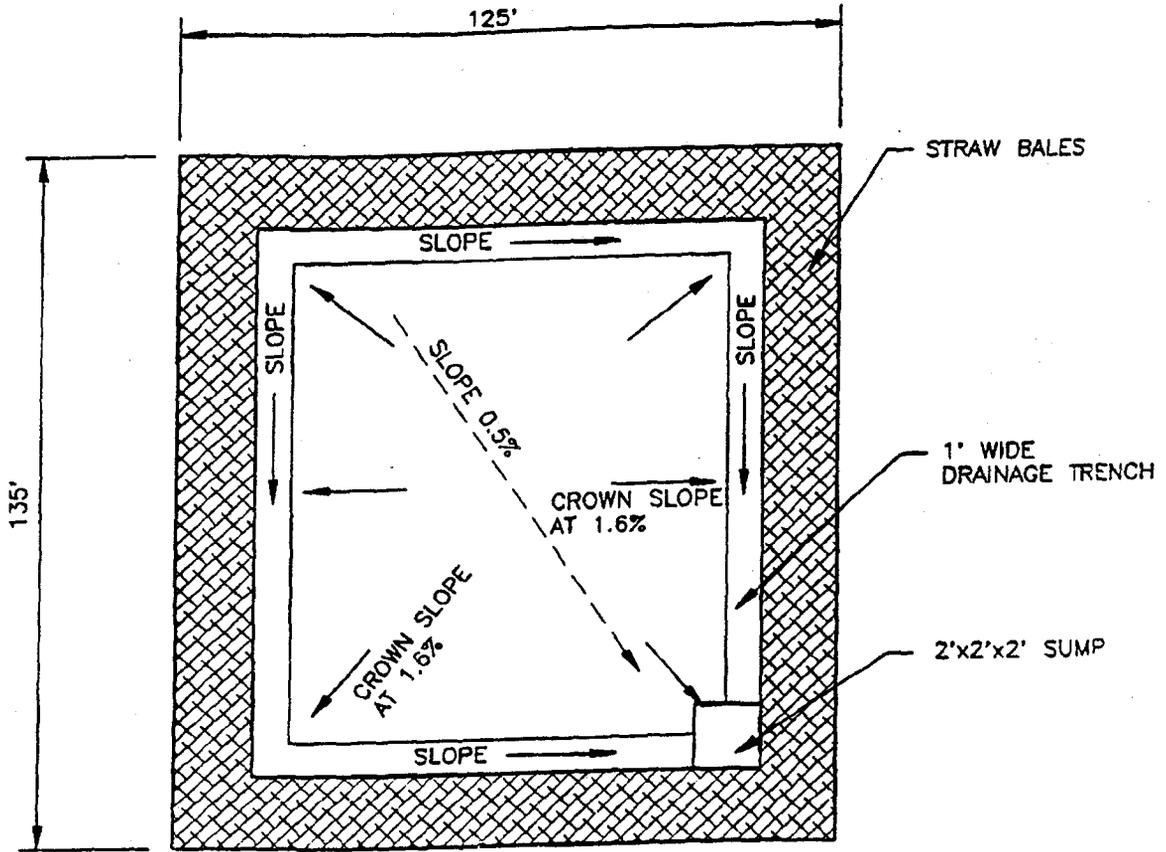
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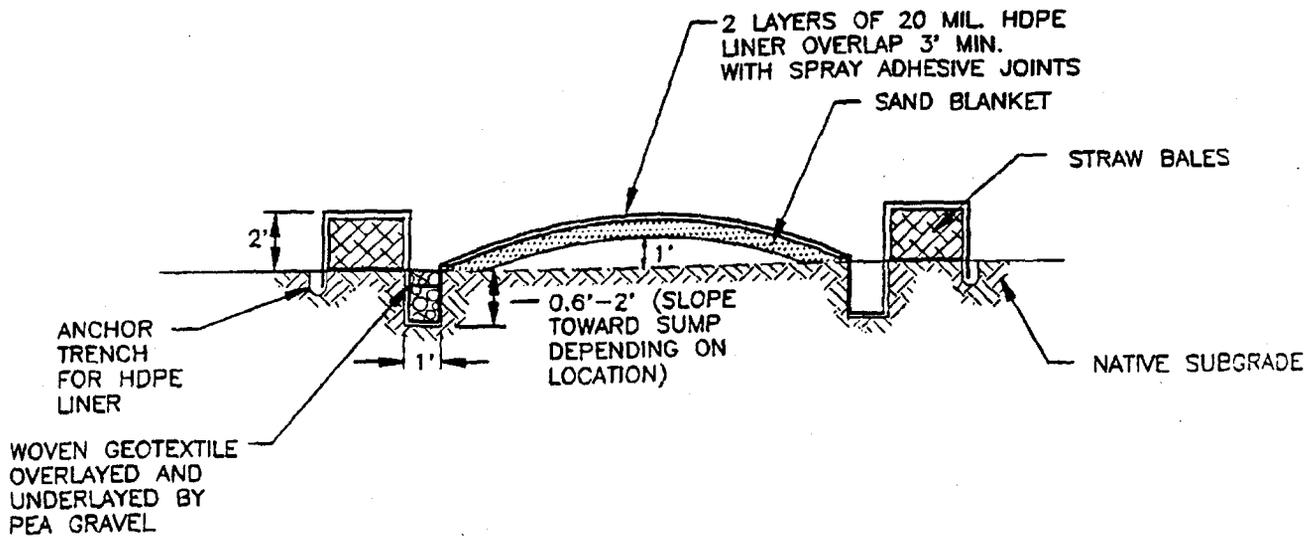
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STORAGE AREA PLAN



STORAGE AREA CROSS SECTION

Figure 3:
Plan and Cross Section View of the
Temporary Storage and Treatment Area
(TSTA)

NOT TO SCALE

NAVAL AIR STATION
ALAMEDA, CALIFORNIA
ITT INTERNATIONAL
TECHNOLOGY
CORPORATION