



DEPARTMENT OF THE NAVY  
NAVAL TRAINING CENTER  
SAN DIEGO, CALIFORNIA 92133

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**ACTION MEMORANDUM**

Subject: ACTION MEMORANDUM FOR REMOVAL ACTION AT THE NAVAL TRAINING CENTER (NTC), SAN DIEGO, CA

Site ID: CA2170023202

Category of Removal: Time Critical

From: Captain J.C. Ensich, U.S. Navy, On Scene Coordinator (OSC)

To: California Environmental Protection Agency  
Department of Toxic Substances Control (DTSC)  
Office of Military Facilities  
Anthony Landis, Chief of Operations

**I. PURPOSE**

The purpose of this ACTION MEMORANDUM is to document, for the Administrative Record, the Department of the Navy's (DON's) decision to undertake a removal action for landfill emissions from the Marine Corps Recruit Depot (MCRD) inactive Disposal Area (landfill) located at Naval Training Center (NTC), San Diego. The Department of Defense has the authority to undertake Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA) response actions, including removal actions, under 42 U.S.C. §9604, 10 U.S.C. §2705 and Federal Executive Order 12580. This removal action commenced on September 10, 1993. Onsite activities are expected to continue through November 15, 1993.

Conditions exist at the site which, if not addressed, are believed to pose a potential threat to public health or welfare. Human uses of the study area on adjacent lands consist of residential housing, recreation, and commercial/industrial land use.

The conditions at the site meet the criteria for initiating a removal action under 40 CFR Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and it is anticipated to require approximately \$33,000 for completion. The removal action would employ the services of the SEABEES Naval Construction Battalion to patch and grade the surface cracks and other surface degradation on the landfill at NTC San Diego, California for the purpose of minimizing emissions of methane generated by waste decomposition.

## II. SITE CONDITIONS AND BACKGROUND

### A. Site Description

#### 1. Removal Site Evaluation

The MCRD inactive Disposal Area comprises approximately 32 acres of property on the eastern boundary of NTC. From approximately 1950 until 1971 the site was used for disposal of various waste materials. It is estimated that approximately five million cubic feet of waste was dumped into the site. The disposal area primarily received refuse from normal day-to-day activities at MCRD and NTC, although there may have been infectious waste, paint waste, wood preservative, liquid hazardous waste and industrial waste disposed in the landfill. Part of the site is designated as a California Least Tern Protected nesting area. A site map is presented as enclosure (1) [NTC MAP SHOWING INACTIVE LANDFILL].

On August 9, 1993, the San Diego County Air Pollution Control District SDCAPCD (or the District) issued a Notice of Violation (NOV) to NTC for exceeding allowable landfill gas emissions. Landfill gas, primarily methane, is a byproduct gas of anaerobic biodegradation that occurs in all landfills and is not necessarily indicative of a "Hazardous Waste" landfill.

#### 2. Physical Location

The MCRD inactive Disposal Area is located in the easternmost portion of the NTC [Enclosure 1]. The site was originally salt marsh land which existed between Lindbergh Field and the boat channel. The inactive disposal area occupies approximately 32 acres of land. The site does not have a street address. It is located within the boundaries of the NTC property. The site is located in Book 450, page 79, Parcel 01 of the San Diego County Assessor's Map Book.

#### 3. Site Characteristics

The site area is largely unpaved, flat-lying, and without drainage systems, natural or manmade. Infiltration to the fill soils and sheet flow of runoff waters to the municipal storm sewer are likely hydrologic pathways. The exact depth of the waste mass is unknown; however, it does exist both above and below the water table. A boat channel to San Diego Bay exists along the length of the MCRD Disposal Area from approximately 900 feet west of its southern end.

The inactive Disposal Area is situated on the bayside portion of a broad plateau of manmade land on the north side of San Diego Bay. Ground elevation across the site area is relatively even east to west, but decreases northerly. The general groundwater flow direction is reported as being south to southwesterly, toward the boat channel [Jacobs Engineering Group, SWAT report, February 7, 1992].

4. Release or threatened release into the environment of a hazardous substance or pollutant or contaminant

In August of 1993 the disposal area was recognized as being in alleged violation of San Diego Air Quality Standards as established by the SDCAPCD. Specifically, landfill gas emissions as methane were measured by the District at concentrations above the allowable levels [Rule 59(d)(1)(ii)(A)].

Shortly thereafter, the Navy began a time critical removal action by grading and repairing the surface of the disposal area. This action was taken in order to control the release of landfill gas from the inactive disposal area.

5. National Priority List (NPL) Status

The MCRD/NTC disposal area is not on the NPL.

B. Other Actions to Date

1. Previous Actions

An Initial Assessment Study (IAS) of NTC, MCRD and Fleet Anti-Submarine Warfare Training Center (FASWTC) was completed in February 1986. The purpose of an IAS is to identify and assess sites posing a potential threat to human health or to the environment due to contamination from past operations that used hazardous materials.

Based on information from historical records, aerial photographs, field inspections, and personnel interviews, a total of five potentially contaminated sites were identified: three at NTC, two at MCRD and zero at FASWTC. Each of the sites was evaluated with regard to contamination characteristics, migration pathways, and pollutant receptors.

The study concluded that in 1986, while none of the sites posed an immediate threat to human health or the environment, all of the sites warrant further investigation under the Navy Assessment and Control of Installation Pollutants

(NACIP) program to assess potential long-term impacts. A confirmation study involving actual sampling of the five sites was recommended to determine the extent of contamination and necessity of conducting remedial measures.

A Solid Waste Water Quality Assessment Test (SWAT) report was completed in February of 1992. The SWAT report is the collection of findings from field events. The field events consisted of a geophysical survey to clear borehole locations and to delineate the aerial extent of the disposal area; installation of groundwater monitoring wells; groundwater level study; and soil, surface-water and ground water sampling and analyses.

## 2. Current Actions

An Air Solid Waste Quality Assessment Test Protocol (AIR SWAT) was completed on October 15, 1993. The objective of the AIR SWAT is to conduct field activities and provide an analysis of the compounds presently and potentially emitted from the MCRD Landfill.

The DON is in the process of preparing a Remedial Investigation/Feasibility Study (RI/FS) Work Plan to support the conduct of a CERCLA RI/FS and, ultimately, selection of remedial action at the site. It is currently anticipated that the RI/FS work plan will be completed during 1st quarter 1995 and be made available for review comment. The DON will also establish an administrative record for future remedial action as required pursuant to Section 113 of CERCLA which will incorporate the administrative record for this action.

The DON will place all pertinent information from the administrative record in a public repository at a convenient, public location such as a library. Members of the public may comment on the Removal Action for a period of at least 30 days. All comments will be addressed by the Navy and significant comments will be responded to.

## C. State and Local Authorities Roles

### 1. State and Local Actions to Date

On February 7, 1992, the DON submitted a Final Solid Waste Water Quality Assessment Test (SWAT) Report to the San Diego Regional Water Quality Control Board (RWQCB). Section 13273 of the California Water Code mandates the testing of solid waste disposal sites to determine whether there is hazardous waste leakage from the site. Operators of solid

waste disposal sites are required to submit SWAT reports to the appropriate California RWQCB. The objectives of a SWAT are to provide:

- An analysis of the surface and groundwater on, under and within 1 mile of the solid waste disposal site to provide a reliable indication of whether there is any leakage of hazardous waste; and
- A chemical characterization of the soil-pore liquid in those areas that are likely to be affected if the solid waste disposal site is leaking, as compared to geologically similar areas near the solid waste disposal site that have not been affected by leakage of waste discharge.

The SDCAPCD issued a Notice of Violation for landfill gas emissions in excess of Air Quality standards [Rule 59(d)(1)(ii)(A)].

The Navy was granted a 90-day Interim Variance from District Rule 59(d)(1)(ii)(A) on December 16, 1993. The Variance was subject to the following conditions:

- a. A protocol for performing an air SWAT was submitted to the District on October 18, 1993.
- b. Within the period of the Interim Variance, the Navy will perform all necessary grading and surface repairs to achieve compliance with Rule 59 standards.
- c. The Navy will institute a self-monitoring program to determine the on-going compliance status of this site with respect to Rule 59 standards. Records will be kept which will be made immediately available to the district upon request.

### III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

#### A. Threats to Public Health or Welfare

A threat to public health may have been posed by excess levels of landfill gas emitting to the ambient. Landfill gas measurements were taken by SDCAPCD on August 4, 1993 near cracks in the soil and asphalt concrete surfaces. The SDCAPCD reported landfill gas as methane levels ranging from 275 to 5,500 parts per million by volume (ppmv) on August 4, 1993. Methane is liberated from the soils through the soil

pore spaces and in sometimes higher concentrations through surface cracks in the soil.

#### B. Threats to the Environment

The Navy is also concerned with the effect of the landfill gas upon the Least Tern Protected nesting area located on the site. Since the Least Tern area is located directly atop the disposal area, the nesting area is directly in route of the potential landfill gas exposure. Upon completion of the Removal Action, the compliant landfill emissions should have no adverse effect upon the Least Tern.

#### IV. Endangerment Determination

Actual or threatened releases of pollutants or contaminants from this site, if not addressed by having implemented the response action selected in this Action Memorandum, may have presented a danger to public health or welfare.

#### V. Proposed Actions and Estimated Costs

##### A. Action Taken

##### 1. Description of Action Taken

The objective of the proposed Removal Action is to minimize the release of localized high concentrations of methane pending completion of the RI/FS (including the Air SWAT as a key component) and selection of remedial action for the site. The proposed Removal Action is not intended to address final remediation or "closure" of this landfill site. This Removal Action is not intended to address actual or threatened releases of any other hazardous substances, pollutants or contaminants into any other media (such as surface water, groundwater or soil contamination).

The proposed Removal Action consists of grading the problem areas upon the inactive disposal area and repairing surface cracks caused by settling of the soils and landfill waste. This will prevent concentration and release of higher levels of methane along cracks which provide a path of least resistance for the gas.

##### 2. Contribution to remedial performance

The removal action is expected to reduce the landfill gas emissions to compliant levels pending further evaluation of gas emission rates and quantities in the Air SWAT and CERCLA RI/FS .

### 3. Description of alternative technologies

#### Alternative 1: No Action

This action is not acceptable because the methane gas would continue to collect and create an area of high concentration.

#### Alternative 2: Impervious Cap

This alternative goes beyond the scope of the removal action; if the entire disposal area was to be capped with an impervious layer, a gas collection system would be necessary to prevent subsurface off-site landfill gas migration and accumulation of landfill gas beneath the cap. It is anticipated that a remedial alternative similar to this will be addressed at a later date in a CERCLA Feasibility Study which will also address other pathways associated with capping (e.g., groundwater, surface water).

#### Alternative 3: Landfill gas collection system

This alternative goes beyond the scope of the removal action. The DON does not have sufficient information to design and install a system of this magnitude. The time required to gather additional data would allow continued release, which is unacceptable. For these reasons, this alternative was not chosen. Nonetheless, the collection system will be evaluated as an alternative in the Remedial Investigation/Feasibility Study (RI/FS).

#### Alternative 4: Surface Repair

This is the chosen alternative. It is an interim solution. The action will consist of grading and filling the surface cracks. Eliminating the cracks will remove the path of least resistance for the migrating landfill gas, thereby reducing pockets of higher concentration. This action is both cost-effective and relatively quick to accomplish.

4. Applicable or relevant and appropriate requirements (ARARs) - 40 CFR Section 300.415(i) requires that on-site removal actions pursuant to CERCLA, comply, to the extent practicable, with the substantive portions of Federal and State ARARs.

#### Federal

1. SDAPCD Rule 59(d)(1)(ii)(A):

This rule has been approved by U.S. EPA as a component of the Federally-approved State Implementation Plan as provided in Section 110 of the Federal Clean Air Act. The rule mandates that no disposal area may have landfill gas concentrations immediately above the disposal area surface in excess of 500 ppmv expressed as methane.

2. Sections 7 and 9 of the Federal Endangered Species Act, 16 U.S.C. §§1536 and 1538:

The Navy maintains a part of the area in question (19 acres) as a breeding area for the California Least Tern (Tern), a federally listed endangered species. Prior to implementing the removal action, the site was surveyed for the presence of Terns. None were found, and none are likely to be found there until approximately April, 1994, when the Tern breeding season begins. In addition, the grading of potential nest site areas would be consistent with management practices currently employed. Terns prefer a graded substrate for nesting. For these reasons, the removal action described herein would not affect the Tern. The U.S. Fish and Wildlife Service was notified of this action and concurs with the conclusion.

3. Section 404 of the Federal Clean Water Act, 33 U.S.C §1344.

The landfill surface contains small areas of wetland that total less than an acre. The grading complies with the substantive standards of Section 404 of the Clean Water Act, as set out under Corps of Engineers Nationwide permit #26 and associated regulations under 33 CFR Part 330. The Army Corps of Engineers was notified of the removal action prior to its commencement.

The individual and cumulative environmental effects of the removal are minimal. The particular wetland areas in question were incidentally formed by storm runoff from the paved areas during high rainfall periods recently experienced, and were dry at the time of survey. The areas were isolated from other waters, and of low quality, being marked by the presence of cattail and some sedge, and the absence of any rare or endangered species. It should be noted that this particular removal action will not result in any net loss of wetlands because other Navy restoration and enhancement efforts in the region will more than offset any loss. Moreover, the loss is not likely to be permanent as grading did not change the basic drainage patterns of the area. Therefore, cattail and sedge are likely to recur in the same spots given similar rainfall conditions.

Section 404 requirements also embody the requirements of Section 401 of the Clean Water Act and of the Federal Coastal Zone Management Act, both of which are administered by State agencies in California. While it is possible for a responsible State agency to issue a general consistency determination for a Nationwide Permit, California has not done so. Therefore these requirements must be considered on a case-by-case basis.

4. State Water Quality Certification Under Section 401 of the Clean Water Act, 33 U.S.C. §1341

Section 401 of the Clean Water Act provides, among other things, that a state must provide certification that an activity under Section 404 will comply with applicable provisions of 33 U.S.C. §§1311, 1312, 1313, 1316, and 1317, or certify that no such limitations or standards apply. The state may also waive certification, either affirmatively or by its silence.

According to a Water Resources Control Engineer with the Regional Water Quality Control Board (the agency that would make the certification in this case), California does not have formal standards and limitations that apply to the type of small isolated wetlands at issue. The substantive standards that would be relied upon here would, for the most part, be found in other laws and regulations such as the Endangered Species Act and the Coastal Zone Management Act and in Federal EPA guidance.

Given the foregoing, the subject removal action would seem to comply with the relevant and appropriate substantive standard under Section 401.

5. Coastal Zone Management Act, 16 U.S.C. §1451 et seq. (CZMA)

The CZMA and its implementing regulations provide that federal activities that affect any land or water use or any natural resource must be carried out in a manner that is consistent to the maximum extent practicable with the enforceable policies of approved state management programs. The key substantive provisions of the California's management plan are found in the California Coastal Act of 1976, codified as amended at Division 20 of the California Public Resources Code.

Procedurally, Federal agencies are to review their proposed actions and provide the relevant state agency (California Coastal Commission in this case) with a consistency determi-

nation or a "negative determination." Review is to be done at the earliest possible time, but in no case later than 90 days before final Federal agency approval of the action, unless the Federal and the State agency agree to a different schedule.

The removal action would not directly affect the coastal zone. The landfill area is not within the zone, which is defined at 16 U.S.C. §1453(1) to exclude lands subject solely to the discretion of the Federal Government, its officers or agents. In addition, the action is consistent with relevant and appropriate substantive standards set out in the California Coastal Act. Public access and recreational and aesthetic factors are unaffected. The action is consistent with marine resource and sensitive habitat values, as described above in discussion of endangered species and wetlands. See sections 2 and 3 above.

#### State ARARs

For this removal action, DTSC has indicated that no ARARs need to be considered.

#### 5. Project Schedule

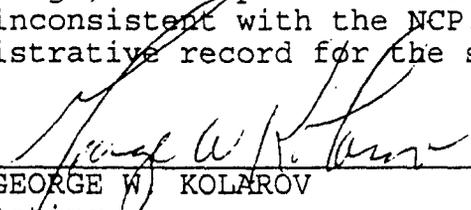
The proposed removal action is scheduled for September 10, 1993 through January 10, 1994.

#### B. Estimated Costs

The estimated cost for the SEABEES, a Navy construction crew, to perform the mitigation is \$33,000 which is the cost for fuel, equipment and man-hours. Public Works Center bid the project at \$78,000. The SEABEES' bid was accepted.

#### VI. Recommendation

This decision document represents the selected removal action for Site 1 (MCRD Inactive Disposal Area) at Naval Training Center San Diego, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the site.

  
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GEORGE W. KOLAROV  
Acting

29 Dec 1993  
Date

ENCLOSURE 1  
NTC MAP SHOWING INACTIVE LANDFILL

ACTION MEMORANDUM FOR TIME CRITICAL  
REMOVAL ACTION AT THE MCRD INACTIVE  
DISPOSAL AREA FOR LANDFILL EMISSIONS

THE ABOVE IDENTIFIED MAP IS NOT AVAILABLE.

EXTENSIVE RESEARCH WAS PERFORMED BY  
SOUTHWEST DIVISION TO LOCATE THIS MAP.

THIS PAGE HAS BEEN INSERTED AS A  
PLACEHOLDER AND WILL BE REPLACED  
SHOULD THE MISSING ITEM BE LOCATED.

QUESTIONS MAY BE DIRECTED TO:

**DIANE C. SILVA**  
**RECORDS MANAGEMENT SPECIALIST**  
**SOUTHWEST DIVISION**  
**NAVAL FACILITIES ENGINEERING COMMAND**  
**1220 PACIFIC HIGHWAY**  
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NTC SAN DIEGO  
SSIC # 5090.3

SUPPLEMENT TO ACTION MEMORANDUM  
FOR TIME-CRITICAL REMOVAL ACTION  
AT THE MCRD INACTIVE DISPOSAL AREA  
FOR LANDFILL EMISSIONS

DATED 28 MARCH 1994

IS ENTERED IN THE DATABASE AND FILED AT  
ADMINISTRATIVE RECORD NO. **N00247.000190**