

M60050.000807.

CLT 201-01F018

M60050.000807
MCAS EL TORO
SSIC # 5090.3

ENVIRONMENTAL QUALITY

1982



TITLE: ENVIRONMENTAL QUALITY REPORT, MCAS
EL TORO & MCAS (HELICOPTER) TUSTIN

AUTHOR: UNITED STATES MARINE CORPS

DATE: 01/01/82

CATEGORY: 1.2

MARINE CORPS AIR STATION, EL TORO
MARINE CORPS AIR STATION,
(HELICOPTER) TUSTIN

PREFACE

This document highlights the progress made over the past three years in developing a comprehensive program of environmental enhancement. The program minimizes the impact of military operations on the ecosystem at the Marine Corps Air Station, El Toro, California. Under the "lead activity" concept, MCAS El Toro is also responsible for the development and management of environmental programs at the Marine Corps Air Station (Helicopter), Tustin, California. The close proximity of these two activities has lead to the development of a single environmental program managed by the Energy/Environmental Office at MCAS El Toro. As such, the accomplishments of both Stations are included in this submission for review as a single environmental program.

TABLE OF CONTENTS

Composition and Mission 1

Executive Summary 5

Projects Summary 6

Organization 11

Policy and Guidance 13

Air Quality 15

Water Quality 19

Noise Level Control 23

Solid Waste Management 25

Hazardous Materials/Waste Management 26

Environmental Enhancement 34

Environmental Education and Training Program 38

APPENDIX

Soils Description A
MCO 6280.5 B
MCBul 6280 C
MCO 6280.1 D
StaO 11300.5A E
ABO 6260.1A F
OPNAVINST 6260.1B G
StaO 6260.7B H
ABO 11345.1E I
MCO 6280.2 J
WESTNAVFACENGCOMINST 6250.1A K
StaO 5420.20A L

COMPOSITION AND MISSION



MCAS EL TORO

MCAS El Toro serves as the primary U. S. Marine Corps all-weather master jet facility on the Pacific Coast. As such, it is Headquarters for the Commander, Marine Corps Air Bases, Western Area (COMCABWEST), and its primary tenant, the Third Marine Air Wing. Commissioned 17 March 1943 as a fleet operational training facility for Marine Corps pilots, it has grown to 5,000 acres with 2,000 structures and buildings, not including housing, plus runways and parking aprons, roads, parking facilities and utilities systems - a virtual self-contained city.

There are approximately 175 aircraft operated and maintained at the Air Station. As of July 1982, Station loading to support the assigned mission totaled 9,572 personnel (7,872 military and 1,700 civilian employees). In addition, weekend and summer reserve components numbered 1,050 individuals, bringing the maximum seasonal loading to 10,622. An additional 2,300 dependents occupied housing at MCAS El Toro.

MCAS El Toro is located in the County of Orange, State of California, approximately fifty miles southeast of Los Angeles, in the basin between the foothills of the Santa Ana Mountains and the Pacific Ocean. The topography of the main portion of this Station slopes gently up into moderately steep foothills at the northeast corner. Elevation of the Station ranges from 220 feet to 780 feet above mean sea level. The Station is bordered on the northwest and southeast by agricultural land, the northeast by agricultural and grazing area and the southwest by railroad and freeway right-of-ways. See Appendix A for soil descriptions.



MCAS (H) TUSTIN

Marine Corps Air Station (Helicopter) Tustin, California was first commissioned as a U. S. Naval Lighter-Than-Air (LTA) Base in 1942. Within a year, two large hangars were built to house Naval Anti-Submarine Warfare blimps. The Station was decommissioned in 1949, but reactivated in May 1951 as a Marine Corps Air Facility for rotary wing aircraft. On 1 September 1969 the Station was reclassified as MCAS (H) Santa Ana, California and on 1 December 1978 the Station was renamed MCAS (H) Tustin, California.

The mission of MCAS (H) Tustin is to provide services and material to support operation of the Third Marine Air Wing and units designated by the Commandant of the Marine Corps in coordination with Chief of Naval Operations. The primary tenant of MCAS (H) Tustin is Marine Air Group (MAG-16), a rotary-wing air group consisting of 12 squadrons. Other tenants include a Mobile Calibration Complex (MCC-3) and a Naval Air Maintenance Training Group Detachment (NAMTRAGRUDET). The aircraft fleet at MCAS (H) Tustin consists of 115 helicopters, but may fluctuate during peak training periods or mobilization. The Station is comprised of 1,554 acres of land and includes 164 buildings and structures. Presently, the personnel loading at MCAS (H) Tustin includes 3,090 military and 249 civilians. In addition, there are 837 dependents occupying housing.

MCAS (H) Tustin is situated in the north central area of Orange County, approximately five miles northwest of MCAS El Toro. The area immediately surrounding MCAS (H) Tustin is flat coastal plain with an average elevation of fifty feet above mean sea level. A large industrial park complex is developing along the north and south sides of the Station, with residential development to the east and west. Currently, vacant land to the south of the Station is slated for residential and commercial/light industrial development. See Appendix A for a soil description.

EXECUTIVE SUMMARY

GENERAL

The composite program to protect and enhance the environment at MCAS El Toro and MCAS (H) Tustin has developed quickly over the past three years due to an increased availability of environmental funding and specialized training. The majority of the special projects undertaken in the environmental area were pursued in order to implement Department of Defense policies regarding Federal environmental legislation. The majority of the operational/procedural changes enacted under the environmental program were in direct response to Federal, State and local environmental regulations.

With the bulk of the necessary fixed assets (plant account) in place or under construction to operate the program, the emphasis in the El Toro/Tustin program has shifted towards individual responsibility and awareness of how daily operations impact, or have the potential to impact, the quality of our environment.

PROJECTS SUMMARY

The projects and procedures listed below have been completed, initiated or developed under the auspices of the MCAS El Toro/MCAS (H) Tustin environmental program during the past year.

1. P-325, Industrial Waste Collection Improvements, is currently under construction, providing pollution abatement protection to aircraft and vehicle washracks and other portions of the sewer systems at MCAS El Toro.
2. P-227, Oil Spill Prevention, is currently under design in the FY84 MILCON program to provide MCAS (H) Tustin with similar improvements to those built under P-325 at MCAS El Toro.
3. SA212R, Hazardous Waste Storage Facility, is currently under construction at MCAS (H) Tustin as a portion of the FY83 Pollution Abatement Projects Program.
4. ET267R, Hazardous Waste Collection Facilities, is pending construction at MCAS El Toro under the FY83 Pollution Abatement Projects Program.
5. An open-end water analysis/material identification contract has been established to support the daily operations of the Environmental Office and to aid in the identification of materials during the investigation of spills and other incidents.

6. A project was recently completed at MCAS (H) Tustin, reshaping earthen storm drainage channels and repairing heavily silted or eroded areas of the system.
7. A project provided a variety of repairs to the storm drainage system at MCAS El Toro resulting from the heavy storms of the winter of 1981.
8. There was completion of a complete Spill Prevention and Control Countermeasures (SPCC) Plan for both Stations via A-E contract.
9. Design authorization has been given under the FY84 MILCON program to begin P-238, Spill Control Facilities for Pollution Abatement, to enact the SPCC Plan at MCAS (H) Tustin by constructing a permanent crash crew training pit, high level alarms at the fuel farm and placing oil/water separators on the drainage systems.
10. New oil/water separators have been installed in the drainage systems at MCAS El Toro under local authority to ensure compliance with NPDES requirements.
11. A complete Hazardous Materials/Hazardous Waste (HM/HW) study of both Stations was performed via A-E contract.

12. Applications to the Environmental Protection Agency and the California Department of Health Services resulted in the issuance of Part A Interim Permits for HM/HW operations at both Stations.
13. Over 500 trees and 2,000 shrubs have been planted aboard the Stations in order to enhance the visual beauty of each station and improve the general environment.
14. Use of reclaimed water on the Station golf course was initiated to reduce the load on the potable water system and maximize use of the water resources available.
15. ET493R, Reclaimed Water Distribution System, will further reduce the use of potable water for general landscape watering. This project was validated under the FY84 Natural Resources Projects Program.
16. SA215E and SA301E provide station power, pollution abated drainage and noise attenuation facilities for the new Engine Test Systems being installed at MCAS (H) Tustin.
17. Operational procedures have been developed for the Hush House (Building 716) at MCAS El Toro in order to ensure engine Test Operations are carried out in such a manner that Air Quality regulations are complied with.

18. Building 658, the stationary test cell used by MAG-11, was modified to enable the system to burn ferrocene, a fuel additive that inhibits visible air emissions and aids in compliance with State Air Quality regulations.
19. Eighty-six Permits to Construct/Permits to Operate were requested from the South Coast Air Quality Management District (SCAQMD) and are currently in active use at both Stations.
20. A special emergency vehicle has been procured and will be outfitted for use by the Environmental Office in daily operations and in response to emergency calls.
21. MCAS El Toro has arranged to host training for all West Coast Marine Corps activities in Hazardous Waste Handling in March 1983. Training will be provided by the Naval Environmental Engineering Support Activity.
22. Timed to coincide with the completion of HM/HW facilities at both Stations, a new Air Bases Order* has been drafted outlining the HM/HW Management Program and detailing individual responsibilities of those organizations generating, handling and disposing of them.

*Not included in Appendix.

23. The newly-developed Master Plans for both Stations have been structured to take into account the impact of aircraft noise on all occupied facilities.

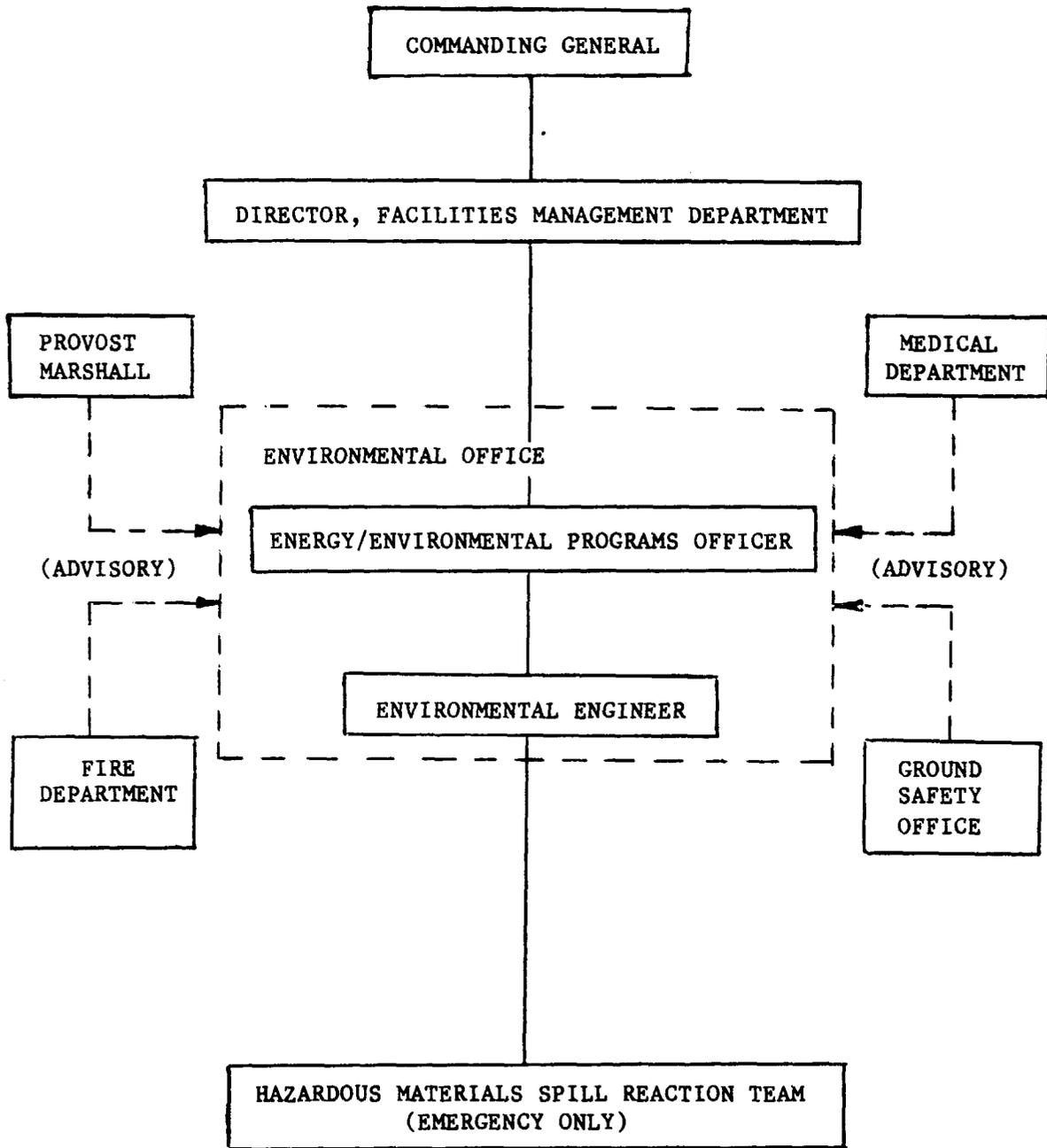
24. P-326, Unaccompanied Enlisted Personnel Housing, constructed a new barracks complex within the CNEL 65 contour, but included sound deadening glass, air-conditioning and other noise attenuation features.

25. All active and inactive transformers and capacitors aboard MCAS El Toro have been individually tested and labeled as to PCB concentrations.

26. ET250R, Pest Control Facility, is now under construction at MCAS El Toro as part of the HM/HW Management Plan.

ORGANIZATION

The Director, Facilities Management Department, is responsible to the Commanding General for all matters pertaining to environmental protection, while the Energy/Environmental Programs Officer has direct responsibility for daily management of environmental affairs. The Energy/Environmental Programs Officer is assisted by the Station Environmental Engineer in direct management of the program. Close coordination with the Fire Department, the Ground Safety Office, the Medical Department and the Provost Marshall ensures quick response to emergency situations and that any incident affecting the environmental posture of the Station is immediately reported to the Environmental Office. When required, the Environmental Office, the Fire Department and the Facilities Management Department combine forces in the form of specially-trained personnel to comprise the Hazardous Materials Spill Reaction Team. This composite group is trained and completely equipped to respond to environmental emergencies at both Stations.



POLICY AND GUIDANCE

Federal policy on environmental matters was initially developed under the National Environmental Policy Act and has been implemented within the Marine Corps by primarily two documents: Marine Corps Order P11000.8B*, the Environmental Protection Manual and Marine Corps Order 6280.5 (Appendix B), "Environmental Considerations in Marine Corps Actions in the United States". These two documents identify the requirement to consider environmental impact during the decision-making process of every operation undertaken by Marine Corps activities and outline the programs through which environmental enhancement may be undertaken. Marine Corps Orders 6280 and 6280.1 (Appendices C and D) further describe procedural requirements and Marine Corps Policy.

MCAS El Toro and MCAS (H) Tustin have implemented these policies through a variety of programs and procedures established in the policy documents contained in the appendices. To ensure environmental concerns receive the highest possible visibility during the decision-making process, Station Order 11300.5A, Appendix E, establishes the Joint Activity Environmental Impact Review Board. This body serves in an advisory capacity to the Commanding General, MCAS El Toro and the Commanding Officer, MCAS (H) Tustin with respect to the environmental impact of any and all proposed or existing projects or operations.

*Not included in Appendix.

Existing operations are continually reviewed for compliance with all Federal, State and local environmental regulations and consistency with Department of Defense guidance. New Station policy documents are issued, as appropriate, to implement changes in environmental policies or regulations.

AIR QUALITY

GENERAL

Air quality control is one of the important steps in the environmental concerns of any Marine Corps activity. The measures taken at MCAS El Toro and MCAS (H) Tustin include (1) securing air quality permits for all stationary sources of air pollution, (2) ongoing review of these existing sources to assure compliance with the State and local air quality rules and regulations, (3) incorporations of visible emission reduction methods in the MCAS El Toro jet engine test cells, (4) review of all proposed construction specifications and drawings to include state of the art methods whenever possible, (5) air episode emergency plans and (6) asbestos monitoring.

PERMITS

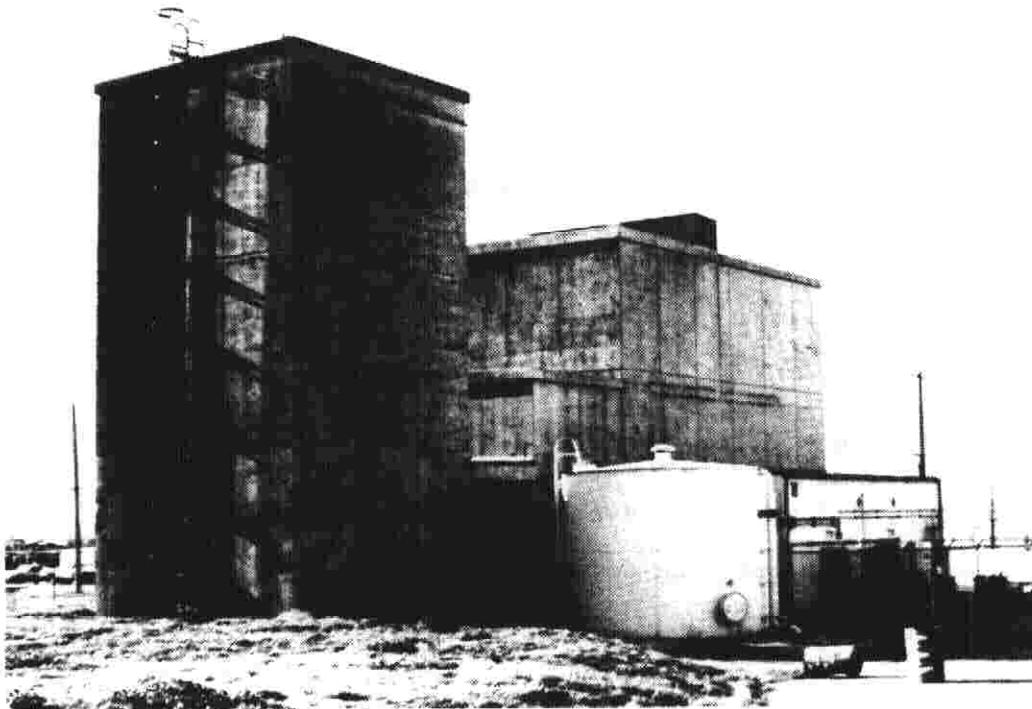
Permits are applied for to notify the South Coast Air Quality Management District (SCAQMD) of the intention to construct equipment so that air emission levels may be updated and possible problems discovered prior to installation of the equipment. Potential problems are avoided in advance when there is time to add necessary corrections. The permits, when received, have operating conditions written in that assure rule compliance during future operation.

EXISTING SOURCES

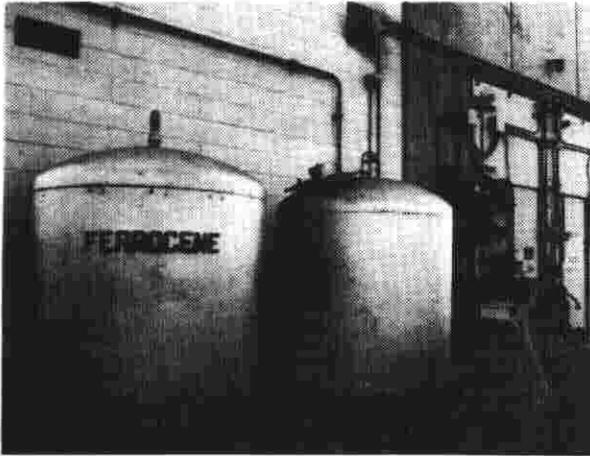
It is necessary to maintain any pollution control equipment once installed for compliance and especially for the safety of activity personnel using it. All permitted equipment is checked at least once per year for these reasons.

TEST CELLS

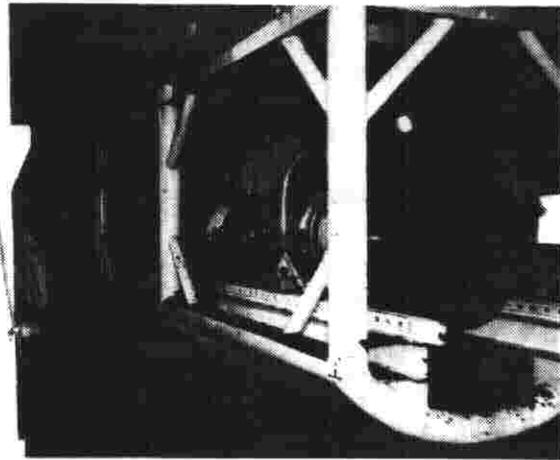
Jet Engine Test Cells, although originally designed primarily for noise reduction, allow the pollution reduction methods necessary during operation of some engine models. The MCAS El Toro test cell pictured employs both an exhaust water injection system and a ferrocene fuel additive to reduce visible air emissions (smoke). Past problems have included notices of violation from the SCAQMD.



TEST CELL SHOWING WATER RESERVOIR



FERROCENE TANKS



ENGINE MOUNTED INSIDE CELL

NEW PROJECTS

Review of plans during the design stages of projects is when control equipment is determined correct for local use. Alterations to design are most easily accomplished here.

SMOG PLAN

Planned brush burning and crash crew training fires are the only instances where intentional fires are started. These fires are allowed only on preauthorized burn days established by the SCAQMD and with the approval of the MCAS El Toro and MCAS (H) Tustin Fire Departments.

During an air pollution emergency episode further measures would be taken. These include voluntary car pooling and restriction of all unnecessary motor vehicle travel. Air Bases Order 6260.1A (Appendix F) gives further details.

ASBESTOS MONITORING

Asbestos monitoring for both Stations is performed by the Environmental Health Department at MCAS El Toro. Demolition and disposal methods for contracts are arranged with the aid of the environmental office and sampling is conducted by the Environmental Health Department before personnel are allowed to reenter any disturbed area. OPNAV Instruction 6260.1B, Appendix G, sets average limits of asbestos not to exceed 2 fibers longer than 5 micrometers per cubic centimeter of air. The maximum allowable concentration for all personnel is 10 fibers of the same size per cubic centimeter of air. Station Order 6260.7B (Appendix H) provides for personnel health records.

WATER QUALITY

GENERAL

The lack of adequate water quality control measures has been an area of great concern at MCAS El Toro and MCAS (H) Tustin. Many recent advances have been made here, including: (1) storm drainage channel repairs, (2) improved oil/water separating equipment at the MCAS El Toro outfalls, (3) industrial waste collection improvements, (4) followup of the MCAS (H) Tustin Spill Prevention Control and Countermeasures (SPCC) Plan and (5) improvements in the methods of monitoring surface discharge water.

STORM DRAINAGE

Heavy rainstorms during the winter season cause much damage to the earthen drainage channels of both Stations. Damage appears as erosion, washout of the channel, and clogging with silt, sand and debris in different areas. This damage causes failure of control equipment and leads to severe maintenance problems.

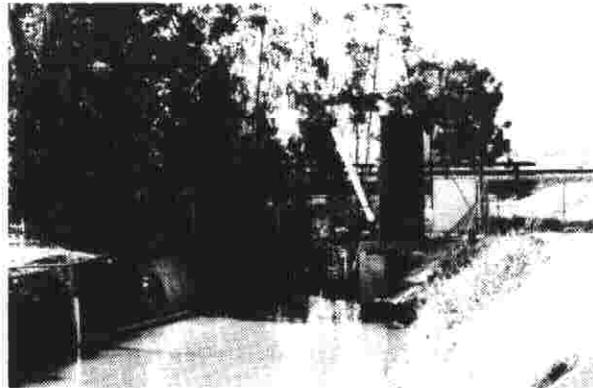
There is a great amount of ongoing work at MCAS El Toro to repair this damage and a project at MCAS (H) Tustin recently reshaped the channels there. Plans are under consideration to gunnite (reinforce with concrete) selected areas to prevent some of this damage. These plans must wait, however, until sand dropout pits and debris screens can be installed where necessary. This work, planned for FY83, has to be done first so that the silt, sand and debris doesn't just flow unchecked off of the Stations.

OIL/WATER SEPARATORS

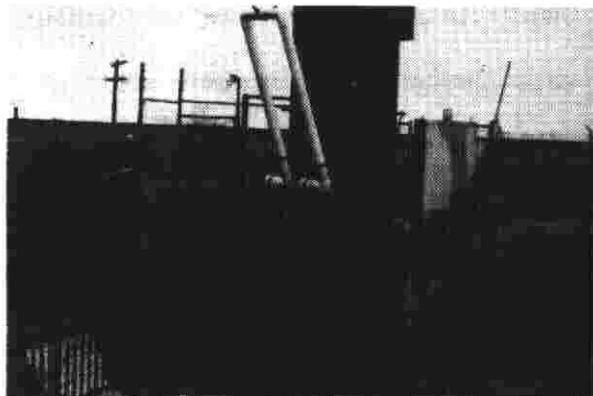
Equipment was installed in August, 1982, at the two outfalls of MCAS El Toro to act as final oil/water separators for all surface runoff leaving the Station. Water quality permits from local and State water boards specify that no oil or oily waste must be discharged from the storm channels. The reason being that these waters empty into Upper Newport Bay, a wildlife refuge, and then into the ocean. Marine Corps Order P11000.8B directs all activities to comply with all State, local and Federal regulations. A similar project has been approved for MCAS (H) Tustin under the SPCC Plan.



LONGSHOT OF DISCHARGE
CHANNEL



OIL/WATER SEPARATOR WITH OIL BOOM



CLOSE-UP SHOWING OIL SKIMMER
THAT RIDES ON WATER SURFACE

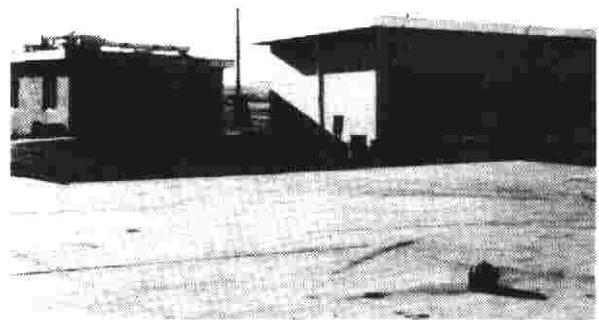
WASTE COLLECTION

Motor vehicles and aircraft have been washed in the past with no control over the wash water. This water collects oil and grease that builds up on the vehicles and has been allowed to enter the storm drainage channels finding its way into public waterways.

A project is being constructed at MCAS El Toro washracks that will separate the oil and grease, direct it to a holding sump, discharge the detergent laden water to the sanitary sewer and during a rain-storm to allow the runoff to exit via the storm drains. Before and 80% complete photographs of a typical washrack at MCAS El Toro may be seen below. A similar project is under design for MCAS (H) Tustin.



BEFORE SHOT SHOWING COLLECTED
WATER RUNOFF



NEW BUILDING WILL HOUSE
CONTROLS AND EQUIPMENT

MCAS (H) TUSTIN SPCC PLAN

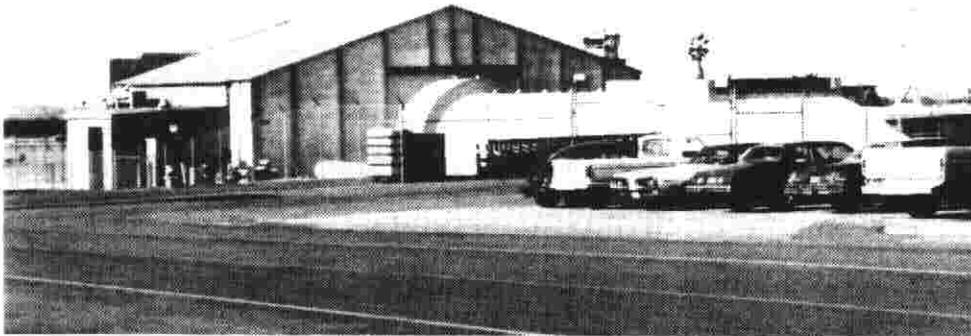
Further water quality measures will be taken by construction of a permanent crash crew training pit at MCAS (H) Tustin. This project will prevent the contaminated aircraft fuels used here from soaking into the ground and will also provide secure storage for any unused fuel. High level alarms on fuel storage tanks will also be installed to prevent a possible spill caused by overfilling. Air Bases Order 11345.1E (Appendix I) Prevention of Contamination to State Water Resources, describes spill requirements.

WATER TESTING

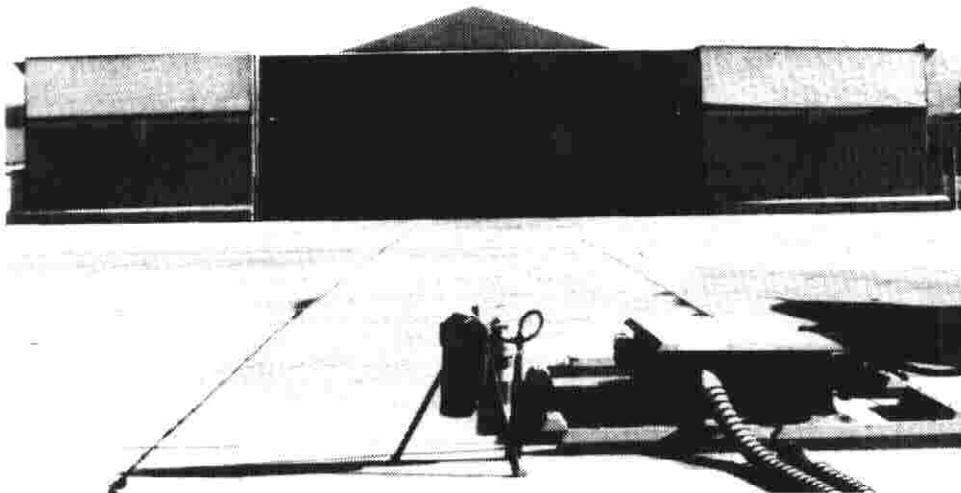
Samples must be taken and then tested by a lab in order to assure the water districts that no excessive pollutant levels exist in discharge water. A contract has been drawn up and an anticipated award in March of 1983 will facilitate sample collecting and assure fast and accurate results for required monthly water quality reports. This contract will also aid in the Hazardous material/waste program to be discussed later.

NOISE LEVEL CONTROL

Aircraft flights are probably the most noticed activity aboard any air station. Great attention is paid to public concern over noise levels of aircraft engines. Noise abatement projects are constantly being implemented. An example of a recent advance in this area is pictured. The Hush House allows an entire aircraft to enter and be closed off so that the engines may be tested while in-frame.



HUSH HOUSE WITH SOUND ATTENUATOR IN BACK



FRONT VIEW OF HUSH HOUSE. THE LARGE DOORS ON THE SIDES CLOSE ELECTRICALLY TO ENCLOSE THE AIRCRAFT.

Projects constructing noise attenuation facilities for new engine test systems at MCAS (H) Tustin are under design.

Noise levels measured in decibels (db) are established by the Orange County Environmental Management Agency. A 'not to exceed' 75 db level at all has been set for residential areas. A new barracks complex recently completed at MCAS El Toro within the 65 db contour includes sound deadening glass, insulation and air-conditioning so windows won't have to be left open. The 'not to exceed' time period for 65 db uncontrolled exposure is 5 minutes per hour. The new barracks complex is well below that level.

The newly-developed Master Plans for both Stations have been structured to place development of inhabited facilities in areas of the Stations which receive the minimum aircraft noise impact. Similarly, a concerted effort was made to site recreational and public service facilities so they receive the least exposure to the industrial-based operations occurring aboard the Stations.

SOLID WASTE MANAGEMENT

Refuse collection and disposal at a site located at MCAS El Toro had been done in the past but is no longer a permitted procedure by the Orange County Health Department. Solid waste is now disposed of under contract with an outside firm. An estimated 100,000 cubic yards of garbage and trash must be disposed of at MCAS El Toro and MCAS (H) Tustin annually at a cost of approximately \$100,000.

HAZARDOUS MATERIALS / WASTE MANAGEMENT

GENERAL

A major concern in recent times is the handling and disposal of hazardous materials and hazardous wastes (HM/HW). This includes all petroleum products such as oils and solvents, fuels, paints, chemicals (photographic and pest control) and detergents as well as acutely toxic substances such as polychlorobiphenyls (PCB's).

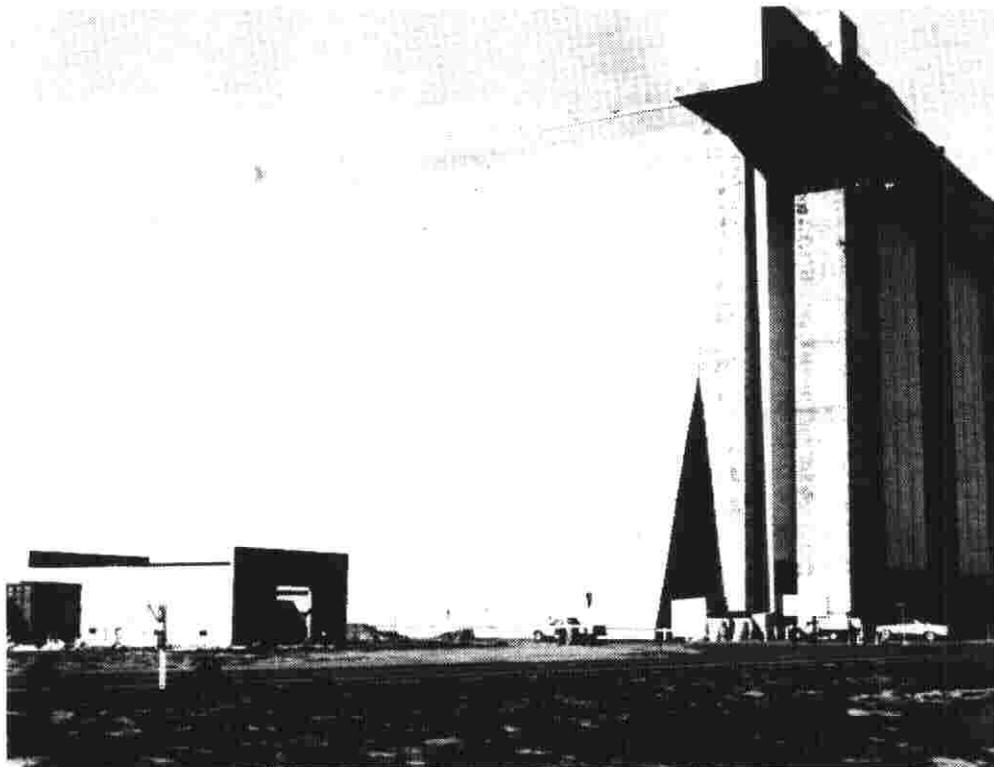
Chemical spills of all types command more attention now than in the past because of increased public awareness. MCAS El Toro and MCAS (H) Tustin are governed both by the Environmental Protection Agency (EPA) and the California Department of Health Services. Active concerns and projects include (1) past surveys, (2) hazardous waste collection and storage facilities and submittal of EPA applications, (3) PCB awareness, (4) spill response and cleanup, (5) recent Station Orders pertaining to spills, and (6) pest control facility.

PAST SURVEYS

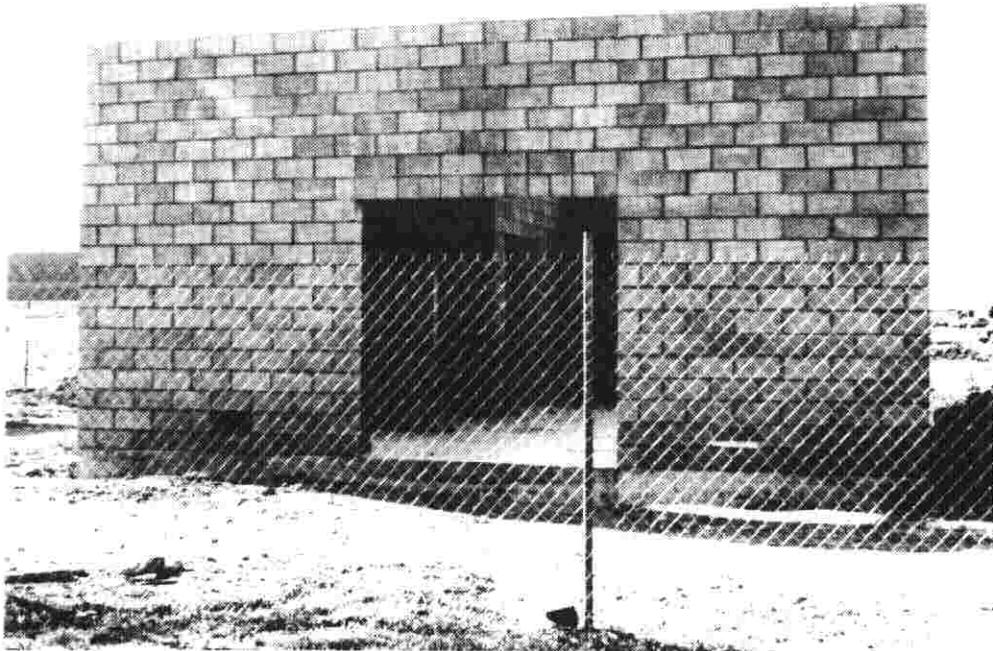
An architect and engineering contracted study of both Stations led to the initiation of many State required operational plans and projects in the hazardous waste area. A similar recent study identified projects necessary for the completion of the SPCC Plan.

COLLECTION AND STORAGE FACILITIES

The hazardous waste storage facility pictured is under construction at MCAS (H) Tustin and completion is expected in March of 1983. This facility provides 1,100 square feet of conforming storage in support of the HM/HW Management Program.



CONSTRUCTION OF THE FACILITY NEXT TO
HANGAR NO. 1 AT TUSTIN

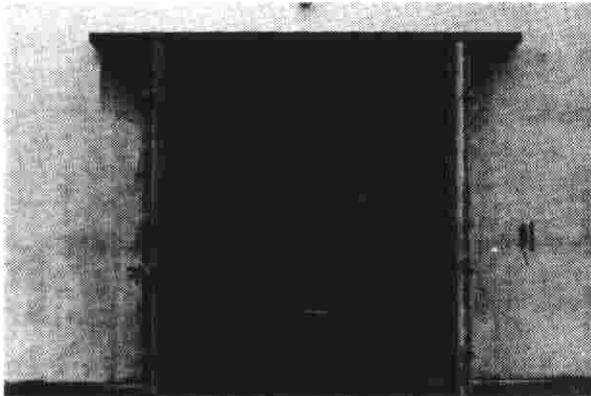


CLOSE-UP OF THE TUSTIN FACILITY SHOWING THE
INDIVIDUAL COMPARTMENTS FOR MATERIAL STORAGE

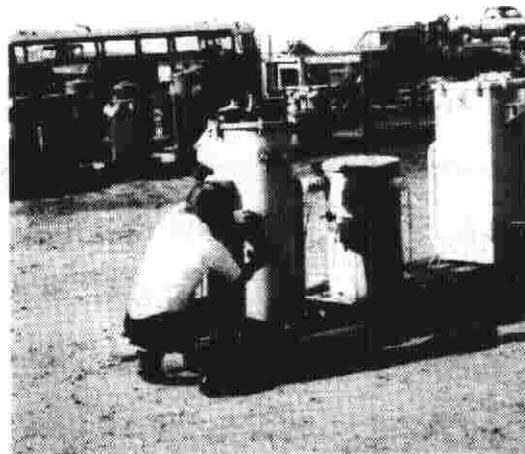
A similar but more extensive project will provide six collection facilities located throughout MCAS El Toro. These will be used for the safe and convenient collection of those waste materials designated as a part of the HM/HW Program. In addition to these facilities, interim permits No. CA6170023208 for MCAS El Toro and No. CA9170090022 for MCAS (H) Tustin were obtained from the State. These permits are used for the tracking of hazardous substances when taken over public highways and for disposal purposes. The Defense Property Disposal Office located at MCAS El Toro is tasked with the responsibility of ensuring timely, safe and proper disposal of hazardous materials and wastes.

PCB AWARENESS

Oils used for insulating electrical equipment that contain PCB's are handled with the utmost care as PCB's are suspected carcinogens. A separate location has been set aside to collect PCB contaminated material and unusable equipment, such as transformers, while awaiting proper disposal. All PCB contaminated matter at both Stations is labeled to indicate its PCB concentration including all active and inactive transformers. A contract has been set up to provide for the change out and replacement of active transformers as they wear out. Marine Corps Order 6280.2 (Appendix J), PCB Management, describes how these items are to be handled under the Toxic Substances Control Act.



PCB STORAGE BUNKER



TRANSFORMER LABELING

SPILL RESPONSE AND CLEANUP

The Environmental Office responds to all spills and related emergency calls. Proper cleanup methods are determined and put into action. The scene pictured is one of a turned over transformer that resulted in a loss of PCB contaminated oil. Because the spill was on asphalt, this resulted in a need for taking up and containerizing the roadway and some of the surrounding dirt.



INITIAL STEP AFTER A SPILL IS
TO PREVENT THE OIL FROM SPREADING.



OIL SOAKED MATERIAL IS LOADED
INTO 55 GALLON DRUMS.



THE CONTAMINATED
ASPHALT IS REMOVED.

Cleanup equipment is on hand including proper containers, absorbants, protective clothing and tools. Specialized equipment includes two vacuum (suction) trucks for waste pickup and a soon to be ready emergency vehicle for response to calls. The emergency vehicle will include a spectrophotometer/colorimeter for material analysis, chemical protective suits for protection of personnel exposed to hazardous environments, self-contained breathing apparatus, a variety of testing and analysis equipment, and disposable materials for HM/HW cleanup operations. The vehicle will be equipped with emergency lights and sirens and is capable of communicating on all Station radio nets.



**SUBJECT WEARING BREATHING APPARATUS
AND SUITING UP**



THE CHEMICAL SUIT PREVENTS ANY POSSIBLE
EXPOSURE TO TOXIC MATERIALS

STATION ORDERS

Methods of operation around the Stations are constantly reviewed for compliance with EPA and State mandated procedures for HM/HW handling. A new Air Bases Order, now in draft form, outlines responsibilities in the HM/HW Management Program that have been unclear in the past. This program includes participation by the Supply Department in initial identification of potentially hazardous materials, the Environmental Office in providing guidance and assistance in determining the proper methods of reclamation/disposal and the Defense Property Disposal Office in removing HM/HW materials from both Stations.

PEST CONTROL

Chemicals used at both Stations for pest control are kept at MCAS El Toro. An 1,100 square foot facility is under construction that will provide a concrete block structure for the handling, storage and disposal of organic phosphates, organics and pesticides. It will also provide a small office space for administration of pest control operations and records. The facility will meet Federal and State regulations relating to the control of pesticides and related chemicals. WESTNAVFACENCOM Instruction 6250.1A, Appendix K, establishes procedures to follow.

ENVIRONMENTAL ENHANCEMENT

GENERAL

Environmental and Natural Resource Management at MCAS El Toro and MCAS (H) Tustin plays an important part in public relations and the overall responsibilities to all Station personnel, their families, and to mother nature herself. An environmental enhancement committee (See Station Order 5420.20A, Appendix L) is established to provide command involvement in the areas of Station beautification, water and energy conservation and recreational development.

BEAUTIFICATION

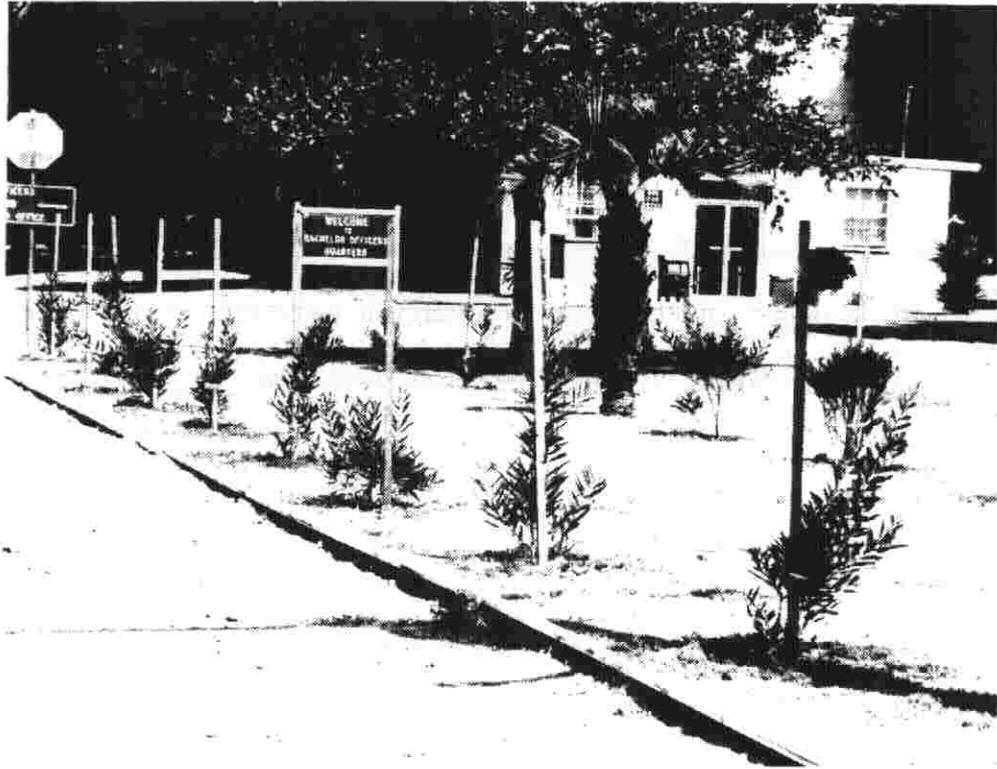
There is an ongoing tree and shrub planting program to enhance the appearance of each Station and improve the general environment. Over 500 trees and 2,000 shrubs have been planted aboard the Stations in the past three years.



PLANTING A PINE TREE



SHRUBS AND TREES ALONG MAIN ROAD



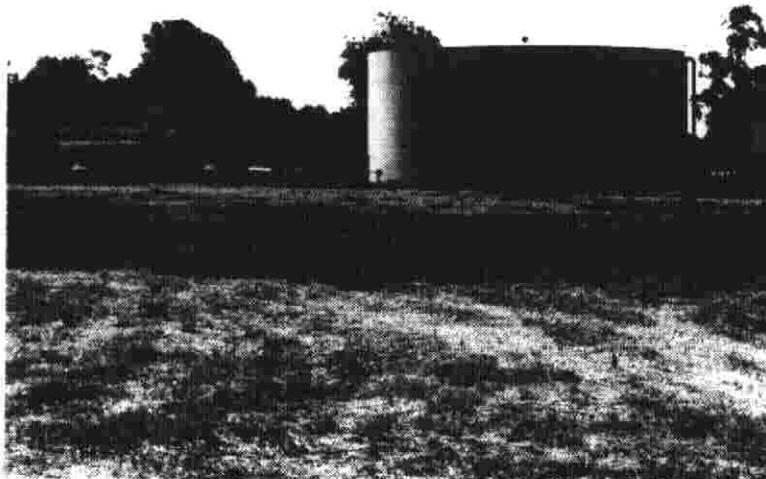
DESIRED EFFECT ON THE BOQ

CONSERVATION

Much work is done in water conservation. A system for watering the MCAS El Toro golf course using reclaimed water was activated. This reduces the load on the potable (drinking) water system and maximizes use of the water resources available.



75 MILLION GALLONS OF WATER ARE
USED ANNUALLY ON THE GOLF COURSE



ONE MILLION GALLON RECLAIMED WATER RESERVOIR

Another upcoming project to expand the reclaimed water system will allow much of the landscape that is now maintained with potable water to be switched over to reclaimed. This program may provide additional fertile acreage for agricultural outlease.

Energy conservation measures are instituted with projects that replace low efficiency lighting with a high efficiency sodium vapor type. Public awareness is stressed to switch off lighting in empty rooms and to cut down on all water and electricity waste.

RECREATION

Previously undeveloped areas are being considered for recreational development. Outside eating areas with picnic facilities are planned to allow office workers places to take lunch. Exercise locations with obstacle courses will give the military personnel diversionary places to work out. Some existing baseball diamonds have been upgraded and new ones are planned.

ENVIRONMENTAL EDUCATION AND TRAINING PROGRAM

The Environmental Officer/Engineer is available at any time to act as a guest speaker at Station safety meetings. These meetings provide an excellent opportunity to educate personnel in all areas of environmental concern and to exchange ideas on potential problems. An average of one meeting per month is now attended with an expected increase as programs are implemented and presentations, including slides, are further developed.

A Hazardous Waste Handlers Course will be hosted by MCAS El Toro in March of 1983. Training will be provided by the Naval Environmental Engineering Support Activity. The four-day course will provide the students with the knowledge required to perform their jobs in a safe, efficient and environmentally sound manner.

APPENDIX A

MCAS EL TORO AND MCAS (H) TUSTIN

SOIL DESCRIPTIONS

SOILS

MCAS EL TORO

Three soils comprise the level land at MCAS El Toro: Sorrento loam, San Emigdio sandy loam and Metz sand. The Sorrento series of soils consist of well-drained, medium to moderately textured soils, with calcareous subsoils. Sorrento soils are used for orchards, most types of row crops and small grains. The San Emigdio series consists of well-drained, deep, coarse textured, calcareous soils. The San Emigdio soils are low in fertility, moderately alkaline, permeability is moderately rapid, the surface runoff is slow and the erosion hazard is slight. San Emigdio soils support all types of row crops, citrus trees, field crops and urbanization. Metz soils consist of excessively drained loamy sand. This soil is low in fertility and retains only a small portion of the water fed into the soil as permeability is rapid. The surface runoff is slow and the erosion is slight. The rooting depth is very deep and is useful for row crops except asparagus and celery. Complete fertilization of the soil is necessary for adequate crop yields.

MCAS (H) TUSTIN

The soil of MCAS (H) Tustin is comprised primarily (more than 95 per cent) of Chino silty clay loam. Chino silty clay loam soils support asparagus, celery, sweet corn and tomatoes.

APPENDIX B
MARINE CORPS ORDER 6280.5
ENVIRONMENTAL CONSIDERATIONS IN
MARINE CORPS ACTIONS IN THE UNITED STATES



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D. C. 20380

MCO 6280.5
LFF-2-mgg
16 Dec 1981

MARINE CORPS ORDER 6280.5

From: Commandant of the Marine Corps
To: Distribution List

Subj: Environmental Considerations in Marine Corps Actions in the United States

Ref: (a) MCO P11000.8A
(b) Pub. L. No. 91-532 (NOTAL)
(c) OMB Circular A-95 (NOTAL)

Encl: (1) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508), by the Council on Environmental Quality, Executive Office of the President

Report Required: Environmental Documentation (PEA/EA/ES) Report
(Report Symbol DD-6280-04)
External Report Symbol DD-M (AR) 1327, par. 8

1. Purpose. To implement the President's Council on Environmental Quality (CEQ) regulations that implement the National Environmental Policy Act.

2. Applicability. The provisions of this Order apply to all Marine Corps commands when proposing actions within the United States.

3. Background

a. The National Environmental Policy Act (NEPA) requires Federal agencies to use all practicable means to conduct their respective missions in concert with the environment. (See the enclosure, page 34.)

b. Section 102 of the enclosure requires each Federal agency to document the environmental impacts and alternatives considered during the agency's decisionmaking process. This documentation is known as the "Environmental Impact Statement."

c. The Marine Corps must act with care to ensure to the maximum extent possible that, in carrying out its mission of providing for the national defense, it does so in a manner consistent with national environmental policies. In so doing, the Marine Corps recognizes that the NEPA process includes the systematic examination of the likely environmental consequences of implementing a proposed action. To be an effective decisionmaking tool, this process will be integrated with other Marine Corps project planning at the earliest possible time. This ensures that planning and decisionmaking reflect environmental values, avoid legal delays later in the process, and avoid potential resource use conflicts. Care must be taken to ensure that, consistent with other considerations of national policy and with national security requirements, practical means and measures are used to protect, restore, and enhance the quality of the environment; to avoid or minimize adverse environmental consequences; and to attain the objectives of:

(1) Achieving the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other consequences that are undesirable and unintended.

PCN 102 094935 00

(2) Preserving important historic, cultural, and natural aspects of our national heritage, and maintaining, where possible, an environment that supports a variety of beneficial uses.

(3) Achieving a balance between resource use and development within the sustained carrying capacity of the ecosystem involved.

(4) Enhancing the quality of renewable resources and working toward the maximum attainable recycling of depletable resources.

4. Definitions. For the purposes of this Order, the following definitions apply:

a. United States means all states, the District of Columbia, territories and possessions of the United States, and all waters and airspace subject to the territorial jurisdiction of the United States. The territories and possessions of the United States include the Virgin Islands, American Samoa, Wake Island, Midway Islands, Guam, Palmyra Island, Johnston Atoll, Navassa Island, and Kingman Reef. For the purpose of this Order, the United States also includes the Commonwealth of Puerto Rico and the Commonwealth of the Northern Marianas.

b. Action. An action includes, but is not limited to, the following:

(1) Recommendations or reports relating to legislation, including those for appropriation.

(2) Projects, programs, and continuing actions.

(3) Policies, regulations, instructions, manuals, or major policy statements.

c. Action Sponsor. That individual or organization proposing an action.

d. Documentation. Assessment of environmental impact shall be a formal process providing an audit trail available for public review. Data generated as part of the assessment of a proposed action shall be incorporated in one or more of the following documents:

(1) Preliminary Environmental Assessment (PEA). The initial, internal Department of the Navy recorded process which identifies and evaluates any impact of a proposed action on the environment. The records of PEA's conducted are held by the command sponsoring the action under consideration. Their primary function is to assist the action sponsor in determining whether the proposed action should be subject to further environmental review.

(2) Environmental Assessment (EA). A concise public document which provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a "Finding of No Significant Impact," indicates compliance with the National Environmental Policy Act when no environmental impact statement is necessary, and facilitates preparation of a statement when one is necessary. Upon review by the activity Environmental Impact Statement (EIS) Review Board, the EA and recommendations for disposition are forwarded to the Commandant of the Marine Corps (Code LFF) for review by the Headquarters Marine Corps (HQMC) EIS Review Board.

(3) Finding of No Significant Impact (FNSI). A document by which the activity or HQMC EIS Review Board briefly presents the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment, and for which an environmental impact statement therefor will not be prepared. The FNSI shall include all alternatives considered, all significant findings, mitigation measures to be implemented, and shall note any other environmentally related documents and decisions. An FNSI may be

one result of a HQMC review of an environmental assessment. When an FNSI is proposed by the activity, a draft is forwarded to the Commandant of the Marine Corps (Code LFF), with the EA, for review by the Headquarters EIS Review Board.

(4) Environmental Statement (ES). A document taking one of the following forms:

(a) Draft Environmental Statement (DES). A document normally prepared for actions which potentially have a significant impact on the quality of the human environment or which are potentially controversial in environmental effects. They are filed with the Environmental Protection Agency (EPA) and distributed to cognizant Federal, State, local and private agencies, organizations, and individuals for review and comment.

(b) Final Environmental Statement (FES). A completed statement, normally a separate and additional document from the DES, which incorporates all pertinent comments and modifications made as a result of review of the DES. Responses to each agency's review comments will be contained in the FES.

(c) Supplemental Environmental Statement (SES). A document describing environmental impacts of a project or proposal which is prepared when substantial changes are made in the proposed action, or significant new information becomes available concerning expected environmental impacts. A supplement may be prepared at anytime, after preparation and filing of a draft or final statement, and is filed with the EPA (as with a DES) and distributed to recipients of the DES and FES.

(5) Public Record of Decision (PRD). A concise summary for the public record of the decision made by the Marine Corps among the alternatives presented in an FES. The document, to be prepared by the Commandant of the Marine Corps (Code LFF), will state the decision, identify the alternatives considered (including that which was environmentally preferable), and discuss other considerations (than the environment) that influenced the decision identified. Those proposals to minimize environmental harm, if applicable, will be identified as well as those that are not capable of being implemented. Additionally, any monitoring associated with mitigation shall be addressed.

e. Categorical Exclusion. Certain actions, based upon past experience, are known to have insignificant impact on the environment. Such actions are excluded from EA preparation. Specific examples of actions falling within this criteria are provided in paragraph 5b(1), following.

f. Required Assessments. Certain actions, based upon past experience, are known or suspected to have a significant impact on the environment. Such actions require EA's. Specific examples of actions falling within this criteria are provided in paragraph 5b(2), following.

5. Discussion. The program to implement NEPA and the CEQ regulations (provided as the enclosure) covers the myriad of decisions being made on a daily basis throughout the Marine Corps. Consideration of environmental factors at the earliest practicable stage in the planning process must be a standing operating procedure for managers in the chain of command, and must complement other requirements in the decisionmaking process (such as mission, function, cost effectiveness, etc.). As part of this process, environmental planning is considered integral with the development of base-wide facilities master plans. Accordingly, a necessary input to these plans is an assessment of the impact on the environment, using the same logic established for the preparation of EA's. The requirements for an assessment "at the earliest

practicable stage" and a formal audit trail available for public review reinforces the requirement that funding of PEA's and EA's be budgeted as a normal planning requirement. The following guidelines are provided regarding environmental documentation:

a. Preliminary Environmental Assessments. At the lowest level possible, and at the earliest planning stages of a proposed action, a PEA shall be prepared to address the scope of the endeavor to a sufficient degree to guide the decisionmaker in choosing the level of environmental scrutiny required (i.e., categorical exclusion, required EA, or ES). To the extent practicable, the PEA will also serve to alert the responsible action authority of the need for any mitigating measures. Where a determination is made that no further documentation is required, the PEA shall be filed with the action officer as evidence of NEPA compliance. PEA's need not be elaborate documents. Quite simply, they are the written evidence of the decision process used to formulate the proposed actions, and the implications which may or may not have environmental or socioeconomic impact on the human environment.

b. Environmental Assessments. When a PEA indicates a requirement for a more indepth analysis of a proposed action, an EA can be prepared. An EA is prepared when it is not known beforehand whether the proposed action will significantly affect the environment or be controversial with respect to its environmental effects. The EA will not only help comply with NEPA when no ES is necessary, but may also contribute to the preparation of an ES when one is necessary. Certain actions are categorically exempted from the requirement of EA preparation while other actions specifically require their preparation.

(1) Categorical Exclusions. A categorically excluded action is one which, based on the following criteria and past experience, does not have a significant impact on the quality of the human environment. Categorical exemptions are granted for those kinds of actions, which, among other factors, minimally affect the quality of the human environment, do not result in any significant change from the conditions existing at the site of their impact, and those whose effect is primarily economic. The following are examples of actions which, under normal conditions, are categorically excluded from the necessity for an environmental assessment or environmental statement:

(a) An action, the effects of which, are included in a previously written assessment, or draft or final impact statement. A new evaluation of the effects of such an action is not required unless the environmental effects will be markedly different from those in the original assessment or statement.

(b) Emergency activities (e.g., riot control or search and rescue (SAR) activities) do not require assessments or an environmental statement. Emergency situations requiring a response by the Marine Corps, which in turn result in significant harm to the environment, shall be reported to the Commandant of the Marine Corps (Code LFF) who will consult with the Secretary of the Navy and CEQ.

(c) Routine movement of mobile equipment.

(d) Routine maintenance and repair.

(e) Reductions in force (RIF's).

(f) Continuing actions, if there is no substantial adverse change from previously existing conditions.

(g) Minor training exercises on military property. Minor training exercises are normally construed to be those of less than Marine amphibious brigade (MAB) scope. These exercises must, however, be examined carefully with a PEA. Such review may indicate a requirement for an EA due to the proposed

location or scope of the exercise. Where an EA is not written, the PEA must ensure that all alternatives are adequately considered, mitigating measures are employed for the selected alternative, and environmental monitoring is implemented, as appropriate.

(h) Land transfers within the Department of Defense or to another Federal agency.

(i) Preparation of regulations, directives, manuals, or guidance documents which do not significantly affect the quality of the human environment in their implementation.

(j) Routine procurements.

(k) Basic and applied scientific research normally confined to laboratory services and field investigations.

(l) Mission realignment wherein no substantive change to operations is proposed.

(m) Studies that involve no commitment of resources other than manpower and funding allocations.

(n) Proposed actions that, based upon professional judgment that can be readily substantiated, are of such an environmentally insignificant nature that they clearly do not meet the threshold for requiring an EA or ES. (For example, construction/demolition of a building in an already developed area when the PEA reveals no impact.)

(2) Required Assessments. Assessments will be made for those actions which normally have the potential for violation of environmental laws or could result in a degree of degradation of environmental quality. The following are examples of actions which, under normal conditions, would require preparation of an EA:

(a) Training exercises on nonmilitary property.

(b) Major training exercises on military property. Generally, a major exercise is one of MAB size or greater. As noted previously, the scope and location of the exercise, rather than the size of the training group, may dictate the requirement for more extensive documentation. These criteria must be carefully evaluated.

(c) Dredging projects that increase water depth over previously dredged or natural depths, and/or require new spoil disposal area designations.

(d) Proposed utilization of tidelands.

(e) Real estate acquisitions or outleases of land, excluding agriculture or grazing lands, involving:

1 New leases only; i.e., not renewals or continuances.

2 Fifty acres or more.

3 Notwithstanding the information in paragraphs 5b(2)(e)1 and 2 preceding, any acquisition or lease which may be considered environmentally controversial, regardless of the appropriation or intended utilization.

(f) New installation developments; e.g., addition of a naval hospital within an existing complex.

(g) Major (greater than 50 units) family housing projects.

MCO 6280.5
16 Dec 1981

(h) New target ranges or range mission changes which would increase environmental impact.

(i) Exercises conducted at the request of States (as ship sinkings for artificial reefs) wherein environmental impact might be expected.

(j) Creation of, or changes to, low altitude aircraft training routes, special use airspace and warning areas, wherein overflights constitute a nuisance factor to persons, wildlife (particularly endangered species), or property.

(l) New sanitary landfills.

(l) Disposal of biological or chemical munitions, pesticides, or herbicides, other than in the manner in which they are authorized for use or disposal.

(m) Mission changes, base closures/relocations/consolidations, and deployments which precipitate requests for major military construction projects, or which would cause major long-term population increases or decreases in affected areas.

(n) Any activity proposed in a designated or recommended "critical" habitat of an endangered species.

(o) Any activity proposed which would affect historical or cultural sites either now cited on the National Register of Historical Places or deemed eligible for inclusion on the National Register.

(p) Closure or limitation of access to any areas that were open previously to public use, such as roads or recreational areas.

(q) Construction or any other action affecting an EPA designated aquifer or recharge zone (as specified by reference (b), section 1424 (e) (Safe Drinking Water Act)).

(r) Construction or other activities in designated wetlands, especially those in coastal zones which are designated areas of influence under the State's established coastal zone management program.

(s) Irreversible conversion of "prime or unique farmland" to other uses unless "other national interests override the importance of preservation or otherwise outweigh the environmental benefits derived from their protection."

(t) Transportation of hazardous substances, conventional munitions, or other wastes for intentional disposal into the oceans.

(u) Award or termination of contracts involving substantial quantities of natural resources, wherein the Marine Corps is the contracting agency.

(v) New or revisions to established regulations, directives, or policy guidance which initiate actions that are likely to have significant environmental effects.

(w) Weather modification projects.

(x) Any action, the environmental effect of which is likely to become the subject of public controversy.

If, after careful review of the proposed action, doubt remains as to whether an action is specifically subject to or reasonably analogous to a categorically excluded action, one which requires an EA, or one which requires an ES, the command responsible for preparation of the environmental documentation shall coordinate with the Commandant of the Marine Corps (Code LFF) in order to determine the proper course of action. Undoubtedly, the lists of categorical exclusions and required assessments are not exhaustive. If, based upon experience, action sponsors determine that the list(s) should be expanded, they are encouraged to submit their recommendations with supporting documentation to the Commandant of the Marine Corps (Code LFF) for consideration.

c. Environmental Statement. An ES will be prepared in cases where the Marine Corps Headquarters EIS Review Board finds the proposed action to significantly affect the quality of the human environment or is highly controversial with respect to environmental effects. While detailed guidance on their preparation would be forwarded with such a decision, the following general guidelines are applicable:

(1) As soon as practicable after the decision has been made to prepare an ES, an early and open process called "scoping" shall be used for determining the significant issues to be analyzed in depth relative to the proposed action. This process also serves to deemphasize insignificant issues, narrowing the scope of the environmental impact statement process accordingly. Scoping results in the identification by the action officer of the range of actions, alternatives, and impacts to be considered in the ES. For any action, the scope may depend on the relationship of the proposed action to other existing environmental documentation. Activity environmental officers and planners should establish close and harmonious planning relations with local and regional agencies and planning commissions of adjacent cities, counties, and States, for cooperation and resolution of mutual land use and environment-related problems. Additional coordination may be obtained from State and area-wide planning and development "clearinghouse." These are agencies which have been established pursuant to reference (c). Since the A-95 clearinghouses serve as a review and coordination function for Federal activities, the activity may gain insights into other agencies' approaches to environmental assessments, surveys, and studies in relation to any current proposal. They would also be able to assist in identifying possible participants in scoping procedures for projects requiring an ES.

(2) Commands commencing the preparation of an ES are encouraged to set time limits appropriate to the proposed action. The process should consider operational requirements, but must include time for the public notice and agency comment period required by law. The EPA publishes a weekly notice in the Federal Register of the environmental statements filed during the preceding week. The following time periods, calculated from publication of the EPA notice, are applicable:

(a) Draft statements should be available to the public for 15 days prior to any public hearing on the DES.

(b) Not less than 45 days from publication of notice of filing shall be allowed for public comment on draft statements prior to filing of the FES.

Prior to any decision on the proposed action, draft statements shall be available to the public for not less than 90 days. Final statements, which will be published after public review and comment, shall similarly be available to the public for at least 30 days. These periods may run concurrently.

(3) The fact that a proposed action may be of a classified nature does not relieve the Marine Corps from complying with the National Environmental Policy Act. Nevertheless, the environmental statement, both draft and final, as well as supplements, shall be prepared, safeguarded, and disseminated in accordance with the requirements applicable to classified information. When feasible, these documents shall be organized in such a manner that classified portions can be included as annexes, so that the unclassified portions can be made available to the public.

6. Processing of Environmental Documentation

a. Action sponsors will perform PEA's for proposed actions. The sponsor, in coordination with the activity EIS Board will determine if the action is listed under categorical exclusions or required assessments. If listed under categorical exclusions, no further documentation is required, and the action sponsor will retain the PEA record to demonstrate compliance with the NEPA process. If listed under required assessments, the action sponsor shall prepare the assessment. Where this requirement exceeds in-house technical capability, the action sponsor shall forward an Engineering Services Request (ESR) to the cognizant engineering field division (EFD) of the Naval Facilities Engineering Command for technical assistance. Such ESR's normally require reimbursement.

b. If the action does not fall under categorical exclusions or required assessments, the action sponsor in conjunction with the activity EIS Review Board will review the PEA and determine if the action involves sufficient environmental impact or controversy to warrant preparation of an EA. If it is determined an EA is not necessary, the sponsor will retain the PEA. If an EA is necessary, the sponsor will prepare the EA and forward the EA and a draft FNSI (when appropriate) to the Commandant of the Marine Corps (Code LFF) for review by the Headquarters Marine Corps EIS Review Board.

c. If the Headquarters Marine Corps EIS Review Board determines that an Environmental Statement is necessary, the Commandant of the Marine Corps (Code LFF) will provide guidance to the action sponsor at that time.

d. If the Headquarters EIS Review Board determines that a "Finding of No Significant Impact" is appropriate, the FNSI will be returned to the action sponsor for publication or be published in the Federal Register, if of local or national significance, respectively.

7. Overseas Actions. Guidance for assessment of proposed actions in the global commons or at overseas activities has been addressed in a separate Marine Corps Order in the 6280 series.

8. Action. All Marine Corps commands shall:

a. Assess environmental consequences of proposed actions that could affect the quality of the environment in the United States in accordance with reference (a) and the enclosure during the initial planning stages for the proposed action. Report Control Symbol DD-6280-04 has been assigned to the Environmental Documentation (PEA/EA/ES) Report required by this Order.

b. Make available to States, counties, municipalities, institutions, and individuals advice and information useful in restoring, maintaining, and enhancing the quality of the environment.

c. Utilize ecological information obtained through this process in planning and developing resource-oriented projects.

d. Utilize mitigation and monitoring techniques established as part of the environmental documentation process when implementing the proposed action.

MCO 6200.5
16 Dec 1981

9. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

H. A. Hatch

H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: 7000162 (25)
2005/2020/2030/2157003/3001/3700/4090005/5691001/6025/6050/
6600001, 002, 003, 004/6901001, 002/6967/7230001/7315/7401/
7505001/7801001/7970001/ 8145004, 005/ (2)

Copy to: 7150068/900004/9501100/9508110, 111, 112, 113, 114, 115, 116,
117/CNO(OP 45)/WestDivNavFacEngComBrO, Seattle, WA 98115/CO,
NEESA, Port Hueneme, CA 93043 (2)
7000144/8145001 (1)

APPENDIX C
MARINE CORPS BULLETIN 6280
PROCEDURAL REQUIREMENTS OF STATE
AND LOCAL POLLUTION CONTROL AGENCIES



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D. C. 20380

MCBul 6280
LFF-2-ncs
6 Oct 1981

MARINE CORPS BULLETIN 6280

From: Commandant of the Marine Corps
To: Distribution List

Subj: Procedural Requirements of State and Local Pollution Control
Agencies

Ref: (a) MCO P11000.8A

1. Purpose. To advise addressees of the requirement to comply with State and local procedural requirements in implementation of national pollution control laws.

2. Discussion

a. As outlined in the reference, Marine Corps commands have been required to comply with all substantive requirements (e.g., emission standards) of Federal, State, and local environmental regulations. Recent national laws, including the Resource Conservation and Recovery Act, the Safe Drinking Water Act, amendments to the Clean Air Act, and amendments to the Federal Water Pollution Control Act, have given specific direction to Federal agencies to now comply with State and local procedural (e.g., permits) as well as substantive requirements.

b. States and local agencies may impose requirements for permits, testing, monitoring, recordkeeping, reporting, and operator certification. Agencies may also require payment of permit application and renewal fees. Such fees will be budgeted as an operations and maintenance expense. Activities will consider the payment of fees as a mandatory requirement.

c. National Pollutant Discharge Elimination System permits administered by the Environmental Protection Agency (EPA) may now be turned over to States which have primary enforcement authority. Activities in those States should contact the State to determine the proper local procedures. In States which do not have primary enforcement authority, the EPA will continue to administer the permits. If States request an additional permit, activities should comply and advise the Commandant of the Marine Corps (Code LFF).

d. Activities receiving requests for permits or other controls on military unique structures, equipment, or vehicles should contact the Commandant of the Marine Corps (Code LFF) for guidance. The word "vehicle" is defined as a self-propelled vehicle designed for use on the highways other than vehicles designed or used for military field training, combat, or tactical purposes. EPA has determined that vehicles that exhibit features which render their use on a street or highway unsafe, impractical, or highly unlikely (e.g., tracked vehicles, vehicles of inordinate size, or with features ordinarily associated with military combat or tactical purposes such as armor and/or weaponry) are not subject to the Clean Air Act, as amended (40 CFR 85.1703(a)(3)). In view of the foregoing, military vehicles and other mobile sources which are designed and used for military field training, combat, or tactical purposes are not subject to EPA-established emissions standards applicable to new motor vehicles.

MCBul 6280
6 Oct 1981

e. The cognizant engineering field division of the Naval Facilities Engineering Command will provide assistance, upon request, in complying with both substantive and procedural requirements.

f. Headquarters Marine Corps will include the contents of this Bulletin in a forthcoming change to the reference.

3. Action. Addressees shall comply with the substantive and procedural requirements of the State and local pollution control agencies. Advise the Commandant of the Marine Corps (Code LFF) of any significant problems encountered.

4. Reserve Applicability. This Bulletin is applicable to the Marine Corps Reserve.

H. A. Hatch

H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: 2005/2020001, 001, 003, 004, 005, 006, 008, 009/3001/
3700001, 002, 004, 005, 007, 008/4090005/6025/6050001/
6600004/6901/7230001/7315/7501001 (5)
8145004, 005 (2)

Copy to: 7000162 (30)
9508110, 111, 113, 114, 115, 116, 117 (5)
7000144/8145001.(1)

APPENDIX D

MARINE CORPS ORDER 6280.1

DEPARTMENT OF THE NAVY ASSESSMENT

AND CONTROL OF INSTALLATION POLLUTANTS



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D. C. 20380

MCO 6280.1
LFF-2-mad
30 Jan 1981

MARINE CORPS ORDER 6280.1

From: Commandant of the Marine Corps
To: Distribution List

Subj: Past Hazardous Waste Disposal Sites--Department of the Navy Assessment and Control of Installation Pollutants

Ref: (a) MCO P11000.8A

1. Purpose. To identify, assess, and control the contamination of the environment from past waste disposal operations at Marine Corps activities in the 50 States and the District of Columbia.

2. Background

a. Marine Corps policy is to comply with local, State, and Federal regulations concerning generation, transportation, storage, treatment, and disposal of hazardous wastes. Implementation of this policy is being accomplished in a program consisting of two parts. The first part addresses proper handling of day-to-day generated wastes. This part of the program was implemented by a Marine Corps bulletin in the 6280 series. This Order implements the second part, which is a program to determine where hazardous wastes have been deposited in the past, assess the present and future environmental impact of the waste, and provide for control measures.

b. Past hazardous waste disposal methods, although acceptable at the time, have often caused long-term problems through release of hazardous pollutants into the soil and ground water. Residential and municipal wells have been contaminated by hazardous wastes improperly dumped or buried many years ago. In some cases, residential and commercial developments have been built on old disposal sites resulting in serious human health problems. These environmental and health problems have led to greatly increased national concern regarding past disposal practices.

c. Congressional surveys and Environmental Protection Agency (EPA) estimates indicate that there are thousands of old hazardous waste disposal sites throughout the nation. The EPA is developing a comprehensive national program to manage these disposal sites. Local, State, and Federal environmental agencies have already made inquiries to the Marine Corps; and many more are expected. It is necessary for the Marine Corps to develop a program to identify and assess its hazardous waste disposal sites and practices, and control any pollutants which pose a threat to the environment.

3. Discussion

a. In accordance with Department of Defense (DOD) direction, the U.S. Army has acted as the lead department and developed a DOD concept plan for assessment and control of installation pollutants. The plan specifies basic elements of military departments' programs and identifies support available from the Army. The Army program is administered by the U.S. Army Toxic and Hazardous Materials Agency, Edgewood Area, Aberdeen Proving Ground, Maryland 21010. Military department liaison is accomplished through a departmental coordinating committee.

PCN 102 094931 00

b. The Department of the Navy Assessment and Control of Installation Pollutants (NACIP) Program has been developed in accordance with the DOD concept plan to identify, evaluate, control, and correct past deficient waste disposal sites and practices. Similar to other Department of the Navy environmental programs, the NACIP Program is oriented toward compliance with Federal and State environmental laws and regulations using the structure of the existing Naval Environmental Protection Support Service (NEPSS). A team of specially trained personnel will be maintained at the Naval Energy and Environmental Support Activity under the Executive Director of NEPSS to conduct NACIP investigations and to develop priority recommendations for NACIP work.

c. The NACIP Program consists of three major phases: two to identify the presence of hazardous wastes and evaluate effects on the environment, and a third phase to identify and program any required corrective measures. Funding constraints necessitate that this program extend over several fiscal years. Timeframes for initiating the first phase of the NACIP Program at specific Marine Corps activities will vary and depend upon the severity of known or suspected contamination problems. Notification of an activity's imminent involvement in the program will be forwarded by letter or a Marine Corps bulletin in the 6280 series.

(1) Initial Assessment Study. The initial assessment will involve an extensive review and evaluation of existing records located at the activity and elsewhere, an examination of the activity's waste disposal history, and identification of any potential or existing pollutant problems at the activity.

(2) Confirmation Study. A confirmation study will verify problems uncovered by the initial assessment study through physical and/or analytical testing and monitoring of suspected hazardous pollutants. Confirmation studies might include, but are not limited to, soil and ground water sampling and analysis. Both the initial assessment studies and confirmation studies will be funded from pollution abatement funds managed by the Naval Facilities Engineering Command (NAVFACENGCOM).

(3) Project Identification. The confirmation study may indicate the need for remedial actions. Corrective measures will be programed in normal appropriation accounts utilizing NAVFACENGCOM-managed pollution abatement funds for projects of military construction scope and Marine Corps minor construction funds for projects of lesser scope.

4. Action

a. Commanding generals and commanding officers of Marine Corps activities selected for the initial assessment shall:

(1) Provide an activity point of contact and logistical support for the initial assessment team.

(2) Provide an activity point of contact and logistical support for the confirmation study effort, if required.

(3) Submit data on hazardous waste disposal practices to the EPA or State or local agencies (as appropriate), when required, and in the format required. Such submittals shall be made via the cognizant engineering field division of the NAVFACENGCOM with copies provided to the Commandant of the Marine Corps (Code LFF).

(4) Develop and submit exhibits for any pollution abatement projects identified in the confirmation study in accordance with the reference.

b. Commanding generals and commanding officers of Marine Corps activities not selected for the initial assessment, and in receipt of information requests

MCO 6280.1
30 Jan 1981

from the EPA, or State or local agencies regarding past hazardous waste disposal practices, shall notify the Commandant of the Marine Corps (Code LFF) for further guidance.

5. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

H. A. Hatch

H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: 2005/2020001, 002, 004, 005, 006, 007, 008, 009, 010/3001/3700/
4090005/6025/6600004/6901001, 002/7230001/7315/7401/7501/
8145004, 005 (2)

Copy to: 7000162 (20)
9508110, 111, 113, 114, 115, 116, 117 (2)
7000144/8145001 (1)

APPENDIX E

STATION ORDER 11300.5A

JOINT ACTIVITY ENVIRONMENTAL

IMPACT REVIEW BOARD

UNITED STATES MARINE CORPS
Marine Corps Air Station
El Toro (Santa Ana), California 92709

StaO 11300.5A
1JG:DMK:M6
5 Mar 1982

STATION ORDER 11300.5A

From: Commanding General
To: Distribution List

Subj: Establishment of Joint Activity Environmental Impact Review Board

Ref: (a) MCO P11000.8A

1. Purpose. To establish and delineate the responsibilities of the subject board.
2. Cancellation. StaO 11300.5.
3. Background. Paragraph 3028.9b of the reference directs each Marine Corps field activity to establish an Environmental Impact Review Board in order to provide the activity with the broad environmental awareness and responsibility required by the National Environmental Protection Act. Due to the lead activity tasking of El Toro Facilities Management and the proximity of Marine Corps Air Station (Helicopter), Tustin and this activity, one combined Review Board will serve both installations.
4. Objective. The Environmental Impact Review Board will serve to review the environmental impact of proposed actions and provide recommendations of where environmental significance or controversy exists.
5. Board Membership. The Chief of Staff is assigned as the senior member of the Board. Members are:

Assistant Chief of Staff, G-4 (Station)
Director, Facilities Management Department (Station)
Energy/Environmental Program Officer (Station)
Community Plans Officer (Station)
Executive Officer, MCAS(H)

6. Action

a. The Board will meet at the direction of the Senior Member. Any organization may bring proposed projects, actions or operational events to the attention of the Board by submitting a written synopsis of the matter to the Board via the Energy/Environmental Program Officer (Code 1JG). The Energy/Environmental Program Officer shall coordinate the meeting arrangements and act as recorder at each meeting.

b. The Board will perform the functions required by the reference. Minutes of the Board will be forwarded to the Commanding General for review within five (5) working days after the Board's meeting.

7. Applicability. The Commanding General, 3d Marine Aircraft Wing, the Commanding Officers, Marine Aircraft Group-46; Marine Corps Air Station (Helicopter), Tustin and Detachment "B", First Force Service Support Group concur and make this Order applicable to their units aboard MCAS, El Toro and MCAS(H), Tustin.



D. F. NEWTON
Chief of Staff

DISTRIBUTION: A

APPENDIX F
AIR BASES ORDER 6260.1A
AIR POLLUTION EPISODE
ABATEMENT PLAN

UNITED STATES MARINE CORPS
Marine Corps Air Bases, Western Area
El Toro (Santa Ana), California 92709

ABO 6260.1A
1JG:DMK:mey
8 Jan 1982

AIR BASES ORDER 6260.1A

From: Commander
To: Distribution List

Subj: Air Pollution Episode Abatement Plan

Ref: (a) Clean Air Act 1970, 1977
(b) Executive Order 12088
(c) California Air Resources Board Rule 708.4

Encl: (1) Diagram of Notification Procedure
(2) Example of Essential Manpower Requirements List
(3) Post-Episode Report Form

1. Purpose. To establish the procedures to be followed in the event of an announced Air Pollution Episode.

2. Cancellation. ABO 6260.1.

3. Background. MCAS El Toro and MCAS(H) Tustin are situated in the South Coast Air Basin which includes Orange County. Due to the utilization of petrochemical resources, the atmosphere is contaminated with various amounts of chemical pollutants. Occasionally, concentrations of specific contaminants in the atmosphere pose a significant threat to human health. Reference (a) supported by reference (b) directs Federal agencies to prepare a plan to be implemented in the event episode levels are reached in the future. The Environmental Protection Agency (EPA) has delegated responsibility of monitoring South Coast Air Basin air quality and declaring episode alerts to the South Coast Air Quality Management District (SCAQMD). This order provides the procedure to be followed during future episode days.

4. Information

a. The Air Episode Abatement Program is designed to minimize pollutant emissions from stationary and mobile sources for the duration of the alert.

b. Air episodes are classified as First-Stage, Second-Stage, and Third-Stage in ascending severity. In addition, each episode might be existing (actual) or predicted for the following day.

c. Photochemical oxidant levels are of primary concern during air episodes. Gasoline-powered vehicles are responsible for approximately 80 percent of the photochemical oxidants produced; therefore, motor vehicle travel must be restricted when episodes occur.

8 Jan 1982

d. Many commercial business concerns and recreational facilities will be closed during a Second and Third-Stage alert to remove the incentive to travel by personnel not required at work. All residents of the Episode Alert Area are encouraged to remain at home and travel by vehicle only as necessary.

5. Procedures

a. First-Stage Alert

(1) Actual

(a) Utilize voluntary car pools.

(b) Delay "convenience" travel in private/government vehicle for the duration of the alert.

(2) Predicted - Same as actual First-Stage Alert.

b. Second-Stage Alert

(1) Actual

(a) Utilize voluntary car pools.

(b) Suspend non-essential travel in private/government vehicles.

(c) Request visitors to postpone travel into the alert area if possible.

(2) Predicted - Same as actual Second-Stage Alert.

c. Third-Stage Alert

(1) Actual

(a) Suspend all non-essential vehicle operations.

(b) Close all services to the public except those of a critical nature.

(c) Curtail all activities which result in direct emission of "reactive hydrocarbons" (i.e. gasoline transfer, use of oil base paints, use of organic solvents).

(d) Utilize car pools to deliver personnel to their homes.

(e) Military personnel on "off crews" shall be notified of the condition through unit recall procedures and will not be required to report to work unless needed.

(2) Predicted

(a) When the Commanding General, MCABWA directs, only essential personnel will be required to report to work. Civilian personnel shall be placed on administrative leave status in accordance with regulations given in Civilian Manpower Management Instructions. Military personnel shall be in a liberty status at home, subject to recall.

(b) Encourage car-pooling by required personnel.

(c) Implement all controls listed for an actual Third-Stage Alert.

d. Notification Procedure

(1) The Commanding General, MCAS El Toro and Commanding Officer MCAS(H) Tustin will receive initial notification of an episode declaration from SCAQMD. The information shall then be disseminated to all personnel by the procedure diagrammed in enclosure (1). Upon notification by SCAQMD that the alert is terminated, the same procedure shall be employed to inform personnel.

(2) Notification on an individual unit basis will be effected by utilizing the unit recall roster.

(3) Additional information on the Episode Alert situation may be received by tuning the radio to one of the following stations: KFI - 640; KMPC - 710; KBIG - 740; KFVB - 980. All personnel shall be made aware of the service provided by these radio stations.

6. Action

a. The following shall function as Air Pollution Episode Coordinator (APEC):

(1) During Working Hours
MCAS EL TORO
Director, Facilities Management Dept., 1JG Ext. 2821

TUSTIN
Station S-4 Officer, 2EA Ext. 7334

(2) After Working Hours
MCAS EL TORO
Command Duty Officer, Ext. 3901

MCAS(H) TUSTIN
Station Duty Officer, Ext. 7324

b. All units aboard MCAS El Toro and MCAS(H) Tustin shall prepare an Essential Manpower Requirements List following the format of enclosure (2). The list must indicate the minimum number of personnel who will be required

8 Jan 1982

to report to work during a Third-Stage Air Episode. This list shall be used in conjunction with paragraph 5.c.(2). A copy of the list shall be forwarded to the respective Station APEC and maintained in current status. The MCAS(H) Tustin APEC shall forward copies of the Essential Manpower Requirements List to the MCAS El Toro APEC.

c. Each unit shall make necessary entries in its Standard Operating Procedures (SOP) to reflect Air Episode Planning.

d. The MCAS El Toro APEC shall complete, within three (3) working days, the report shown in enclosure (3) for MCAS El Toro, MCAS(H) Tustin and 3d Marine Aircraft Wing. A separate form shall be completed for each Second/Third Stage episode day. The report will be maintained on file and in accordance with reference (c), shall be provided to the SCAQMD upon request.

e. Third Marine Aircraft Wing units will implement this plan by the assignment of an Air Pollution Episode Coordinator, who will ensure the completion of the following actions:

(1) An Essential Manpower Requirements List will be prepared following the format of enclosure (2). The list must indicate the minimum number of personnel who will be required to report to work during a Third-Stage Air Episode. This list shall be used in conjunction with paragraph 5.c.(2). A copy of the list shall be forwarded to the MCAF El Toro APEC.

(2) Necessary entries in Standard Operating Procedures (SOP) shall be made to reflect Air Episode Planning.

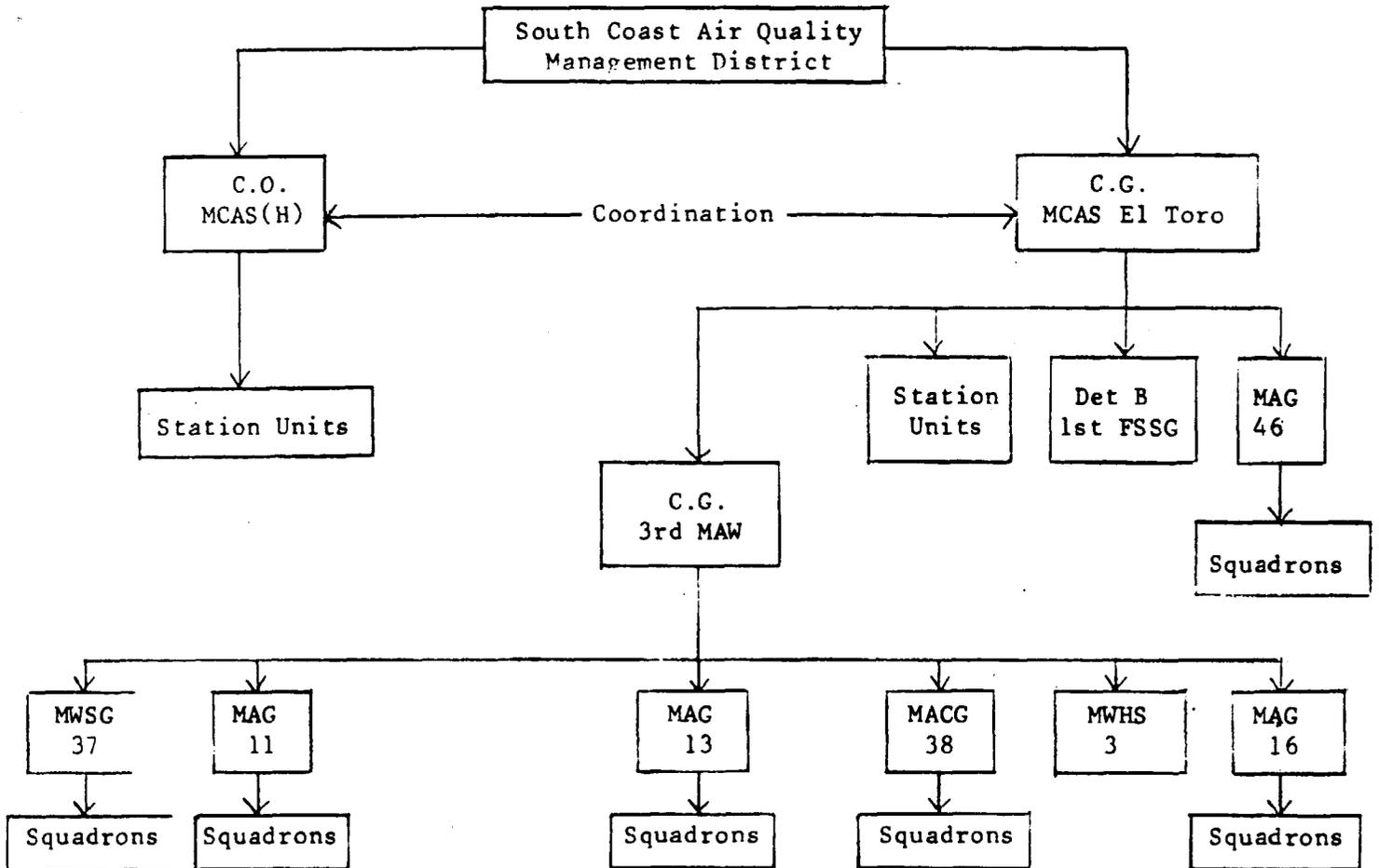
6. Applicability. The Commanding General, 3d Marine Aircraft Wing; Commanding Officer, MCAS(H) Tustin; Commanding Officer, MARTD; and Commanding Officer, DET "B" 1st FSSG concur and make this directive applicable to all their units aboard MCAS El Toro and MCAS(H) Tustin.



D. F. NEWTON
Chief of Staff

DISTRIBUTION LIST: A less MCAS Yuma; MCAF CamPen
plus 3d MAW (150); 1JG (25)

NOTIFICATION CHAIN



APPENDIX G

OPNAV INSTRUCTION 6260.1B

CONTROL OF ASBESTOS EXPOSURE

TO NAVAL PERSONNEL AND ENVIRONS

DEPARTMENT OF THE NAVY
Office of the Chief of Naval Operations
Washington, DC 20350

OPNAVINST 6260.1B
OP-45
12 February 1982

OPNAV INSTRUCTION 6260.1B

From: Chief of Naval Operations
To: All Ships and Stations (less Marine Corps field addressees not having Navy personnel attached)
Subj: Control of Asbestos Exposure to Naval Personnel and Environs

- R) Ref: (a) Code of Federal Regulations, Title 29, Chapter XVII, Part 1910, Sub Part Z, Section 1910.1001 (29 CFR 1910.1001) (NOTAL)
A) (b) OPNAVINST 5100.23A
R) (c) Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. (1971) (NOTAL)
(d) 40 CFR Part 61 (1977) (NOTAL)
(e) OPNAVINST 5100.8E
- R) Encl: (1) NAVOSH Exposure Standards, Control, and Medical Surveillance Requirements for Asbestos
(2) National Emission Standard for Asbestos
(3) Industrial Hygiene Technical Assistance Directory

1. Purpose

a. **Occupational Health** - To comply with the national safety and health standards on asbestos, promulgated in reference (a), by issuance of a Navy Occupational Safety and Health (NAVOSH) Standard, in accordance with reference (b).

b. **Environmental Protection** - To comply with the National Emission Standard for asbestos, promulgated by reference (c) and implemented by reference (d).

2. Cancellation. OPNAVINST 6260.1A.

3. Background

a. Asbestos is a general term used to describe several fibrous mineral silicates. Although there are many asbestos minerals, only six are of commercial importance: chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite. Major uses of asbestos are: asbestos cement products, floor tiles, fireproofing, high temperature insulation, asbestos cloth, friction materials (such as brake linings and clutch facings), various gasket materials, and miscellaneous other products.

b. Inhalation of asbestos fibers has been demonstrated to cause at least two distinct disease states. (R)

(1) Asbestosis is a form of fibrosis of the lung which may become disabling or even fatal. The use of the term "asbestosis" in a generic sense for all asbestos-associated disorders (including pleural plaques) is imprecise and confusing.

(2) Asbestos has also been found to be a causal factor in the development of lung cancer, malignant mesothelioma, and cancer of the gastro-intestinal tract. A latency period of 20-40 years between first exposure to asbestos and the appearance of a malignancy has been observed.

c. Some examples of tasks which can generate concentrations of airborne asbestos which exceed permissible limits are: the fabrication, installation, repair or removal ("rip-out") of asbestos insulation materials; power sawing of asbestos-containing fire retardant building materials; and brake relining and repair work.

d. Although asbestos-free substitute materials are being developed, asbestos materials continue to be used in the Navy in selected applications. In addition, ships presently in commission and shore installations both have asbestos boiler and pipe insulation that will eventually require rip-outs. The potential for personnel exposure will therefore exist for another 20 or more years. (R)

e. Recognizing the serious health implications of asbestos exposure, the government has imposed stringent occupational health and environmental protection standards (references (a) and (d) respectively) for the control of asbestos. These standards and controls, specified in enclosures (1) and (2), must be strictly enforced and followed by all Navy civilian employees, both appropriated and nonappropriated fund, and by all military personnel, both afloat and at all shore activities. (R)

4. Action

a. The Chief, Bureau of Medicine and Surgery (BUMED), shall centrally manage the Asbestos Medical Surveillance Program ashore and afloat. BUMED shall also provide professional, technical, and health educational assistance to commands for the purpose of evaluating the potential for asbestos exposure in accordance with reference (e), and as prescribed in reference (b). Enclosure (3) provides (R)

a list of activities where industrial hygiene assistance is available.

R) b. The Chief of Naval Material shall, in coordination with BUMED, provide advice and technical assistance to define appropriate engineering and work practice controls, and to identify acceptable asbestos-free substitute materials within the meaning of subparagraph 2c of enclosure (1).

c. Major claimants shall insure program support by budgeting the resources required to meet the regulatory standards for the control of asbestos as prescribed by this instruction.

d. Commanding officers for shore activities shall insure that:

(1) Appropriate occupational health/industrial hygiene control measures and monitoring procedures in enclosure (1), or headquarters-approved alternatives that provide substantially equivalent protection, are applied to processes and procedures using asbestos or asbestos-containing materials.

(2) The National Emission Standard for Asbestos is complied with as prescribed in enclosure (2).

e. Commanding officers of afloat commands shall comply with the provisions of enclosure (1) to the maximum extent feasible, and shall obtain the necessary protective clothing and equipment to protect ships' force personnel during shipboard removal of thermal asbestos insulation material. The Allowance Equipage List (AEL) 2-330024045 of 30 March 1980 has been provided to all afloat units, less those ships with minimal or no asbestos material aboard. Procedures for ship requisitioning of subject items and funding of item requirements resulting from COSAL changes are set forth in NAVSEAINST 7323.1 of 8 June 1977 (NOTAL). **(R) (A)**

A. M. SINCLAIR
Deputy Chief of Naval
Operations (Logistics)
(Acting)

Distribution:
SNDL Parts 1 and 2

Chief of Naval Operations
OP-09B15C
Washington, DC 20350 (200)

Stocked:
CO, NAVPUBFORMCEN
5801 Tabor Ave.
Philadelphia, PA 19120 (500 copies)

APPENDIX H
STATION ORDER 6260.7B
IMPLEMENTATION OF ASBESTOS
SURVEILLANCE PROGRAM

UNITED STATES MARINE CORPS
3d Marine Aircraft Wing, FMFPac
Marine Corps Air Station
El Toro (Santa Ana), California 92709

UNITED STATES MARINE CORPS
Marine Corps Air Station
El Toro (Santa Ana), California 92709

Naval Regional Medical Center
Long Beach, California 90822

StaO 6260.7B
WgO 6260.5
NRMCLBEACHINST
6260.5
ILA:RAF:A4
23 July 1981

STATION ORDER 6260.7B
WING ORDER 6260.1
NAVREGMEDCENLBEACH INSTRUCTION 6260.5

From: Commanding General, Marine Corps Air Station, El Toro
Commanding General, 3d Marine Aircraft Wing, FMFPac
Commanding Officer, NAVREGMEDCEN Long Beach, California
To: Distribution List

Subj: Implementation of Asbestos Surveillance Program

Ref: (a) OPNAVINST 6260.1A

Encl: (1) Medical Surveillance Questionnaire (OPNAV 6260/1)

1. Purpose. In compliance with the reference, the following guidelines are provided to evaluate and monitor personnel asbestos exposure in order to identify personnel for inclusion in the Asbestos Medical Surveillance Program.

2. Cancellation. StaO 6260.7A.

3. Action

a. All Commanding Officers will insure that the enclosure is distributed to all personnel assigned to their units. All questionnaires are to be completed and returned to Naval Regional Medical Center, Branch Clinic's Environmental Health Service (Code ILA), within five working days after receiving the questionnaires. Units will be contacted individually and provided the necessary forms.

b. The Senior Medical Officer, NRM Branch Clinic, MCAS, El Toro, will insure all personnel checking aboard or detaching have completed a Medical Surveillance Questionnaire. Questionnaires will be evaluated by the Asbestos Surveillance Coordinator and results documented in the individual's Medical Record.

4. Point of Contact. All aspects will be coordinated through the Environmental Health Service, NRM Branch Clinic, MCAS, El Toro.

5. Applicability. This Order is applicable to all military and civilian personnel assigned to the Marine Corps Air Station, El Toro, 3d Marine Aircraft Wing, El Toro, Marine Corps Air Station (Helicopter), Tustin and all tenant activities.


R. D. MILLER
Chief of Staff
3d MAW


Q. E. CREWS, JR.
Capt, MC, USN
Commanding Officer
NRM, Long Beach


D. F. NEWTON
Chief of Staff
MCAS

DISTRIBUTION: A plus 3d MAW (65); ILA (25); NRM (Code 1022) (100 copies)

APPENDIX I

AIR BASES ORDER 11345.1E
PREVENTION OF CONTAMINATION
TO STATE WATER RESOURCES AND
POLLUTION OF STREAMS

UNITED STATES MARINE CORPS
Marine Corps Air Bases, Western Area
El Toro (Santa Ana), California 92709

ABO 11345.1E
1JG:DRP:SI0
14 May 1981

AIR BASES ORDER 11345.1E

From: Commander
To: Distribution List

Subj: Prevention of Contamination to State Water Resources and Pollution of Streams

Ref: (a) Federal Water Pollution Control Act, as amended, 33 USC 1251 (NOTAL)
(b) MCO P11000.8A

1. Purpose. To establish measures to prevent the introduction of contaminants from the Marine Corps Air Station, El Toro into streams and underground water supplies.

2. Cancellation. St#0 11345.1D.

3. Background. The Federal policy for control of stream and harbor pollution, cited in reference (a), places responsibility upon this Command for cooperating with state and local authorities in the preservation and improvement of surface and underground water. Contamination of state and local water sources can make the Government liable for substantial monetary claims and other legal actions.

4. Preventive Measures. Recommended methods to restrict the quantity and concentration of industrial waste products from entering local streams, underground water resources or sewage treatment plants, are cited in reference (b). Potential sources of contaminants include: waste fuels and lubricants drained from aircraft; automotive equipment and other internal combustion engines; wastewater from aircraft and vehicle wash racks and steam cleaning areas containing petroleum products in suspension; paint shops; degreasing/parts cleaning areas; fueling/defueling operations involving oil and fuel containers and related pipelines; and ruptured fuel tanks and bladders. The measures that must be taken to control each of these contaminant sources are as follows:

a. Wash Rack Wastewater. Wastewater from wash racks normally contain free, dissolved and emulsified oils, fuel, greases, and dirt particles. Wastewater from wash racks shall be free of floating petroleum products or excessive quantities of cleaning compounds.

b. Steam Cleaning Areas. All waste lubricants must be placed in 55 gallon drums or large trailer-mounted tanks for transportation to a hazardous waste handling facility. Wastewater from steam cleaning areas shall contain no free floating petroleum/synthetic lubricants/products.

c. Paint Shops. All waste paint solids shall be removed from the wastepaper/separator and disposed of through a Hazardous Waste Facility. Phenolic strippers and/or dry stripping are prohibited from use with existing wastewater control facilities.

d. Degreasing and Part Cleaning Areas. Used degreasing and parts cleaning fluids shall be collected into appropriately marked 55 gallon drums and disposed of through a hazardous waste facility.

e. Collection and Disposal of Waste Hydrocarbons. Waste hydrocarbons such as motor/engine oils, lubricants (greases), fuel from vehicles/aircraft, solvents, paint thinners, degreasers, hydraulic fluids, soluble oils, cutting oils, etc., from all sources shall be collected in appropriately marked 55 gallon drums or large trailer-mounted tanks. These drums shall be used and placed in a manner that will prevent waste fluids from entering any Station drainage system or soaking the surface of the area under the drums or trailers. These drums shall be transported to a hazardous waste facility for appropriate disposal.

f. Fueling/Defueling Operations. Appropriate steps shall be taken to insure that the spilling of waste petroleum products involved in the fueling/defueling of motorized vehicles/tank trucks will not enter the drainage systems.

g. Visual Notification. Notices shall be posted at conspicuous locations in each working area involving the use of any oil product or hazardous substance.

h. Preventive Actions. To reduce the quantity and concentration of water borne contaminants addressees shall:

- (1) Wash all vehicles, aircraft and parts with detergent-type cleaning compounds approved by the Environmental Protection Agency.
- (2) Provide for the cleanout of all oil/water separators and grease traps on a regular schedule.

5. Action

a. Addressees shall list each and every fluid, with quantity and concentration, placed into a container designated for waste products. Upon filling the container notify the Hazardous Waste Coordination Office on extension 2821 during working hours for disposition.

b. In the event that a spill of oil or hazardous substance occurs, the observer shall immediately call the Fire Department on extension 3917 at MCAS El Toro and extension 7225 at MCAS(H), and Facilities Management, extension 2821 (2165 after working hours).

c. Facilities Management Department shall provide equipment and personnel to clean-up and dispose of the spillage.

6. Violations. Permitting any oil product or hazardous substance to flow on to any dirt, asphalt, concrete, metal, wood or area capable of transporting the product/substance into any storm drain channel is a violation of this Order.

7. Applicability. The Commanding General, 3d Marine Aircraft Wing, the Commanding Officers, Detachment "B", 1st Force Service Support Group and Marine Aircraft Group-46 concur and make this directive applicable to all their units aboard MCAS, El Toro and MCAS(H), Tustin.



R. J. WEISS
Chief of Staff
Acting

DISTRIBUTION: A less MCAF, CamPen, Yuma
plus 3d MAW (65); MAG-46 (10); NAMTRADETS (20); 1JG (10)

APPENDIX J
MARINE CORPS ORDER 6280.2
MANAGEMENT OF POLYCHLORINATED
BIPHENYLS (PCB'S) AND PCB ITEMS



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D. C. 20380

MCO 6280.2
LFF-2-mgg
20 Apr 1981

MARINE CORPS ORDER 6280.2

From: Commandant of the Marine Corps
To: Distribution List

Subj: Management of Polychlorinated Biphenyls (PCB's) and PCB Items

Ref: (a) 44 Fed. Reg. 31514 (1979) (40 C.F.R. 761) (NOTAL)
(b) MCO P11000.3A
(c) MCO P11000.5E

Encl: (1) (SC) PCB Compliance, Assessment, and Spill Control Guide
NESO 20.2-028 of Nov 1980
(2) 46 Fed. Reg. 16090 (1981)
(3) Recommended Topics and Information Sources for Local PCB Training
Programs

1. Purpose. To provide guidance on the proper handling, storage, and disposal of PCB's and PCB items regulated under the Toxic Substances Control Act.

2. Background

a. PCB's are a class of nonflammable chlorinated hydrocarbon fluids which, because of their extreme chemical stability, high dielectric strength, and relatively low cost, were used over the years as heat transfer fluids in numerous types of electrical and mechanical equipment. Because of their chemical stability, PCB's persist in the environment. PCB's have a tendency to be absorbed into and retained by animal tissue, and present a chronic, toxic hazard to humans. Recognizing the problems caused by widespread use of PCB's and the fact that the quantities of PCB's still in service in transformers and other equipment pose a significant threat to the environment, Congress directed that they be regulated. On 31 May 1979, the Environmental Protection Agency (EPA) published its final PCB ban rule in reference (a).

b. The Department of Defense (DOD) possesses significant quantities of PCB's in electric transformers and hydraulic fluid systems. The Defense Audit Service has estimated that there are seven million gallons of oils and lubricants containing PCB's in DOD. Some are still in use, and some are being stored awaiting disposal. EPA regulations do not prohibit the use of PCB's in all cases but do strictly control all storage, marking, transportation, and disposal of PCB material.

c. Marine Corps guidance on the broader subject of hazardous material management has been issued via Marine Corps bulletins of the 6280 series. However, due to the extraordinary attention given to PCB handling and disposal, additional guidance, specifically addressing PCB's, is necessary.

3. Action. The Marine Corps will comply fully with the EPA regulations for the handling, storage, marking, and disposal of PCB's and PCB items. In doing so, activity commanders shall:

a. Take all necessary actions to ensure the safe handling, storage, and disposal of PCB's.

MCO 6280.
20 Apr 1981

b. Develop and maintain specific information records on all PCB's and PCB items located at the facility, as required by reference (a). When preparing an activity inventory of PCB's and PCB items, many of them can be identified by attached identification plates or service remarks. If it is economically advantageous, an assumption can be made that a given item contains PCB's in excess of 500 parts per million (ppm) in lieu of actual testing. If the assumption is made regarding the presence and/or concentration of PCB, inventory records must reflect that this is an assumption and not an actual determination. The actual physical location of the identified PCB items, to include PCB contaminated transformers, should be noted in the inventory to facilitate possible future reporting requirements and to assist in the required annual summary preparation. Enclosure (1) provides detailed guidance on the preparation and maintenance of these records.

c. Ensure that the concentration category (less than 50 ppm, between 50 and 500 ppm, or in excess of 500 ppm) and total mass (kilograms) are determined for PCB's that are stored for disposal. If chemical screening is necessary, any scientifically reliable test method may be used.

d. Ensure that those PCB's and PCB items that require marking under EPA regulations (reference (a)) are properly labeled. See enclosure (1) for additional guidance.

e. In accordance with the guidance provided in enclosure (1), establish inspection procedures to detect leaks from PCB transformers and other PCB equipment which are stored for disposal. Develop rapid response cleanup and decontamination procedures for PCB or suspected PCB spills, generally as part of local oil spill contingency plans. Report spills of PCB's in accordance with reference (b), paragraph 3013.

f. In accordance with the requirements of the U.S. Court of Appeals for the District of Columbia, institute the Interim Measures Program for all PCB transformers or PCB-contaminated transformers in service or stored for reuse. Requirements for this program are detailed in enclosure (2).

g. If there is reason to believe that bulk used/waste oil is contaminated with PCB's, test these oils prior to disposal. If they are found to be contaminated, dispose of them only in accordance with EPA regulations.

h. Review the potential hazard that the locations of PCB's and PCB items present; and, if appropriate, ensure that PCB's are moved or isolated from areas that are particularly susceptible to serious environmental damage or human exposure in the event of a leak or a spill. Such areas include food storage, preparation, or serving areas and easily accessible water sources, such as flood areas and drains to a water source, wastewater treatment plant, or waterway. Where feasible, local funds shall be used to facilitate such changes. In cases exceeding local funding authority, a project shall be developed and forwarded for approval and funding in accordance with procedures set forth in reference (c).

i. Modify existing facilities or construct, as necessary, storage areas for PCB's and PCB items awaiting disposal. Funding for facility modification or construction shall be in accordance with the provisions described in paragraph 3h, preceding. Efforts should be made to develop multipurpose hazardous waste storage areas to facilitate implementation of the activity hazardous waste management program.

MCO 6280.2
20 Apr 1981

j. Implement a program to educate appropriate personnel on proper techniques for dealing with PCB's, stressing the environmental dangers and occupational health hazards associated with them. An outline of recommended topics and information sources is provided in enclosure (3).

4. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

H. A. Hatch

H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: 2005/2020001, 002, 004, 005, 006, 007, 008, 009, 010/3001/3700/
4090005/6025/6600004/6901001, 002/7230001/7315/7401/7501/
8145004, 005 (2)

Copy to: 7000162 (15)
7000144/8145001/9508110, 111, 113, 114, 115, 116, 117 (1)

APPENDIX K

WESTNAVFACENGCOM INSTRUCTION 6250.1A

PEST MANAGEMENT

POLICY, PROCEDURES, AND INFORMATION

WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA 94066

WESTNAVFACENGCOMINST 6250.1A
10A

WESTNAVFACENGCOM INSTRUCTION 6250.1A

28 AUG 1975

Subj: Pest management policy, procedures, and information

Ref: (a) Federal Environmental Pesticide Control Act of 1972 (Public Law 92-516)
(b) DOD Directive 4150.7 (NOTAL)
(c) SECNAVINST 6240.6D
(d) OPNAVINST 6240.3D
(e) NAVFACINST 6250.3D
(f) NAVFACINST 6250.5A
(g) NAVFACINST 6250.12
(h) MARCORPS ORDER P11000.8A

Encl: (1) Highlights of applicable Pest Control Directives
(2) New Pesticide Regulatory Use Requirements, Conduct of the Activity Program, and the Activity Pest Control Coordinator
(3) Medical, Public Works, and Environmental Coordination of the Activity Program, and the "Annual Pest Management Plan and Purchase Approval Request"
(4) Requisitioning Pesticides and Pesticide Dispersal Equipment
(5) Pesticide Use and Reporting - Family Housing and Outleased Land
(6) Economic Utilization of Pest Control Personnel
(7) Pest Control Work Performed by Contract

1. Purpose. To transmit current consolidated information and policies on efficient, safe and environmentally acceptable pest management programs applicable to naval activities served by the Western Division, Naval Facilities Engineering Command (WESTNAVFACENGCOM); and to provide such information for Marine Corps activities located in the same geographic areas.

2. Cancellation. WESTNAVFACENGCOM Instruction 6250.1.

3. Information. Public concern for environmental protection and for better managed pest control practices has resulted in dramatic regulatory changes in the field of pest management and its coordination. These changes are now extending progressively into each activity pest control program. This Instruction is designed to better enable addressees and Marine Corps activities in the Western United States to cope with these changes and, simultaneously, to enable the activity pest program to be more effectively utilized and coordinated with other activity components with similar environmental objectives. Enclosures (1) through (7) provide new and substantial information and direction to accomplish this end.

28 AUG 1975

4. Background. Reference (a), to be implemented by 21 October 1976, places new and extensive control over the production, registration, sale and application of pesticides as well as over the qualifications of pest control personnel. Existing DOD Navy and Marine Corps pest control procedures and programs provide a firm technical base to enable compliance with the newer demands. Enclosure (1) highlights the most significant requirements of references (a) through (h) which are germane to Navy and Marine Corps pest control programs in the Western United States, including Alaska.

5. Professional WESTNAVFACENGCOM Pest Management Assistance. Reference (a) and subsequent State and local standards have accentuated the need for professional environmental and regulatory guidance in pest and pesticide controls. Executive Order 11752 provides that Federal facilities shall be designed, constructed, managed, operated and maintained so as to conform to "Federal regulations and guidelines respecting manufacture, transportation, purchase, use, storage, and disposal of pesticides, promulgated pursuant to the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended by the FEPCA of 1972." Executive Order 11752 does not require compliance with State or local administrative procedures with respect to pollution abatement and control. Accordingly, appropriate training in the field of pest management is being provided by WESTNAVFACENGCOM to activity-selected Pest Control Coordinator personnel (see enclosure (2)). WESTNAVFACENGCOM entomologists conduct periodic on-site reviews of activity pest control programs and regular centralized recertification training for activity pest control technicians. Consultation and assistance in the technical aspects of pest control as well as regulatory liaison assistance is available from the Special Assistant for Pest Management. Requests for the professional services involving more than approximately one man-day should be followed in writing stating the specific nature of the service desired.

6. Forms. All pest management forms mentioned in enclosures (1) through (7) are available from WESTNAVFACENGCOM (Code 10A, Special Assistant for Pest Management, AUTOVON 859-2534, Commercial (415) 871-6600, Ext. 2534).

7. Action. In view of the regulatory and environmental aspects of pest control now applicable to activities pursuant to reference (a), it is essential that addressees be made aware of current directives and that the following activity components be familiar with the contents of this Instruction in order to be in conformance with the procedures promulgated herein:

a. Activity Pest Control Coordinator.

b. Public Works Department/Base Maintenance Departments (pest control personnel, Shop Planners, Housing, Transportation, Contracting Officers, Refuse Collection and Disposal personnel, and personnel charged with assuring compliance with real estate and lease requirements).

WESTNAVFACENGCOMINST 6250.1A
28 AUG 1975

c. Medical/Industrial Hygiene Department (disease vector surveillance, sanitation, safe use of pesticides, pest control shop safety facilities, disposal of pesticide containers).

d. Supply/Purchasing Department (procurement, receipt and storage of pesticides and pesticide dispersal equipment).

e. Personnel/Industrial Relations Department (selection, training, and certification of pest control personnel).

f. Air Operations (bird control, weed control, quarantine pests).

g. Waterfront Operations (pests on or in cargo, particularly pest organisms of quarantine significance).

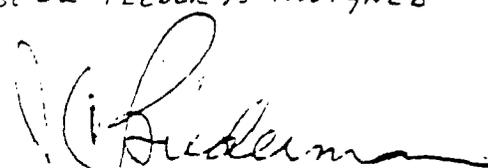
h. Commissary Officer.

i. Food Service Officers/Managers.

j. Safety Officer.

k. Non-appropriated Funds Activities (pest control contracts/pesticide applications for exchanges, golf courses, snack bars, mobile canteens, etc.).

8. "REPORT CONTROL SYMBOL". REPORT WESTDIV 6250-2-FEEDER IS ASSIGNED
TO THIS REPORT.


J. C. BIEDERMAN
Acting

Distribution:

Lists A, D, F (less 5,6), G (less 6,17,19,20,30-36),
H (less 1,10,13,16, 19,21,24,26,30,31,33),
I (less 1,10,11,20,22)

Copy to:

Lists G 31-34, J, K
NAVENPVNTMEDU 5 San Diego (10)

Stocked:

Code 10A (200)

APPENDIX L

STATION ORDER 5420.20A

ESTABLISHMENT OF ACTIVITY

ENVIRONMENTAL ENHANCEMENT COMMITTEE

UNITED STATES MARINE CORPS
Marine Corps Air Station
El Toro (Santa Ana), California 92709

REVIEWED AUG 82
CURRENT - NO REVISION
REQUIRED

StaO 5420.20A
1JG:KKB:B-1A
30 Mar 1979

STATION ORDER 5420.20A w/ch 1

From: Commanding General
To: Distribution List

Subj: Activity Environmental Enhancement Committee; establishment of

Ref: (a) MCO P11000.8A

1. Purpose. To establish and delineate the responsibilities of the subject committee.
2. Cancellation. StaO 5420.20.
3. Background. A continuing Environmental Protection Program has been implemented at MCAS, El Toro to ensure proper resources management and provide timely consideration of environmental requirements. Activity commanders having active programs within the concept of reference (a) are required to establish an Environmental Enhancement Committee. This committee will provide a forum for command involvement in environmental planning, and will make recommendations to the Commanders for environmental planning.
4. Objective. The Environmental Enhancement Committee shall function as an integral part of the Environmental Program, and will monitor, coordinate, and recommend command policy. The committee will review environmental directives and proposals, establish priorities, and direct actions to be taken to meet local environmental standards and goals.
5. Committee Membership. The Assistant Chief of Staff, G-4 is assigned as Chairman of the committee. Members are:
 - Assistant Chief of Staff, G-1 (Station)
 - Assistant Chief of Staff, G-3 (Station)
 - Assistant Chief of Staff, G-4 (3d MAW)
 - Executive Officer, ~~MAG-46~~ El Toro
 - Director, Supply Department
 - Director, Facilities Management Department
 - Station Inspector
 - Special Services Officer
 - Public Affairs Officer
 - Provost Marshal
 - Training Officer
 - Airfield Operations Officer
 - Staff Judge Advocate
 - Safety OfficerEnergy/Environmental Program Officer (Coordinator)
6. Action
 - a. The committee will meet at the direction of the Chairman.
 - b. All committee members shall familiarize themselves with the scope and general content of reference (a).
 - c. The Energy/Environmental Program Officer shall act as coordinator.
 - d. The Chairman will provide a recorder at each meeting.
7. Applicability. The Commanding General, 3d Marine Aircraft Wing and the Commanding Officer, Marine Air Reserve Training Detachment concur and make this directive applicable to their units aboard MCAS, El Toro.


G. L. FENENGA
Chief of Staff

DISTRIBUTION: A less MCAF CamPen
plus 3d MAW (5); 1JG (5)