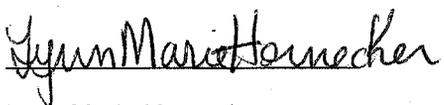


Technical Memorandum

*Former Bomb Assembly Area
Ammunition Supply Point*
Marine Corps Air Station, El Toro, California

7 September 2001

Prepared by:



Lynn Marie Hornecker
Civil Engineer

Southwest Division, Naval Facilities Engineering Command
BRAC Programs Office
San Diego, CA 92101-2404



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

5090
Ser 06CC/1069
October 9, 2001

Ms. Triss Chesney
California Environmental Protection Agency
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4700

Dear Ms. Chesney:

We have prepared this letter in response to your request of July 24, 2001, for information pertaining to the Former Bomb Assembly Area at the Marine Corps Air Station, El Toro. Following the receipt of your request, we conducted a visual inspection of the area and the nearby Oil/Water Separator (OWS) 806 and we have compiled available information in the enclosed Technical Memorandum.

We sent a copy of the documentation pertaining to the OWS 806, located near the former Bomb Assembly Area, under separate cover in response to your letter of July 24, 2001.

We appreciate your participation in the visual inspection of the assembly area on August 10, 2001. Please do not hesitate to call either Ms. Lynn Hornecker at (619) 532-0783 or me at (619) 532-0784, if you have additional questions pertaining to the Bomb Assembly Area.

Sincerely,

A handwritten signature in black ink, appearing to read "Dean A. Gould", written over a circular stamp or mark.

DEAN A. GOULD
Base Realignment and Closure
Environmental Coordinator
By direction of the Commander

Encl: (1) Technical Memorandum (SWDIV, September 2001)

Copy to:
Ms. Nicole Moutoux
United States Environmental Protection Agency
Hazardous Waste Management Division (SFD 8-2)
75 Hawthorne Street
San Francisco, CA 94105-3901

Ms. Patricia Hannon
California Regional Water Quality Control Board
Santa Anna Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

5090
Ser 06CC/1069
October 9, 2001

Ms. Judy Gibson
Division of Environmental Contaminants
Carlsbad Fish and Wildlife Service
2730 Loker Avenue, West
Carlsbad, CA 92008

Ms. Polin Modanlou
Environmental Remediation Manager
MCAS El Toro Local Redevelopment Authority
Building 83
P.O. Box 53010
Irvine, CA 92619-3010

Ms. Marge Flesch
Logistics Systems Analyst
P.O. Box 51718
Irvine, CA 92619-1718

Introduction

The purpose of this Technical Memorandum is to provide a brief description of the routine operations at the Former Bomb Assembly Area, Ammunition Supply Point at the Marine Corps Air Station, El Toro. The California Department of Toxic Substances Control (DTSC) requested information pertaining to the Bomb Assembly Area and the nearby Oil/Water Separator Site 806 in a letter to the United States Marine Corps Air Station, El Toro dated 24 July 2001. A copy of the letter is presented in the Appendix. Included with this Technical Memorandum are photographs of the Former Bomb Assembly Area and pertinent information from previously published reports.

The Former Bomb Assembly Area is located in the northeastern section of the Station, north-northeast of Installation Restoration Program (IRP) Site 2 - the Magazine Road Landfill - and east of Magazine Road. The site consists of a large concrete foundation with five steel canopy structures: Structures 806 (the largest), 807, 808, 809, and 810. The site is located within a parcel that has been designated for future use as a habitat area (County of Orange, 1999).

The structures were constructed in approximately 1986 according to plant account records and as-built drawings. Routine operations at the Former Bomb Assembly Area were discontinued in early calendar year 1999, and the Station closed on 2 July 1999. The vicinity of the Former Bomb Assembly Area is shown on Exhibit 1, and photographs are presented as Exhibit 2.

The Former Bomb Assembly Area was visually inspected by representatives of the Navy, the Marine Corps, and the California Department of Toxic Substances Control on 10 August 2001. The concrete foundation was in excellent condition and no stains or evidence of spills were observed on the concrete surface.

Bomb Assembly Area Operations

The Former Bomb Assembly Area (Assembly Area) is part of the Ammunition Supply Point (ASP), which was used for the loading and unloading of munitions in the magazine area. Bombs and components were stored in nearby ammunition magazines. The bombs were stored in containers or on pallets in the magazines and at the Assembly Area. The bombs arrived intact and were contained.

The assembly of bombs included the attachment of fins, fuse adaptors, and lug bolts for the mounts and electrical harnesses. There was no discharge of chemicals or any residual explosive materials as a result of assembly operations. The assembly operations were conducted in accordance with the appropriate ordnance publications.

Nearby Environmental Restoration Program Investigations

Evaluation of Historical Aerial Photographs

Science Applications International Corporation (SAIC) evaluated historical aerial photographs of the MCAS El Toro and the results of the evaluation are published in the *Final Report, Aerial Photograph Assessment, MCAS El Toro* (SAIC, 1993).

SAIC identified anomaly 521 as a new building on a photograph dated January 9, 1987, and anomaly 521 coincides with the Former Bomb Assembly Area structures. SAIC recommended no additional investigation of the anomaly. Extracts pertaining to anomaly 521 from the aerial photograph assessment are presented in the Appendix.

The United States Environmental Protection Agency (USEPA) evaluated historical aerial photographs of MCAS El Toro and the results of the evaluation are published in the *Site Analysis, El Toro MCAS, Orange County, California* (USEPA, 1991).

USEPA identified anomaly 301 (drums) on a photograph dated 1991. The anomaly may have been caused by the containers for bomb components that were previously stored at the Former Bomb Assembly Area. Information pertaining to anomaly 301 are presented in the Appendix.

Resource Conservation and Recovery Act Facility Assessment (RFA)

Solid Waste Management Unit (SWMU) Number 8 was identified west of the Assembly Area during the Resource Conservation and Recovery Act Facility Assessment (RFA). The sampling visit of the RFA included collection of seven soil samples from three locations adjacent to the unit. SWMU Number 8 was identified during the RFA as an abandoned oil exploration well, however, inspections that were conducted in 1999 identified the unit as an oil/water separator for the Former Bomb Assembly Area. The unit was identified as OWS 806 and SWMU Number 8 (oil exploration well) was designated a phantom site. In 1999, DTSC and the RWQCB concurred with the phantom designation for SWMU 8.

Oil/Water Separator (OWS) Site 806

Oil/Water Separator (OWS) Site 806 is located west of the Assembly Area, and runoff from the Assembly Area flowed through OWS 806. Soil samples were collected adjacent to OWS 806, and a report was submitted to the California Regional Water Quality Control Board (RWQCB), Santa Ana Region in 1999. Low levels of petroleum hydrocarbons were detected. The RWQCB concurred with no further action status for OWS Site 806 on 4 August 2000.

Installation Restoration Program

Installation Restoration Program (IRP) Site 2 – Magazine Road Landfill – is located south-southwest of the Assembly Area. An interim Record of Decision was signed in July 2000, remedial design documentation is in development as of September 2001, and a radiological survey of Site 2 is in progress as of September 2001.

A monitoring well constructed during the remedial investigation of IRP Site 2, 02NEW11, is located south-southwest of the Assembly Area, between IRP Site 2 and the Assembly Area. Results of the routine groundwater monitoring activities have been published in groundwater monitoring reports for the Installation Restoration Program. Additionally, the remedial investigation documents for IRP Site 2 address groundwater.

Storm Water Pollution Prevention Plan (SWPPP)

The SWPPP (IEM, 1997) indicates that Assembly Area Structures 806 through 810 were inspected in 1993, that either no industrial activities were in progress or no hazardous materials were in storage at the time of the inspection, and that no additional best management practices were recommended. Extracts from the SWPPP are included in the Appendix.

References and/or Sources of Information

CDM Federal Programs Corporation. 2000. Final Groundwater Monitoring Report, October-November 1998, Round 8 Sampling, Marine Corps Air Station, El Toro.

California Department of Toxic Substances Control. 2001. Letter pertaining to Oil/Water Separator 806 and the Bomb Assembly Area. 24 July.

County of Orange. 1999. Preferred Land Use Plan, Concept B. August. [prepared by the MCAS El Toro Local Redevelopment Authority]

Integrated Environmental Management (IEM). 1997. Storm Water Pollution Prevention Plan (SWPPP) for Marine Corps Air Station, El Toro, El Toro, California. July. [Contract No. N68711-96-D-2059, Delivery Order Number 0002] *{Annotation: The IEM planning document included the acquisition and review of historical and current plans of facilities and utilities. Extracts from the IEM report are presented in the Appendix.}*

Jacobs Engineering Group (JEG). 1993. Installation Restoration Program, Final Resource Conservation and Recovery Act Facility Assessment Report for Marine Corps Air Station, El Toro, California. [Navy Contract N68711-89-D-9296, Contract Task Order 193]

Science Applications International Corporation (SAIC). 1993. Final Report, Aerial Photograph Assessment, MCAS El Toro. Contract N68711-91-D-4658, Delivery Order 0002, SAIC Project No. 01-0892-0817.

Southwest Division, Naval Facilities Engineering Command. 1999. Site Assessment Report, Oil/Water Separator Site 806, Marine Corps Air Station, El Toro.

United States Environmental Protection Agency. 1991. Site Analysis, El Toro MCAS, Orange County, California.

United States Marine Corps Air Station, El Toro. 1997. Building Guide.

United States Marine Corps Air Station, El Toro. 2000. Final Interim Record of Decision, Operable Unit 2B, Sites 2 and 17, Marine Corps Air Station, El Toro. July.

Appendix

DTSC Letter dated 24 July 2001 (OWS 806 and Bomb Assembly Area)

Exhibit 1. Vicinity Map

Exhibit 2. Photographs

Extracts from Property Records and Building Guide

Extracts from SAIC Report of 1993

Extracts pertaining to USEPA anomaly 301

Extracts from SWPPP of 1997

DTSC Letter dated 25 May 1999 (Phantom SWMU 8)

RWQCB Letter dated 3 November 1999 (Phantom SWMU 8)

RWQCB Letter dated 4 August 2000 (OWS 806)



Department of Toxic Substances Control



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

Gray Davis
Governor

July 24, 2001

Mr. Dean Gould
BRAC Environmental Coordinator
Marine Corps Air Station El Toro
Base Realignment and Closure
P.O. Box 51718
Irvine, California 92619-1718

SITE ASSESSMENT REPORT FOR OIL/WATER SEPARATOR (OWS) 806
ASSOCIATED WITH THE FORMER BOMB ASSEMBLY AREA, MARINE CORPS AIR
STATION (MCAS) EL TORO

Dear Mr. Gould:

The Department of Toxic Substances Control (DTSC) requests that the Site Assessment Report for OWS 806 associated with the former bomb assembly area be submitted for review and concurrence. Based on the nature of the activities, hazardous substances as defined by the Comprehensive Environmental Response, Compensation and Liability Act may have been associated with this area.

The former bomb assembly structures (Buildings 806, 807, 808, 809, and 810) are located east of Magazine Road between Installation Restoration Program Sites 1 and 2. DTSC understands that runoff from the former bomb assembly structures was conveyed through OWS 806 to a tributary of Borrego Canyon Wash near Magazine Road. The requested Site Assessment Report describes the results of field sampling activities at OWS 806.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.
For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.*

Mr. Dean Gould
July 24, 2001
Page 2

If you have any questions, please contact me at (714) 484-5395.

Sincerely,



Triss M. Chesney, P.E.
Remedial Project Manager
Southern California Branch
Office of Military Facilities

cc: Ms. Nicole Moutoux
Remedial Project Manager
U. S. Environmental Protection Agency Region IX
Superfund Division (SFD-8-1)
75 Hawthorne Street
San Francisco, California 94105-3901

Ms. Patricia Hannon
Remedial Project Manager
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Mr. Gregory F. Hurley
Restoration Advisory Board Co-chair
620 Newport Center Drive, Suite 450
Newport Beach, California 92660-8019

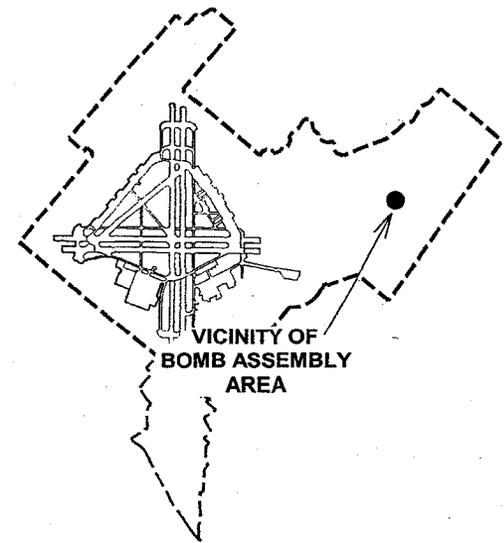
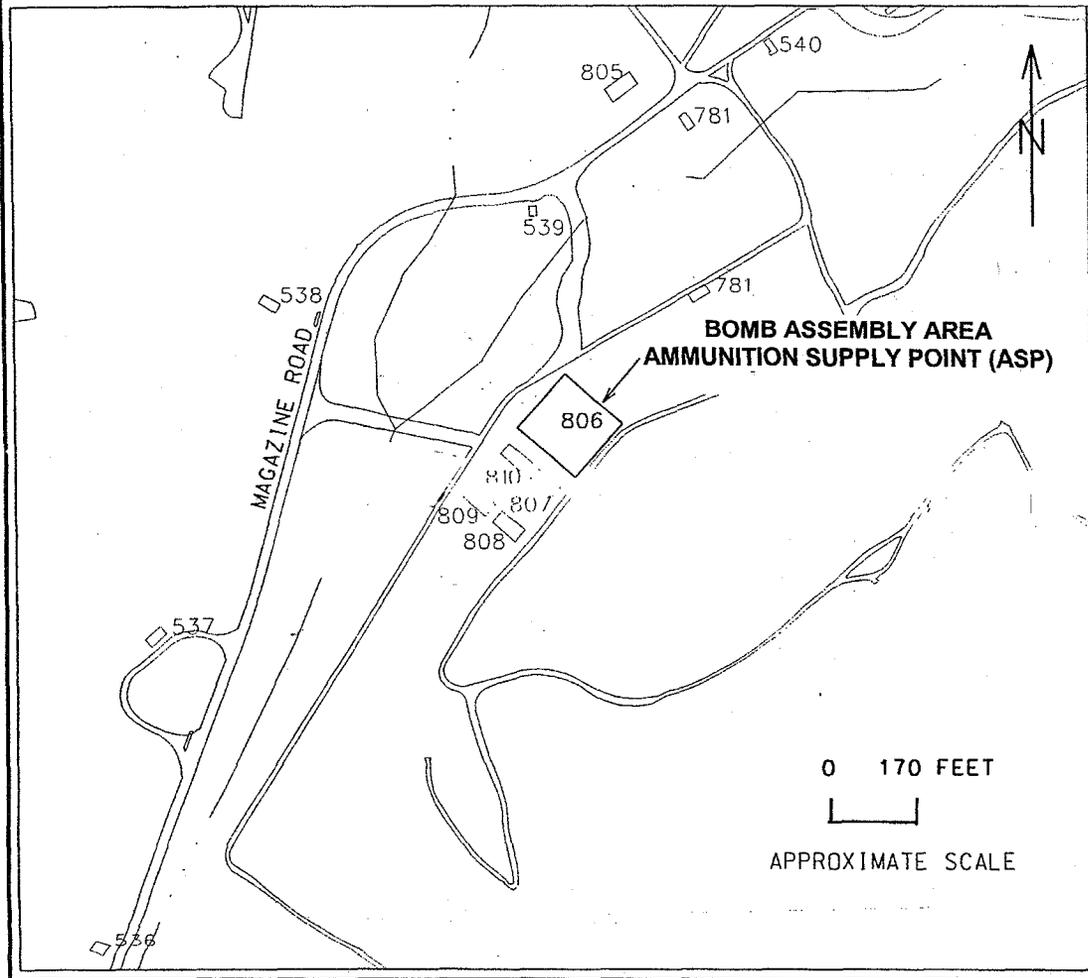
Ms. Polin Modanlou
Environmental Remediation Manager
MCAS El Toro Local Redevelopment Authority
Building 83
P.O. Box 53010
Irvine, California 92619-3010

Mr. Dean Gould
July 24, 2001
Page 3

cc: Mr. Steven Sharp
Orange County Health Care Agency
2009 East Edinger Avenue
Santa Ana, California 92705

Ms. Lynn Hornecker
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division - Code 06CC.LH
1220 Pacific Highway
San Diego, California 92132-5187

Ms. Judy Gibson
United States Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008



MARINE CORPS AIR STATION, EL TORO

Exhibit 1.

**BOMB ASSEMBLY AREA
AMMUNITION SUPPLY POINT**

VICINITY MAP

MARINE CORPS AIR STATION, EL TORO

**Exhibit 2. Photographs of Former Bomb Assembly Area, Ammunition Supply Point (ASP)
Marine Corps Air Station, El Toro**

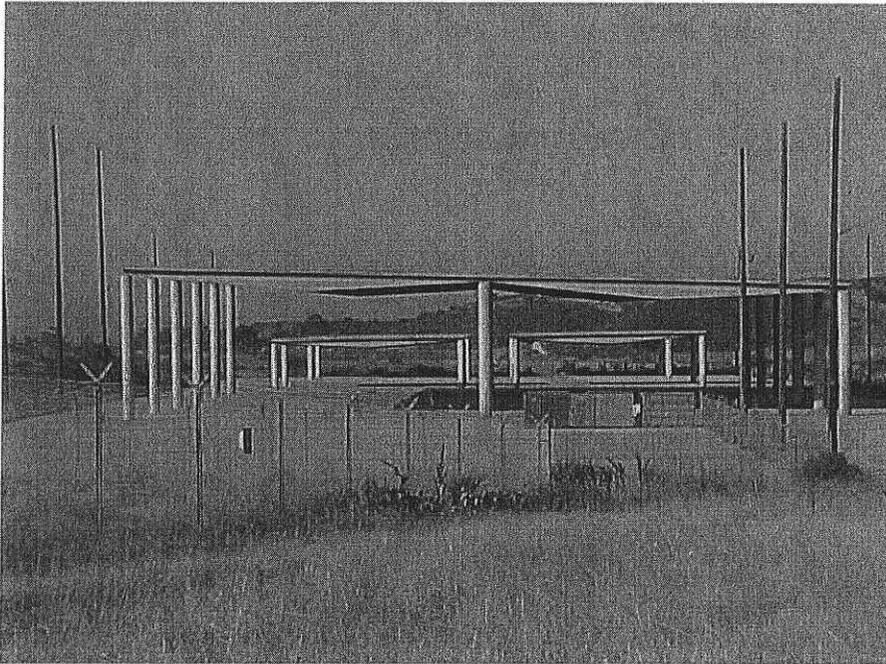


Photo 1. Bomb Assembly Structures 806, 807, 808, 809, and 810. Structure 806 is in the foreground.
(Date of Photo: August 2001)

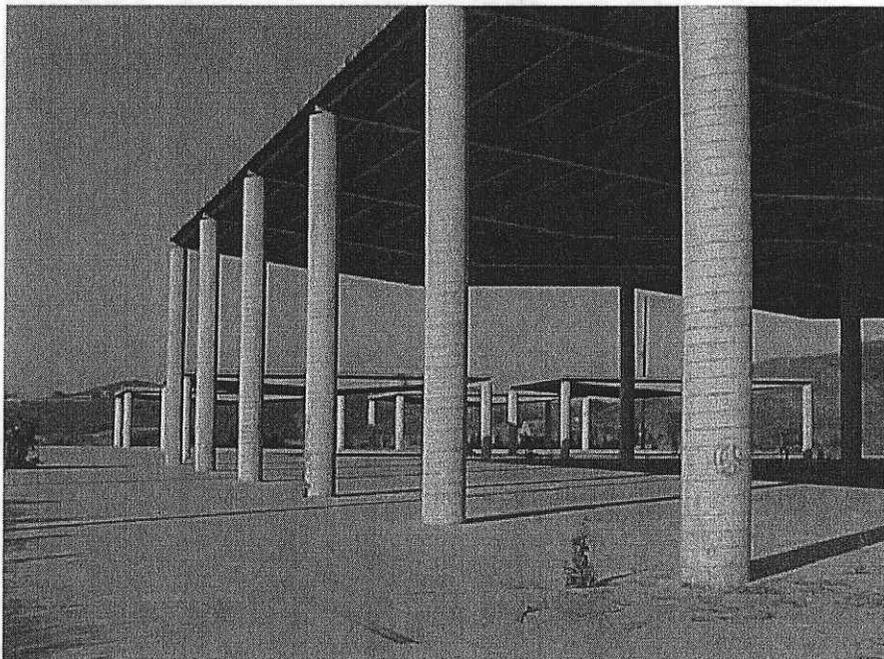


Photo 2. Bomb Assembly Structures 806, 807, 808, 809, and 810. (Date of Photo: August 2001)

Exhibit 2. (Continued)
Photographs of Former Bomb Assembly Area, Ammunition Supply Point (ASP)
Marine Corps Air Station, El Toro

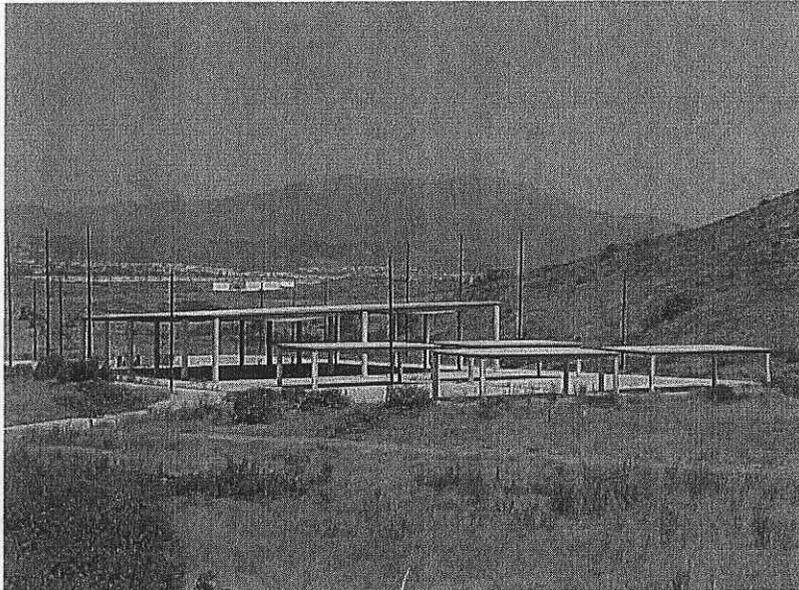


Photo 3. Bomb Assembly Structures. (Date of Photo: August 2001)

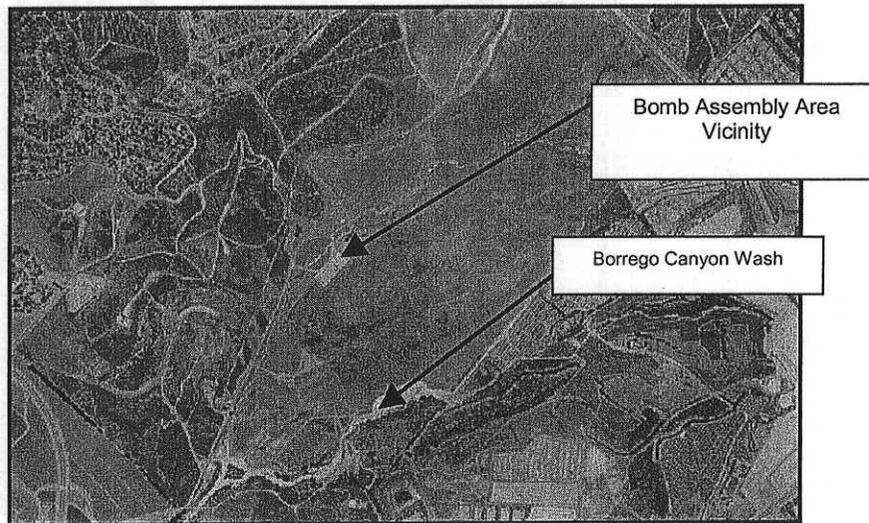


Photo 4. Bomb Assembly Area Vicinity. (Date of Photo: Summer 2000)

El Toro Building Guide

| BLDG | GRI | DESCRIPTION | TENANT | CATCO | CAC | SIZE |
|------|-----|------------------------------|--------------|-------|------|---------|
| 798 | P12 | Aircrft Decontamination Trng | Wing NBC | 17950 | EBAO | 2 AC |
| 799 | P1 | Package Store | MWR/Ret | 74071 | EBLO | 10000 |
| 800 | U10 | Vehicle Maint Facility | MWSS-373 | 21451 | EBBO | 30661 |
| 801 | U10 | Dispatcher | MWSS-373 | 21451 | EBBO | 240 SF |
| 802 | U10 | Washrack | MWSS-373 | 21455 | EBBO | 4000 SF |
| 803 | U10 | Fuel Island (1) | MWSS-373 | 12310 | ECBO | 3 OL |
| 804 | U10 | Fuel Island (2) | MWSS-373 | 12310 | ECBO | 3 OL |
| 805 | H15 | Forklift Bldg | Sta Ordn | 21860 | EBBO | 1922 SF |
| 806 | H15 | Ammunition Assembly Shed | Sta Ordn | 42510 | EBQO | 74888 |
| 807 | H15 | Open Ammunition Storage | Sta Ordn | 42510 | EBQO | 1800 SF |
| 808 | H15 | Open Ammunition Storage | Sta Ordn | 42510 | EBQO | 1800 SF |
| 809 | H15 | Open Ammunition Storage | Sta Ordn | 42510 | EBQO | 1800 SF |
| 810 | H15 | Open Ammunition Storage | Sta Ordn | 42510 | EBQO | 1800 SF |
| 811 | H15 | Box Magazine | Sta Ordn | 42172 | EBQO | 3630 SF |
| 812 | H15 | Box Magazine | Sta Ordn | 42172 | EBQO | 3630 SF |
| 813 | H15 | ARCH Magazine | Sta Ordn | 42122 | EBQO | 1250 SF |
| 814 | H15 | ARCH Magazine | Sta Ordn | 42122 | EBQO | 1250 SF |
| 815 | H15 | ARCH Magazine | Sta Ordn | 42122 | EBQO | 1250 SF |
| 816 | Q12 | Computer Van Pad | MAG-11 | 11665 | EDCO | 174 SF |
| 817 | Q13 | Vehicle Wash Bldg | MWR/Rec | 21455 | EBBO | 288 SF |
| 818 | T-3 | Sewage Lift Station | Installation | 83230 | EHFO | 100 GM |
| 819 | K15 | Small Arms Range Bldg | Sta Trng | 17940 | ECFO | 1 EA |
| 823 | O3 | Temporary Lodging Facility | MWR/Hosp | 74020 | EBLO | 23800 |
| 824 | S7 | Crash Crew & Sta Recovery | SOMS | 14120 | EBNO | 2112 SF |
| 825 | U10 | Hazardous MH Locker | MWSS-373 | 44130 | EBDO | 250 SF |
| 826 | P12 | Armory | MALS-16 | | | 4050 SF |
| 827 | U7 | Supply Loading Ramp | Supply | 85115 | EDAO | 1 EA |
| 828 | K7 | Stables Equip Building | MWR/Rec | 74079 | EBLO | 1120 SF |
| 829 | P4 | Admin Office | NAESU | 61010 | EBFO | 620 SF |
| 829 | P4 | Wing Headquarters | 3d MAW | 61070 | EBFO | 45287 |
| 830 | L2 | Playing Field | MWR/Rec | 75020 | ECNO | 1 EA |
| 831 | R12 | Cryogenics | MALS-11 | 14187 | EBNO | 5074 SF |
| 832 | P12 | NBC Gas Chamber | MWHS-3 | 17120 | EBAO | 2680 SF |
| 833 | N3 | Chapel | Chaplain | 73083 | EBLO | 7228 SF |
| 834 | L10 | Fam Hsg Community Center | Installation | 71432 | EBBO | 5000 SF |
| 835 | P14 | Gate #3 Sentry House | PMO | 73025 | EBLO | 96 SF |
| 836 | T3 | Aircraft Display Gate #9 | Installation | 76020 | ECNO | 1 EA |
| 837 | P2 | Aircraft Display Gate #1 | Installation | 76020 | ECNO | 1 EA |
| 838 | M9 | Aircraft Display Gate #2 | Installation | 76020 | ECNO | 1 EA |
| 839 | Q4 | Combat Training Pool | Training | 17120 | EBAO | 20820 |
| 840 | N14 | Explosive Safety Office | MALS-11 | 61010 | EBFO | 928 SF |
| 841 | O13 | Open Ammunition Storage Pad | Sta Ord | 42510 | 75RO | 210 SY |
| 842 | O2 | Bachelor Enlisted Quarters | Billeting | 72111 | EBGO | 216 PN |
| 842 | O2 | Bachelor Enlisted Quarters | Billeting | 72112 | EBGO | 180 PN |
| 842 | O2 | Bachelor Enlisted Quarters | Billeting | 72113 | EBGO | 110 PN |
| 843 | P12 | Tactical Support Van Pad | MAG-11 | 11665 | EDCO | 1044 SY |

| | | | | | | | | | | | | |
|------|-------|------------------------------|---------------|----------|----|-------|----|----|----|-------------|-------------|------|
| | 81320 | ELECTRICAL TRANSFORMER | N6247487C7876 | 19930610 | | 0 | 0 | 0 | 0 | \$29,960 | \$33,016 | 1993 |
| 860 | 13470 | PAR PLATFORM | N6247485C5807 | 19881215 | | 104 | 34 | 12 | 6 | \$90,000 | \$109,710 | 1988 |
| 861 | 14130 | AIRCRAFT LINE OPERATIONS BLD | N6247485C5807 | 19881215 | | 240 | 20 | 12 | 8 | \$33,000 | \$40,227 | 1988 |
| 5763 | 75057 | PLAYGROUND NO.2 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$28,000 | \$30,856 | 1993 |
| 5764 | 75057 | PLAYGROUND NO.3 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$21,000 | \$23,142 | 1993 |
| 5765 | 75057 | PLAYGROUND NO.4 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$19,000 | \$20,938 | 1993 |
| 5766 | 75057 | PLAYGROUND NO.6 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$33,000 | \$36,366 | 1993 |
| 5767 | 75057 | PLAYGROUND NO.8 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$49,000 | \$53,998 | 1993 |
| 5768 | 75057 | PLAYGROUND NO.10 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$28,000 | \$30,856 | 1993 |
| 5769 | 75057 | PLAYGROUND NO.12 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$30,000 | \$33,060 | 1993 |
| 5770 | 75057 | PLAYGROUND NO.14 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$11,000 | \$12,122 | 1993 |
| 5771 | 75057 | PLAYGROUND NO.15 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$8,000 | \$8,816 | 1993 |
| 5772 | 75057 | PLAYGROUND NO.16 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$71,000 | \$78,242 | 1993 |
| 5773 | 75057 | PLAYGROUND NO.18 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$33,000 | \$36,366 | 1993 |
| 5774 | 75057 | PLAYGROUND NO.19A | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$29,000 | \$31,958 | 1993 |
| 5775 | 75057 | PLAYGROUND NO.20 | N6247491C2791 | 19931215 | | 0 | 0 | 0 | 0 | \$16,000 | \$17,632 | 1993 |
| 929 | 73076 | DOG KENNEL | | 19870101 | SF | 540 | 36 | 15 | 10 | \$20,000 | \$25,800 | 1987 |
| 806 | 42510 | ASSEMBLY SHED | N6247483C2177 | 19860715 | | 0 | 0 | 0 | 0 | \$1,055,097 | \$1,372,681 | 1986 |
| 807 | 42510 | STORAGE SHED | N6247483C2177 | 19860715 | | 0 | 0 | 0 | 0 | \$77,297 | \$77,297 | |
| 808 | 42510 | STORAGE SHED | N6247483C2177 | 19860715 | SY | 0 | 0 | 0 | 0 | \$77,297 | \$100,563 | 1986 |
| 809 | 42510 | STORAGE SHED | N6247483C2177 | 19860715 | SY | 0 | 0 | 0 | 0 | \$77,297 | \$100,563 | 1986 |
| 810 | 42510 | | N6247483C2177 | 19860715 | SY | 0 | 0 | 0 | 0 | \$77,297 | \$100,563 | 1986 |
| 931 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 36 | 0 | 0 | 0 | \$2,000 | \$2,000 | |
| 932 | 44130 | HAZARDOUS MATERIAL | | 19940901 | SF | 120 | 10 | 12 | 0 | \$2,000 | \$2,000 | |
| 933 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 17 | 16 | 15 | \$4,000 | \$4,000 | |
| 934 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 17 | 16 | 16 | \$3,000 | \$3,000 | |
| 935 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 16 | 0 | 0 | 0 | \$2,000 | \$2,000 | |
| 936 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 16 | 17 | 16 | \$4,000 | \$4,000 | |
| 937 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 17 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 938 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 16 | 17 | 15 | \$4,000 | \$4,000 | |
| 939 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 255 | 15 | 17 | 15 | \$4,000 | \$4,000 | |
| 940 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 16 | 17 | 15 | \$4,000 | \$4,000 | |
| 941 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 20 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 942 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 13 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 943 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 13 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 944 | 44130 | HAZARDOUS WASTE | | 19940901 | SF | 253 | 11 | 23 | 7 | \$10,000 | \$10,000 | |
| 945 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 288 | 16 | 18 | 15 | \$4,000 | \$4,000 | |
| 946 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 9 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 947 | 44130 | HAZARDOUS MATERIAL | | 19940901 | SF | 840 | 42 | 20 | 0 | \$4,000 | \$4,000 | |
| 948 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 93 | 0 | 0 | 0 | \$1,000 | \$1,000 | |
| 949 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 288 | 12 | 24 | 8 | \$1,000 | \$1,000 | |
| 950 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 288 | 12 | 24 | 8 | \$500 | \$500 | |
| 951 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 16 | 17 | 15 | \$4,000 | \$4,000 | |
| 952 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 272 | 16 | 17 | 15 | \$4,000 | \$4,000 | |
| 953 | 44130 | HAZARDOUS MATERIAL | | 19940901 | SF | 140 | 10 | 14 | 0 | \$2,000 | \$2,000 | |
| 954 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 104 | 8 | 13 | 7 | \$500 | \$500 | |
| 955 | 44130 | HAZARDOUS MATERIAL | | 19940901 | SF | 1,352 | 26 | 52 | 16 | \$1,000 | \$1,000 | |
| 956 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 720 | 18 | 40 | 16 | \$4,000 | \$4,000 | |
| 957 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 320 | 16 | 20 | 15 | \$4,000 | \$4,000 | |
| 958 | 44130 | HAZARDOUS MATERIAL | | 19940901 | SF | 200 | 20 | 10 | 14 | \$4,000 | \$4,000 | |
| 959 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 513 | 27 | 19 | 14 | \$4,000 | \$4,000 | |
| 960 | 83141 | HAZARDOUS WASTE | | 19940901 | SF | 200 | 20 | 10 | 14 | \$4,000 | \$4,000 | |
| 961 | 83142 | HAZARDOUS WASTE | | 19940901 | SY | 11 | 0 | 0 | 0 | \$500 | \$500 | |

EXTRACTS

Final Report
Aerial Photograph Assessment
MCAS El Toro
Contract No. N68711-91-D-4658
Delivery Order 0002
SAIC Project No. 01-0892-02-0817

Submitted to:

Naval Facilities Engineering Command
Southwest Division
1220 Pacific Highway, Room 18
San Diego, CA 92132-5181

Submitted by:

Science Applications International Corporation
Engineering Sciences Division
10260 Campus Point Drive, MS F1
San Diego, CA 92121

October 25, 1993

Aerial Photographic Interpretation
 MCAS El Toro
 Santa Ana, California

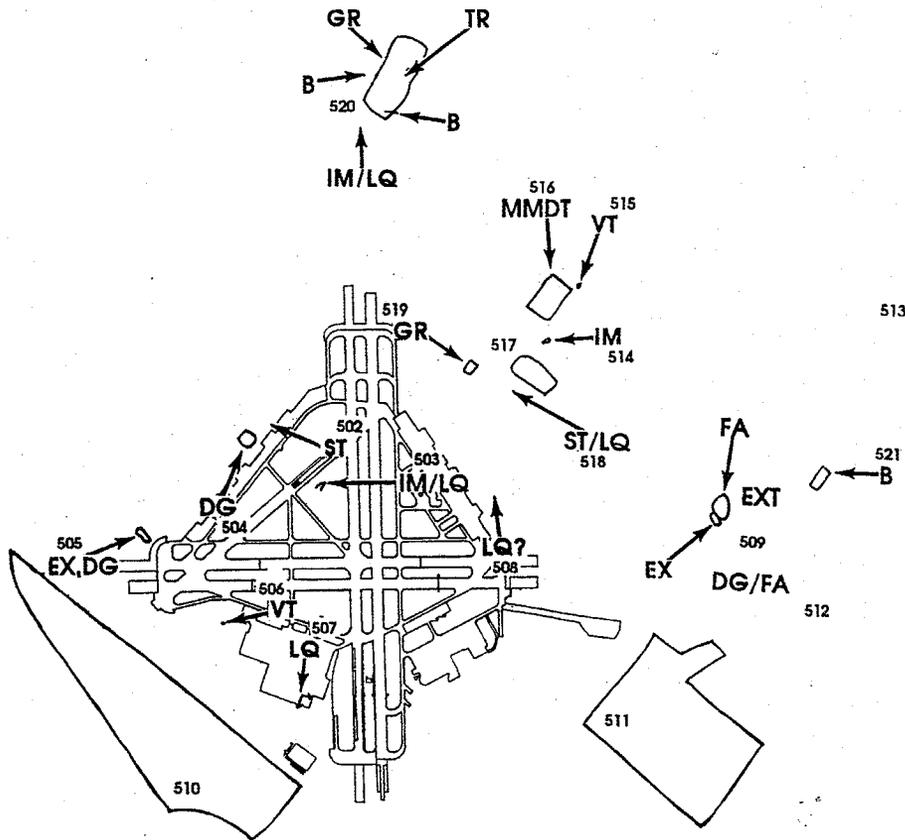
1987
 Figure 23

Sheet 1 of 1
 January 9, 1987
 Photo Number F-255
 Source:

Continental Aerial Photo, Inc.

Prepared for:

Southwest Division
 Naval Facilities Engineering Command
 Contract N68711-92-D-4658



LEGEND:

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|--------|------------------|--------|---------------------|
| B | Building | IM | Impoundment |
| D | Drums | LQ | Liquid |
| DB | Debris | LT | Light-Toned |
| DG | Disturbed Ground | M | Material |
| DK | Dark-Toned | MM | Mounded Material |
| EX | Excavation | OS | Open Storage |
| EXT | Extraction | R | Refuse |
| FA | Fill Area | ST | Stain |
| FBR | Fuel Bladder | TR | Trench |
| | Revetment | UO | Unidentified Object |
| GR | Graded Area | VT | Vertical Tank |
| GS | Ground Scar | WS | Wet Soil |
| HT | Horizontal Tank | | |



3000' 0 3000' 6000'
 1" = 3000'

1992 Airfield Outline
 Used for Reference

SAC Science Applications
 International Corporation
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2.22 1987 PHOTOGRAPHS

FIGURE: 23
DATE: 9 JANUARY 1987
PHOTOGRAPH: F-255
NOTES: Copyrighted photograph, reproduction not authorized.

This is a small-scale photograph with poor resolution.
Recognition and identification of small-scale features is difficult.

c 502. Stains (ST) and possible drums (D) are noted between Buildings 13 and 14, near N 2nd Place and N 3rd Place. Additional investigation is recommended.

a 503. No significant changes are noted at Crash Crew Pit No.2 (Site 16), but an impoundment (IM) with liquids (LQ) is observed. No additional investigation is recommended at this time. The current IR program field investigation of the Site 16 area appears to be adequate, relative to the features noted here.

c 504. Disturbed ground (DG) related to new construction can be observed at the eastern corner of El Toro Boulevard and West Marine Way. Additional investigation is not recommended at this time.

c 505. Areas of excavation (EX) and disturbed ground (DG) are noted near the Battery Acid Disposal Area (Site 14). The purpose of the work is unknown. The current IR program field investigation area for Site 14 should be expanded to include these features.

c 506. There is a probable vertical tank (VT) in the Transformer Storage Area (Site 11). The tank should be verified, and its contents determined. The current IR program field investigation of Site 11 should be expanded to include the area of the tank.

b 507. Liquid (LQ) is flowing southward and westward from the southeast corner of Building 296 (hangar), toward Buildings 315 and 326, near the southeast corner of the aircraft parking apron. Additional investigation of the area where the liquids reach soil is recommended. This can be accomplished by expanding the limits of the current IR program field investigation of Drop Tank Drainage Area No.2 (Site 7).

c 508. There may be liquid (LQ) flowing near the northeast side of Building 125, near N 9th Street and P Street. Additional investigation is recommended.

a 509. No significant changes are noted at the Communication Station Landfill (Site 17).

c 510. The International Raceway facilities have been removed and grading (GR) for Interstate Highway 5 and Interstate Highway 405 is in progress. No additional

→ c 521. There is a new building (B) at the southern edge of the magazine area. No additional investigation is recommended at this time.

PLATE 2
LOCATION OF SITES AND AREAS OF
POTENTIAL CONCERN IDENTIFIED DURING
THE SAIC INVESTIGATION

MCAS El Toro
Santa Ana, California

Prepared for:

Southwest Division
Naval Facilities Engineering
Command

Contract N68711-92-D-4658

LEGEND:

(453)

Approximate location of site or area of
potential concern.

Note: The number refers to comments in
Section 2 and Appendix B that discuss or
identify the feature or area of concern.



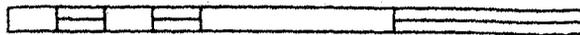
General Areas and Areas of Potential Concern
Discussed in Section 2 of this Report



SAP Amendment RI/FS Sites



600' 300' 0 600' 1200'



1" = 600'



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SITE 1

- 571
- 572
- 97
- 118
- 221
- 254
- 373
- 513

107

267

285

325

521

- 182
- 256
- 315
- 375
- 388
- 473
- 474
- 509
- 535
- 568
- 573

193

498

534

455

98

57

98

SITE 2



APPENDIX A

SITES OF POTENTIAL CONCERN IDENTIFIED BY USEPA (Reference B)

Symbol Legend

| Symbol | Description | Symbol | Description |
|--------|------------------------|--------|---------------------|
| B | Building | IM | Impoundment |
| D | Drums | LQ | Liquid |
| DB | Debris | LT | Light-toned |
| DG | Disturbed ground | M | Material |
| DK | Dark-toned | MM | Mounded material |
| EX | Excavation | OS | Open storage |
| EXT | Extraction | R | Refuse |
| FA | Fill area | ST | Stain |
| FBR | Fuel bladder revetment | TR | Trench |
| GR | Graded area | UO | Unidentified object |
| GS | Ground scar | VT | Vertical tank |
| HT | Horizontal tank | WS | Wet soil |
| C | Container | | |

| COMMENT | YEAR | OBSERVATIONS |
|---------|------|--------------|
| 1. | 1952 | LQ,TR |
| 2. | 1952 | EX |
| 3. | 1952 | MT MM |
| 4. | 1952 | PROB ST |
| 5. | 1952 | POSS ST |
| 6. | 1952 | ST |
| | 1965 | ST |
| 7. | 1952 | PROB PIT |
| | 1965 | POSS ST |
| 8. | 1965 | POSS ST |
| | 1970 | ST |
| | 1980 | ST |
| 9. | 1965 | POSS LQ |
| 10. | 1965 | ST |
| | 1970 | WS |
| | 1986 | PROB ST |
| | 1991 | PROB FA, ST |
| 11. | 1965 | ST |
| 12. | 1965 | ST, DG |
| 13. | 1965 | ST |
| | 1970 | ST |
| | 1980 | ST |
| | 1991 | ST |

| | | |
|--------|------|--------------------------------|
| 272. | 1970 | DB |
| | 1991 | POSS PITS, GS |
| 273. | 1970 | POSS PITS |
| 274. | 1970 | FA W/DB, MT, DK MM, R |
| | 1986 | FA |
| 275. | 1970 | FA W/DB, MT, DK MM, R |
| | 1980 | LQ |
| 276. | 1970 | GR |
| | 1986 | GR, FA |
| 277. | 1970 | POSS TR W/ DK LQ |
| | 1980 | ST |
| | 1986 | ST |
| 278. | 1970 | POSS TR W/LQ |
| 279. | 1970 | FA |
| 280. | 1970 | Possible Smoke Plume, R |
| | 1986 | POSS ST |
| 281. | 1970 | ST, DK MM, DK Circular Objects |
| 282. | 1970 | DB, DK LQ |
| | 1991 | PIT |
| 283. | 1970 | Additional R and ST |
| 284. | 1980 | FA/GS |
| | 1986 | REV FA |
| | 1991 | REV FA |
| 285. | 1980 | REV FA |
| | 1986 | REV FA |
| | 1991 | REV FA |
| 286. | 1980 | LT, DK MM |
| | 1986 | GR,FA |
| 287. | 1980 | ST |
| | 1991 | ST |
| 288. | 1980 | ST |
| 289. | 1980 | ST |
| | 1986 | (2) PITS |
| 290. | 1980 | ST |
| | 1991 | M |
| 291. | 1980 | DK MM |
| 292. | 1980 | LT MM |
| 293. | 1980 | EXT |
| 294. | 1986 | TR |
| 295. | 1986 | ST |
| 296. | 1986 | POSS ST |
| 297. | 1986 | VT |
| 298. | 1986 | VT |
| 299. | 1986 | GS |
| 300. | 1991 | FA/DK MM |
| → 301. | 1991 | (10) D |

PLATE 1
LOCATIONS OF SITES AND AREAS
OF POTENTIAL CONCERN IDENTIFIED
DURING THE USEPA INVESTIGATION

MCAS El Toro
Santa Ana, California

Prepared for:

Southwest Division
Naval Facilities Engineering
Command
Contract N68711-92-D-4658

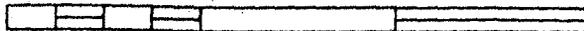
LEGEND:

 Approximate location of site or area of potential concern.

Note: The number refers to comments in Appendix A of this report. See also Reference B, Site Analysis, El Toro MCAS, Orange County, California, USEPA, 1991.

 SAP Amendment RI/FS Sites



600' 300' 0 600' 1200'

1" = 600'

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EXTRACTS

**STORM WATER POLLUTION PREVENTION PLAN
(SWPPP)**

FOR

**MARINE CORPS AIR STATION EL TORO
EL TORO, CALIFORNIA**

**CONTRACT NO. N68711-96-D-2059
DELIVERY ORDER NO. 0002**

VOLUME 1

JULY, 1997

INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.

5. STORM WATER POLLUTION PREVENTION EVALUATION

Because of its mission as a part of the National Defense system, MCAS El Toro has numerous facilities and activities where there is potential for pollutants to contact storm water. These facilities include fueling operations, wash racks for aircraft, vehicles, and equipment, engine repair and maintenance, and support facilities that use or store significant quantities of materials containing potential pollutants.

Discharges from MCAS El Toro occur at various locations. Storm water run-off enters Agua Chinon Wash, Bee Canyon Wash, Rifle Range Road Ditch, San Diego Creek, and Upper Newport Bay. A Site Topographic Map shows the locations of discharges leaving the air station. To provide a clearer understanding of the hydrologic conditions at MCAS El Toro, each drainage basin has been modeled using the U.S. Environmental Protection Agency's Storm Water Management Model, as described in the Watershed Characterization Report (Volume 3). The physical characteristics of each drainage basin (e.g., percent impermeability, etc.) are also discussed in that report.

The facilities at MCAS El Toro were investigated from field visits in 1993 to determine whether they were of limited concern or were more likely to be a possible threat to water quality. Addressed in the following sections are those buildings of concern within each Drainage Basin. Each building or activity observed during field observations is listed and discussed by drainage basin.

5.1 DRAINAGE BASIN 1

This drainage basin comprises most of the buildings in Areas 27 and 28. It has a map area of about 188 acres.

5.1.1 Buildings of Limited Concern

The buildings listed below in Table 5-1 do not use, handle, transport or store significant quantities of industrial materials nor do they generate significant amounts of liquid or solid industrial pollutants, and they do not appear to be of concern to the quality of storm water discharges:

5.33 DRAINAGE BASIN 33

This drainage basin comprises some of the buildings in Areas 1, 5, 10 and 15. It has an area of about 798 acres. This is an agricultural area and there were no industrial pollutants or activities observed. For agricultural operations, a non-point survey and monitoring program is recommended to assess potential contributions of pollutants in storm water run-off.

5.33.1 Buildings of Limited Concern

The following buildings do not use, handle, transport, or store significant quantities of industrial materials nor do they generate significant amounts of liquid or solid pollutants, and they do not appear to be of concern to the quality of storm water discharges:

| TABLE 5-35 BASIN 33 BUILDINGS OF LIMITED CONCERN | | |
|--|----------------------------|------------------|
| BLDG # | DESCRIPTION | TENANT |
| 536 | Small Arms/Pyro Magazine | Station Ordnance |
| 537 | Small Arms/Pyro Magazine | Station Ordnance |
| 538 | Small Arms/Pyro Magazine | Station Ordnance |
| 539 | Small Arms/Pyro Magazine | Station Ordnance |
| 540 | Fuse & Detonator | Station Ordnance |
| 542 | High Explosives - Magazine | Station Ordnance |
| 543 | High Explosives - Magazine | Station Ordnance |
| 544 | High Explosives - Magazine | Station Ordnance |
| 545 | High Explosives - Magazine | Station Ordnance |
| 546 | High Explosives - Magazine | Station Ordnance |
| 682 | Gate Sentry House | AWTU-3 |
| 780* | Ready Serve Magazine | EOD |

| TABLE 5-35 | | |
|------------------------------|-----------------------------|------------------|
| BASIN 33 | | |
| BUILDINGS OF LIMITED CONCERN | | |
| BLDG # | DESCRIPTION | TENANT |
| 805* | Forklift Building | Station Ordnance |
| 806* | Ammunition Assembly Shed | Station Ordnance |
| 807* | Open Ammunition Storage | Station Ordnance |
| 808* | Open Ammunition Storage | Station Ordnance |
| 809* | Open Ammunition Storage | Station Ordnance |
| 810* | Open Ammunition Storage | Station Ordnance |
| 811* | Box Magazine | Station Ordnance |
| 812* | Box Magazine | Station Ordnance |
| 813* | ARCH Magazine | Station Ordnance |
| 814* | ARCH Magazine | Station Ordnance |
| 815* | ARCH Magazine | Station Ordnance |
| 819 | Small Arms Range Building | Station Training |
| 893 | Ordnance Operation Building | Station Ordnance |
| 1752* | Magazine Equipment Shed | Station Ordnance |
| 1810 | Magazine Area Security | Station Ordnance |

* Buildings with an asterisk indicate facilities which were not involved in any industrial activities or did not store any hazardous materials at the time of our field observations. However, these facilities appear to have been involved in activities of potential concern in the past. If activities of concern resume in the future, site specific BMPs should be adopted. These facilities/activities should be reviewed on an annual basis in order to update this plan as necessary.

TABLE 6-1
MCAS EL TORO

STATIONWIDE SUMMARY OF BMPs

| BLDG # | BASIN | BUILDING DESCRIPTION | TENANT | Concern Level | BMP STATUS | BMP # | BMP Description |
|--------|-------|--------------------------|------------------|---------------|------------|-------|---|
| 803 | 02 | Fuel Islands | MWSS-373 | Concern | Rec | 009 | Personnel Training |
| | | | | | Rec | 112 | Prepare Appropriate Spill Prevention and Response Plans |
| | | | | | Rec | 066 | Eliminate Topping Off Tanks |
| | | | | | Rec | 065 | Place Spill Kit in Area |
| 804 | 02 | Fuel Islands | MWSS-373 | Concern | Rec | 009 | Personnel Training |
| | | | | | Rec | 112 | Prepare Appropriate Spill Prevention and Response Plans |
| | | | | | Rec | 066 | Eliminate Topping Off Tanks |
| | | | | | Rec | 065 | Place Spill Kit in Area |
| 805 | 33 | Forklift Building | Station Ordnance | Previous | | | No Additional BMPs Recommended |
| 806 | 33 | Ammunition Assembly Shed | Station Ordnance | Previous | | | No Additional BMPs Recommended |
| 807 | 33 | Open Ammunition Storage | Station Ordnance | Previous | | | No Additional BMPs Recommended |
| 808 | 33 | Open Ammunition Storage | Station Ordnance | Previous | | | No Additional BMPs Recommended |
| 809 | 33 | Open Ammunition Storage | Station Ordnance | Previous | | | No Additional BMPs Recommended |
| 810 | 33 | Open Ammunition Storage | Station Ordnance | Previous | | | No Additional BMPs Recommended |



Winston H. Hickox
Secretary for
Environmental
Protection

Department of Toxic Substances Control

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630



Gray Davis
Governor

May 25, 1999

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
AC/S, Environmental (IAU), BRAC Building #899
P. O. Box 95001
Santa Ana, California 92709-5001

Dear Mr. Joyce:

COMMENTS ON TECHNICAL MEMORANDUM FOR SOLID WASTE MANAGEMENT UNIT NUMBER 8, MARINE CORPS AIR STATION (MCAS) EL TORO

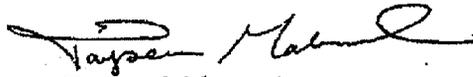
The Department of Toxic Substances Control (DTSC) has reviewed the subject document dated April 26, 1999 and received by us on May 6, 1999. The Technical Memorandum presents the results of the investigation for Phantom Solid Waste Management Units (SWMU) Number 8 that was identified during the Resource Conservation and Recovery Act Facility Assessment (RFA). The RFA identified SWMU Number 8 as an abandoned oil exploration well (also known as Well 50-3285). DTSC comments are as follows:

1. Section 3 Conclusions and Recommendations, Page 3
 - a. The Technical Memorandum concludes that SWMU Number 8 is an oil/water separator (OWS 806) that was mistakenly identified as an abandoned oil exploration well. DTSC agrees with the recommendation to designate SWMU Number 8 as a phantom environmental Location of Concern (LOC). The Base Realignment and Closure Cleanup Plan (BCP) does not list OWS 806 as LOC. Please ensure that the closure status of OWS 806 is included in the BCP update.
 - b. The Technical Memorandum recommends that the closure of all abandoned former water supply wells and oil exploration wells continue under the Station's well management program rather than under the RFA program. We request that you provide a list of all former water supply wells and oil exploration wells that were identified in the RFA program. If the regulatory agencies agree that wells were mistakenly identified as SWMUs, the transfer of these wells to the Station's well management program should be documented in a Technical Memorandum.

Mr. Joseph Joyce
May 25, 1999
Page 2

If you have any questions, please contact me at (714) 484-5418.

Sincerely,



Tayseer Mahmoud
Remedial Project Manager
Office of Military Facilities
Southern California Operations

cc: Mr. Glenn Kistner, SFD-8-2
Remedial Project Manager
U. S. Environmental Protection Agency
Region IX, Superfund Division
75 Hawthorne Street
San Francisco, California 94105-3901

Ms. Patricia Hannon
Remedial Project Manager
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Mr. Gregory F. Hurley
Restoration Advisory Board Co-chair
620 Newport Center Drive, Suite 450
Newport Beach, California 92660-8019

Ms. Polin Modanlou
MCAS El Toro Local Redevelopment Authority
10 Civic Center Plaza, 2nd Floor
Santa Ana, California 92703

Ms. Lynn Hornecker
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division - Code 5BME.LH
1220 Pacific Highway
San Diego, California 92132-5187



California Regional Water Quality Control Board

Santa Ana Region



Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/~rwqcb8>
3737 Main Street, Suite 500, Riverside, California 92501-3339
Phone (909) 782-4130 or FAX (909) 781-6288

Gray Davis
Governor

November 3, 1999

Mr. Dean Gould
BRAC Environmental Coordinator
Mail Code 05BM
Naval Facility Engineering Command, SWDIV
1220 Pacific Highway
San Diego, CA 92132-5190

REPORTS ON PHANTOM SITES: OWS-244, OWS-388C, OWS-602, OWS-606C, OWS-652, SWMU-8, TAA-359A AT MARINE CORPS AIR STATION, EL TORO

Dear Mr. Gould:

We have completed our review of the reports on the following seven phantom sites:

| Phantom Site | Report date |
|--|------------------|
| Oil water separator (OWS) 244 | July 7, 1998 |
| Oil water separator (OWS) 388C | August, 10, 1998 |
| Oil water separator (OWS) 652 | July 27, 1998 |
| Oil water separator (OWS) 602 | March 7, 1999 |
| Oil water separator (OWS) 606C | June 4, 1999 |
| Solid Waste Management Unit (SWMU) 8 | April 26, 1999 |
| Temporary Accumulation Area (TAA) 359A | January 6, 1999 |

According to the reports on the above referenced sites, evidence could not be found to confirm the existence of the seven sites.

Provided that the information submitted in these reports for the above referenced sites is true and correct, we concur with the Navy's request to remove these sites from the Base Realignment and Closure Cleanup Plan (BCP).

If you should have any questions, please call me at (909) 782-4498.

Sincerely,

Patricia A. Hannon
DoD Section

cc: Dept. of Toxic Substances Control - Alice Gimeno
Naval Facility Engineering Command, SWDIV - Lynn Hornecker
U. S. EPA, Region IX - Glenn Kistner
Kutak Rock, Attorneys - Gregory F. Hurley
Orange County Hall of Administration - Polin Modanlou

California Environmental Protection Agency



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California Regional Water Quality Control Board

Santa Ana Region



Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>
3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis
Governor

August 4, 2000

Mr. Dean Gould
BRAC Environmental Coordinator
Base Realignment & Closure, Environmental Div.
P O Box 51718
Irvine, CA 92619 -1718

SITE ASSESSMENT REPORT, OIL/WATER SEPARATOR SITE 806, MARINE CORPS AIR STATION, EL TORO

Dear Mr. Gould:

We have completed our review of the above referenced document dated April 15, 1999 and received at this office on April 23, 1999. Soil borings were drilled around the separator, and soil samples were collected. Samples were analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals. Low concentrations of TPH were detected.

Base on information in the April 15, 1999 Site Assessment Report, Oil/Water Separator Site 806, Marine Corps Air Station, El Toro, and provided that the information is complete and accurate, we concur with the request for no further action at this site.

If you should have any questions, please call me at (909) 782-4494.

Sincerely,

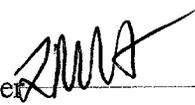

John Broderick
SLIC/DoD Section

cc: Dept. of Toxic Substances Control - Triss Chesney
Kutak Rock, Attorneys - Gregory F. Hurley (El Toro RAB Co-Chair)
Orange County Hall of Administration - Polin Modanlou
Naval Facility Engineering Command, SWDIV - Lynn Hornecker
U. S. EPA, Region IX - Glenn Kistner

California Environmental Protection Agency

TRANSMITTAL

Date: 19 Nov 2001

From: Lynn Marie Hornecker 
MCAS El Toro

To: Diane Silva
Code 01LS.DS

Subj: CERCLA Administrative Record Materials
Marine Corps Air Station, El Toro

Installation: Marine Corps Air Station, El Toro

UIC Number: M60050

Document Title (or subject): Technical Memorandum, former Bomb
Assembly Area

Author: Lynn Hornecker, SWDIV

Recipient: Triss Chesney DTSC

Record Date: 7 Sep 2001

Approximate Number of Pages: 40

EPA Category: 01.1

Sites: Site 2

Key Words: ammunition

Contract: N/A

CTO Number: N/A

Note: The bomb assembly area was located adjacent to IRP Site 2