

# Summary Report

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*Phantom Drum Storage Area  
Solid Waste Management Unit (SWMU) 32  
Marine Corps Air Station, El Toro, California*

17 December 2001

*Prepared by:*

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

# Summary Report

*Phantom Drum Storage Area*  
*Solid Waste Management Unit (SWMU) 32*  
Marine Corps Air Station, El Toro, California

17 December 2001

*Prepared by:*

A handwritten signature in black ink that reads "Lynn Marie Hornecker". The signature is written in a cursive style and is positioned above a horizontal line.

Lynn Marie Hornecker  
Project Manager

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

## TRANSMITTAL

Date: 17 December 2001

From: Lynn Marie Hornecker *LMH*

To: **Ms. Triss Chesney**  
State of California Environmental Protection Agency  
Department of Toxic Substances Control, Region 4  
Site Mitigation Branch  
Base Closure Unit  
5796 Corporate Avenue  
Cypress, CA 90630

Subj: Solid Waste Management Unit (SWMU) Number 32  
Former Drum Storage Area near Building 36  
Marine Corps Air Station, El Toro

Provided for your review as the attachment are three copies of the Summary Report for Solid Waste Management Unit (SWMU) 32, a phantom or non-existent drum storage area near Building 36, at the Marine Corps Air Station, El Toro. SWMU 32 was identified during the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA). The site was reportedly described in a letter from the Regional Water Quality Control Board (RWQCB), Santa Ana Region dated 1989.

Building 36, a former barracks in the northwestern section of the Station, was constructed in approximately 1943 and was demolished during the 1960's.

We evaluated historical property records, information from environmental compliance program management plans, historical regulatory correspondence, and the results of visual inspections of the site. The historical information does not indicate that industrial activities occurred or that hazardous wastes were generated in the former Building 36 vicinity. Additionally, Building 36 was demolished years before the 1989 letter from the RWQCB. It is possible that the hazardous waste accumulation areas at Building 31 (TAA 31A and TAA 31B) were inadvertently associated with the former Building 36.

Based upon the evaluation of the information, we believe that the drum storage area identified as SWMU 32 is a non-existent or phantom site and should be deleted from the location of concern inventory in the BRAC Business Plan.

If we do not receive comments from you within sixty (60) days of receipt of this document, then we will assume that you concur with our findings and recommendations and we will proceed to delete SWMU 32 from the inventory. Please do not hesitate to call if you have questions pertaining to this site. A formal transmittal letter may follow.

Attachment:

Summary Report, SWMU 32 (SWDIV, December 2001)

CF: (w/ attachment)

Dean Gould (MCAS El Toro BEC)

Dhananjay Rawal (IT/OHM)

Project File (MCAS El Toro)

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## Section 1

### ***Introduction***

The purpose of this Summary Report is to present information pertaining to a phantom or non-existent drum storage area, designated as Solid Waste Management Unit (SWMU) 32, in the northwestern section of the Marine Corps Air Station (MCAS), El Toro. SWMU 32 was identified during the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA), and the RFA documentation indicates that SWMU 32 was originally described as a drum storage area at Building 36 in a Regional Water Quality Control Board (RWQCB), Santa Ana Region letter dated 1989.

The Marine Corps Air Station, El Toro, also known as the Station, comprises approximately 4,700 acres in eastern Orange County approximately 45 miles southeast of Los Angeles, California. SWMU 32 is located in the northwestern section of the Station at the former site of Building 36, southwest of Building 38. Building 36 was located at the intersection of South 7<sup>th</sup> Street and "F" Street and the nearby existing buildings (Buildings 32, 33, 34, and 35) were formerly used as bachelor officer quarters (barracks). Building 38 was originally a barracks facility with a mess hall. The vicinity of SWMU 32 is shown on Figure 1.

The Station closed on 2 July 1999 in accordance with the Base Realignment and Closure Act of 1993 (BRAC III). SWMU 32 is located within a parcel designated for future use as the terminal and parking area according to *The Preferred Land Use Plan, Concept B* (County of Orange, August 1999) as shown on Figure 2.

This Summary Report includes a description of information collected during a review of historical property records, environmental compliance management plans, the previous evaluations of historical aerial photographs, the functions of nearby existing buildings, and the results of visual inspections of the site. The records show that Building 36 was constructed as a bachelor officer quarters without a mess facility in approximately 1943 and the building was demolished during the 1960's. The historical records do not indicate that Building 36 or the other nearby buildings were used for industrial activities or would have required hazardous waste storage areas. The RWQCB letter dated 23 June 1989 does not specifically identify Building 36 or a site near Building 36. Based upon the review of the historical information, it is recommended that SWMU 32 be considered a phantom or non-existent site and be deleted from the inventory of locations of concern in the next BRAC Business Plan update.

## Section 2

### ***Field Inspections and Historical Records***

#### **2.1 Field Inspections and Sampling Activities at nearby Locations of Concern.**

SWMU 32 was described as a drum storage area at Building 36. A review of records and visual inspections were conducted during the preparation of the *Installation Restoration Program, Final Resource Conservation and Recovery Act Facility Assessment Report for Marine Corps Air Station, El Toro, California* (Jacobs Engineering Group (JEG) 1993). The visual inspection documentation states the following: "The DSA was identified in a 1989 letter from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB), to the Station. There is currently no building 36 at MCAS El Toro. A building guide for MCAS El Toro dated 6 February 1989 also does not indicate the existence of a Building 36 at the Station. This site could not be located and is excluded from further consideration in the RFA."

The SWMU 32 vicinity was visually inspected by representatives of the Navy on 26 and 28 November and on 4 December 2001. The site is a relatively level, unpaved lot between Building 34 and Building 38. No stains or discolored areas of soil were observed during the site visits. The site is located near the vehicle storage lot near Building 29 and Building 31. Photographs of the site, dated 26 and 28 November 2001, are included in the Appendix.

A letter dated 23 June 1989 from the Regional Water Quality Control Board, Santa Ana Region is also included in the Appendix. The letter is included in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record as Record Number M60050.001130. The letter describes additional areas, including drum storage areas, that were recommended for additional investigation. The letter does not refer specifically to Building 36 or a site near Building 36.

#### **2.2 Historical Property Records and Environmental Program Records**

Property records and information from previously published environmental compliance and environmental restoration program projects were acquired and reviewed. Some of the documents are included in the CERCLA Administrative Record. Information pertaining to former Building 36 and the SWMU 32 vicinity is summarized in Tables 1 and 2.

According to the information presented in Table 1, Building 36, a former barracks, was demolished in the 1960's. Buildings 33, 34, and 35, that are located nearby, are also former barracks facilities, and Building 38, located northeast of former Building 36, was identified as an officers' club on the 1954 facility maps. The nearest industrial facility to

former Building 36 is existing Building 31, a former utilities shop, and two temporary accumulation areas (TAA 31A and TAA 31B) are located near Building 31.

**Table 1. MCAS El Toro Historical Records for Former Building 36.**

Building Identification Number	Approximate year of acquisition or construction	Type of Use	Comments
Building 36	1943	Bachelor officer quarters (BOQ)	Dimensions: approximately 144 feet long by 30 feet wide (similar to existing Building 34) according to plant account records
Building 36	1954	BOQ	Building 36 is shown on Master Plot Plan and General Development Map (GDM) dated 1954.
Building 36	1967	BOQ	Property record card has the annotation: "Disposition 06/67", and the card identifies Building 36 as a BOQ facility without mess.
Building 36	1978		Building 36 is not shown on the 1978 GDM.
Building 36	1989, 1994, and 1997		Building 36 is not shown on the Building Guides dated 1989, 1994, or 1997.
Building 36	1994		Building 36 is not shown on the Station map in the HM/HWMP dated 1994.

*Hazardous Materials/Hazardous Waste Management Plan (HM/HWMP of 1994) and Historical Hazardous Waste Management Documents*

Visual inspections of TAAs were conducted in 1993, and the HM/HWMP (SAIC 1994) identifies a hazardous waste accumulation area on the northwest side of Building 31, more than 500 feet southeast of the former Building 36 site. The accumulation areas at Building 31 are addressed in separate documents. Extracts from the HM/HWMP are included in the Appendix.

Hazardous waste management and spill contingency planning documents from the 1980's were acquired from the CERCLA Administrative Record (AR) files and reviewed. Extracts from the historical documents are included in the Appendix.

The Hazardous Materials/Hazardous Waste Engineering Study (Roy F. Weston, February 1984 - AR number M60050.000899) shows six (6) hazardous waste accumulation areas, and one area appears to be near Building 31.

The Spill Prevention, Control, and Countermeasure Field Survey Report (NBS/Lowry, 1988 - AR number M60050.000800) identifies six hazardous waste storage areas which are not described in the text but are shown on a map. The map was not available in the AR copy of this document.

A list of sites requiring additional investigation dated April 1989 was reviewed. The list is AR number M60050.000776. The list does not include Building 36.

### *Storm Water Pollution Prevention Plan (SWPPP)*

Visual inspections of areas where hazardous materials and hazardous wastes were stored were conducted in 1993. No specific comments or recommendations for additional best management practices were provided for Buildings 32, 33, 34, 35, or 38, which are located near the former Building 36 site, in the SWPPP (IEM 1997).

The SWPPP indicates that significant industrial activities or hazardous materials storage activities were not observed at Building 31, located southeast of former Building 36, during the inspection of 1993.

The SWPPP also includes a spill history table in Section 5, and this table does not identify historic spills near the former Building 36 site. Extracts from the SWPPP are included in the Appendix.

Surface runoff from the former Building 36 vicinity discharges to Bee Canyon Wash. Surface water quality was monitored under the Station's National Pollutant Discharge Elimination System (NPDES) Permit for storm water while the Station was operational and surface water samples were collected routinely from Bee Canyon Wash. Additionally, the surface drainage channels, including Bee Canyon Wash, were investigated as IRP Site 25 –the Major Drainages – during the remedial investigation, and a Record of Decision for No Action was signed for IRP Site 25 in September 1997.

### *Underground Storage Tank (UST) Program*

SWMU 32 is located southwest of Building 38. Underground Storage Tank (UST) 38 was removed from the southwest side of Building 38 in 1997 and confirmation sampling activities were conducted with oversight by Orange County Health Care Agency.

Heating oil tanks were also located at the nearby Buildings 33, 34, and 35, and former Building 37. The tanks have been removed and no further action status has been achieved for these sites.

### *Temporary Accumulation Areas*

Temporary Accumulation Areas (TAAs) 31A and 31B are located more than 500 feet southeast of SWMU 32 near Building 31. The Hazardous Material/Hazardous Waste Management Plan identifies the temporary accumulation area on the northwest side of Building 31. The Storm Water Pollution Prevention Plan identifies storage of antifreeze, lube oil, diesel fuel, and other hazardous materials at Building 31. Field sampling activities have been conducted at TAA 31A and TAA 31B.

### *Aerial Photograph Anomalies*

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 anomaly 404, identified as "liquid flowing northeasterly from Building 38" on a photograph taken in 1979, is located closest to former Building 36.

Several other anomalies were identified on the northwestern side of Building 31. These anomalies are SAIC 38 (vertical tank 1946), 77 (open storage, drum 1955), 273 (disturbed ground 1974), 274 (stain 1974), and 548 (open storage, drum 1992). Suspended fuel tanks were formerly located on the northwestern side of Building 31, and this area was investigated as IRP Site 15, Unit 1 (stained areas). These anomalies appear to be associated with the storage activities that were previously conducted at Building 31 and the anomalies are located within sites that have been investigated under the Installation Restoration Program, the RFA Program, or the petroleum corrective action program.

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).

EPA anomalies 44 (liquid, open storage 1991) and 45 (debris, stain 1991) are located northwest of Buildings 31 and 29, respectively.

Extracts from the SAIC and the EPA reports are included in the Appendix.

### *Installation Restoration Program*

Installation Restoration Program (IRP) Site 15 – Suspended Fuel Tanks – was located more than 500 feet southeast of former Building 36.

IRP Site 15, Unit 1 (stained areas) was transferred from the Installation Restoration Program to the petroleum corrective action program, near-surface soils were removed, and no further action status was designated by the RWQCB in May 1997.

The CERCLA Record of Decision for no action at IRP Site 15, Unit 2 (drainage ditch) was signed in September 1997. One of the RFA sites, SWMU 273, was included within the investigation boundary of IRP Site 15, Unit 2; this site was determined to be a phantom or non-existent wash rack site and it has been deleted from the inventory of locations of concern. Soil sampling was conducted at SWMU 273 and this data was used in the evaluation of IRP Site 15, Unit 2 during the Remedial Investigation of IRP Site 15.

No Further Action decision documents for nearby environmental locations of concern are included in the Appendix.

**Table 2. MCAS El Toro Property Records and Information from Environmental Program Projects.  
 SWMU 32 Vicinity**

Building Identification Number or Feature Identifier	Approximate year of acquisition or construction	Type of Use	Comments
SWMU 32	Not applicable		<p>SWMU 32 is described in the RFA (JEG 1993) as a drum storage area identified in the RWQCB letter dated 1989.</p> <p>The Final Environmental Baseline Survey Report (JEG 1995) includes SWMU 32 and identifies the RWQCB letter of 1989 as the source of information.</p>
Building 36	1943	Bachelor officer quarters	Building 36 is not shown on the GDM dated 1978 or in the Building Guides dated 1989, 1994, and 1997.
Building 38	1943	Admin office	<p>Building 38 was identified as an officer's club facility on the 1954 map.</p> <p>The 1994 building guide identifies Building 38 as a BOQ storage facility and a Boy Scouts/Young Marines Facility.</p> <p>The 1997 building guide identifies Building 38 as a museum storage facility.</p> <p>Building 38 is located northeast of former Building 36. Underground Storage Tank (UST) 38 at Building 38 was removed with oversight by Orange County Health Care Agency (OCHCA), and the Regional Water Quality Control Board (RWQCB), Santa Ana Region closed the site in 1997.</p>
Building 34	1943	Officers barracks	<p>Building 34 is located southwest of the former Building 36. Building 34 is identified as a BOQ on the 1954 GDM and in the 1989, 1994, and 1997 building guides.</p> <p>UST 34, a 500-gallon fuel oil tank, was removed and the site was closed by the RWQCB in 1996.</p>

**Table 2. (Continued)**

Building Identification Number or Feature Identifier	Approximate year of acquisition or construction	Type of Use	Comments
Building 35	1943	Barracks	<p>Building 35 is located approximately west-northwest of the former Building 36. Building 35 is identified as a BOQ on the 1954 map and in the 1994 and 1997 building guides.</p> <p>UST 35, a 500-gallon fuel oil tank, was removed and the site was closed by the RWQCB in 1996.</p>
Building 31	1943	Utilities Shop	<p>Building 31 is identified as a Utilities Shop in the 1989, 1994, and 1997 building guides.</p> <p>Temporary Accumulation Area (TAA) 31A and TAA 31B have been investigated under the RFA program.</p> <p>A visual inspection was conducted in approximately 1993 during development of the Hazardous Materials/Hazardous Waste Management Plan (HM/HWMP) (SAIC, 1994), and a hazardous waste accumulation area was identified at Building 31.</p> <p>The hazardous materials inventory in the SWPPP identifies storage of antifreeze, lube oil, diesel, and other hazardous substances at Building 31. The site was visually inspected in 1993 during development of the SWPPP.</p> <p>IRP Site 15, Suspended Fuel Tanks, is located adjacent to the northwest side of Building 31. IRP Site 15 originally consisted of two units: Unit 1 and Unit 2. No further action status has been achieved for both Units 1 and 2.</p>

**Table 2. (Continued)**

Building Identification Number or Feature Identifier	Approximate year of acquisition or construction	Type of Use	Comments
Aerial Photograph Anomalies	Not applicable	Not applicable	<p>Several anomalies were identified in the generally vicinity of former Building 36. Only the anomalies closest to former Building 36 are described in this table.</p> <p>EPA 44: Stain, open storage adjacent to northwest side of Building 31. TAA 31A and TAA 31B, both located on the northwest side of Building 31, were investigated under the RFA program.</p> <p>SAIC 404: Liquid flowing from Building 38 near S 7<sup>th</sup> Street and F Street. The annotation on the 1979 photograph for SAIC 404 identifies the southwest side of Building 38, which is paved parking area, where the former UST 38 was located. The tank was removed, and the RWQCB has concurred with no further action status for UST Site 38.</p>

### 2.3 Ground Water Conditions

Ground water conditions have been investigated in the vicinity of former Building 36 during the remedial investigation of Installation Restoration Program (IRP) Site 15 – Suspended Fuel Tanks. IRP Site 15 is located on the northwest side of Building 31, more than 500 feet southeast of former Building 36.

One monitoring well, 15\_DBMW51, was constructed at IRP Site 15. The depth to groundwater is approximately 110 to 120 feet below ground surface and the well is located near the northern edge of the chlorinated solvent plume originating at IRP Site 24. The chlorinated solvent plume is managed under IRP Operable Unit 1.

## Section 3 Findings and Recommendations

The following findings are based upon information collected during the record search activities, the RFA documentation, and from observations during the visual inspections of the vicinity of SWMU 32 at the former Building 36:

- SWMU 32, a drum storage area at Building 36, was identified in the Installation Restoration Program, Final Resource Conservation and Recovery Act Facility Assessment Report for Marine Corps Air Station, El Toro, California (Jacobs Engineering Group 1993) and the report states that a Regional Water Quality Control Board, Santa Ana Region letter dated 1989 was the source of information for SWMU 32.
- Building 36 was located in an area of bachelor officer quarters or barracks facilities. Building 36 and the nearby existing Buildings 33, 34, and 35, and former Building 37 were used as barracks from the 1940's until the Station closed. Building 38, northwest of Building 36, was used as an officers' club, a BOQ storage facility, a Boy Scout and Young Marines facility, and a storage facility for the museum. Based upon the review of historical data, none of the buildings in the former Building 36 vicinity were used for hazardous waste storage or industrial activities.
- Building 36 was demolished in the 1960's according to Station records. Building 36 is shown on the 1954 GDM but not on the 1978 GDM. Building 36 did not exist when the RWQCB letter of 1989 was prepared and Building 36 is not identified in the RWQCB letter of 1989. It is possible that the 1989 letter referred to accumulation areas at or near Building 31. Two temporary accumulation areas - TAA 31A and TAA 31B - on the northwest side of Building 31 have been investigated under the RFA program.
- Reviews of historical aerial photographs were conducted by the United States Environmental Protection Agency (USEPA) and Science Applications International Corporation (SAIC) in the early 1990's. The reports of anomalies identified by USEPA and SAIC in the vicinity of Building 36 were reviewed and no anomalies corresponding to drum storage areas at former Building 36 were found.
- No stains or discolored areas were observed during the visual inspections that were conducted of the former Building 36 vicinity in late November and early December 2001.

Based upon the absence of evidence of industrial activities or hazardous waste storage activities at the former Building 36 site or at nearby existing buildings, the absence of a specific reference to Building 36 in the RWQCB letter of 1989, and the results of the visual inspections of the former Building 36 site, it is recommended that SWMU 32 (drum storage area at Building 36) be considered a phantom or non-existent site. Deletion of SWMU 32 from the inventory of locations of concern in the next Business Plan Update is recommended.

## Section 4

### ***References and/or Sources of Information***

Bechtel National, Incorporated. 1996. Final Addendum to the RCRA Facility Assessment, MCAS El Toro, California [Navy Contract N68711-92-D-4670, CTO 65]

CDM Federal Programs Corporation. 1998. Final Groundwater Monitoring Report, October 1997 Sampling Round, Groundwater Monitoring Program for Marine Corps Air Station, El Toro. [Navy Contract N68711-96-D-2029, Delivery Order 5]

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]

Jacobs Engineering Group (JEG). 1995. Marine Corps Air Station El Toro, El Toro, California, Final Environmental Baseline Survey Report. April. [Navy Contract N68711-89-D-9296, Contract Task Order 284]

Science Applications International Corporation (SAIC). 1994. Final, Marine Corps Air Station, El Toro, Hazardous Material/Hazardous Waste Management Plan {with Appendices C and I, Hazardous Waste Accumulation Areas and Photographs of Accumulation Points and Hazardous Material Storage Areas}. August. [Contract N68711-92-D-4658, Delivery Order Number 4]. ]

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.

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

United States Marine Corps Air Station, El Toro. 2001. Base Realignment and Closure (BRAC) Business Plan.

United States Marine Corps Air Station, El Toro. 1999. Base Realignment and Closure (BRAC) Cleanup Plan.

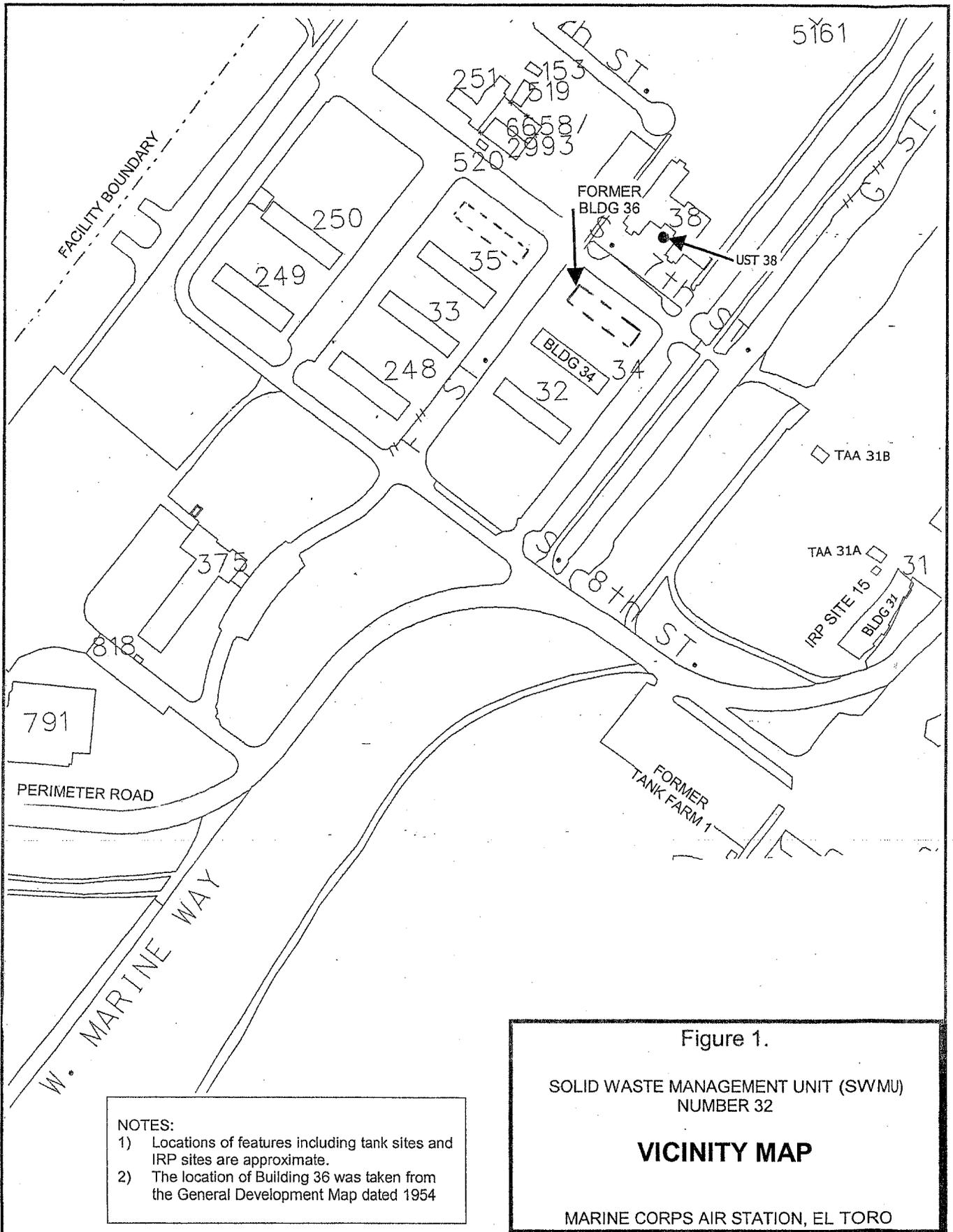
United States Marine Corps Air Station, El Toro. Circa 1946-1999. Station Property Records and Building Guides. (General Development Maps dated 1954 and 1978; Facility Maps dated 1954 and 1958; Building Guides dated 1989, 1994, and 1997)

U.S. Marine Corps Air Station, El Toro. 1997. Draft Final Record of Decision, Operable Units 2A and 3A, No Action Sites, Marine Corps Air Station, El Toro, California. September.

United States Marine Corps Air Station, El Toro, Public Works Department. 1954. Master Plot Plan, Proposed Additional Aircraft Parking Facilities in Tactical Area III and Proposed Relocation of Existing Stables. [Alternate drawing identification number Public Works drawing PS-1236]

United States Marine Corps Air Station, El Toro. 1994. Aerial Photograph.

United States Marine Corps Air Station, El Toro. 1997-2000. No Further Action correspondence from RWQCB, OCHCA, and/or DTSC.



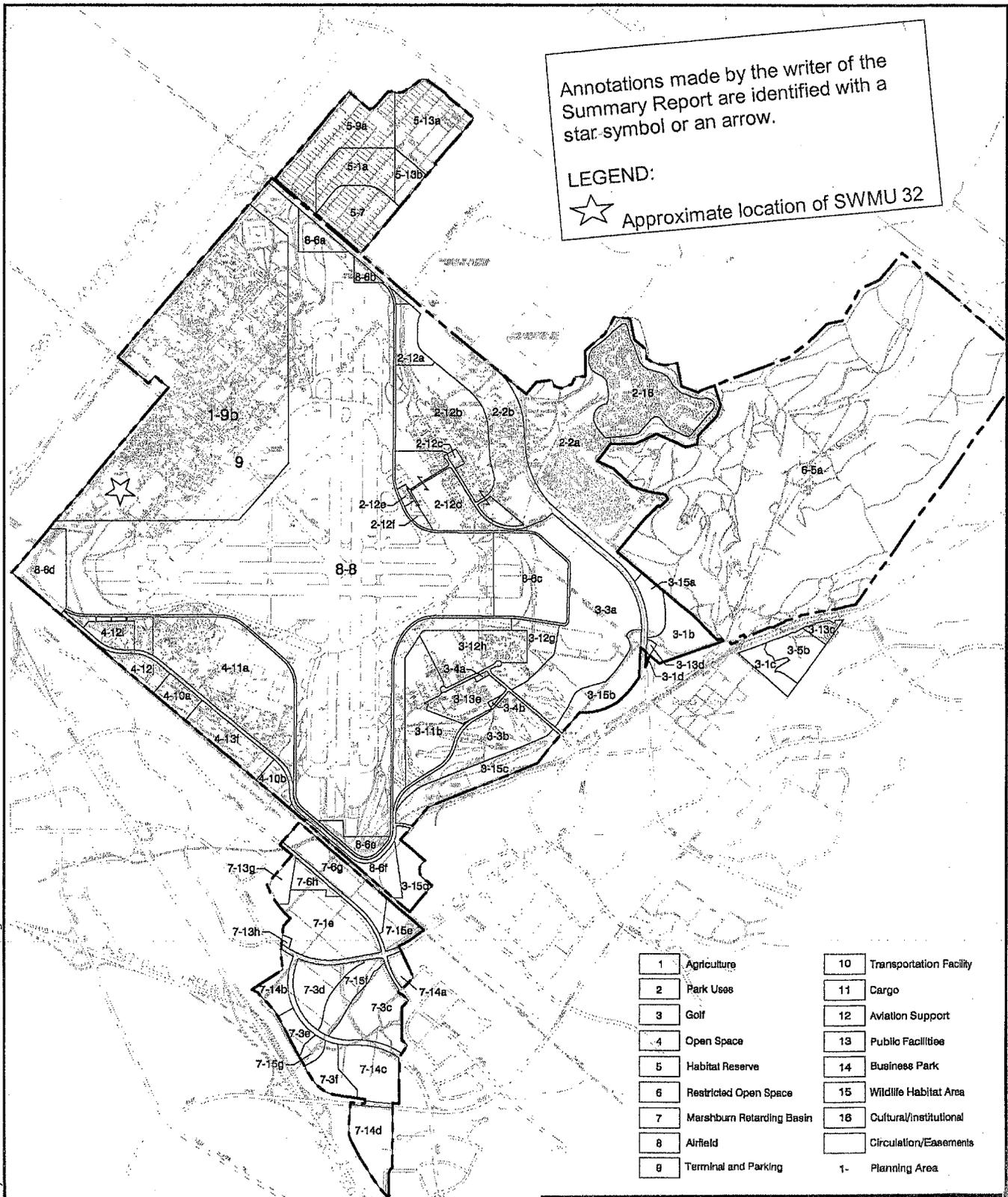
NOTES:  
 1) Locations of features including tank sites and IRP sites are approximate.  
 2) The location of Building 36 was taken from the General Development Map dated 1954

Figure 1.  
 SOLID WASTE MANAGEMENT UNIT (SWMU)  
 NUMBER 32  
**VICINITY MAP**  
 MARINE CORPS AIR STATION, EL TORO

Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.

**LEGEND:**

☆ Approximate location of SWMU 32



1	Agriculture	10	Transportation Facility
2	Park Uses	11	Cargo
3	Golf	12	Aviation Support
4	Open Space	13	Public Facilities
5	Habitat Reserve	14	Business Park
6	Restricted Open Space	15	Wildlife Habitat Area
7	Marshburn Retarding Basin	16	Cultural/Institutional
8	Airfield		Circulation/Easements
9	Terminal and Parking	1-	Planning Area

Figure 2.

SOLID WASTE MANAGEMENT UNIT (SWMU)  
NUMBER 32

**TENTATIVE REUSE PARCEL  
LOCATIONS**

MARINE CORPS AIR STATION, EL TORO

## **Appendix**

### **Site Photographs and Other Documentation**

#### Site Photographs

Regional Water Quality Control Board, Santa Ana Region Letter dated  
1989

Extracts from RFA Documentation

Extracts from historical hazardous waste management documents

Extracts from HM/HWMP (SAIC 1994)

Extracts from Storm Water Pollution Prevention Plan (SWPPP) (IEM 1997)

Extracts from Property Records, Building Guides, and Historical Facility  
Maps

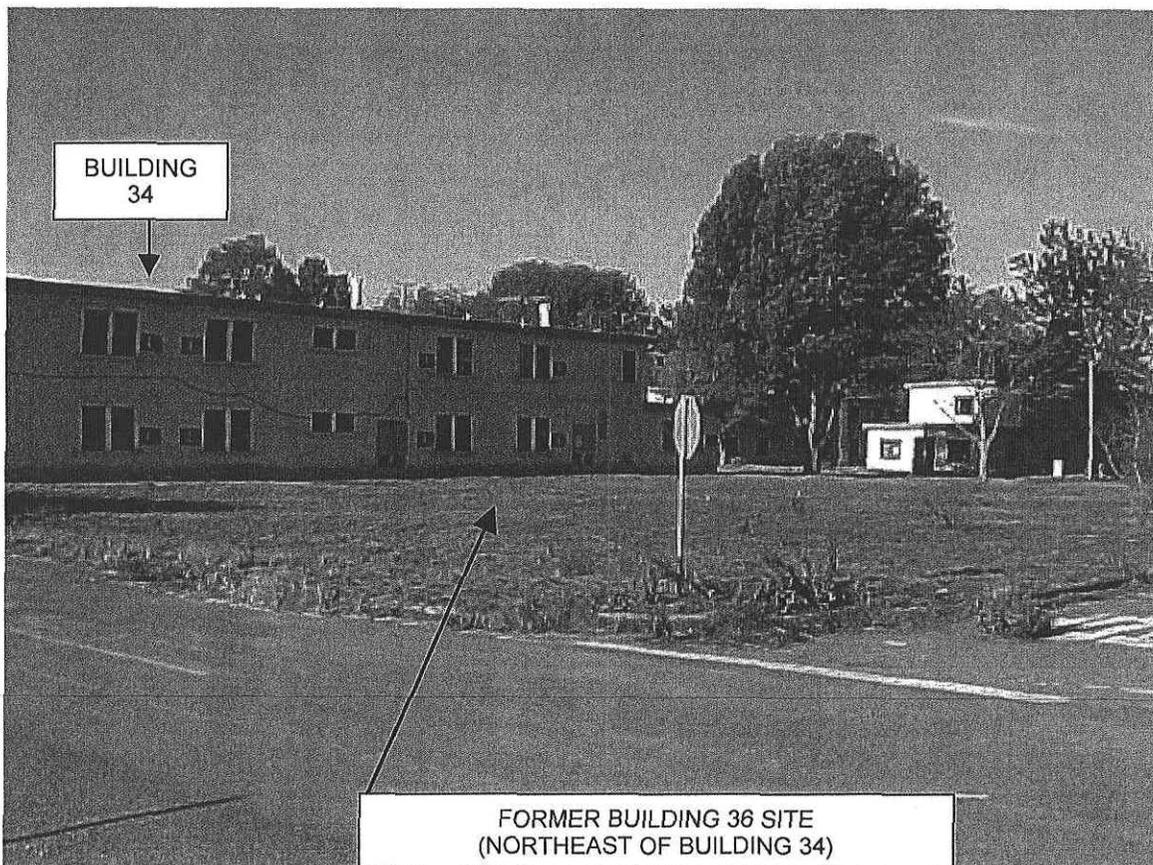
Extracts from Final Environmental Baseline Survey of 1995

Extracts from Base Realignment and Closure Cleanup Plan of 1999

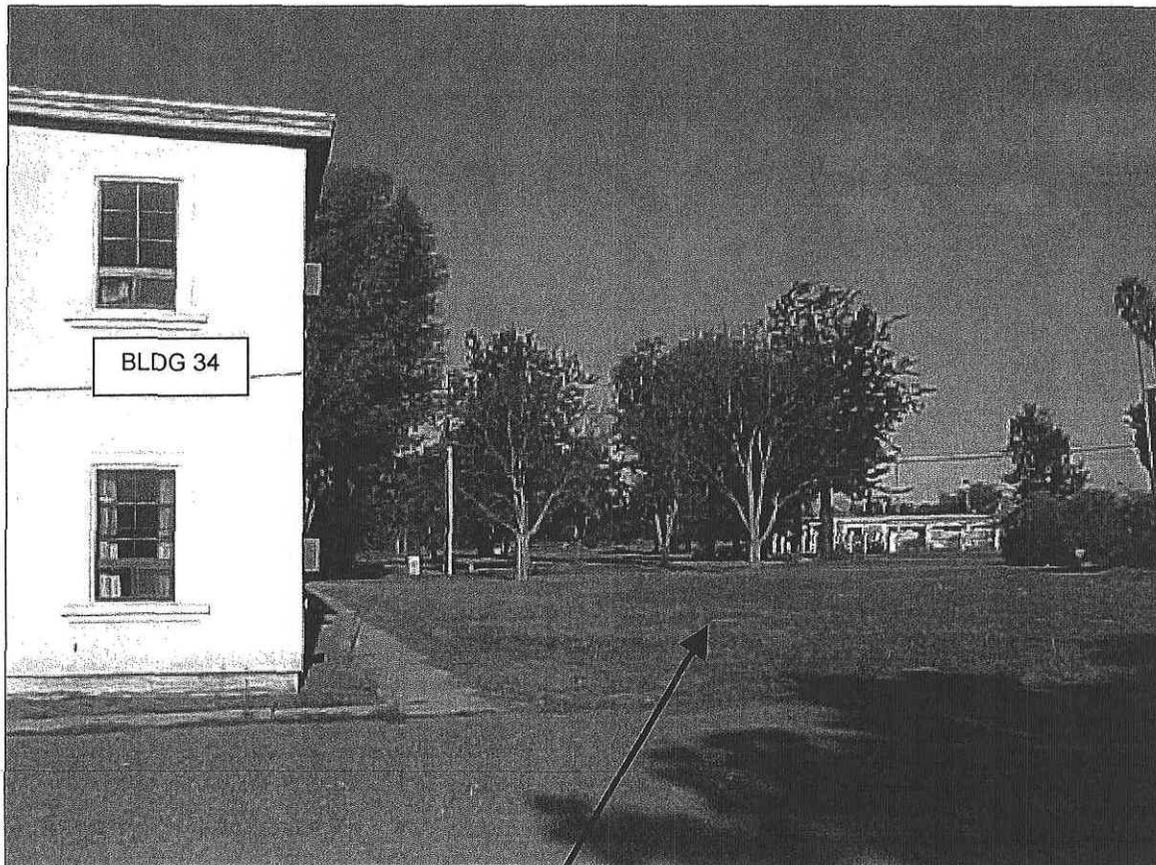
Extracts from Evaluations of Historical Aerial Photographs

No Further Action Decision Documents for Nearby Locations of Concern

Photograph 1. Vicinity of Suspected Drum Storage Area  
Former Building 36  
Solid Waste Management Unit (SWMU) 32  
Marine Corps Air Station, El Toro  
Date of Photograph: 28 November 2001



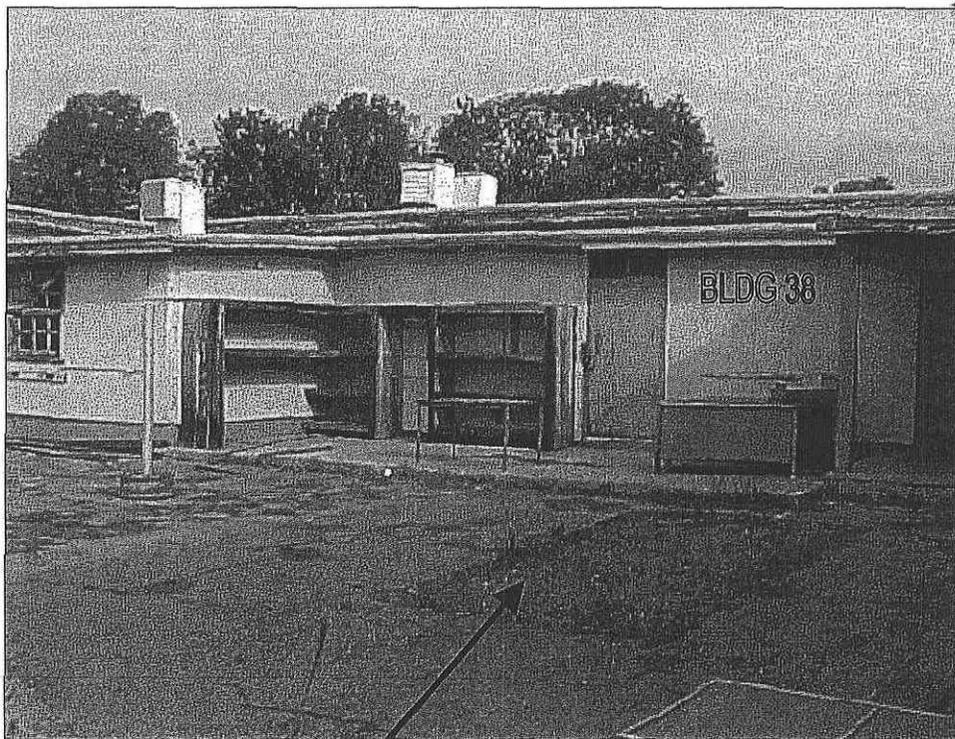
Photograph 2. Vicinity of Suspected Drum Storage Area  
Former Building 36  
Solid Waste Management Unit (SWMU) 32  
Marine Corps Air Station, El Toro  
Date of Photograph: 28 November 2001



FORMER BUILDING 36 SITE  
(NORTHEAST OF BUILDING 34)

Photograph 3. Building 38 located adjacent to and northeast of  
Former Building 36 Site  
(Pavement Patch for Former UST 38 in the Foreground)  
Marine Corps Air Station, El Toro

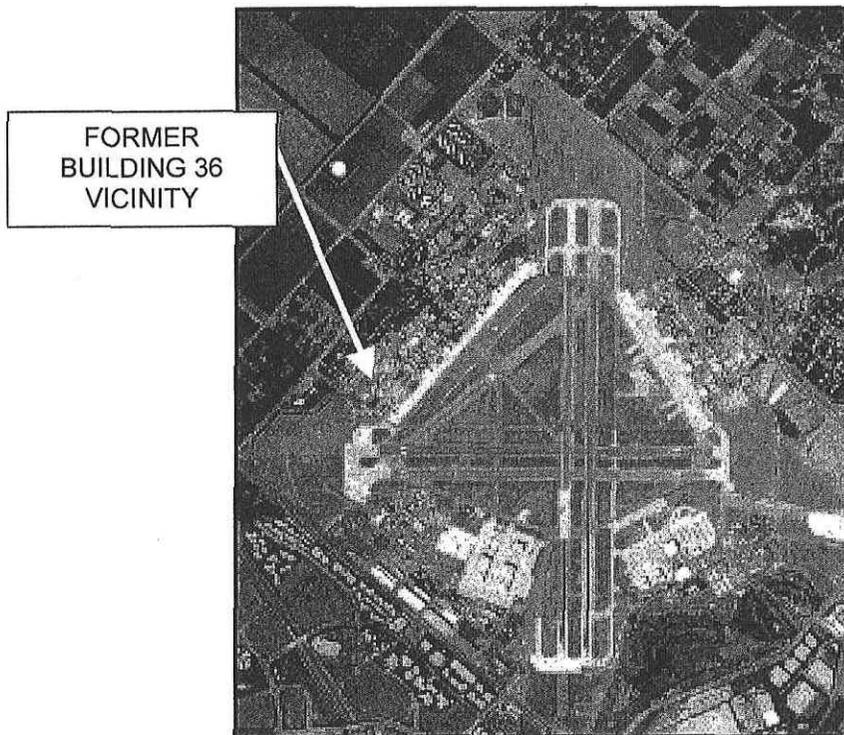
Date of Photograph: 26 November 2001



FORMER UST SITE 38  
LOCATED NORTHEAST OF  
FORMER BUILDING 36

Photograph 4. Vicinity of Former Building 36  
Marine Corps Air Station, El Toro

Date of Aerial Photograph: 1994



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION  
INDIANA AVENUE, SUITE 200  
SIDE, CALIFORNIA 92506  
PHONE: (714) 782-4130

ML60050.001130

**DUPLICATE**

June 23, 1989

LTJG Michael Rehor, Environmental Director  
MCAS El Toro (Code 1JG)  
Santa Ana, CA 92709-5001

MCAS EL TORO - SITE INSPECTION PLAN OF ACTION

Dear LTJG Rehor:

As we discussed in our May 30, 1989 meeting, we are hereby transmitting our recommendations for additional sites at the El Toro Marine Corps Air Station (MCAS) which we believe should be included in the Site Inspection Plan of Action.

Although the Installation Restoration (IRP) program is intended to address only past facility operations, we believe that some currently operating facilities should be included in the IRP program. Past and current chemical use and disposal practices at these sites may have allowed contaminants to be discharged where they could impact water quality. We believe that it is appropriate to include these sites in the present phase of investigation. The sites listed are areas where trichloroethylene (TCE) is either known or suspected to have been used. Chemical use and disposal practices, documented in the November 1987 Oil and Hazardous Substance Spill Prevention Control and Countermeasure (SPCC) plan, strongly suggest that there are areas on the base where TCE was routinely discharged to bare ground and unlined channels.

Although some of these areas are located near sites that have already been selected for investigation, we believe that the sites require individual investigation to adequately evaluate the threat to water quality from past chemical use practices. In some cases adequate coverage may be provided by expanding the specific site investigations. However, in most cases separate site investigations will be necessary. Investigation of these sites should focus on potential discharge areas and any adjacent drainage channels. The following sites should be given highest priority:

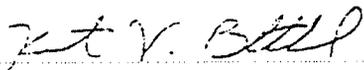
1. Building 359 - corrosion control facility, which housed 2 TCE degreasers.
2. Three engine test cells - the SPCC plan documents oily discharges from two of these test cells, located in buildings 658 and 447, that eventually entered storm drains. The location of the third test cell is not indicated.

3. Six drum storage areas - The SPCC plan depicts numerous drum storage areas on bare ground. The plan documents solvent storage in the following areas:
- A. Northeast of building 392
  - B. Southeast of building 602
  - C. Between buildings 454 and 456
  - D. Northeast of building 320
  - E. Northeast of building 317
  - F. East of building 359
4. Hazardous and flammable materials storehouses 320 and 357.
5. Oil/water separators at Bee Canyon Wash and Agua Chinon Wash.

In addition, the SPCC plan identifies 23 wash areas including seven aircraft wash facilities. Each of these wash areas should be evaluated to determine whether solvents were used. If solvents were used at any wash area, that area should be included in the investigation.

Please submit a proposed sampling program for the sites discussed above in the form of an amendment to the Site Inspection Plan of Action. If you should have any questions, please call me or Steven Overman of our Pollutant Investigation Section.

Sincerely,



Kurt V. Berchtold  
Supervising Engineer

cc: OCWD - Jim Reilly

TDP/mcaset2

EXTRACTS

**MARINE CORPS AIR STATION EL TORO  
EL TORO, CALIFORNIA  
INSTALLATION RESTORATION PROGRAM  
FINAL RESOURCE CONSERVATION  
AND RECOVERY ACT (RCRA)  
FACILITY ASSESSMENT REPORT**

**PREPARED BY:**  
Southwest Division, Naval Facilities  
Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190

**THROUGH:**  
CONTRACT #N68711-89-D-9296  
CTO #193  
DOCUMENT CONTROL NO:  
CLE-C01-01F193-S2-0001

**WITH:**  
Jacobs Engineering Group, Inc.  
3655 Nobel Drive, Suite 200  
San Diego, California 92122

**In association with:**  
International Technology Corporation  
CH2M HILL

  
\_\_\_\_\_  
Mike Arends, P.E.  
CLEAN Project Manager  
CH2M HILL, Inc.

7/16/93  
Date

  
\_\_\_\_\_  
Raoul Portillo  
CLEAN Technical Reviewer  
Jacobs Engineering Group Inc.

15 July 1993  
Date

**Evaluation Form  
SWMU/Area of Concern  
Number 32**

Name: Drum Storage Area

Location: Building 36

Size: Unknown

This DSA was identified in a 1989 letter from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB), to the Station. There is currently no building 36 at MCAS El Toro. A building guide for MCAS El Toro dated 6 February 1989 also does not indicate the existence of a Building 36 at the Station. This site could not be located and is excluded from further consideration in the RFA.

TABLE 4-2 SWMUs AND AREAS OF CONCERN RECOMMENDED FOR SAMPLING VISIT MCAS EL TORO RFA		
SWMU/ AOC NO.	TYPE	LOCATION/BUILDING
3	Marshburn Channel	See Figure 1-2 of the PR/VI
4	Bee Canyon Wash	See Figure 1-2 of the PR/VI
5	Borrego Canyon Wash	See Figure 1-2 of the PR/VI
6	Landfarming site	NW Bee Canyon Wash
7	Transformer storage area	E of Bee Canyon Wash
8	Abandoned Well 50-3285	West of Bldg. 809
9	Fuel bladder	East of Agua Chinon Wash
11	Agua Chinon Wash	See Figure 1-2 of the PR/VI
13	Drop Tank Fuel Storage Area	SW of bldgs 114 & 115
14	Drop Tank Storage Area	NW of bldgs 605
15	Wash water runoff site	SW of fueling stations 576
16	Wash water runoff site	NW of fueling stations 574
20	Underground Storage Tank	Bldg 414
26	Hazardous Waste Storage Area	5
27	Hazardous Waste Storage Area	10
30	Drum Storage Area	29
33	Hazardous Waste Storage Area	51
39	Hazardous Waste Storage Area	115
41	Vehicle Wash Rack	127
45	Drum Storage Area	155
46	Vehicle maintenance and parking	163
48	Underground Storage Tank	178
49	Underground Storage Tank	179
57	Underground Storage Tank	189
59	Underground Storage Tank	191
65	Underground Storage Tank	240
66	Oil/Water Separator	240
67 (1)	Drum Storage Area	242
70	Hazardous Waste Storage Area	289
72 (1)	Hazardous Waste Storage Area	296
73	Hazardous Waste Storage Area	297

**TABLE 4-1  
COMPREHENSIVE LIST OF SWMUs AND AREAS OF CONCERN  
IDENTIFIED DURING THE PRELIMINARY REVIEW/VISUAL SITE INSPECTION  
MCAS EL TORO RFA**

SWMU	SWMU TYPE	SOURCE (1)	LOCATION/BUILDING	COMMENTS	DATE	SIZE	MATERIAL	CONTENTS
1	Former Scrap Metal Yard	Photograph	Near Golf course					
2	Vegetation Piles	Photograph	Near Golf Course					
3	Marshburn Channel	l	See Figure 1-2 of PR/VI					
4	Bee Canyon Wash	l	See Figure 1-2 of PR/VI					
5	Borrogo Canyon Wash	l	See Figure 1-2 of PR/VI					
6	Landfarming site	e	NW Bee Canyon Wash	For remediating petroleum-contaminated soil				
7	Transformer storage area	e	E of Bee Canyon Wash					
8	Abandoned Well 50-3285	i	E. of Magazine Rd, W. of Bldg. 809	Drilled in 1950, depth 3285 feet				
9	Fuel bladder	e	East of Aqua Chinon Wash	2,000-gallon fuel bladder				
10	Abandoned Well 24-4274	i	E of bldg 385	R/FS Site				
11	Agua Chinon Wash	l	See Figure 1-2 of PR/VI					
12	Active Sanitary Sewer Lines	l	See Figure 3-2 of PR/VI					
13	Drop Tank Storage Area	e	SW of bldgs 114 & 115	Tanks drained onto adjacent soil or storm drain				
14	Drop Tank Storage Area	e	NW of bldgs 605	Tanks drained onto adjacent soil or storm drain				
15	Wash water runoff site	e	SW of direct fueling stations 576	Wash water runoff onto unprotected soil				
16	Wash water runoff site	e	NW of fueling stations 574	Wash water runoff onto unprotected soil				
17	Underground Storage Tank	f	Tank Farm 2	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
18	Underground Storage Tank	f	Tank Farm 4	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
19	Underground Storage Tank	f	Tank Farm 4	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
20	Underground Storage Tank	f	414	Located near 414; piped to Farm 5, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
21	Underground Storage Tank	f	Tank Farm 5	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
22	Underground Storage Tank	f	Tank Farm 5,6	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
23	Underground Storage Tank	f	Tank Farm 555	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
24	Underground Storage Tank	f	Tank Farm 6	Spill Containment Tank, Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste JP-5
25	Drum Storage Area	b	5					
26	Hazardous Waste Storage Area	Active	5					
27	Hazardous Waste Storage Area	Active, b	AERO CLUB 10					
28	Fuel Spill Site	e	AERO CLUB 10	Routine fuel spills in the past				
29	Drum Storage Area	c	AERO CLUB 10			240 sq ft		
30	Drum Storage Area	b,c	29			360 sq ft		

TABLE 4-1  
 COMPREHENSIVE LIST OF SWMUs AND AREAS OF CONCERN  
 IDENTIFIED DURING THE PRELIMINARY REVIEW/VISUAL SITE INSPECTION  
 MCAS EL TORO RFA

SWMU	SWMU TYPE	SOURCE (1)	LOCATION/BUILDING	COMMENTS	DATE	SIZE	MATERIAL	CONTENTS
31	Drum Storage Area	c	29	R/FS Site				
32	Drum Storage Area (2)	b	36					
33	Hazardous Waste Storage Area	Active	51					
34	Drum Storage Area	c	71	Identified as MCAS Tustin		45,000 sq ft		
35	Drum Storage Area	b	96					
36	Drum Storage Area	a	103	Duplicate of SWMU/AOC 27				
37	Aircraft Wash Area	a	114	Duplicate of SWMU/AOC 210				
38	Drum Storage Area	a	114					
39	Hazardous Waste Storage Area	Active	115					
40	Drum Storage Area (2)	a	127					
41	Vehicle Wash Rack	a	127					
42	Drum Storage Area	a,b	130					
43	Drum Storage Area (2)	c	137			450 sq ft		
44	Drum Storage Area (2)	a	143					
45	Drum Storage Area	c	155			150 sq ft		
46	Vehicle maintenance and parking	e	163	DRMO Lot 2				
47	Drum Storage Area (2)	c	172					
48	Underground Storage Tank	f	178	Active	1943	50,000 gal	Steel-Lined Concrete	Waste Oil
49	Underground Storage Tank	f	179	Active	1943	25,000 gal	Steel-Lined Concrete	Waste Oil
50	Drum Storage Area	c	179			56 sq ft		
51	Underground Storage Tank	f	180	Active	1943	50,000 gal	Steel-Lined Concrete	Waste JP-5
52	Underground Storage Tank	f	182	Active	1943	25,000 gal	Steel-Lined Concrete	Waste Oil
53	Underground Storage Tank	f	185	Identified as MCAS Tustin	Unknown	750 gal	Steel	Waste Oil
54	Underground Storage Tank	f	185	Identified as MCAS Tustin	Unknown	750 gal	Steel	Waste Oil
55	Drum Storage Area (2)	c	186			20 sq ft		
56	Drum Storage Area (2)	c	187			172 sq ft		
57	Underground Storage Tank	f	189	Active	1943	50,000 gal	Steel-Lined Concrete	Waste Oil
58	Underground Storage Tank	f	189	Active	1988	2,000 gal	Fiberglass-Coated Steel	Waste Oil
59	Underground Storage Tank	f	191	Active	1943	25,000 gal	Steel-Lined Concrete	Waste Oil
60	Underground Storage Tank	f	204	Release detection 1989, Active	1943	50,000 gal	Steel-Lined Concrete	Waste JP-5

**TABLE 4-1  
COMPREHENSIVE LIST OF SWMUs AND AREAS OF CONCERN  
IDENTIFIED DURING THE PRELIMINARY REVIEW/VISUAL SITE INSPECTION  
MCAS EL TORO RFA**

SWMU	SWMU TYPE	SOURCE (1)	LOCATION/BUILDING	COMMENTS	DATE	SIZE	MATERIAL	CONTENTS
301	Mark Arrest System	m	East side of Runway 34R					
302	Mark Arrest System	m	West side of Runway 34R					
303	Underground Storage Tank	m	359					
304	Trenches inside Building 359	m	359					
305	Septic Tank	l	601			2,000 gal	Concrete	Sanitary Waste
306	Septic Tank	l	687			2,000 gal	Concrete	Sanitary Waste
307	Septic Tank	l	819		1986	2,200 gal	Concrete	Sanitary Waste

**NOTES:****(1) SOURCE:**

Current - Based on site visits Jan-Feb 1991

Past - Based on agency records review and miscellaneous records for MCAS El Toro as identified below:

- a - Regional Water Quality Control Board, letter to LL Rehor (June 23, 1989)
- b - SPCC map (no date)
- c - Department of Health Services, 1980 Photographs
- d - EPA, Region IX, Compliance Inspection Report, May 1987
- e - interview
- f - UST list EG & G Idaho, Inc., November 1990
- i - Department of Conservation, California Division of Oil and Gas, Long Beach
- j - Per MCAS El Toro List of Oil/Water Separators
- k - Observed during VSI
- l - Other
- m - Per Navy direction (added during SV)

(2) SWMU/AOC was not able to be accurately located and/or identified from the records review information and the site visits.

CLE - C01 - 01F018 - A2 - 025

M 60050.000800

Annotations made by the writer of the  
Summary Report are identified with a  
star symbol or an arrow.

DUPLICATE

EXTRACTS

OIL AND HAZARDOUS SUBSTANCE  
SPILL PREVENTION, CONTROL AND  
COUNTERMEASURE FIELD SURVEY REPORT,  
SPCC PLAN, AND SPILL CONTINGENCY PLAN  
FOR THE  
U.S. MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA

11/29/88

Prepared for:  
Department of the Navy  
Western Division  
Naval Facilities Engineering Command  
P.O. Box 727  
San Bruno, California 94066

Prepared by:  
NBS/Lowry  
Engineers - Planners  
Post Office Box 851  
Hemet, CA 92343

economically justifiable. A determination should be made at the time of inspection as to whether cathodic equipment should be installed.

### C. Hazardous Wastes Storage Areas

There are six designated hazardous wastes storage areas at MCAS El Toro. The locations of these areas are shown on the SPCC Key Map. Each area has been provided with a structure consisting of a 12-foot by a 16-foot, 8-inch concrete pad with a 6-inch containment curb. This pad is covered by a metal deck roof and surrounded by a chain link fence with a lockable gate. The structures are not provided with emergency eyewash stations, and, although originally planned, fire extinguishers have not been installed because the fire department feels that personal safety would be threatened if an unauthorized person were to attempt to fight a large fire. Warning signs are posted listing Energy/Environmental and Fire Department phone numbers.

These storage pens were originally designed to provide short term storage (less than 90 days) for HM/HW generated at this station with hazardous materials being transferred to the Defense Reutilization and Marketing Office (DRMO), and hazardous waste being picked up by disposal contractors and

transferred off-site. The DRMO has since been given the responsibility for the disposal of hazardous wastes. DRMO does not, however, take physical custody of the waste material, as they do not currently have any facilities which conform to present storage requirements.

M60050.000776 (1-2)  
4/17/89 TDP ~~TTB~~

MCAS EL TORO

ADDITIONAL SITES NEEDING INVESTIGATION

Tom D Peltier

DUPLICATE

M60050.000776  
MCAS El Toro

Test Cells 658 and 447

- Bldg. 626 Wash Rack
- Bldg. 392 Wash Rack and Drum Storage Area
- Bldg. 127 Wash Rack
- Bldg. 673 Wash Rack and Drum Storage
- Bldg. 390 Wash Rack
- Bldg. 386 Steam Cleaning Area
- Bldg. 298 Maintenance Shop
- Bldg. 388 Wash Rack
- Hanger 605 Aircraft Wash Area
- Hanger 606 Aircraft Wash Area
- Hanger 114 Aircraft Wash Area
- Hanger 463 Aircraft Wash Area
- Hanger 461 Aircraft Wash Area
- Hanger 297 Aircraft Wash Area and Drum Storage
- Bldg. 320 Trichloroethylene Drum Storage
- Bldg. 357 Drum Storage
- Bldg. 454/456 Drum Storage
- Bldg. 317 Drum Storage
- Bldg. 534 Drum Storage
- Bldg. 655 Drum Storage
- Bldg. 359 Drum Storage
- Bldg. 130 Drum Storage
- Bldg. 602 Drum Storage
- Salvage Yard Drum Storage

TITLE: ADDITIONAL SITES NEEDING INVESTIGATION, POTENTIAL AREAS OF CONTAMINATION

AUTHOR: TOM D. PELTIER?

DATE: 4/17/89

CATEGORY: 1.2

OTHER POTENTIAL AREAS OF CONTAMINATION

Mag. 13	Paint Sheds
Auto Hobby Shop	Leaking waste Oil Tank
Bldg. 103	Paint Shed
Heavy Equipment	Vehicle Wash Area
Empty or Destroyed Buildings 143, 343, and 1789	
Combat Ready Vehicle Storage and Wash Area	
Bldgs. 359 & 651	Wash Areas
Bldg. 262	Wash Rack
Exchange Car Wash	

CLF-001-0000-A2-0000  
M60050.000899 M60050.000899  
MCAS El Toro

**DUPLICATE**

Environmental Quality Division  
Naval Facilities Engineering Command  
Alexandria, Virginia

**EXTRACTS**

# Hazardous Materials/Hazardous Waste Engineering Study

February 1984

Hazardous Materials/Wastes Generation  
Survey, Hazard Analysis and Storage  
Facility Design Recommendations  
Marine Corps Air Station  
El Toro, California

TITLE: HAZARDOUS MATERIALS/HAZARDOUS  
WASTE ENGINEERING STUDY

AUTHOR: ROY F. WESTON, INC.

DATE: 02/01/84

CATEGORY: 1.2



Table 2.5

Aggregate Annual Hazardous Waste Generation Rates  
DPDO El Toro

Waste Stream	Annual Volume Generated (gal)	Container Type	Potential Hazard <sup>1</sup>
Paint remover	170	5 gallon can	Corrosive
Nitric acid	1,470	6.5 gallon container	Corrosive
Sulfuric acid electrolyte	200	5 gallon drum	Corrosive
Potassium hydroxide	210	6 quart bottle	Corrosive
Miscellaneous corrosives	640	---	Corrosive
Sodium silicate solution	750	5 gallon can	Toxic
Cleaning compound	1,940	55 gallon drum	Toxic
Miscellaneous toxics	1,520	---	Toxic
Lacquer	2,620	5, 1 gallon can 1 quart, 1 pint can	Ignitable (IA)
Primer coating	420	1 gallon can 2 pint can	Ignitable (IA)
Polyurethane coating	410	2 gallon, 2 quart, 2 pint can	Ignitable (IA)
Miscellaneous ignitables (IA)	410	---	Ignitable (IA)
Fuel	8	1 pint can	Ignitable (IB)
Naptha alphamatic	210	5 gallon can	Ignitable (IC)



Table 2.5  
(continued)

Waste Stream	Annual Volume Generated (gal)	Container Type	Potential Hazard <sup>1</sup>
Miscellaneous ignitables (III)	9,590	---	Ignitable (III)
Corrosion preventative compound	11,200	1 pint can 5 gallon can	Oxidizer
Miscellaneous oxidizers	870	---	Oxidizer

<sup>1</sup>Industrial wastes have been included in this list. Since they have not been tested, a conservative RCRA hazard category has been assigned.

B-7

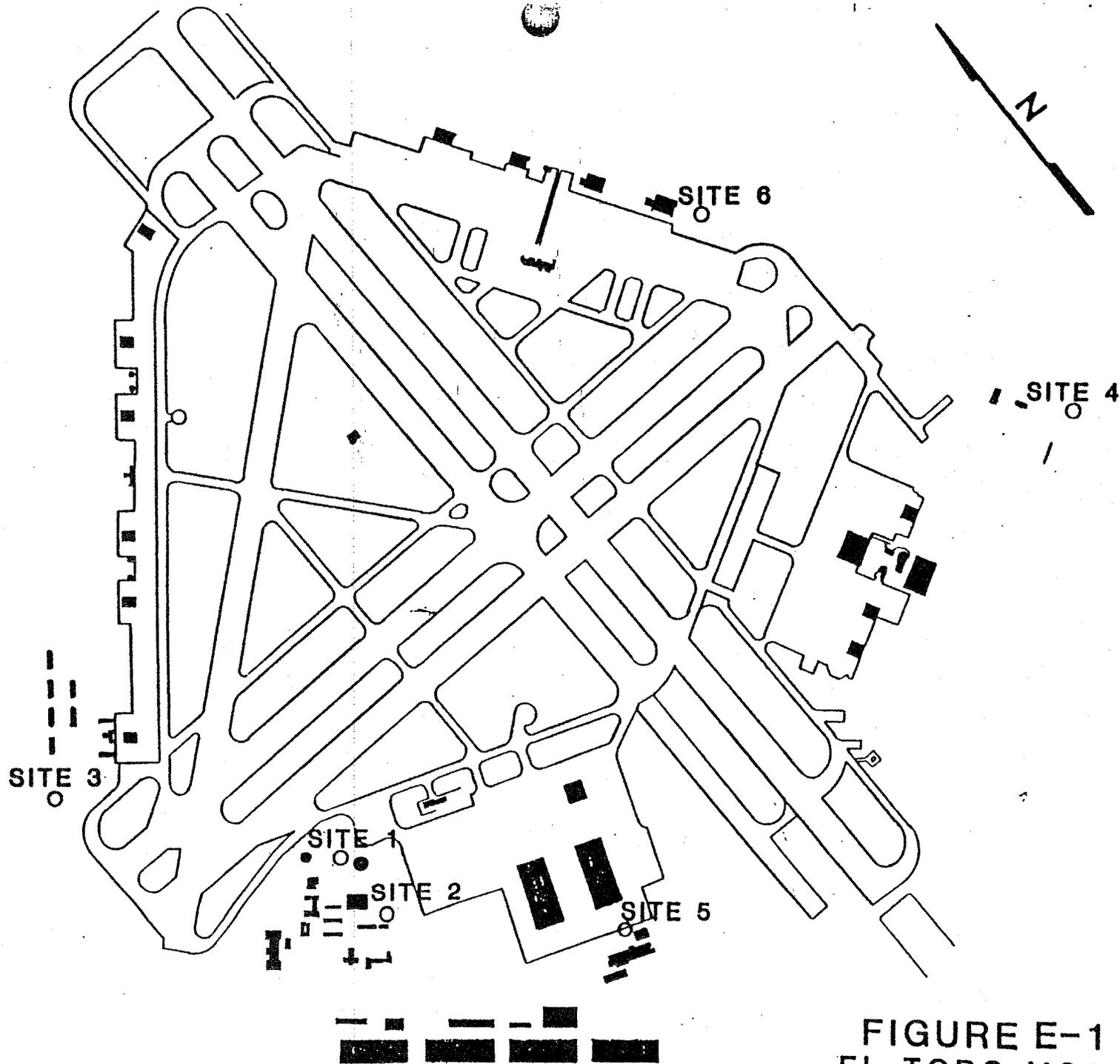
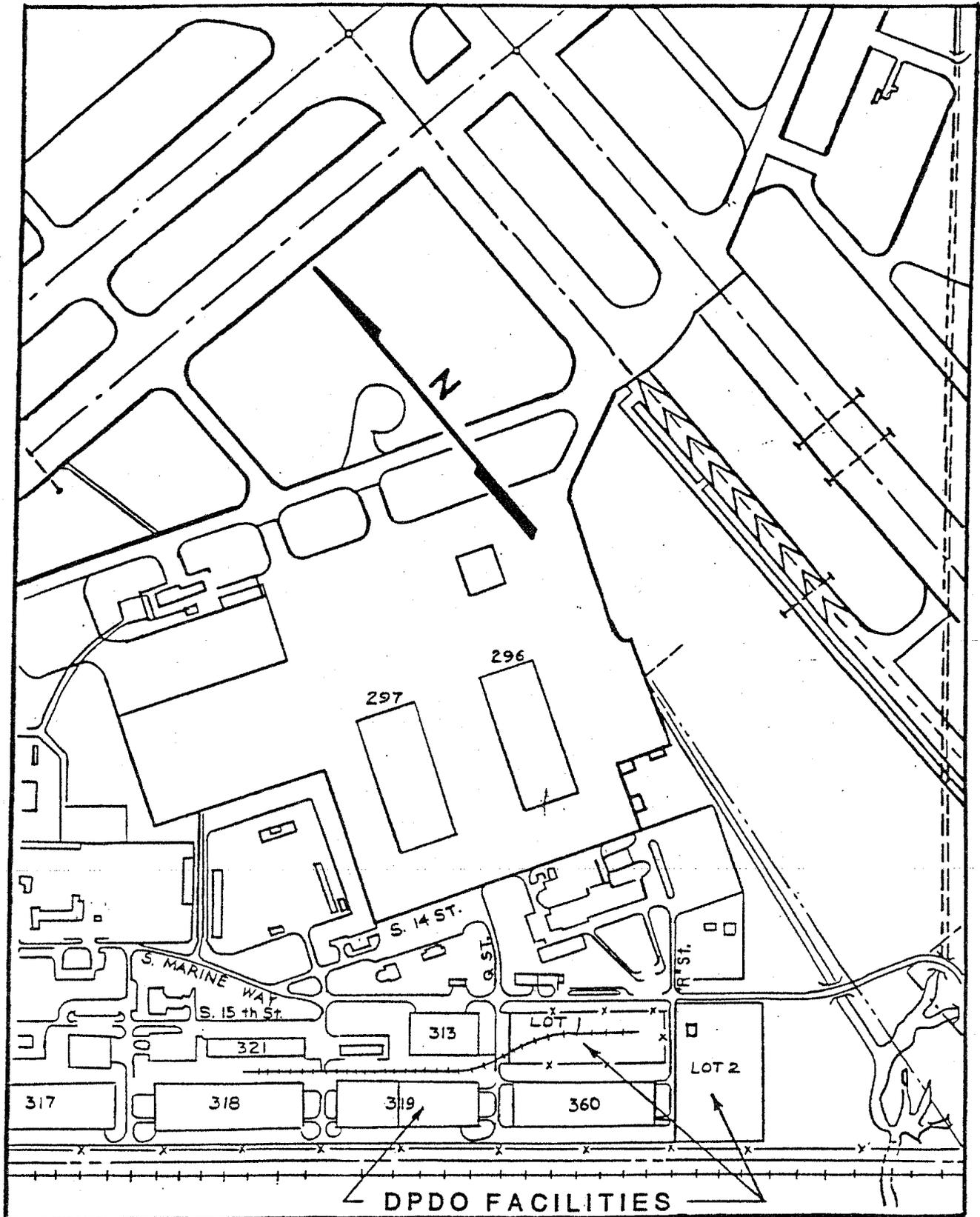
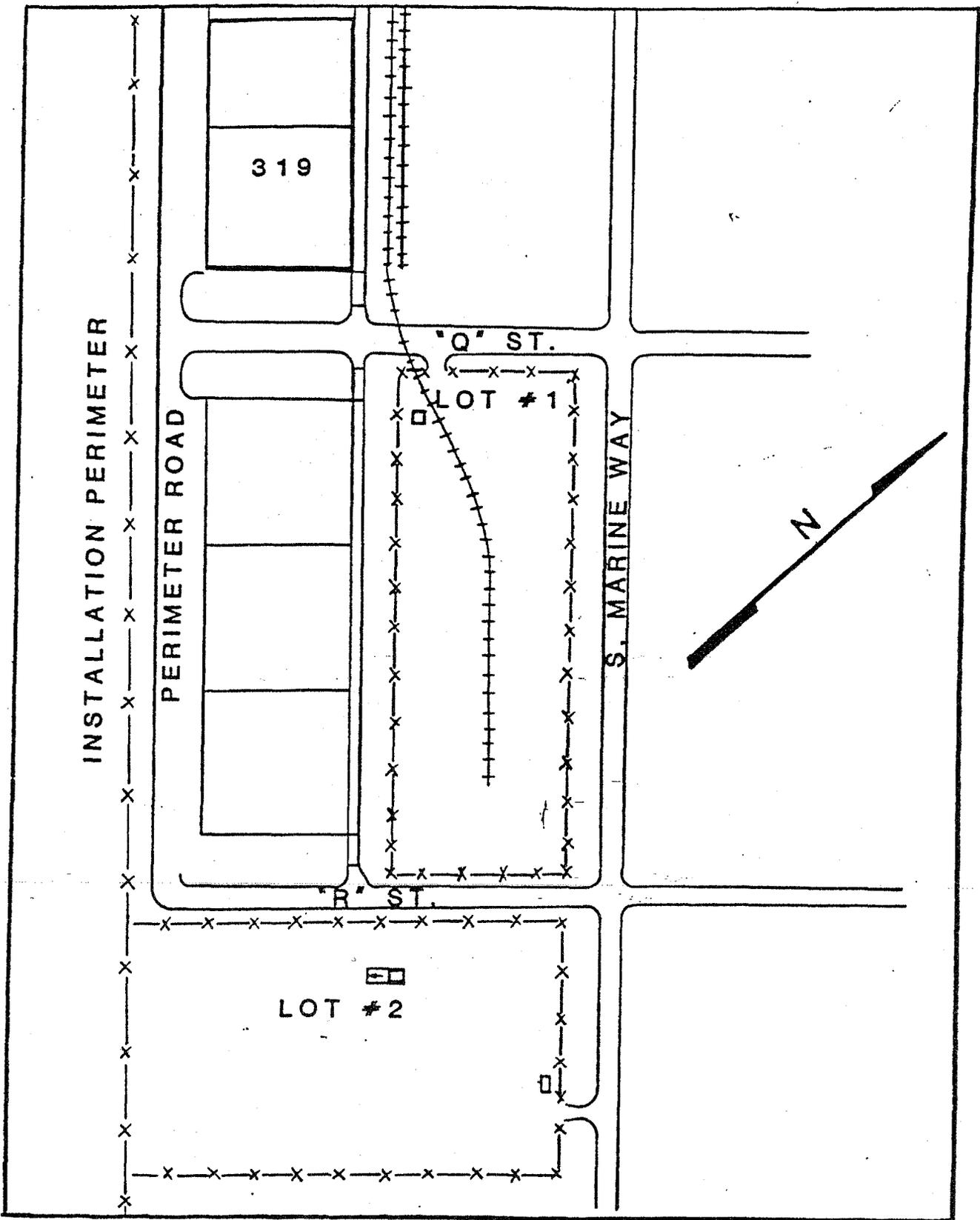


FIGURE E-1  
EL TORO MCAS  
HW STORAGE AREAS



SCALE: 1" = 600'

**FIGURE E-2**  
**DPDO LOCATION SITE PLAN**  
**EL TORO MCAS**



SCALE: 1" = 200'

**FIGURE E-3**  
**EXISTING DPDO STORAGE FACILITIES**  
**EL TORO MCAS**

Final

Marine Corps Air Station El Toro  
Hazardous Material/Hazardous Waste  
Management Plan

August 1994

**EXTRACTS**

ANNOTATIONS BY THE WRITER OF THE  
TECHNICAL MEMORANDUM ARE  
IDENTIFIED WITH AN ARROW OR A STAR  
SYMBOL.



Prepared for:

Southwest Division Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132-5190

Prepared by:

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

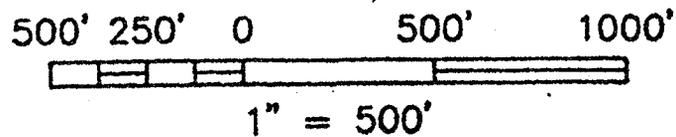
Contract No. N68711-92-D-4658  
Delivery Order No. 0004

- ▲ HAZARDOUS MATERIALS STORAGE
- HAZARDOUS WASTE ACCUMULATION POINT
- ONE YEAR PERMITTED HAZARDOUS WASTE STORAGE AREA

MCAS El Toro  
Santa Ana, California

# HAZARDOUS WASTE ACCUMULATION POINTS AND HAZARDOUS MATERIAL STORAGE LOCATIONS

NOVEMBER 5, 1993



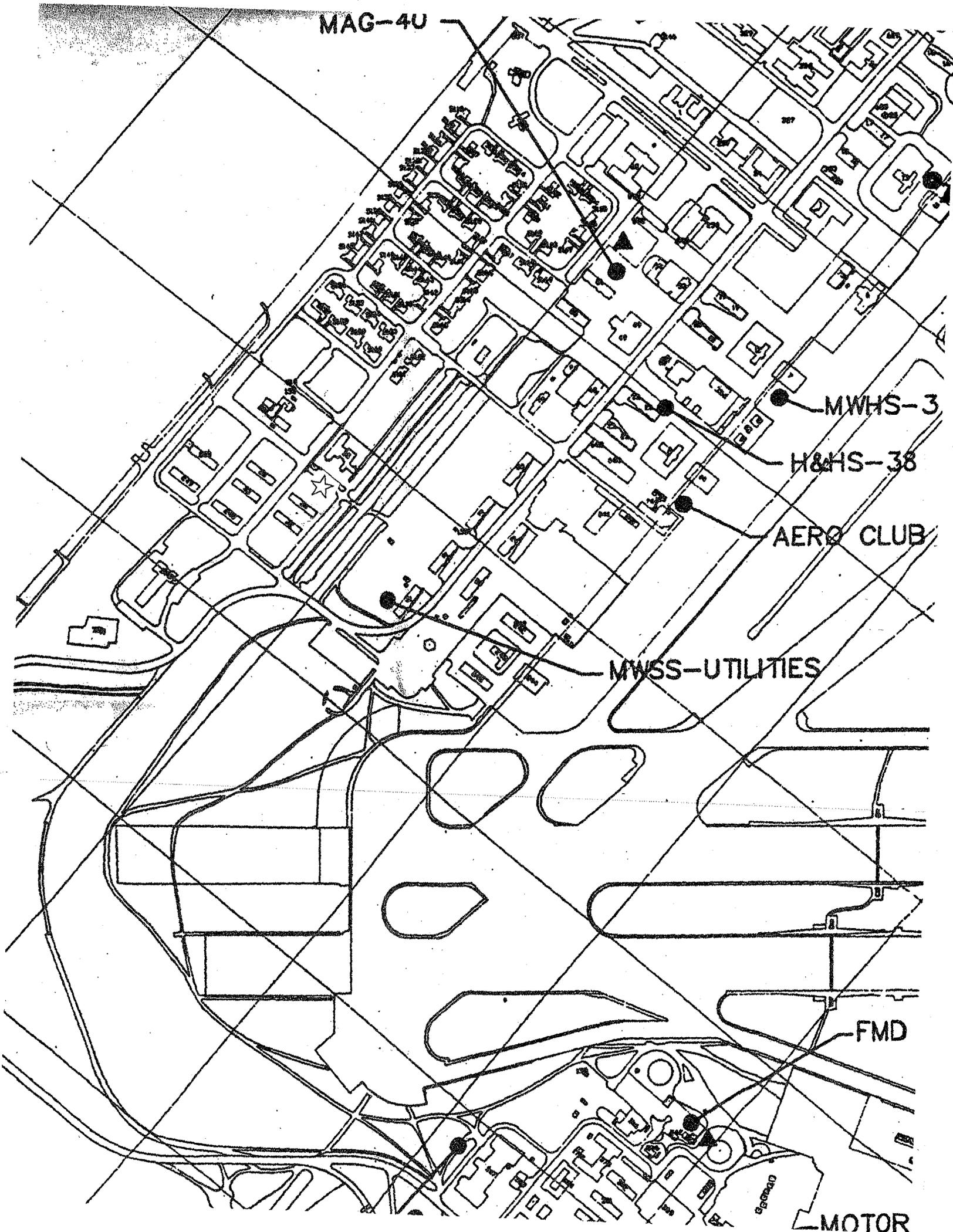
Science Applications  
International Corporation  
An Employee-Owned Company

Hazardous Waste Accumulation Point Summary		
Unit	Bldg #	Coordinates
Aero Club	10	R5
Armory	744	O2
Auto Hobby Shop	626	M3
CSSD-14	388	U8
Environmental Above Ground Storage Tank	n/a	U6
FMD Shops, Bldg 1601	370	T6
Fuels Division	314	U9
H&HS 38	22	R4
MACG-38 MWCS 38	HGR 5	R4
MAG-46	51	Q4
MAG-46 Fixed Wing	296	T9
MAG-46 Helo Mals-46	295	S6
MALS-11 Air Frames	130	M9
MALS-11 Avionics	856	Q12
MALS-11 Cryogenics (ALSS)	636	R12
MALS-11 GSE North	392	M9
MALS-11 Ordnance	673	P12
MALS-11 Power Plant	658	N10
MALS-11 Power Plant	634	N9
MALS-11 Supply	441	P12
Maytag Aircraft Corp	779	N10
MOD Team	115	N9
Motor Pool (G-4), Bldg 770	386	T7
MWHS-3	7	Q5
MWR Auto #1	651	O2
MWR Golf Course	390	P13
MWSS-Utilities	31	S4
MWSS-373-HQ	800	U10
MWSS-373 Refuelers	671	U9
SOMS HQ	289	N5
SOMS Maintenance	HGR 2	O4
SOMS Recovery		
Supply	320	U7
VMFA (AW)-121	462	R11
VMFA (AW) 225	698	N9
VMFA (AW)-242	461	R11
VMFAT-101	371	Q10
VMFA-323	606	N8
VMGR-352	297	T8
VFMA-314	605	N7

Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.

☆ The HM/HWMP does not identify a TAA near the former site of Building 36. The nearest existing building with a TAA is Building 31.

MAG-4U



MWHS-3

H&HS-38

AERO CLUB

MWSS-UTILITIES

FMD

MOTOR

**EXTRACTS**

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

**FOR**

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

Annotations made by the writer of the  
Summary Report are identified with a  
star symbol or an arrow.

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

**VOLUME 1**

**JULY, 1997**

**INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.**

## 5.22 DRAINAGE BASIN 22

This drainage basin comprises all the buildings in Areas 21 and 22. It has an area of about 65 acres.

### 5.22.1 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 5-19 BASIN 22 BUILDINGS OF LIMITED CONCERN		
BLDG #	DESCRIPTION	TENANT
7	Storage out of Stores	MWHS-3
8	Storage out of Stores	MTACS-38
9	Storage out of Stores	MTACS-38
11	Squadron Headquarters	MTACS-38
25*	Construction Shop	MWSS-373
26	Communications Shop	MWSS-373
27	Food Services Storage PMO Storage	MWSS-373 PMO
28	Food Services	MWSS-373
29	Storage NIS Field Office	3 <sup>rd</sup> MAW G-2 NIS
31*	Utilities Shop/TAFDS	MWSS-373
32	BOQ, W-1/O-2	Station/G-4
33	BOQ, W-1/O-2 Transients	Station/G-4
34	BOQ, W-1/O-2	Station/G-4
35	BOQ, w-1/O-2, Transients	Station/G-4

<b>TABLE 5-19</b>		
<b>BASIN 22</b>		
<b>BUILDINGS OF LIMITED CONCERN</b>		
<b>BLDG #</b>	<b>DESCRIPTION</b>	<b>TENANT</b>
240	Contract Refueler Facility	Supply (Vacant)
241	Storage	Vacant
	Laundry Pickup Point	Vacant
242	Museum	Station Training
243	Historical Center	Training
245	Storage Air/Ground	MWSG-37
248	BOQ Quarters	Station/G-4
249	VIP Quarters (Transients)	Station/G-4
250	VIP Quarters (Transients)	Station/G-4
251	Conference Center	Station/G-4
	Recreation Pavilion	Station/G-4
	Bathhouse	Training
421	Playing Courts, Tennis	MWR-Rec
520	Wading Pool	Training
657	Visitor/Vehicle Registration	PMO
683	Cold Storage Warehouse	Supply
	General Warehouse MC	Supply
729	Main Gate Sentry House	PMO
771*	Hazardous Waste Collection Facility	MWSG-37
889	Vintage Aircraft Display Shelter	Station

\* 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 5-20**  
**BASIN 22**  
**SUMMARY OF BMPs**

BLDG #	BASIN	BUILDING DESCRIPTION	TENANT	Concern Level	BMP STATUS	BMP #	BMP Description
7	22	Storage out of Stores	MWHS-3	Limited			No Additional BMPs Recommended
8	22	Storage out of Stores	MTACS-38	Limited			No Additional BMPs Recommended
9	22	Storage out of Stores	MTACS-38	Limited			No Additional BMPs Recommended
10	22	Aero Club Hngr	MWR/Rec	Concern	Rec Existing Rec Rec Existing Rec	009 112 012 018 005 065	Personnel Training Prepare Appropriate Spill Prevention and Response Plans Construct Berm or Dike Around Critical Areas Provide Roof to Cover Source Area Provide Regular Sweeping of Floor/Lot Place Spill Kit in Area
11	22	Squadron Headquarters	MTACS-38	Limited			No Additional BMPs Recommended
25	22	Construction Shop	MWSS-373	Previous			No Additional BMPs Recommended
26	22	Communications Shop	MWSS-373	Limited			No Additional BMPs Recommended
27	22	Food Services Storage PMO Storage	MWSS-373 PMO	Limited			No Additional BMPs Recommended
28	22	Food Services	MWSS-373	Limited			No Additional BMPs Recommended
29	22	Storage NIS Field Office	3 <sup>rd</sup> MAW G-2 NIS	Limited			No Additional BMPs Recommended

**TABLE 5-20**  
**BASIN 22**  
**SUMMARY OF BMPs**

BLDG #	BASIN	BUILDING DESCRIPTION	TENANT	Concern Level	BMP STATUS	BMP #	BMP Description
31	22	Utilities Shop/TAFDS	MWSS-373	Previous			No Additional BMPs Recommended
32	22	BOQ, W-1/O-2	Station/G-4	Limited			No Additional BMPs Recommended
33	22	BOQ, W-1/O-2 Transients	Station/G-4	Limited			No Additional BMPs Recommended
34	22	BOQ, W-1/O-2	Station/G-4	Limited			No Additional BMPs Recommended
35	22	BOQ, w-1/O-2, Transients	Station/G-4	Limited			No Additional BMPs Recommended
38	22	Museum Storage	Station/G-4	Limited			No Additional BMPs Recommended
152	22	Ground Equipment Shed	Installation	Previous			No Additional BMPs Recommended
240	22	Contract Refueler Facility	Vacant	Limited			No Additional BMPs Recommended
240	22	Contract Refueler Facility	Supply (Vacant)	Limited			No Additional BMPs Recommended
241	22	Storage	Vacant	Limited			No Additional BMPs Recommended
241	22	Storage Laundry Pickup Point	Vacant Vacant	Limited			No Additional BMPs Recommended
242	22	Museum	Station Training	Limited			No Additional BMPs Recommended
243	22	Historical Center	Training	Limited			No Additional BMPs Recommended

TABLE 7-1 MCAS EL TORO MATERIALS INVENTORY								
BLDG #	BASIN	BUILDING DESCRIPTION	TENANT	Concern Level	TRADE/COMMON NAME	MAX. DAY	AVE. Day	CONT.
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Antifreeze	55 gal	25 gal	55 gal
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Citric Acid, Anhydrous	2112 lb	200 lb	50 lb
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Coagulant, Water Treatment	1265 lb	100 lb	5 lb
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Diesel Fuel	55 gal	25 gal	55 gal
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Lubricating Oil, 30W	55 gal	25 gal	55 gal
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Lubricating Oil, 80/90W	55 gal	25 gal	55 gal
31	22	Utilities Shop/TAFDS	MWSS-373	Previous	Sodium Hexametaphosphate	554 lb	50 lb	100 lb
49	24	Storage out of Stores Squadron Headquarters Academic Instruction	MWSS-373 MWSS-373 MWSS-373	Concern	Diesel Fuel	N/A	N/A	N/A
49	24	Storage out of Stores Squadron Headquarters Academic Instruction	MWSS-373 MWSS-373 MWSS-373	Concern	Waste Oil	N/A	N/A	N/A
57	17	Bathhouse	Training	Limited	Sodium Hypochlorite	500 gal	100gal	500 gal
99	17	Flight Line Storage	SOMS	Concern	Lubricating Oil	N/A	N/A	N/A
99	17	Flight Line Storage	SOMS	Concern	Solvent	N/A	N/A	N/A
114	08	Maint Hngr Space	HMM-166	Concern	Diesel Fuel	N/A	N/A	N/A

**TABLE 5-39**

**MCAS EL TORO  
 SPILL HISTORY**

Date	Incident No.	Description
November 28, 1995	N/A	Approximately 2 quarts of hydraulic fluid were lost on the roadway and shoulder when a forklift's hydraulic line was inadvertently punctured. A drip pan was placed under the leaking line to contain the leak and contaminated soil was removed and drummed as hazardous waste.
September 18, 1995	N/A	A one gallon container of liquid scale dissolver spilled when it was dropped by warehouse personnel. The spill was diked and absorbed with ash. Spill contained to the warehouse floor.
September 12, 1995	N/A	Three quarts of hydraulic fluid spilled onto the concrete warehouse floor when a forklift's fork punctured the stored material during issuance. Spilled cleaned up with speedy dry absorbent. Spill contained to the warehouse floor.
July 21, 1995	N/A	Approximately 80 gallons of JP-5 fuel spilled when a fuel truck attempted to fuel an aircraft with an open fuel cell. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
July 20, 1995	N/A	Approximately 10 gallons of JP-5 fuel spilled when an aircraft vented it's tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
June 29, 1995	N/A	Approximately 70 gallons of JP-5 fuel spilled from an aircraft fuel tank with a dysfunctional valve. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 1, 1994	N/A	Approximately 400 gallons of JP-5 fuel leaked from an F/A-18 aircraft. Three hundred gallons were recovered and 100 gallons were cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 1, 1994	N/A	Approximately 250 gallons of JP-5 fuel leaked from an F/A-18 aircraft.  Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.

**TABLE 5-39**  
**MCAS EL TORO**  
**SPILL HISTORY**

Date	Incident No.	Description
September 1, 1994	N/A	Approximately 1 gallon of hydrochloric acid and another gallon of chlorine spilled when their lines ruptured. Pumping through the line was stopped immediately and the spill was cleaned up with sodium bicarbonate. Spill contained to the flightline.
August 12, 1994	N/A	A small amount of paint stripper (methylene chloride) from a 5 gallon can spilled when the can overheated and blew its cap. The small amount evaporated before cleanup could occur.
July 14, 1994	249777	Approximately 25 gallons of transformer oil, possibly containing more than 55 ppm PCBs, spilled when the personnel handling the transformer overturned it. The initial responders laid down absorbent socks, mats pads and Lite-Dri absorbent around the spill and on the liquid. Workers then removed and drummed soil from the spill area as hazardous waste. Cleanup began immediately on 14 July 94 and was completed 15 July 94. Additional hazardous waste included the absorbent materials, personal protective gear rags and mops used to cleanup the spill.
April 26, 1994	N/A	Approximately 100 gallons of JP-5 fuel spilled when an aircraft vented its tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
March 8, 1994	N/A	Approximately 20 gallons of JP-5 fuel spilled when an aircraft was refueling. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
May 11, 1993	318	Caustic soap leaked from a container behind Bldg. 317.
March 1, 1993	146	Approximately one quart of methyl ethyl ketone spilled to the ground at Bldg. 306.
September 9, 1992	873	Unknown quantity of fumigant released into the soil at Strawberry Field.
August 16, 1992	788	Fire occurred at Bldg. 751 with a van containing Hg, Li, Cd, and Pb-acid batteries. This caused a chemical release into the atmosphere.

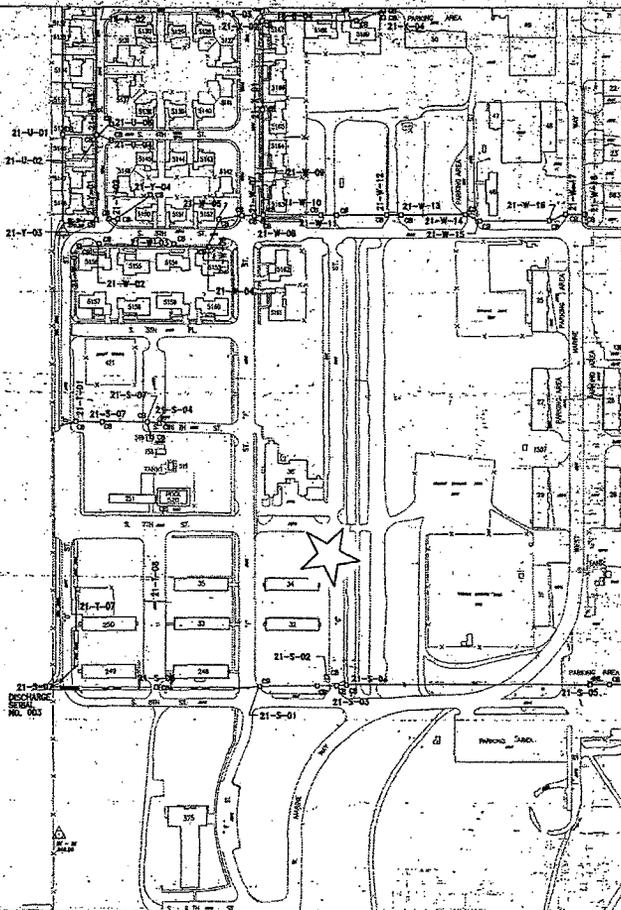
TABLE 5-39		
MCAS EL TORO		
SPILL HISTORY		
Date	Incident No.	Description
June 1, 1992	560	Approximately 3,950 gallons of JP-5 spilled from a refueler. Fuel was contained and did not enter storm drains.
May 28, 1992	552	JP-5 smell coming from storm drain at Bldg. 368. Flow from drain diverted to oil/water separators.
March 5, 1992	228	Three quarts of Hg spilled at Bldg. 297. The spill was contained.
March 5, 1992	223	Tractor trailer spilled 15-20 gallons of diesel fuel into sanitary sewer. Sewer system was diked and covered.
February 5, 1992	121	One gallon of transformer oil containing PCBs spilled at Bldg. 439. The spill was contained.
January 17, 1992	053	Approximately 100 gallons of antifreeze spilled into ditch and then to Agua Chinon.
December 18, 1991	1092	Lithium battery exploded at Bldg. 17. The debris was contained with some off-gassing.
November 19, 1991	997	Approximately 10 Lithium Batteries leaking and off-gassing at Bldg. 673T3.
September 16, 1991	754	Contaminated oil spilled into sewer at Bldg 295.
July 12, 1991	580	Paint stripper spilled into ditch near Bldg. 800. The spill was diverted to oil/water separator.
May 23, 1991	453	Unknown white substance found at Officer's Club crystal room.

A reference to a major spill is contained in the May 1990 SPCCP written for the MCAS. The SPCC states that "one major unauthorized release has occurred in the last two years. In August 1988, a 108,000 gallon JP-5 storage tank pipe was reported to have leaked causing soil and ground water contamination. The leak was reportedly repaired in early 1990."

Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.



Star symbol identifies the approximate location of former Building 36.

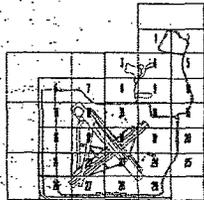


**MCAS EL TORO - AREA 21**  
SCALE: 1"=150'-0"

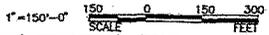
REVISIONS			
SYMBOL	DESCRIPTION	PREP'D BY	DATE

**LEGENDS**

- AST - ABOVE GROUND STORAGE TANK
- AM - AIRCRAFT MAINTENANCE
- AW - AIRCRAFT WASHING
- AF - AIRCRAFT FUELING
- AP - AIRCRAFT PAINTING
- CB - CATCH-BASIN
- ES - EQUIPMENT STORAGE
- EM - EQUIPMENT MAINTENANCE
- HMS - HAZARDOUS MATERIAL STORAGE
- HWS - HAZARDOUS WASTE STORAGE
- HWTA - HAZARDOUS WASTE TRANSFER AREA
- MH - MANHOLE
- OVS - OIL/WATER SEPARATOR
- PCA - POLLUTANT CONTACT AREA
- PPCA - POTENTIAL POLLUTANT CONTACT AREA
- UGT - UNDERGROUND STORAGE TANK
- VP - VEHICLE PAINTING
- VF - VEHICLE FUELING
- VM - VEHICLE MAINTENANCE
- VW - VEHICLE WASHING
- WR - WASH RACK
- WTA - WASTE TRANSFER AREA



**KEY PLAN**  
SCALE: NONE



IF SHEET IS LESS THAN 22X34 IT IS A REDUCED PRINT SCALE ACCORDINGLY

**ITEM**  
INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.

NEW YORK OFFICE • 8000 42E • STORRS, CONNECTICUT 06268 (860) 795-0074  
 STAFF: 198-0074 • (810) 795-0074

PROJECT NO.	EL TORO	DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
DATE	1/28/00	SOUTHWEST DIVISION	CALIFORNIA
TYPE	STORM DRAIN	WARRIOR CORPS AIR STATION	EL TORO, CA
<b>MCAS EL TORO</b>			
<b>AREA 21 - STORM DRAINS</b>			
DESIGNER	DATE	SIZE	CODE BOOK NO.
		D	
APPROVED	DATE	CORR. CODE NO.	XXXXX

OF 08 FOR COMBINED DRAWING SCALE SPEC. SHEET OF

## Extracts from Property Records and Building Guides

# DISPOSAL RECORD

1. ACTIVITY <b>MARCOR AIR STATION/EL TORO</b>		2. ACCTG. NO. <b>60050</b>	3. TOTAL COST \$ <b>33,455</b>	4. DIST. <b>11</b>	5. ACTIVITY CODE <b>8139-875</b>	6. BLDG. NO. <b>36</b>	CARD NO. <b>2-00036</b>
8. CITY	9. CITY CODE	10. COUNTY <b>ORANGE</b>	11. CO. CODE <b>059</b>	12. STATE/COUNTRY <b>CALIFORNIA</b>		13. STAIR CASE <b>04</b>	14. LAND OWNERSHIP OWNED <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> CAT. CODE <b>911-4</b>
15. COMPONENT/TENANT		16. NONCONTIGUOUS AREA	17. MGMT. BUR. CODE <b>NAVAIR 1</b>		18. FIN. BUR. CODE	19. PRG. DA MO.-YR. <b>9/65</b>	
20. TYPE OF CONSTRUCTION			21. CONDITION			22. PRIME CONTRACT NO.	23. MAP GRID
PERM. <input type="checkbox"/> P	SEMI. <input type="checkbox"/> S	TEMP. <input checked="" type="checkbox"/> T	USABLE <input checked="" type="checkbox"/> U	USABLE <input type="checkbox"/> T	USABLE <input type="checkbox"/> R	USABLE <input type="checkbox"/> C	USABLE <input type="checkbox"/> N
25. BUILDING TITLE (LOCAL DESCRIPTION) <b>BOQ W/O MESS</b>			26. VOLUME CU. FT. <b>86987</b>	27. DIMENSIONS (a) LENGTH <b>119</b> (b) WIDTH <b>30</b> (c) HEIGHT <b>22</b> (d) NO. OF STORIES <b>2</b>			28. MATERIAL CODES (e) IRREG. <input checked="" type="checkbox"/> X (a) FOUND. <b>JJP</b> (b) EXTER. <b>99</b> (c) ROOF <b>FS</b>
USE	29. NAVY DESCRIPTION	30. NAVY CODE	31. AREA SQ. FT. (GROSS)	32. VACANT (SQ. FT.)	33. OTHER MEASURE QUANTITY	34. CAPACITY QUANTITY	35. TYPE ACTION
(a) PRI.	<b>B/OFF/B W/O MESS</b>	<b>724-13</b>	<b>7740</b>	<b>7740</b>	<b>20 MN</b>		1. ACC. <input type="checkbox"/>
(b) SEC.							2. CAP. IMPRV. <input type="checkbox"/>
(c) TER.							3. CORR. <input type="checkbox"/>
(d) THR.							4. DISP. <input type="checkbox"/>
36. ACQUISITION DATA				37. DISPOSITION DATA			
MO.-YR.	METHOD	CODE	MO.-YR.	METHOD	CODE	38. ADP	

*Disposition 06/67*

**BUILDINGS (CLASS II) NAVCOMPT FORM 277 (4C) (REV. 5-62) UPPER**

ACTIVITY <b>MARCOR AIR STATION/EL TORO</b>	ACCTG. NO. <b>60050</b>	TOTAL COST \$ <b>33,455</b>	DIST. <b>11</b>	ACTIVITY CODE <b>8139-875</b>	BLDG. NO. <b>36</b>	CARD NO. <b>2-00036</b>
---	----------------------------	--------------------------------	--------------------	----------------------------------	------------------------	----------------------------

39. FLOORS →	BASEMENT	FIRST FLOOR	SECOND FLOOR	THIRD FLOOR	FOURTH FLOOR	FIFTH FLOOR	SIXTH FLOOR
(a) LIVE LOAD (LBS. PER SQ. FT.)							
(b) FLOOR MATERIAL CODE							
(c) SQ. FT. FLOOR AREA							
40. MISCELLANEOUS (a) HEATING SYSTEM FUEL TYPE		(b) ELECTRICAL CURRENT VOLTS PHASES CYCLES			(c) HOT WATER FUEL STORAGE CAPACITY (GALS.)		
(d) CRANES NO. OF IDENTIFICATION NO. TON CAPACITY	(e) ELEVATORS NO. OF IDENTIFICATION NO. TON CAPACITY	(f) SPRINKLER SYSTEM YES NO		(g) TELEPHONE SYSTEM YES NO			
41.	42.	43.		44.			
44.	45.	46.		47.			

47. REMARKS:

MEMORANDUM

EXTRACTS

11000

1JP.40

Date: 7 July 1989

From: Director, Facilities Management Department  
To: DISTRIBUTION

Subj: FY 1989 BUILDING GUIDES

Encl: (1) MCAS El Toro Building Guide  
(2) MCAS Tustin Building Guide  
(3) MCAS Camp Pendleton Building Guide  
(4) Big Bear Building Guide

1. Enclosures (1) through (4) contain current data for all numbered Class II real property at MCAS El Toro, MCAS Tustin, MCAS Camp Pendleton, and Big Bear. The enclosures will be the official reference for use in preparing routine job orders and other documents requiring cost account codes, category codes, or building descriptions.

2. Any changes to the enclosures resulting from field investigations should be reported to the Planning Office, extension 6585. Additional building guides will be provided upon request, with a complete revision to be issued quarterly.

*C. C. Morell*  
C. C. MORELL  
By direction

DISTRIBUTION:

MCAS A

ICC

IDA

1JA List A, B

MCAS Tustin: 50 copies

MCAS Camp Pendleton: 50 copies

Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.



The 1989 Building Guide does not include Building 36.

MCAS EL TORO BUILDING GUIDE

BLDG NO.	MAP GRID	DESCRIPTION	TENANT	CAT CODE	COST ACCOUNT CODE	U S E
1	P3	Squadron Headquarters	H&HS	61072	7160	*
1	P3	Telephone Exchange	G-6	13140	71KO	
1	P3	A & R Division	COMPT	61010	7160	
2	O5	Hangar Bay	SOMS	21105	71UO	*
2	O5	Crew/Equipment Space	SOMS	21106	71UO	
3	P5	VAL Support	SOMS	14140	71LO	
4	P5	ALCE/Exercise Support	SOMS	14140	71LO	
5	P5	Elec/Comm Maint Shop	MWCS-38	21710	7120	
6	P5	Provost Marshal	PMO	61010	7160	*
7	Q5	Storage out of Stores	MWHS-3	44112	7140	
8	Q5	Elec/Comm Maint Shop	H&HS-38	44112	7140	
9	Q5	Elec/Comm Maint Shop	H&HS-38	44112	7140	
10	R5	Aero Club	MWR	74075	71JO	
11	R4	Squadron Headquarters	H&HS-38	61072	7160	
12	Q4	Squadron Headquarters	MWHS-3	61072	7160	
13	P4	Group Headquarters	MACG-38	61071	7160	
14	O4	Squadron Headquarters	MWCS-38	61072	7160	
15	O4	Elec/Comm Maint Shop	MWCS-38	21710	7120	*
15	O4	Storage out of Stores	MWCS-38	44112	7140	
16	O4	Storage out of Stores	MWCS-38	44112	7140	
17	P4	Elec/Comm Maint Shop	MWCS-38	21710	7120	
19	Q4	Squadron Headquarters Storage	MWHS-3	61072	7160	
20	Q4	Storage out of Stores	MWHS-3	44112	7140	*
20	Q4	Dental Clinic Storage	13th Dental	21871	7120	
21	Q4	General Storage Shed	H&HS-38	44135	7140	
22	R4	Elec/Comm Maint Shop	H&HS-38	21710	7120	*
22	R4	Squadron Headquarters	H&HS-38	61072	7160	
23	R4	Storage out of Stores	H&HS-38	44112	7140	
25	R4	Construction Shop	MWSS-371	21820	7120	
26	R4	Utilities Maint Shop	MWSS-371	21820	7120	
26	R4	NBCD	MWSS-371	21820	7120	
27	R4	G-4 Billeting	G-4	44112	7140	*
27	R4	Warehouse	G-4/MWR	44112	7140	
27	R4	Rec/Admin/Supply Maint	SOMS	44112	7140	
28	S4	Utilities Maint Shop	MWSS-371	21820	7120	
29	S4	Storage	MAG-46	44112	7140	
29	S4	Admin (NIS Field Office)	NIS	44112	7140	*
31	S4	Utilities Office	MWSS-373	61010	7160	
32	S3	Bachelor Officers Quarters	G-4	72411	71AO	
33	S3	Bachelor Officers Quarters	G-4	72411	71AO	
34	S3	Bachelor Officers Quarters	G-4	72411	71AO	
☆ 35	S3	Bachelor Officers Quarters	G-4	72411	71AO	
38	S3	Club Systems	MWR	61010	7160	*
38	S3	U.S. Attorney	SJA	61010	7160	
38	S3	Young Marines	G-4	61010	7160	
38	S3	Sea Cadets	G-4	61010	7160	
38	S3	Boy Scouts	G-4	61010	7160	
46	R4	Reproduction	Adjutant	61010	7160	

## EXTRACTS

UNITED STATES MARINE CORPS  
Marine Corps Air Station El Toro  
P O Box 94003  
Santa Ana, CA 92709-4003

11000  
IJP.7  
15 June 1994

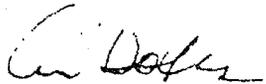
### MEMORANDUM

From: Assistant Chief of Staff, Installations  
To: Distribution

Subj: FY94 BUILDING GUIDE

Encl: (1) MCAS El Toro Building Guide  
(2) MCAS Tustin Building Guide  
(3) MCAS Camp Pendleton Building Guide  
(4) Big Bear Building Guide

1. Enclosures (1) through (4) contain data for all Class II property on listed air stations and Big Bear.
2. It is requested the information be reviewed to ensure that future building guides are corrected. Please report discrepancies to the Planning Division at extension 2232.



ANN DOTSON  
By direction

#### DISTRIBUTION:

MCAS A  
IJA List A, B  
MCAS Tustin: 50 copies  
MCAS Camp Pendleton: 50 copies

**EXTRACTS**

MCAS EL TORO BUILDING GUIDE

FAC NO.	MAP GRID	DESCRIPTION	TENANT	CAT CODE NUMB	COST ACCT CODE	SIZE
1	P3	Telephone Exchange	Sta/G-6	13140	EBMO	3278 SF
1	P3	Admin (A&R, Compt, G-6, Insp, DIS)	Station	61010	EBFO	3406 SF
1	F3	Squadron Headquarters	SDMS	61010	EBFO	9084 SF
2	O5	Hangar Bay	SDMS	21105	EBVO	6740 SF
2	O5	Crew/Equipment Space	SDMS	21106	EBVO	3630 SF
3	P5	Material/IMRL	SOMS	21106	EBVO	1560 SF
4	P5	Search & Rescue	SDMS	14120	EBNO	1560 SF
5	P5	Auto Organizational Shop	MWCS-38	21451	EBBO	10370 SF
6	P5	Provost Marshal/Secur. Hdqrts	Sta/FMO	73020	EBLO	9226 SF
7	O5	Storage Out of Stores	MWHS-3	44112	EBDO	10370 SF
8	O5	Storage Out of Stores	MTACS-38	44112	EBDO	1560 SF
9	O5	Storage Out of Stores	MTACS-38	44112	EBDO	1560 SF
10	R5	Aerc Club Hangar	MWR	74075	EBLO	10370 SF
11	R4	Squadron Headquarters	MTACS-38	61072	EBFO	3960 SF
*	O4	Group Headquarters	MWHS-3	61072	EBFO	3960 SF
3	P4	Group Headquarters	MWCS-38	61072	EBFO	3960 SF
14	O4	Squadron Headquarters	MWCS-38	61072	EBFO	3960 SF
15	O4	Elec/Comm Maint Shop	MWCS-38	21710	EBBO	3120 SF
15	O4	Radio Supply	MWCS-38	44112	EBDO	3120 SF
16	O4	Storage out of Stores	MWCS-38	44112	EBDO	6240 SF
17	P4	Elec/Comm Maint Shop	MWCS-38	21710	EBBO	6240 SF
19	O4	Squadron HQs	MWHS-3	61072	EBFO	240 SF
20	O4	Storage out of Stores	MWHS-3	61072	EBFO	680 SF
20	O4	Maintenance/Storage	13th	61072	EBFO	160 SF
21	O4	General Storage Shed		61072	EBFO	40 SF
22	R4	Elec/Comm Maint Shop		61072	EBFO	40 SF
23	R4	Storage out of Stores		61072	EBFO	0 SF
25	R4	Construction Shop		61072	EBFO	0 SF
26	R4	Communication Shop		61072	EBFO	6240 SF
27	R4	FMO Storage		61077	EBFO	6240 SF
28	S4	Food Services	ML	21820	EBBO	6240 SF
29	S4	NIS Field Office	NIS	61010	EBFO	2400 SF
31	S4	Utilities Shop/TAFDS	MWSS-373	21820	EBBO	6240 SF
32	S3	BOQ, W-1/0-2	Sta/G-4	72411	EBKO	20 PN
33	S3	BOQ, W-1/0-2 Transients	Sta/G-4	72411	EBKO	20 PN
34	S3	BOQ, W-1/0-2	Sta/G-4	72411	EBKO	20 PN
35	S3	BOQ, W-1/0-2 Transients	Sta/G-4	72411	EBKO	20 PN
38	S3	Young Marines/Boy Scouts	Sta/G-4	61010	EBFO	6565 SF
38	S3	BOQ Storage/Station	Sta/G-4	61010	EBFO	2825 SF
* 3	R4	Reproduction	Sta/G-4	61010	EBFO	2280 SF
7	R4	Constr/Wt. Handlg Equip Shop	MWCS-48	21820	EBBO	2980 SF
48	R4	FIIU Headquarters	MWHS-3	61072	EBFO	5148 SF
49	O4	Storage out of Stores	MASS-6	44112	EBDO	12000 SF
49	O4	Academic Instruction	MASS-6	61072	EBAO	4978 SF
49	O4	Squadron Headquarters	MWCS-48	61072	EBFO	5088 SF
50	O4	Academic Instruction	MWSS-472	17110	EBAO	3120 SF
50	O4	Squadron Headquarters	MWSS-472	61071	EBFO	3120 SF

Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.

★ The 1994 Building Guide does not include Building 36.

ENCL (1)

# El Toro Building Guide

BLDG	GRI	DESCRIPTION	TENANT	CATCO	CAC	SIZE
1	P3	Admin(A&R,Compt,G-6,Insp)	Station	61010	EBFO	
1	P3	Squadron Headquarters	SOMS	61010		
1	P3	Telephone Exchange	Sta/G-6	1312		
2	O5	Crew/Equipment Space	SOMS	2110		
2	O5	Hangar Bay (SAR)	SOMS	2110		
3	P5	Material/IMRL	SOMS	21106		
4	P5	Search and Rescue (SAR)	SOMS	14120		
5	P5	Auto Organizational Shop	MWCS-38	21451	EBNO	1560 SF
6	P5	Provost Marshal/Secur. Hdqrts	Sta/PMO	73020	EBLO	9226 SF
7	Q5	Storage Out of Stores	MWHS-3	44112	EBDO	10370 SF
8	Q5	Storage Out of Stores	MTACS-38	44112	EBDO	1560 SF
9	Q5	Storage Out of Stores	MTACS-38	44112	EBDO	1560 SF
10	R5	Aero Club Hangar	MWR/Rec	74075	EBLO	10370 SF
11	R4	Squadron Headquarters	MTACS-38	61072	EBFO	3960 SF
12	Q4	Group Headquarters	MWHS-3	61072	EBFO	3960 SF
13	P4	Group Headquarters	MWCS-38	61072	EBFO	3960 SF
14	O4	Squadron Headquarters	MWCS-38	61072	EBFO	3960 SF
15	O4	Elec/Comm Maint Shop	MWCS-38	21710	EBBO	3120 SF
15	O4	Radio Supply	MWCS-38	44112	EBDO	3120 SF
16	O4	Storage out of Stores	MWCS-38	44112	EBDO	6240 SF
17	P4	Elec/Comm Maint Shop	MWCS-38	21710	EBBO	6240 SF
19	Q4	Squadron HQs	MWHS-3	61072	EBFO	6240 SF
20	Q4	Maintenance/Storage	13th Dental	21871	EBBO	1560 SF
20	Q4	Storage out of Stores	MWHS-3	44112	EBDO	4680 SF
21	Q4	General Storage Shed	MWCS-38	44135	EBDO	640 SF
22	R4	Elec/Comm Maint Shop	MTACS-38	21710	EBBO	6240 SF
23	R4	Storage out of Stores	MTACS-38	44112	EBDD	6240 SF
25	R4	Construction Shop	MWSS-373	21820	EBDO	6240 SF
26	R4	Communication Shop	MWSS-373	21820	EBBO	6240 SF
27	R4	PMO Storage	PMO	61077	EBFO	2080 SF
27	R4	Food Services Storage	MWSS-373	21820	EBFO	4160 SF
28	S4	Food Services	MWSS-373	21820	EBBO	4160 SF
29	S4	NIS Field Office	NIS	61010	EBFO	5760 SF
29	S4	Storage	3rd	17177	EBAO	480 SF
31	S4	Utilities Shop/TAFDS	MWSS-373	21820	EBBO	6240 SF
32	S3	BOQ, W-1/0-2	Sta/G-4	72411	EBKO	20 PN
33	S3	BOQ, W-1/0-2 Transients	Sta/G-4	72411	EBKO	20 PN
34	S3	BOQ, W-1/0-2	Sta/G-4	72411	EBKO	20 PN
35	S3	BOQ, W-1/0-2 Transients	Sta/G-4	72411	EBKO	20 PN
38	S3	Museum Storage	Sta/G-4	76010	ECNO	100 SF
38	S3	Young Marines/Boy	Sta/G-4	61010	EBFO	9290 SF
46	R4	Reproduction	Sta/G-4	61010	EBFO	2280 SF
47	R4	(Constr/Wt. Handlg Eqp Shop)	Vacant	21820	EBBO	2980 SF
48	R4	FIU Headquarters	MWHS-3	61072	EBFO	5148 SF
49	Q4	(Academic Instruction)	Vacant	61072	EBFO	4978 SF
49	Q4	(Squadron Headquarters)	Vacant	61072	EBFO	5088 SF

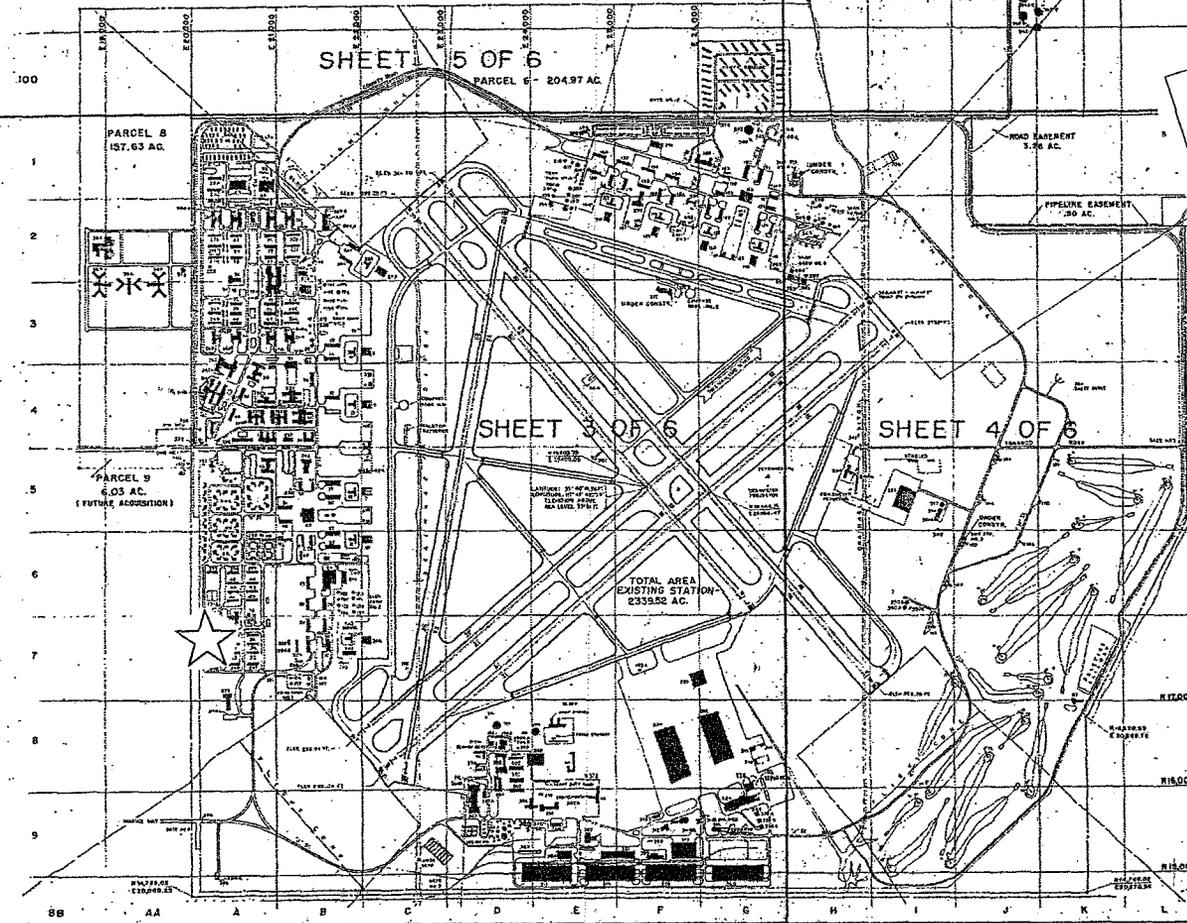
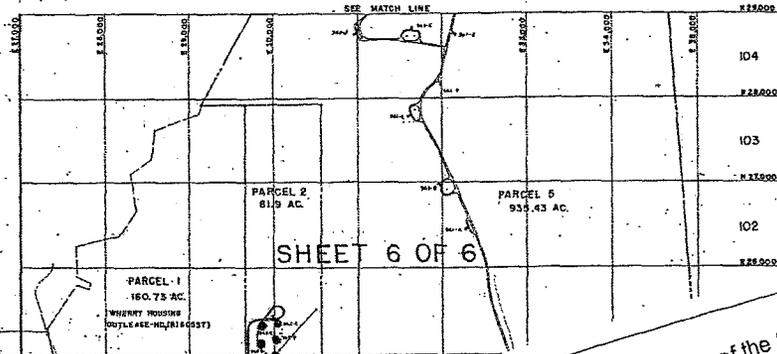
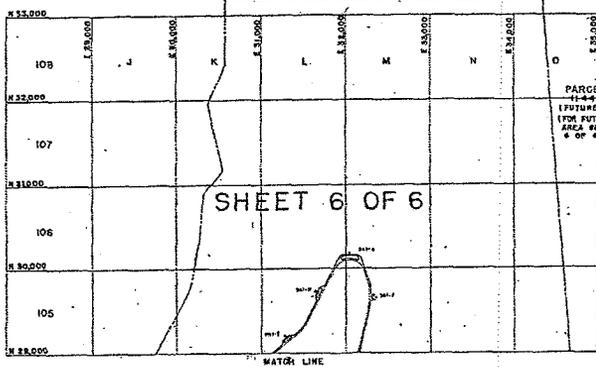
Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.  
 ☆ The 1997 Building Guide does not include Building 36.

FACILITY NUMBER	PRIMARY USE	FACILITY NAME	ACQUISITION NAME	ACQUISITION DATE	AREA UNIT MEASURE	TOTAL AREA	LENGTH	WIDTH	HEIGHT	GOVERNMENT COST	CURRENT PLANT VALUE	YEAR BUILT	YEAR IMPROVED
1	61010	SQDN HQ-TELEPHONE CENTER	NOY5421	19430301	SF	15,768	208	107	22	\$92,096	\$1,151,426	1943	1988
2	21105	NOSE HANGAR	NOY5421	19430601	SF	10,370	85	122	27	\$60,039	\$580,354	1943	1989
3	14140	COMM MNT SHOP	NOY5421	19430101	SF	1,560	39	40	14	\$7,808	\$106,204	1943	1977
4	14140	ELEC/COMM MAINT SHOP	NOY5421	19430101	SF	1,560	40	39	14	\$33,964	\$137,722	1943	1990
5	21451	AUTO/ORGANIZATIONAL SHOP	NOY5421	19430101	SF	10,370	85	122	27	\$53,015	\$551,077	1943	1983
6	73020	PROVOST MARSHAL OFFICE	NOY5421	19430301	SF	9,226	156	91	44	\$267,076	\$2,416,721	1943	1990
7	44112	STRG/OUT OF STORES MARCOR	NOY5421	19430301	SF	10,370	85	122	27	\$97,190	\$1,167,438	1943	1985
8	44112	STORAGE	NOY5421	19430301	SF	1,560	40	39	14	\$7,036	\$95,704	1943	1980
9	44112	STORAGE	NOY5421	19421201	SF	1,560	39	40	14	\$16,310	\$118,701	1942	1982
10	74075	COMM/ELEC SHOP	NOY5421	19430301	SF	10,370	122	85	27	\$50,672	\$519,208	1943	1983
11	61072	SQUADRON HEADQUARTERS	NOY5421	19430301	SF	3,960	108	80	11	\$21,999	\$299,230	1943	1977
12	61072	GROUP HQ	NOY5421	19430301	SF	3,960	108	80	11	\$23,229	\$303,563	1943	1985
13	61072	GROUP HQ	NOY5421	19430301	SF	3,960	108	80	11	\$23,669	\$306,486	1943	1986
14	61072	SQDRN HD	NOY5421	19430301	SF	3,960	108	80	11	\$22,887	\$306,425	1943	1984
15	21710	STOREHOUSE/ELECTRONICS MAINT	NOY5421	19430301	SF	6,240	160	39	13	\$23,428	\$312,107	1943	1990
16	44112	STORAGE GROUP	NOY5421	19430301	SF	6,240	160	39	13	\$17,692	\$240,647	1943	1977
17	21710	ELEC MAINT SHOP	NOY5421	19430301	SF	6,240	160	39	13	\$26,018	\$305,882	1943	1981
19	61072	ADMIN OFF	NOY5421	19431101	SF	6,240	160	39	13	\$20,464	\$272,593	1943	1981
20	21871	STRG/OUT OF STORES MARCOR	NOY5421	19430301	SF	6,240	160	39	13	\$16,105	\$219,060	1943	1977
21	44135	STORAGE	NOY5421	19430301	SF	640	32	20	13	\$4,372	\$60,522	1943	
22	21710	ELECNX/COMMS MAINT SHOP	NOY5421	19430601	SF	6,240	160	39	13	\$34,386	\$281,323	1943	1984
23	44112	STORAGE	NOY5421	19431001	SF	6,240	160	39	13	\$25,404	\$236,267	1943	1989
25	21820	CARPENTRY SHOP	NOY5421	19430301	SF	6,240	160	39	13	\$55,404	\$258,359	1943	1984
26	21820	STORAGE OUT OF STORES	NOY5421	19430601	SF	6,240	160	39	13	\$14,665	\$199,473	1943	
27	61077	PMO ADMIN STORAGE	NOY5421	19430301	SF	6,240	160	39	13	\$30,583	\$246,383	1943	1986
28	21820	COMMUNICATION SHOP	NOY5421	19430101	SF	6,240	160	39	13	\$20,206	\$240,818	1943	1979
29	61010	STORAGE	NOY5421	19431201	SF	6,240	160	39	13	\$66,492	\$536,110	1943	1990
31	21820	AUTO MAINT FAC	NOY5421	19430301	SF	6,240	160	39	13	\$33,092	\$228,853	1943	1986
32	72411	BOQ W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	\$55,386	\$558,495	1943	1986
33	72411	BOQ W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	\$60,725	\$570,751	1943	1988
34	72411	OFFICERS BARRACKS	NOY5421	19430201	SF	7,740	144	30	22	\$55,426	\$558,549	1943	1986
35	72411	UOPH W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	\$44,185	\$545,005	1943	1990
38	61010	ADMIN OFFICE	NOY5421	19430201	SF	9,390	132	108	14	\$69,708	\$948,168	1943	
46	61010	ADMIN OFFICE	NOY5421	19430301	SF	2,280	114	20	11	\$20,537	\$266,135	1943	1985
47	21820	ENGINE MAINTENANCE SHOP	NOY5421	19430301	SF	2,980	69	31	26	\$55,374	\$759,079	1943	1985
48	61072	FIU HEADQUARTERS	NOY5421	19430201	SF	5,148	132	39	14	\$42,074	\$401,692	1943	1986
49	44112	TRAINING BLDG/RESERVES		19430601	SF	21,956	165	168	27	\$95,913	\$1,025,869	1943	1983
50	17110	RESERVE TRAINING BLDG	NOY5421	19430601	SF	6,240	160	39	13	\$20,766	\$260,215	1943	1979
51	21451	RESERVE TRAINING BLDG	NOY5421	19430601	SF	6,240	160	39	15	\$25,095	\$344,328	1943	1977
52	44112	STOREHOUSE	NOY5421	19430601	SF	4,224	100	66	21	\$19,727	\$268,327	1943	
53	17110	GROUND SAFETY	NOY5421	19430601	SF	4,036	109	39	37	\$18,881	\$250,559	1943	1990
54	61040	LAW CENTER	NOY5421	19430301	SF	11,374	170	120	11	\$298,101	\$2,773,006	1943	1990
56	61072	TRNG/ELEC COMM/GRD SAFETY	NOY5421	19430301	SF	11,528	168	99	14	\$133,343	\$1,160,364	1943	1990
57	74089	BATHHOUSE	NOY5421	19430301	SF	9,310	111	70	17	\$121,087	\$1,549,313	1943	1988
58	61010	JOINT RECEPTION CENTER	NOY5421	19430301	SF	30,610	202	144	21	\$422,673	\$2,189,283	1943	1990
59	61010	ADMINISTRATIVE OFFICES	NOY5421	19430601	SF	5,696	140	46	10	\$82,106	\$1,116,806	1943	
60	61072	RESERVE SUPPORT UNIT	NOY5421	19431001	SF	5,376	168	32	9	\$162,641	\$511,066		1988
156	84140	WATER PRESSURE TANK	NOY5421	19430101	SY	0	54	0	0	\$7,000			
174	84140	STORAGE TANK GRND POT	NOY5421	19430115	SY	0	0	0	0				
175	84140	STORAGE TANK GRND POT	NOY5421	19430115	SY	0	0	0	0				
FT176	12430	AVGAS STORAGE TANK	NOY5421	19430601	SY	0	0	0	0				



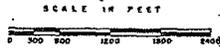
Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.  
 ☆ The Plant Account document does not include Building 36.





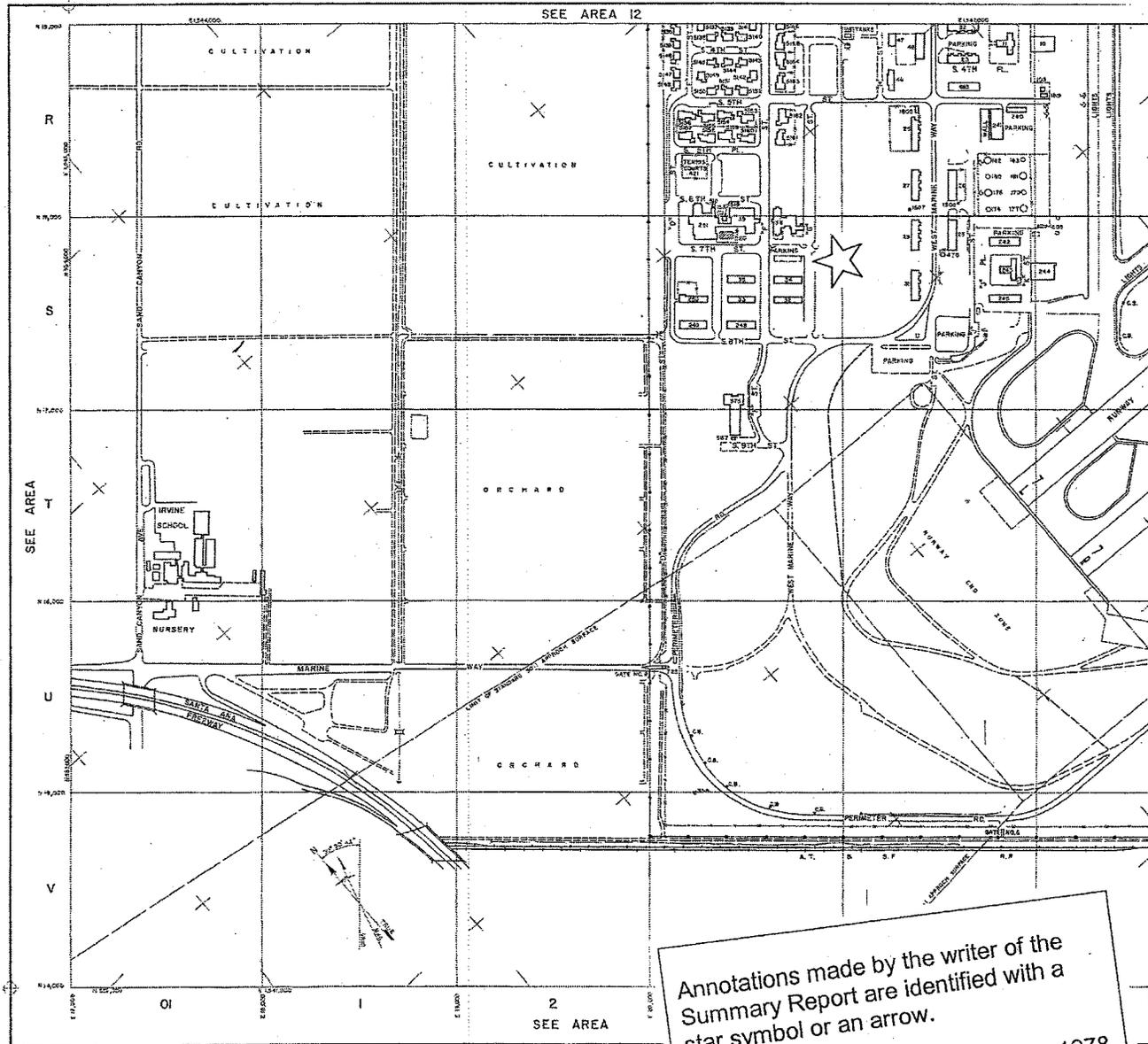
Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.  
 ☆ The 1954 General Development Map Shows Building 36.

- NOTES**
- FOR PROPOSED & FUTURE BUILDINGS SEE SHEETS 3 THROUGH 6
  - DECLARATION OF TAKING FILED FOR PARCELS 1, 2, 3, 4, 5 & 6 SEASIDE, CALIF. CASE ASSIGNED 86-15851-WK.

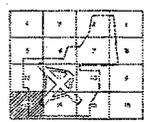


CONDITIONS AS OF 30 JUNE 1954

APPROVED FOR SHORE STATION DEVELOPMENT BOARD	REV. DATE	DESCRIPTION
DATE	ENC. DRAWING NO.	U.S. MARINE CORPS AIR STATION
APPROVED FOR BUREAU OF YARDS AND DOCKS	RS. 1098	EL TORO, CALIFORNIA
DATE	DRAWN BY	PUBLIC WORKS DEPARTMENT
APPROVED FOR BUREAU OF AERONAUTICS	TRACED BY	MASTER SHORE STATION
DATE	REVIEWED BY	DEVELOPMENT PLAN
APPROVED FOR LOCAL DEVELOPMENT BOARD	CHECKED BY	"PART III SECTION 2"
DATE	SUBMITTED BY	GENERAL DEVELOPMENT PLAN
	WBR. MCRAIFF BRANCH	KEY MAP
	APPROVED	APPROVED
	ENGINEER DIRECTOR	PUBLIC WORKS OFFICER
	APPROVED	APPROVED
	DATE	DATE
	COMMANDING OFFICER	STATION DEVELOPMENT BOARD
		SCALE 1" = 800'
		SHEET 1 OF 6
		T & D J
		OWB. NO. 570.215



- LEGEND**
- EXISTING STRUCTURES
  - EXISTING ROADS OR PAVED AREA
  - DIRT ROADS
  - SIDEWALK
  - CONCRETE SLAB
  - TRAIL
  - EXISTING RAILROAD
  - NAVY PROPERTY BOUNDARY
  - NAVY PROPERTY BOUNDARY WITH FENCE
  - FENCE
  - MAIN STATION ENTRANCE
  - BOUNDARIES OF END & APPROACH ZONE
  - TRANSMISSION LINE
  - OBSTRUCTION LIGHT
  - TANKS
  - CATCH BASIN
  - TOWER
  - BENCH MARK
  - HORIZONTAL CONTROL
  - UNDERGROUND TANK
  - MONUMENT
  - HIGH VOLTAGE
  - FUEL PUMP



MAP LOCATOR  
NO SCALE



Annotations made by the writer of the Summary Report are identified with a star symbol or an arrow.

★ Building 36 is not shown on the 1978 General Development Map.

NO.	REVISION DESCRIPTION	PREP'D BY	DATE	APPROVED
WESTERN DIVISION, SAN FRANCISCO OFFICE				
MCAS EL TORO SANTA ANA, CALIFORNIA GENERAL DEVELOPMENT MAP				
EXISTING CONDITIONS				
DESIGNED BY	DATE	SCALE	PROJECT NO.	MAP SHEETS NO.
			6084143	P
25-4322				

MARINE CORPS AIR STATION EL TORO  
EL TORO, CALIFORNIA  
INSTALLATION RESTORATION PROGRAM  
FINAL ENVIRONMENTAL  
BASELINE SURVEY REPORT

01 April 1995

Revision 0

**EXTRACTS**

Annotations made by the writer of the  
Summary Report are identified with a  
star symbol or an arrow.

PREPARED BY:  
Southwest Division, Naval Facilities  
Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190

THROUGH:  
CONTRACT #N68711-89-D-9296  
CTO #284  
DOCUMENT CONTROL NO:  
CLE-C01-01F264-S2-0004

WITH:  
Jacobs Engineering Group Inc.  
401 West A Street, Suite 1905  
San Diego, California 92101

In association with:  
International Technology Corporation  
CH2M HILL

*Mike Arends*

*3/31/95*

Mike Arends, P.E.  
CLEAN Project Manager  
CH2M HILL, Inc.

Date

*Max Pan*

*3-31-95*

Max Pan, P.E.  
CLEAN Technical Reviewer  
IT Corporation

Date

**Table 3-3**  
**Summary of SWMUs/AOCs**  
**MCAS El Toro EBS Report - April 1995**

Database Tracking	SWMU/AOC Number (1)	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Area Type
UST T8	22	NFA	Underground Storage Tank	Tank Farm 5, 6		Spill Containment Tank	7
UST T1	23	NFA	Underground Storage Tank	Tank Farm 555		Spill Containment Tank	7
UST T7	24	NFA	Underground Storage Tank	Tank Farm 6		Spill Containment Tank	7
SAA 5A	25	NFA	< 90-Day Accumulation Area	5		Located on Tarmac	2
SAA 5B	26	FA	< 90-Day Accumulation Area	5	X	Excavate shallow stained soil	6
SAA 10	27	NFA	< 90-Day Accumulation Area	10	X	RFA recommended NFA	2
RFA 28	28	NFA	Fuel Spill Site	AERO CLUB 10		Past routine fuel spills; No evidence of release (3)	2
SAA 29A	30	NFA	< 90-Day Accumulation Area	29	X	RFA recommended NFA	3
SAA 29B	31	FA in IRP (5)	< 90-Day Accumulation Area	29		Located in IRP Site 15 (5)	7
	32	NFA	Drum Storage Area	36		Source: 1989 RWQCB letter (3)	NA
SAA 51	33	FA	< 90-Day Accumulation Area	51	X	RFA recommended excavation of shallow, stained soil	6
	35	NFA	< 90-Day Accumulation Area	96		Source: SPCC map (no date) (3)	NA
SAA 114	38	NFA	< 90-Day Accumulation Area	114		No materials present; No surface defects	2
SAA 115	39	FA	< 90-Day Accumulation Area	115	X	Unknown levels of SVOCs in shallow soil; RFA and DTSC recommended additional investigation; sampling scheduled for 1995	7
	40	NFA	Drum Storage Area	127		Source: 1989 RWQCB letter (3)	NA
RFA 41	41	NFA	Vehicle Wash Rack	127	X	RFA recommended NFA	3
SAA 130C	42	NFA	< 90-Day Accumulation Area	130		Surface free of defects	2
	43	NFA	Drum Storage Area	137		Source: DHS photograph (3)	NA
	44	NFA	Drum Storage Area	143		Source: 1989 RWQCB letter (3)	NA
SAA 155C	45	NFA	< 90-Day Accumulation Area	155	X	RFA recommended NFA	3

**Table 3-3  
Summary of SWMUs/AOCs  
MCAS EI Toro EBS Report - April 1995**

Database Tracking	SWMU/AOC Number (1)	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Area Type
<p>NOTES:</p> <p>(1) SWMU/AOCs identified as duplicate locations are not included in this table. Refer to Table 4-1 of the Final RFA Report dated 16 July 1993 for a complete list of SWMUs/AOCs.</p> <p>(2) SWMU/AOC is located within RI/FS site boundaries and, therefore, was not evaluated in the RFA. These SWMUs/AOCs are being addressed under the IRP.</p> <p>(3) SWMU/AOC was not able to be accurately located or identified from the records review information and the visits conducted as part of the RFA.</p> <p>(4) These sites were not plotted on the GIS map because they were not evaluated under the PR/VSJ.</p> <p>(5) SWMU/AOC is located within RI/FS site boundaries; however, it will be addressed in a closure-related compliance program.</p> <p>(6) DTSC recommended further investigation based on PR/VSJ description, which stated that the drop tank storage area was located on damaged asphalt. This area is actually concrete-paved (tarmac) and, therefore, was not recommended for sampling during the RFA. No further investigation is anticipated at this SWMU/AOC.</p> <p>(7) These sites were not plotted on the GIS map because they were not evaluated under the PR/VSJ. The parcels listed correspond to the nearest building location.</p> <p>* = Pending agency approval.</p> <p>FA = further action</p> <p>IRP = Installation Restoration Program</p> <p>NA = Not applicable. The SWMU/AOC is a large unit that is located in several different parcels.</p> <p>NL = Not located. Unable to locate building or device on historical plans for MCAS EI Toro.</p> <p>NFA = No further action</p> <p>NEESA = Naval Energy and Environmental Support Activity</p> <p>SVOC = semi-volatile organic compounds</p> <p>SOURCE:</p> <p>Jacobs, 1993. MCAS EI Toro Final RCRA Facility Assessment Report.</p>							

**United States Marine Corps**

EXTRACTS

# **Base Realignment and Closure Cleanup Plan (BCP)**



**For  
Marine Corps Air Station  
El Toro, CA**

**March 1999**

Table 3-13  
Summary of SWMUs/AOCs  
(Sheet 3 of 21)

SWMU/AOC Number	Database Tracking	LRA Reuse Parcel	RFA Recommendation	Type/Description	Location, Building, or Number	Sampling Visit	Comments	ECP Area Type
→ 32	RFA 32	32	Not Located During RFA	Drum storage area	Bldg. 36		Source: SPCC map (no date). Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1
33	TAA 51	32	FA	< 90-day accumulation area (inactive)	51	X	Initial RFA recommended excavation of shallow stained soil for SWMU 33. Final RFA Addendum (BNI, 1996): evaluation of removal and/or decontamination strategy proposed, and excavation of shallow, stained soil.	6
35	RFA 35	29	Not Located During RFA	< 90-day accumulation area	96		Source: SPCC map (no date). Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1
38	TAA 114	43	NFA	< 90-day accumulation area (active)	114		No materials present; no surface defects. Final RFA Addendum (BNI, 1996): evaluation of removal and/or decontamination strategy proposed. NFA pending Station closure.	6
39	TAA 115	43	NFA	< 90-day accumulation area (active)	115	X	Final RFA Addendum (BNI, 1996): evaluation of removal and/or decontamination strategy proposed. NFA pending Station closure.	3
40	RFA 40	43	Not Located During RFA	Drum storage area	Bldg. 127		Source: 1989 RWQCB letter. Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1
41	RFA 41	43	NFA	Vehicle wash rack	Bldg. 127	X	NFA concurrence by DTSC (letter dated 7/23/96).	3
42	TAA 130C	43	NFA	< 90-day accumulation area (inactive)	130		Surface free of defects. Final RFA Addendum (BNI, 1996): evaluation of removal and/or decontamination strategy proposed. NFA pending Station closure.	1
43	RFA 43	43	Not Located During RFA	Drum storage area	Bldg. 137		Source: 1980 DHS photograph. Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1
44	RFA 44	42	Not Located During RFA	Drum storage area	143		Source: 1989 RWQCB letter. Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1
45	TAA 155C	23	NFA	< 90-day accumulation area (inactive)	155	X	Final RFA Addendum (BNI, 1996): evaluation of removal and/or decontamination strategy proposed. NFA pending Station closure.	1
46	RFA 46	8	Transfer to RAC	Vehicle Maintenance and Parking / DRMO	163	X	Final RFA Addendum recommended transfer to RAC for limited surface soil clean up of diesel (BNI 1996). The "release" detected by initial RFA activities did not extend into area.	2
47	RFA 47	7	Not Located During RFA	< 90-day accumulation area	172		Location not confirmed during RFA activities. NFA through agency acceptance of the EBS (Table 3-3).	1

Table 3-13  
Summary of SWMUs/AOCs  
(Sheet 21 of 21)

SWMU/AOC Number	Database Tracking	LRA Reuse Parcel	RFA Recommendation	Type/Description	Location, Building, or Number	Sampling Visit	Comments	ECP Area Type
300	IRP 3	40	FA in IRP	Spill area east of SWMU/AOC 194	746	X	To be addressed in IRP Site 3	6
301	RFA 301	23	NFA	Mark arrest system	East side of Runway 34R	X	NFA concurrence by DTSC (letter dated 7/23/96).	1
302	RFA 302	23	NFA	Mark arrest system	West side of Runway 34R	X	NFA concurrence by DTSC (letter dated 7/23/96).	1
303	UST 359A	25	NFA	Former UST site	359	X	Tank removed. Site closed by OCHCA in a letter dated 12/9/96.	4*
304	RFA 304	25	NFA	Trenches inside Bldg. 359	359		Inside building; no evidence of release. NFA recommendation not explicitly stated in RFA (Table 6-15), but concurred with through agency acceptance of the EBS.	1
305	RFA 305	32	NFA	Septic tank	601		Sanitary waste. NFA recommendation not explicitly stated in RFA (Table 6-15), but concurred with through agency acceptance of the EBS.	1
306	RFA 306	32	NFA	Septic tank	687		Sanitary waste. NFA recommendation not explicitly stated in RFA (Table 6-15), but concurred with through agency acceptance of the EBS.	1
307	RFA 307	1	NFA	Septic tank	819		Sanitary waste. NFA recommendation not explicitly stated in RFA (Table 6-15), but concurred with through agency acceptance of the EBS.	1

Sources: Jacobs, 1993. MCAS El Toro Final RCRA Facility Assessment Report.  
Bechtel National, Inc., 1996. MCAS El Toro Final Addendum to the RCRA Facility Assessment.  
SAIC 1994. Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan (SPCC)

Notes: 1 SWMU/AOCs identified as duplicate locations (29, 36, 37, 86, 87, 111, 115, 123, 153, 154, 155, 161, 190, 207, and 235) and those identified as MCAS Tustin (34, 53, and 54) are not included in this table. Refer to Table 4-1 of the final RFA report dated 16 July 1993 for a complete list of SWMUs/AOCs.  
2 Area Types marked with an asterisk (\*) have changed since the March 1998 BCP.  
3 These sites were not plotted on the GIS map because they were not evaluated under the PR/VSI. The parcels listed correspond to the nearest building location.

## Abbreviations:

DHS - Department of Health Services  
DTSC - State of California Department of Toxic Substances Control  
ECP - environmental condition of property  
FA - further action  
HWSA - hazardous waste storage area  
IRP - Installation Restoration Program  
LUFT - Leaking Underground Fuel Tank  
NA - not applicable. The SWMU/AOC is a large unit that is located in several different parcels.  
NEESA - Naval Energy and Environmental Support Activity  
NFA - no further action  
NW - northwest  
OWS - oil/water separator  
PCB(s) - polychlorinated biphenyl(s)

PR/VSI - Preliminary Review/Visual Site Inspection  
PRG - US EPA Preliminary Remediation Goals  
RAC - remedial action contractor  
RFA - RCRA Facility Assessment  
RWQCB - Regional Water Quality Control Board  
SE - southeast  
SPCC - Spill Prevention and Counter Measure Plan and Contingency Plan  
SW - southwest  
SWMU/AOC - Solid Waste Management Unit/Area of Concern  
TAA - Temporary Accumulation Area  
UST - underground storage tank

A. 0050. 000695

**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

Annotations made by the writer of the  
Summary Report are identified with a  
star symbol or an arrow.

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

☆ Extract from  
Plate 1  
Anomalies identified  
by USEPA.

Bldg 36



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**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

14.	1965	POSS PITS
15.	1970	LQ
16.	1970	PROB LQ
17.	1970	WS
18.	1970	POSS WS
<hr/>		
19.	1970	ST
	1980	LQ
	1991	TR
20.	1970	ST
21.	1970	FBR
22.	1970	WS
	1980	PROB ST
23.	1970	ST
	1980	PROB LQ
	1991	ST
24.	1970	V. WS
25.	1970	POSS ST
	1991	POSS ST
26.	1970	ST
	1991	PROB ST
27.	1970	OS, LT M
28.	1970	WS
	1991	DG
29.	1980	DG, PROB LQ, GR
30.	1980	POSS LQ
31.	1980	LQ
32.	1980	ST
33.	1980	LT MM
34.	1980	POSS WS
	1991	POSS ST
35.	1980	PROB ST
36.	1980	POSS LT M
37.	1986	WS
38.	1991	POSS D
39.	1991	LT M
40.	1991	DG, MT M, OS
41.	1991	PROB D, C
42.	1991	ST
43.	1991	TR
→ 44.	1991	LQ, OS
→ 45.	1991	DB, ST
46.	1991	POSS PIT
47.	1952	ST, LQ
	1965	PROB ST, PROB HT
48.	1952	ST, POSS LQ
49.	1952	POSS VT

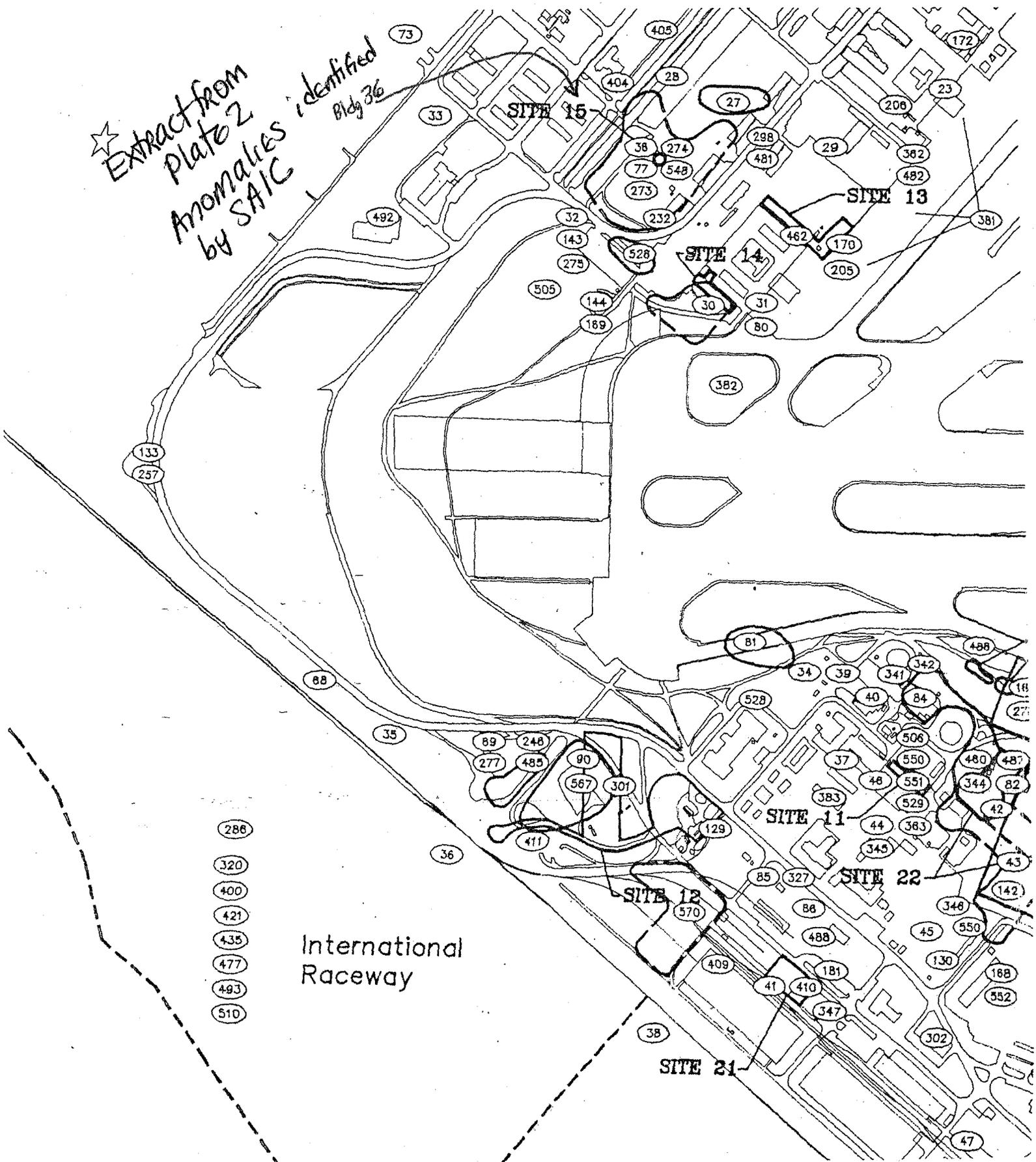
**APPENDIX B**

**SITES OF POTENTIAL CONCERN IDENTIFIED BY SAIC (Reference A)**

---

☆ Extract from  
plate 2  
Anomalies  
by SAIC

identified  
Bldg 36



International  
Raceway

- 286
- 320
- 400
- 421
- 435
- 477
- 493
- 510

SITE 21

## 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

Comment number refers to sites of potential concern indicated on Plate 2 and corresponds to the aerial-photograph analysis comments in Section 2 of this report. The lower-case letter preceding each comment number indicates the following: (a), verification of a feature identified in Reference B and occurring within the SAP Amendment RI/FS site boundaries; (b), features identified during the present investigation that occur within the SAP Amendment RI/FS site boundaries; and (c), sites outside of the SAP Amendment RI/FS site boundaries.

<u>COMMENT</u>	<u>YEAR</u>	<u>OBSERVATIONS</u>
c 1.	1946	EX
c 2.	1946	FA
c 3.	1946	GR, MMDT
c 4.	1946	B, EX
c 5.	1946	VT
c 6.	1946	EX, WS, LQ
c 7.	1946	ST
c 8.	1946	EX
c 9.	1946	B
c 10.	1946	EXT
c 11.	1946	B
c 12.	1946	ST
c 13.	1946	ST
c 14.	1946	OS, D
c 15.	1946	TR, LQ, R
b 16.	1946	MMLT, MMDT, TR

a	17.	1946	VT
c	18.	1946	TR, FA, DG
b	19.	1946	ST
c	20.	1946	EXT
c	21.	1946	OS, D
c	22.	1946	ST
a	23.	1946	ST
c	24.	1946	VT
c	25.	1946	OS
c	26.	1946	OS, D, MMDT, MMLT, UO
a	27.	1946	OS, D, MMDT, MMLT, UO
c	28.	1946	OS, D, MMDT, MMLT, UO
a	29.	1946	ST
c	30.	1946	OS
b	31.	1946	ST
c	32.	1946	VT, WS, ST
c	33.	1946	VT
c	34.	1946	VT
c	35.	1946	UO, VT, M
c	36.	1946	VT
a	37.	1946	LQ
→ c	38.	1946	VT
c	39.	1946	IM
a	40.	1946	VT
b	41.	1946	OS, D
b	42.	1946	ST
b	43.	1946	OS, D
c	44.	1946	ST, OS
b	45.	1946	WS, ST, OS
c	46.	1946	WS, ST, OS
c	47.	1946	OS, D
b	48.	1946	ST, LQ
b	49.	1946	D, OS
c	50.	1946	OS
c	51.	1946	MMDT
c	52.	1946	OS, R, EX, FA
c	53.	1946	LQ
c	54.	1946	B
c	55.	1946	MMLT
c	56.	1946	ST
b	57.	1946	No activity
c	58.	1946	TR
c	59.	1946	IM
c	60.	1952	B, VT
c	61.	1952	UO

c	62.	1952	EXT
c	63.	1952	EX
c	64.	1952	EXT
c	65.	1952	GR
c	66.	1952	TR
c	67.	1952	VT
c	68.	1952	TR
c	69.	1952	MMLT
c	70.	1952	TR, LQ
c	71.	1952	GR
c	72.	1952	HT, VT
c	73.	1955	TR, EX
c	74.	1955	DG
c	75.	1955	B
c	76.	1955	EX, B
→ c	77.	1955	OS, D
c	78.	1955	TR, WS
a	79.	1955	OS
c	80.	1955	ST
c	81.	1955	TR, DG
c	82.	1955	OS
c	83.	1955	ST
c	84.	1955	VT
b	85.	1955	VT
c	86.	1955	OS
c	570.	1955	OS
c	87.	1958	EX, MMLT
c	88.	1958	IM
c	89.	1958	ST, TR
c	90.	1958	LQ, WS
c	91.	1958	DG, EX
c	92.	1958	WS
c	93.	1958	OS, D, LQ
c	94.	1958	VT
b	95.	1958	EXT
b	96.	1958	GS
b	97.	1958	No significant changes
c	98.	1958	TR
c	99.	1960	B, DG, IM, WS, EX
c	100.	1960	DG, EX, TR
c	101.	1960	EX, ST, WS, MMDT
c	102.	1960	D
c	103.	1960	VT, IM, LQ

c	236.	1973	EX, DG, HT
c	237.	1973	WS
c	238.	1973	OS
c	239.	1973	WS
e	240.	1973	ST
c	241.	1973	ST
c	242.	1973	OS
c	243.	1973	WS
a	244.	1973	VT
c	245.	1973	EX
c	246.	1973	EX, FA
c	247.	1973	OS
b	248.	1973	VT, LQ
c	249.	1973	MMLT, DG
c	250.	1973	WS, OS, UO
c	251.	1973	OS
c	252.	1973	EX
c	253.	1973	VT
b	254.	1973	TR, HT
c	255.	1973	HT, OS, TR, R, LQ, EX
b	256.	1973	R
c	257.	1973	GR
c	258.	1973	WS, ST, HT
c	259.	1973	VT
c	260.	1973	DG, EX
c	261.	1973	MMLT, MMDT, MM
c	262.	1973	No significant changes
c	263.	1973	TR, DG
c	264.	1973	IM, LQ
c	265.	1973	GR, FA
c	266.	1973	R
c	267.	1973	DG
c	268.	1973	DG, TR
c	269.	1973	No significant changes
c	270.	1974	LQ
c	271.	1974	D
c	272.	1974	ST, WS
→	c	273.	DG
→	c	274.	ST
c	275.	1974	ST
c	276.	1974	IM, LQ, ST, VT
c	277.	1974	MMLT, MMDT, DG, D
a	278.	1974	ST
c	279.	1974	ST
c	280.	1974	MMLT

c	366.	1977	WS, LQ
b	367.	1977	MMLT, WS
c	368.	1977	TR
c	369.	1977	LQ
c	370.	1977	GR, DS, MMDT
c	371.	1977	No significant change
c	372.	1977	WS, LQ
b	373.	1977	No significant change
b	374.	1977	TR, LQ
b	375.	1977	No significant change
c	376.	1977	No significant change
c	377.	1978	MMLT
c	378.	1978	LQ
a	379.	1978	LQ
a	380.	1978	LQ
c	381.	1978	ST, LQ
c	382.	1978	WS, ST
a	383.	1978	LQ
a	384.	1978	LQ
c	385.	1978	D, OS
c	386.	1978	D, OS
c	387.	1978	D, OS
a	388.	1978	LQ
c	389.	1978	HT
a	390.	1978	LQ
a	391.	1978	LQ
c	392.	1978	UO, TR
c	393.	1978	No significant changes
c	394.	1978	No significant changes
b	395.	1978	MM
a	396.	1978	TR, GR, EXT
c	397.	1978	VT, GR, TR
a	398.	1978	MM, GR
c	399.	1978	LQ
c	400.	1978	No significant changes
c	401.	1978	No significant changes
c	402.	1978	No significant changes
c	403.	1979	ST, WS, GR, OS
→ c	404.	1979	LQ
c	405.	1979	WS, ST
b	406.	1979	OS
b	407.	1979	OS
c	408.	1979	VT
a	409.	1979	D

c	542.	1988	GR
c	543.	1988	B, GR
a	544.	1988	GR
c	545.	1988	IM
<hr/>			
c	546.	1988	No significant changes
c	547.	1988	B, GR
→ c	548.	1992	OS, D
c	549.	1992	ST
a	550.	1992	ST
a	551.	1992	LQ
c	552.	1992	LQ
c	553.	1992	MMLT, DG
c	554.	1992	TR
c	555.	1992	LQ
a	556.	1992	TR
c	557.	1992	B, UO, VT
c	558.	1992	DG
c	559.	1992	OS
c	560.	1992	MMLT, MMDT
c	561.	1992	MMLT, MMDT, IM, LQ
c	562.	1992	ST, MMDT
c	563.	1992	WS, LQ, MMLT, MMDT
c	564.	1992	GR
c	565.	1992	B, GR
a	566.	1992	No significant changes
c	567.	1992	OS
c	568.	1992	DGDT
c	569.	1992	LQ

## 2.17 1979 PHOTOGRAPHS

FIGURE: 18  
DATE: 4 FEBRUARY 1979  
PHOTOGRAPH: M79-OC-86  
NOTE: The photographs do not cover the complete site and provide only partial stereographic coverage.

c 403. There are stains (ST) or wet soil (WS) near the southwest corner of the Auto Hobby Shop, Building 625. There is also grading (GR) to the northeast and open storage (OS) to the southeast. The current IR program field investigation of this area should be expanded to encompass all of the features noted here.

→ c 404. Liquid (LQ) is flowing northeasterly from Building 38, near S 7th Street and F Street. Additional investigation is recommended.

c 405. There is an area of wet soil (WS) or soil staining (ST) in the field about 300 feet northeast of Building 38, near S 7th Street and F Street. The cause of the feature is not known, but does not appear to be related to irrigation. Additional investigation is recommended.

b 406. There is an open storage (OS) area about 400 feet east of Building 295, near the northeast corner of the aircraft parking apron. Additional investigation is recommended. The current IR program investigation of Drop Tank Drainage Area No.2 (Site 7) should be expanded to include this area.

b 407. The open storage (OS) area easterly of the southeast corner of the aircraft parking apron has expanded in area. Additional investigation is recommended. The current IR program investigation of Drop Tank Drainage Area No.2 (Site 7) should be expanded to include this area.

c 408. There is a vertical tank (VT) (Building 446?) immediately north of Building 445, near N 14th Street and Q Street. The contents of the tank should be determined.

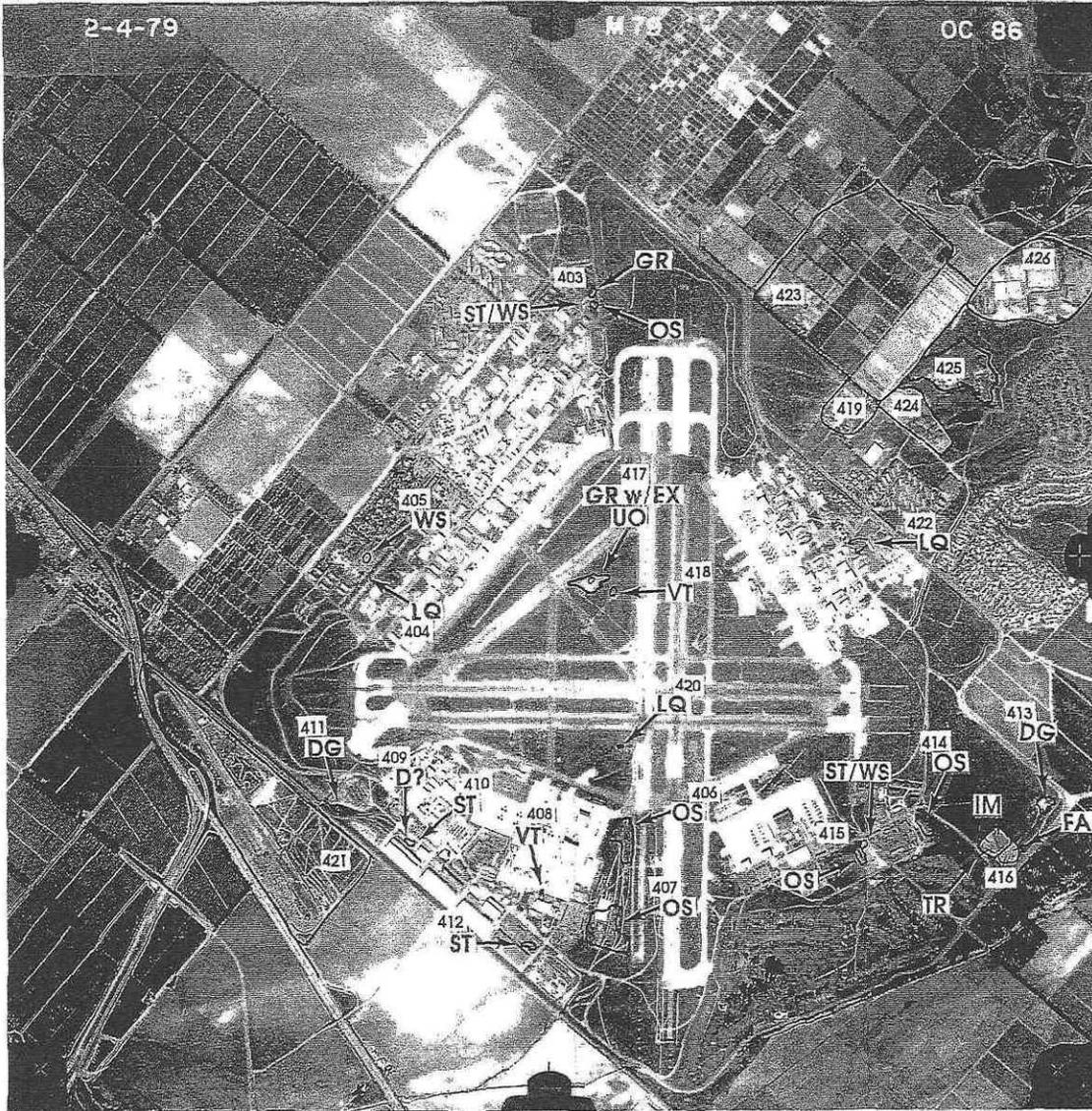
a 409. There may be drums (D) between Building 323 and the railroad tracks, near S 15 Street and M Street. Additional investigation is not recommended at this time. The current IR program investigation of the Materials Management Group (Site 21) area appears to be adequate, relative to the features noted here.

a 410. Stains (ST) can be observed between Buildings 320 and 323, near S 15th Street and M Street. Additional investigation is not recommended at this time. The current IR program investigation of the Materials Management Group (Site 21) appears to be adequate, relative to the features noted here.

2-4-79

M 79

OC 86



Aerial Photographic Interpretation  
 MCAS El Toro  
 Santa Ana, California  
 1979

Figure 18  
 Sheet 1 of 1

February 4, 1979

Photo Number M79-OC-86

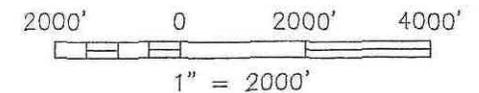
Source: Brewster Pacific Corporation, Pasadena  
 (Reproduced by Permission)

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 Material
DG	Disturbed Ground	MM	Mounded Material
DK	Dark-Toned	OS	Open Storage
EX	Excavation	R	Refuse
EXT	Extraction	ST	Stain
FA	Fill Area	TR	Trench
FBR	Fuel Bladder	UO	Unidentified Object
GR	Graded Area	VT	Vertical Tank
GS	Ground Scar	WS	Wet Soil
HT	Horizontal Tank		



**SAC** Science Applications  
 International Corporation  
 © An Employee-Owned Company

## TRANSMITTAL

Date: 20 May 2002

From: Lynn Marie Hornecker  
MCAS El Toro

To: Diane Silva  
Code ~~01S.DS~~ Code 05G.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):* Summary Report for SWMU Number 32

*Author:* TRISS Chesney DTSC

*Recipient:* Dean Gould

*Record Date:* 15 February 2002

*Approximate Number of Pages:* 1

*EPA Category:* 01.1

*Sites:* SWMU 32

*Key Words:* RFA

*Contract:* N/A

*CTO Number:* N/A

Note SWMU 32 is located near IRP Site 15

## No Further Action Decision Documents for Nearby Locations of Concern

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION  
3737 MAIN STREET, SUITE 500  
RIVERSIDE, CA 92501-3339  
PHONE: (909) 782-4130  
FAX: (909) 781-6288



November 21, 1997

Mr. Wayne D. Lee  
Assistant Chief of Staff  
Environmental and Safety  
Marine Corps Air Station El Toro  
P.O. Box 95001  
Santa Ana, CA 92709-5001

**CASE CLOSURE FORMER UNDERGROUND STORAGE TANK SITE 38, MARINE  
CORPS AIR STATION EL TORO**

Dear Mr. Lee:

This letter confirms the completion of site investigations and remedial actions for the subject underground storage tank site. Based on the information provided in the Tank Removal Site Closure Report, dated 11/7/97 and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

If you have any questions, regarding this matter, please contact Lawrence Vitale at (909) 782-4998.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gerard J. Thibeault".

Gerard J. Thibeault  
Executive Officer

cc: LT Hope Katcharian, Marine Corps Air Station El Toro  
Mr. Bill Diekman, Orange County Health Care Agency  
Mr. John Adams Jr., State Water Resources Control Board, Division of Clean  
Water Programs

# Tank Removal and Site Closure Report

EXTRACTS

*Underground Storage Tank 38*

*Marine Corps Air Station*

*El Toro, California*

*SWDIV Contract No. N68711-93-D-1459, Delivery Order No. 0050*

*OHM Project No. 18292*

*Document Control No. SW4245*

*Revision 0*

*November 7, 1997*



OHM Remediation  
Services Corp.

1202 Kettner Boulevard  
San Diego, California 92101

Prepared by:

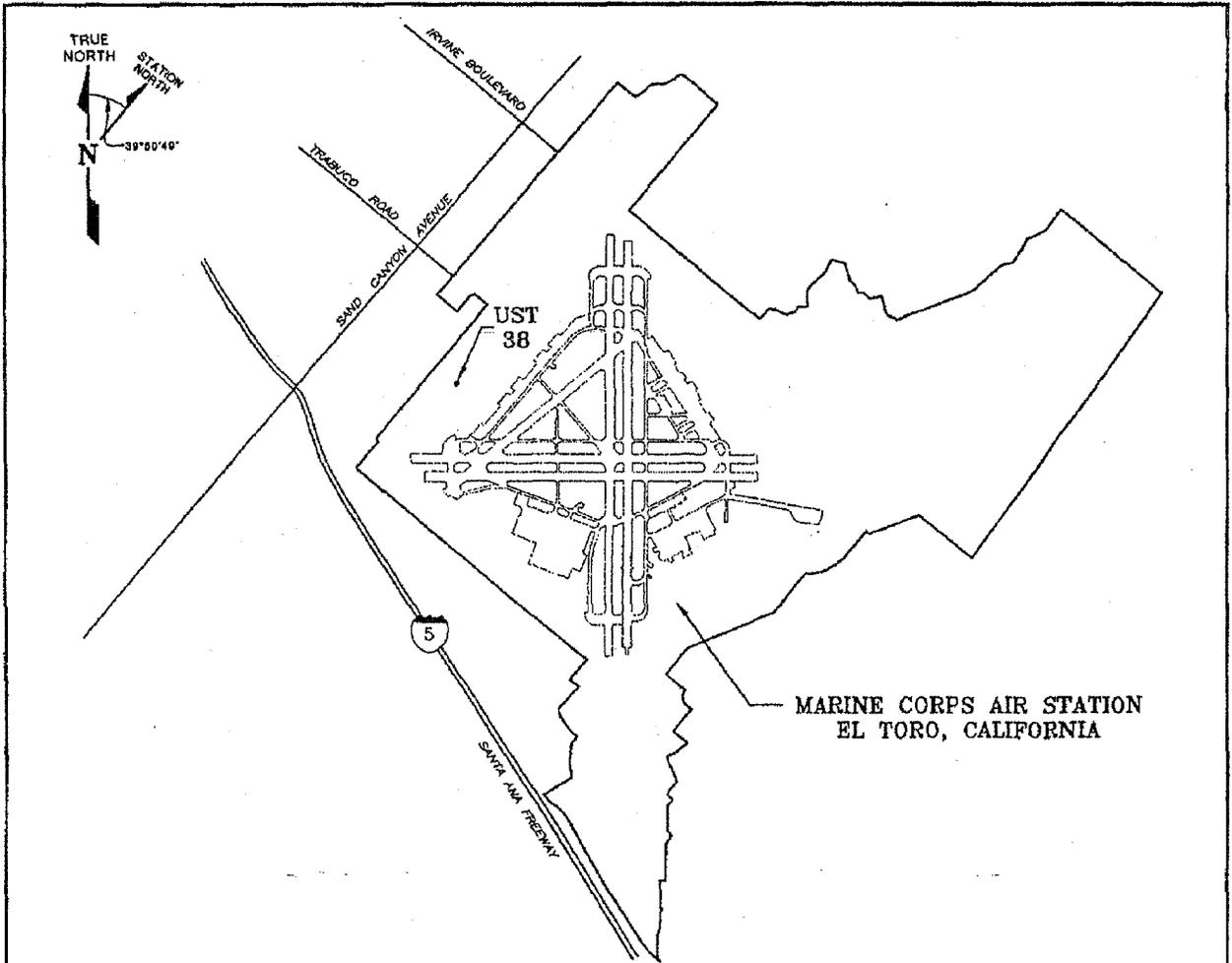
A handwritten signature in cursive script, reading "Matt S. Himmelstein".

Matt S. Himmelstein, P.E.  
Project Engineer

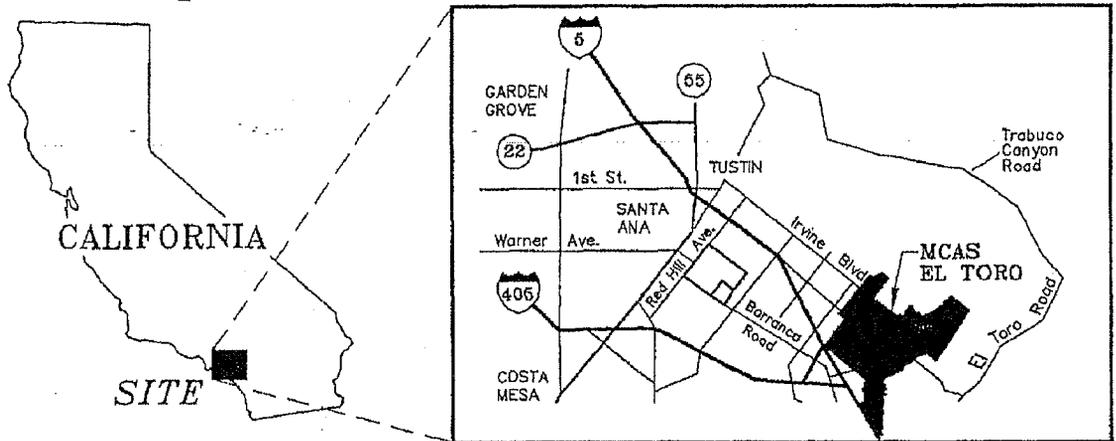
Approved by:

A handwritten signature in cursive script, reading "William L. Sedlak".

William L. Sedlak, P.E.  
Senior Project Manager

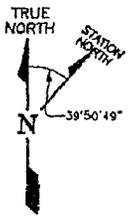
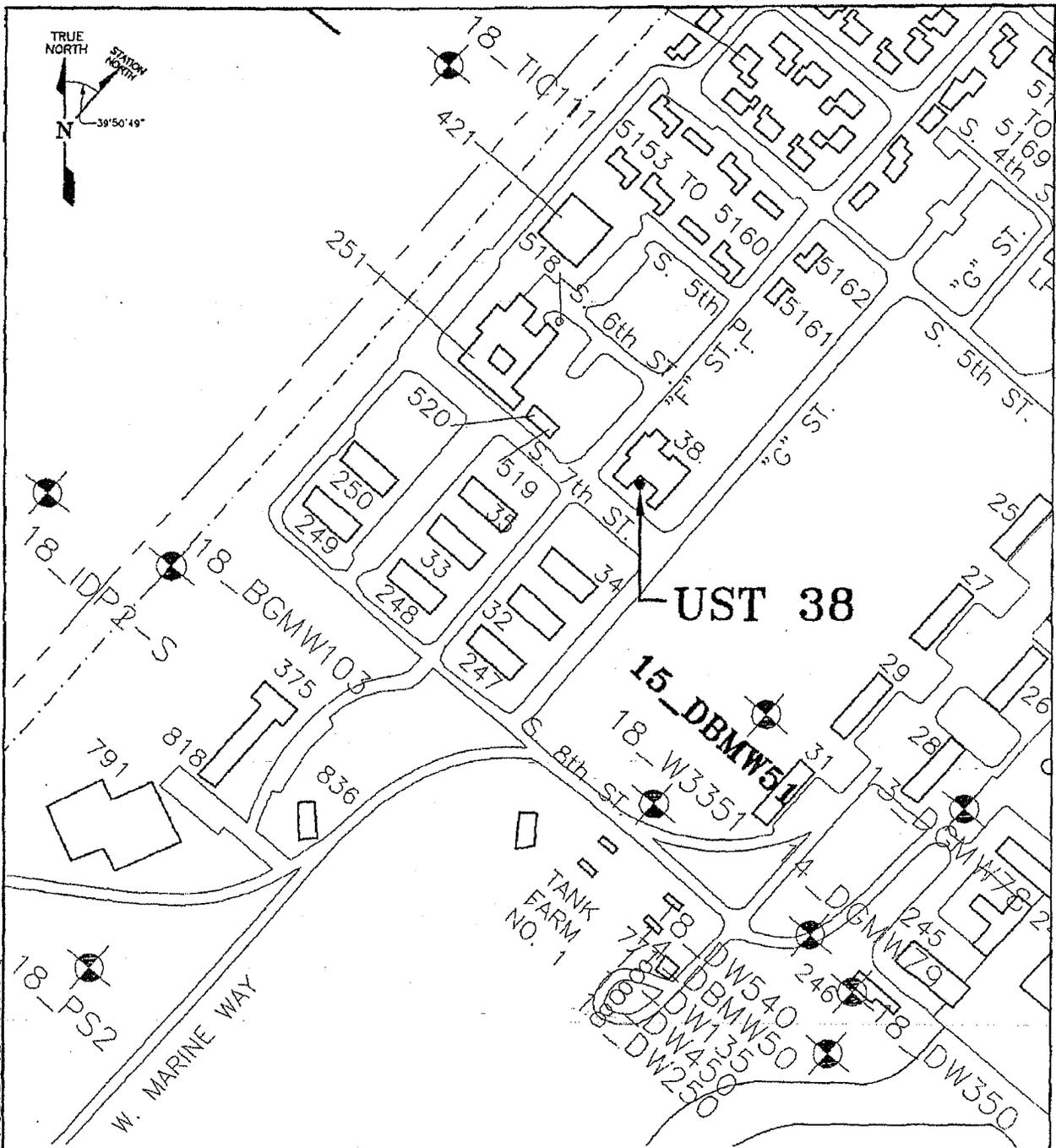


MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA



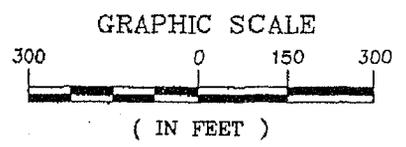
Oct 17, 1997 - 17:02:06 G:\PROJECTS\18292\18292058.dwg

 <b>OHM Remediation Services Corp.</b> A Subsidiary of OHM Corporation SAN DIEGO, CA			DRAWN BY <b>R. PIRMORADIAN</b> DATE <b>10/17/97</b>		<b>FACILITY LOCATION MAP</b> <b>UST 38</b>			
CONTRACT NAME <b>SWDIV</b>			CHECKED BY <b>MSH</b> DATE <b>11/6/97</b>					
AUTOCAD FILE No. <b>18292058.DWG</b>			APPROVED BY <b>[Signature]</b> DATE <b>11/6/97</b>		<b>MARINE CORPS AIR STATION</b> <b>EL TORO, CALIFORNIA</b>			
PLOT SCALE <b>1=1</b>			PROJECT MANAGER <b>W Sedlak</b> DATE <b>11/6/97</b>					
SHEET OF <b>1 1</b>			SCALE <b>NONE</b>		DOCUMENT CONTROL No. <b>SW4245</b>			



**EXPLANATION:**

GROUNDWATER MONITORING WELL



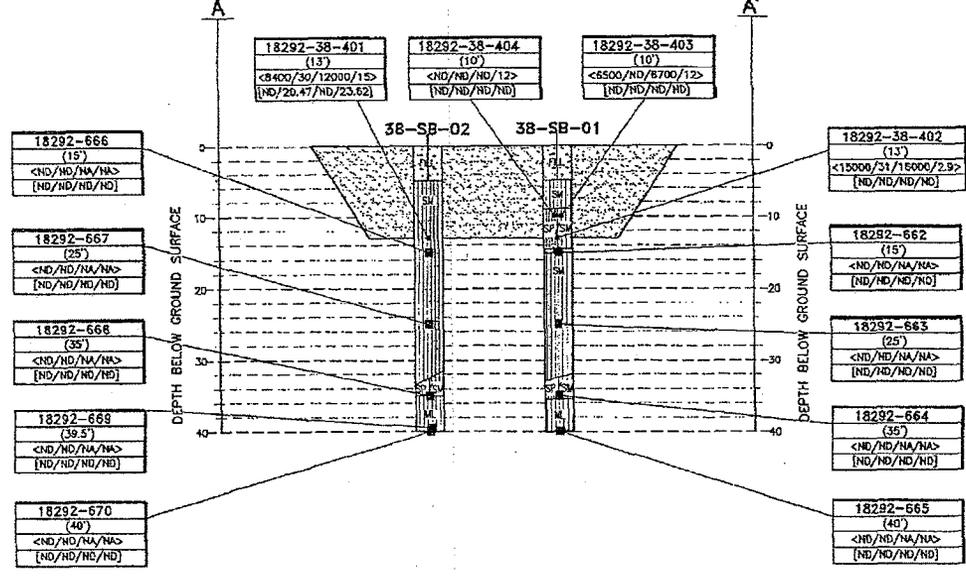
Oct 14, 1997 - 14:37:33 G:\PROJECTS\18292\18292059.dwg

<b>OHM Remediation Services Corp.</b> A Subsidiary of OHM Corporation SAN DIEGO, CA		DRAWN BY <b>R. PIRMORADIAN</b> DATE <b>10/14/97</b>		<b>LOCATION MAP</b> <b>UST 38</b>  <b>MARINE CORPS AIR STATION</b> <b>EL TORO, CALIFORNIA</b>				
CONTRACT NAME <b>SWDIV</b>		CHECKED BY <b>MSH</b> DATE <b>11/6/97</b>						
		APPROVED BY <b>WS</b> DATE <b>11/6/97</b>						
		PROJECT MANAGER <b>Wm Sedlak</b> DATE <b>11/6/97</b>						
AUTOCAD FILE No.	PLOT SCALE	SHEET	OF	SCALE	DOCUMENT CONTROL No.	OHM PROJECT No.	FIGURE No.	REVISION
18292059.DWG	1=1	1	1	AS NOTED	SW4245	18292	FIG 1-2	0

Nov 11, 1997 - 16:12:23 G:\PROJ\CTIS\18292\18292060.dwg

SOUTH WEST

NORTH EAST



**EXPLANATION:**

- EXCAVATION CONFIRMATION SOIL SAMPLE LOCATION
- VERIFICATION SOIL SAMPLE LOCATION
- NA NOT ANALYZED
- ND NOT DETECTED ABOVE LABORATORY REPORTING LIMITS AS SHOWN IN TABLE 2-1
- SPLP SYNTHETIC PRECIPITATE LEACHING PROCEDURE
- TPH TOTAL PETROLEUM HYDROCARBONS
- TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
- mg/kg MILLIGRAMS PER KILOGRAM
- µg/kg MICROGRAMS PER KILOGRAM
- µg/L MICROGRAMS PER LITER
- APPROXIMATE LIMITS OF UNDERGROUND STORAGE TANK 38 EXCAVATION

18292-38-404	SAMPLE IDENTIFIER
(10')	(SAMPLE DEPTH IN FEET)
<ND/ND/ND/12>	<TPH-DIESEL/TPH-GASOLINE/TRPH/SPLP TPH-DIESEL (mg/L) CONCENTRATION mg/kg>
[ND/ND/ND/ND]	[BENZENE/TOLUENE/ETHYLBENZENE/TOTAL XYLENES CONCENTRATION µg/kg]

**A** CROSS SECTION  
SEE APPENDIX D

NOTE: ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

REV. NO.	DESCRIPTION	DATE	APPROVED

CONTRACT NAME <b>SWDIV</b>		OHM Remediation Services Corp. A subsidiary of BE&K Corporation SAN DIEGO, CA	
DRAWN BY R. PIRMORADIAN	DATE 11/11/97	EXCAVATION CROSS SECTION UST 38  MARINE CORPS AIR STATION EL TORO, CALIFORNIA	
CHECKED BY RMSH	DATE 11/16/97		
APPROVED BY [Signature]	DATE 11/16/97		
PROJECT MANAGER [Signature]		DATE 11/16/97	
SCALE		SHEET 1	OF 1
DOCUMENT CONTROL NO. SW4245		OHM PROJECT NO. 18292	DRAWING NO. FIG 2-1



**COUNTY OF ORANGE  
HEALTH CARE AGENCY**

**PUBLIC HEALTH  
DIVISION OF ENVIRONMENTAL HEALTH**

**TOM URAM  
DIRECTOR**

**HUGH F. STALLWORTH, M.D.  
HEALTH OFFICER**

**ROBERT E. MERRYMAN, REHS, MPH  
DEPUTY DIRECTOR**

**MAILING ADDRESS  
2009 EAST EDINGER AVENUE  
SANTA ANA, CA 92705 4726**

**TELEPHONE: (714) 667-3600  
FAX: (714) 912-0749**

November 7, 1996

LT. Hope Katcharian  
Director, Environmental Engineering Division  
Commanding General  
AC/S Environmental 1AU  
Marine Corps Air Station El Toro  
P.O. Box 95001  
Santa Ana, CA 92709-5001

**Subject: Completion of Tank Removal Project**

**RE: Marine Corps Air Station El Toro  
Tank #37  
Santa Ana, CA 92709**

Dear Lt. Katcharian:

This is in response to your request for a confirmation of the completion of the tank removal project. With the provision that the results for the soil samples obtained during the soil sampling activities on December 24, 1991, were accurate and representative of existing conditions, it is the position of this office that no significant soil contamination has occurred at the above noted tank location.

It should be pointed out that this letter does not relieve you of any responsibilities mandated under the California Health and Safety Code if additional or previously unidentified contamination is discovered at the subject site.

If you have any questions regarding this matter, please contact Arghavan Rashidi-Fard at (714) 667-3713.

Sincerely,

**William J. Diekmann, M.S., REHS  
Supervising Hazardous Waste Specialist  
Hazardous Materials Management Section  
Environmental Health Division**

cc: Larry Vitale, Santa Ana Regional Water Quality Control Board

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION**

3737 MAIN STREET, SUITE 500  
RIVERSIDE, CA 92501-3339  
PHONE: (909) 782-4130  
FAX: (909) 781-6288



March 12, 1996

Mr. Wayne D. Lee, Assistant Chief of Staff  
Environmental and Safety  
Headquarters Marine Corps Air Station El Toro  
P.O. Box 95001  
Santa Ana, California 92709-5001

**SUBJECT: CASE CLOSURE, FORMER UNDERGROUND STORAGE TANK AT SITE 34,  
MARINE CORPS AIR STATION EL TORO**

Dear Mr. Lee:

This letter confirms the completion of site investigation and remedial action for the underground storage tank formerly located at the above described location.

Based on the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

If you have any questions, regarding this matter, please contact Lawrence Vitale at (909) 782-4998.

Sincerely,

A handwritten signature in cursive script, reading "Gerard J. Thibeault", is written over the typed name.

Gerard J. Thibeault  
Executive Officer

Mr. Wayne D. Lee

2

March 12, 1996

cc: Mr. James Hendron Orange County Health Care Agency  
Mr. Tayseer Mahmoud, Department of Toxic Substances Control, Base Closure  
Branch  
Ms. Bonnie Arthur, U. S. Environmental Protection Agency, Region 9  
Mr. John Adams Jr., State Water Resources Control Board, Division of Clean  
Water Programs

LV/

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## SANTA ANA REGION

3737 MAIN STREET, SUITE 500

RIVERSIDE, CA 92501-3339

PHONE: (909) 782-4130

FAX: (909) 781-6288



October 30, 1996

Mr. Wayne D. Lee  
Headquarters  
Marine Corps Air Station El Toro  
Environmental and Safety  
P.O. Box 95001  
Santa Ana, CA 92709-5001

SUBJECT: CASE CLOSURES FORMER UNDERGROUND STORAGE TANK SITES;  
33, 35, 105a, 241

Dear Mr. Lee,

This letter confirms the completion of site investigations and remedial actions for the subject underground storage tanks No. 33, 35, 105A and 241. Based on the information provided in the Closure Reports, Site Assessment Report Former Underground Storage Tank Sites 33, 35, 105A, 241 Marine Corps Air Station El Toro, California and with the provision that the information provided in these reports is accurate and representative of site conditions, no further action related to the underground storage tank releases is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

If you have any questions, regarding this matter, please contact Lawrence Vitale at (909) 782-4998.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gerard J. Thibeault".

Gerard J. Thibeault  
Executive Officer

cc: LT Hope Katcharian, Marine Corps Air Station El Toro  
Mr. Bill Diekman, Orange County Health Care Agency  
Mr. John Adams Jr., State Water Resources Control Board, Division of Clean

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## SANTA ANA REGION

3737 MAIN STREET, SUITE 500

RIVERSIDE, CA 92501-3339

PHONE: (909) 782-4130

FAX: (909) 781-8288



May 14, 1997

Mr. Wayne D. Lee  
Assistant Chief of Staff  
Environment and Safety  
Marine Corps Air Station El Toro  
P.O. Box 95001  
Santa Ana, CA 92709-5001

SUBJECT: SUSPENDED FUEL TANKS SITE, STAINED AREAS, (FORMER  
INSTALLATION RESTORATION PROGRAM SITE 15, UNIT 1), MARINE  
CORPS AIR STATION EL TORO

Dear Mr. Lee:

This letter confirms the completion of site investigations and remedial actions for the subject suspended fuel tanks site. Based on the information provided in the Site Assessment Report Suspended Fuel Tanks Site, Stained Areas dated 5/1/97 and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the suspended fuel tanks release site is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

If you have any questions regarding this matter, please contact Lawrence Vitale at (909) 782-4998.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gerard J. Thibeault".

Gerard J. Thibeault  
Executive Officer

cc: LT. Hope Katcharian, Marine Corps Air Station El Toro  
Mr. Bill Diekman, Orange County Health Care Agency  
Mr. John Adams Jr., State Water Resources Control Board, Division of Clean  
Water Programs

# Site Assessment Report

*Suspended Fuel Tanks Site, Stained Areas  
(Former Installation Restoration Program Site 15, Unit 1)  
Marine Corps Air Station  
El Toro, California*

*SWDIV Contract No. N68711-93-D-1459, Delivery Order No. 0024*

*OHM Project No. 17486*

*Document Control No. SW3006*

*Revision 0*

*April 9, 1997*



1202 Kettner Boulevard  
San Diego, California 92101

Prepared by:

A handwritten signature in black ink, appearing to read "Dhananjay B. Rawal", is written over a horizontal line.

Dhananjay B. Rawal  
Project Engineer

Approved by:

A handwritten signature in black ink, appearing to read "William L. Sedlak", is written over a horizontal line.

William L. Sedlak, P.E.  
Project Manager

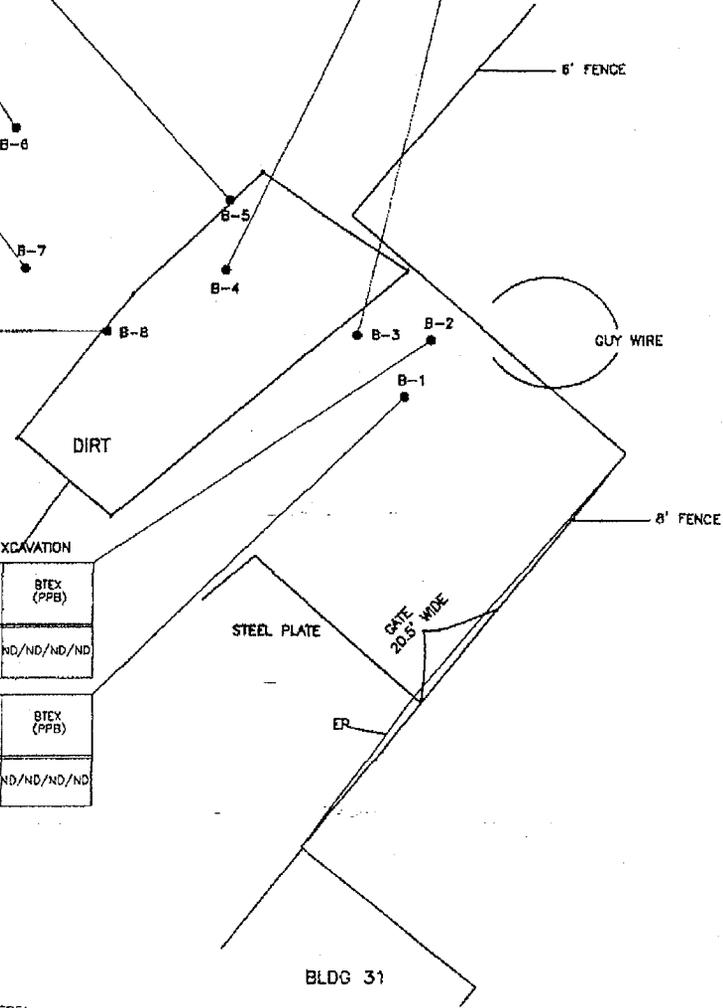


SAMPLE ID	DEPTH (FEET)	TPH-D (PPM)	BTEX (PPB)
96-IRP15-SB05-S-252	SURFACE	75	ND/ND/ND/ND
96-IRP15-SB05-S-256	0.5	980	ND/41/ND/ND
96-IRP15-SB06-S-253	0.5	700	ND/ND/ND/ND
96-IRP15-SB07-S-254	0.5	100	ND/ND/ND/ND
96-IRP15-SB08-S-255	0.5	ND	ND/ND/ND/ND

SAMPLE ID	DEPTH (FEET)	TPH-D (PPM)	BTEX (PPB)
96-IRP15-SB04-S-251	0.5	6800	ND/ND/ND/ND
96-IRP15-SB03-S-250	0.5	ND	ND/ND/ND/ND

LIMITS OF EXCAVATION

SAMPLE ID	DEPTH (FEET)	TPH-D (PPM)	BTEX (PPB)
96-IRP15-SB02-S-249	0.5	ND	ND/ND/ND/ND
96-IRP15-SB01-S-248	0.5	ND	ND/ND/ND/ND



- EXPLANATION:**
- SOIL SAMPLE LOCATIONS
  - TPH-D TOTAL PETROLEUM HYDROCARBON AS DIESEL
  - BTEX BENZENE, TOLUENE, ETHYLBENZENE, TOTAL XYLENES
  - ND NOT DETECTED ABOVE LABORATORY REPORTING LIMITS AS SHOWN IN TABLE 2-3
  - PPM PARTS PER MILLION
  - PPB PARTS PER BILLION
  - ID IDENTIFICATION

RO 0:4:02:27 4/7/97 K:\PROJECTS\17486\17486101

<p><b>OHM Remediation Services Corp.</b> A Subsidiary of OHM Corporation SAN DIEGO, CA</p>	DRAWN BY J. VASQUEZ DATE 04/07/97	<p><b>SOIL SAMPLING LOCATIONS (FIRST ROUND SAMPLES)</b> FORMER IRP SITE 15, UNIT 1 MCAS EL TORO, CALIFORNIA</p>					
	CHECKED BY <i>[Signature]</i> DATE 4/7/97						
APPROVED BY <i>[Signature]</i> DATE							
PROJECT MANAGER DATE							
PROJECT <b>SWDIV</b>	SCALE 1 = 1	SHEET OF 1 1	SCALE NONE	DOCUMENT CONTROL No. <b>SW3006</b>	OHM PROJECT No. <b>17486</b>	FIGURE No. <b>FIG 4-1</b>	REVISION <b>0</b>
AUTOCAD FILE No. 17486101.DWG							

**EXTRACTS**

Annotations made by the writer of the  
Summary Report are identified with a  
star symbol or an arrow.

**DRAFT FINAL  
RECORD OF DECISION  
OPERABLE UNITS 2A AND 3A  
NO ACTION SITES  
MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA**

**SEPTEMBER 1997**

## DECLARATION

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### SITE NAME AND LOCATION

Marine Corps Air Station (MCAS) El Toro  
Operable Unit-3A, Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, and 22  
Operable Unit-2A, Site 25  
Orange County, California

### STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, 22, and 25 at MCAS El Toro in Orange County, California. The document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan. This decision is based on the administrative record file for these sites.

The State of California (through the California Environmental Protection Agency, Department of Toxic Substances Control, and Santa Ana Regional Water Quality Control Board) and the U.S. Environmental Protection Agency concur with the selected remedy.

### DESCRIPTION OF THE SELECTED REMEDY: NO ACTION

The selected remedy for Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, 22, and 25 is no action. In selecting the no action remedy for these sites, the Navy has determined that the existing condition of the sites is protective of human health and the environment.

Although no deed restrictions are required because of chemicals present in soils at the no action sites, shallow groundwater underlying Sites 9, 10, 13, 15, 21, 22, and portions of Site 25 is contaminated by trichloroethene and tetrachloroethene. Remedial investigations have shown that the contamination does not originate from these sites but from Site 24, the volatile organic compound source area. Use restrictions for several sites (including Site 24 and the no action sites listed above) prohibiting drilling of wells and/or extraction of groundwater and allowing access for groundwater monitoring and maintenance of equipment associated with groundwater remediation will be addressed in the Proposed Plan(s) and Record(s) of Decision for Operable Unit-1 and -2A regarding groundwater.

### DECLARATION STATEMENT ☆

Based on extensive field investigations, laboratory analyses, and a thorough assessment of potential human-health risks at each location and of potential ecological risks at Site 25, the Navy has determined that no remedial action is necessary to assure the protection of human health and the environment at Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, 22, and 25. The Remedial Investigations of these sites show that contamination is limited to the shallow soil interval (Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, and 22) and to sediment and

Date: 09/29/97

Conclusion

surface water (Site 23). The human health and ecological risk assessments show that the chemicals present in these media do not present an unacceptable risk to human health or the environment. Therefore, no remedial action is required at these sites. Since hazardous substances are not present at concentrations above unacceptable levels, CERCLA Section 121 cleanup standards do not apply.

Signature: Joseph Joyce  
Mr. Joseph Joyce  
Base Closure and Realignment Environmental Coordinator  
Marine Corps Air Station El Toro

Date: Sept 23, 1997

Signature: John E. Scandura  
Mr. John E. Scandura, Chief  
Southern California Operations  
Office of Military Facilities  
Department of Toxic Substances Control

Date: Sept. 26, 1997

Signature: Daniel D. Opalaki  
Mr. Daniel D. Opalaki, Chief  
Federal Facilities Cleanup Branch  
United States Environmental Protection Agency, Region IX

Date: 9/29/97

Signature: Gerald J. Thibeault  
Mr. Gerald J. Thibeault  
Executive Officer  
Regional Water Quality Control Board, Santa Ana Region

Date: 9/30/97

Extract from Bechtel National, Incorporated. 1995. *Final Field Sampling Plan, Phase II Remedial Investigation/Feasibility Study, MCAS El Toro, California.* August. [Navy Contract N68711-92-D-4670, Contract Task Order 59]

