M60050.002888
MCAS EL TORO
SSIC NO. 5090.3

Summary Report

Former Temporary Accumulation Area (TAA) 856
Solid Waste Management Unit (SWMU) 234
Marine Corps Air Station, El Toro, California

11 March 2002

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

Summary Report

Former Temporary Accumulation Area (TAA) 856
Solid Waste Management Unit (SWMU) 234
Marine Corps Air Station, El Toro, California

11 March 2002

Prepared by:

Lynn Marie Hornecker
Project Manager

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San Diego, CA 92101-2404

SOUTHWESTNAVFACENGCOM
BRAC Operations
Code 06CC.LMH
1220 Pacific Highway
San Diego, California 92132-5190

File: ettaa856ltr.doc

Transmittal

Date: 11 March 2002

From: Lynn Marie Hornecker LMH

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

Subj: Temporary Accumulation Area (TAA) 856
Solid Waste Management Unit (SWMU) 234
Marine Corps Air Station, El Toro

Provided for your review as the attachment is the Summary Report for Former Temporary Accumulation Area (TAA) 856 in the southeastern section of the Marine Corps Air Station, El Toro. TAA 856, a thirteen-foot by thirteen-foot concrete slab, was identified as Solid Waste Management Unit (SWMU) 234 during the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA). A visual inspection and a sampling visit were conducted during the RFA. Building 856 and TAA 856 (both constructed in approximately 1988) are located within a fenced compound formerly used for storage and maintenance of electronic equipment.

We reviewed historical RFA documentation and other historical records, calculated screening risk levels based upon the RFA soil data, and conducted visual inspections of the former TAA 856 during February and March 2002. The concrete slab is in excellent condition and no stains or significant cracks were observed. Additionally, no stains were observed on the asphalt-paved areas immediately adjacent to TAA 856. RFA field sampling activities did not identify significant releases at the site. The hazard index (HI) calculations for both the residential and industrial scenarios resulted in HI values that were significantly less than 1. Based upon our evaluation of the historical documentation, the screening risk calculations, and our observations from recent visual inspections, we are recommending that no further action status be designated for TAA 856 in the next BRAC Business Plan update.

If we do not receive comments from your office within sixty (60) days of receipt of this transmittal, then we will assume that you concur with our recommendation to designate no further action status for TAA 856.

SOUTHWESTNAVFACENGCOM
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File: ettaa856ltr.doc

Please do not hesitate to call me at (619) 532-0783 if you have questions on the attachment. Thank you very much.

Attachment
Summary Report (SWDIV, March 2002)

CF:
Dean Gould (MCAS El Toro BEC)
Project File (MCAS El Toro)

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Section 1
Introduction

The purpose of this Summary Report is to present information pertaining to the former Temporary Accumulation Area (TAA), designated as TAA 856 at the Marine Corps Air Station (MCAS), El Toro. TAA 856 was identified near Building 856 in the southeastern section of the Station during the Resource Conservation and Recovery Act Facility Assessment (RFA). TAA 856 was designated Solid Waste Management Unit (SWMU) 234 and TAA 856 is located northwest of "Z" Street and southeast of Building 856 as shown on Figure 1.

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. The Station closed on 2 July 1999 in accordance with the Base Realignment and Closure Act of 1993 (BRAC III). TAA 856 is located within a parcel tentatively designated for future use as public facilities as shown on Figure 2. Building 856 and the paved areas adjacent to Building 856 are located within a fenced compound. Electronic equipment was stored and maintained within the compound.

Historical facility records and documentation from the environmental compliance program were acquired and reviewed, and the vicinity of Building 856 was visually inspected. The concrete slab that was used as a temporary accumulation area for approximately 12 years was in excellent condition and no stains or significant cracks were observed. Soil samples were collected adjacent to TAA 856 during the RFA and no significant releases were identified. Based upon the review of historical information and the results of the visual inspections, it is recommended that no further action status be designated for TAA 856 (SWMU 234) 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.

TAA 856 was identified during the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) as Solid Waste Management Unit (SWMU 234). TAA 845 consists of a concrete pad, approximately 13 feet wide by 13 feet long. A six-inch concrete curb surrounds the concrete pad and there is no sump. A visual inspection was conducted on 6 May 1991 and no stains or significant cracks were observed. A sampling visit was conducted in October 1992, and a sixty-foot angle boring was advanced adjacent to the southwest side of the concrete pad. Samples were collected at ten-foot intervals from the sixty-foot boring and analytical results are summarized in Table 1. Extracts from the RFA documentation are included in the Appendix.

Table 1. RFA Sampling Visit Data for TAA 856 (SWMU 234).

Sample Identifier	Analytical Results (JEG 1993)	Comments
234A1 (sample depth: 10 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG. Qualified measurements of Methylene Chloride and Acetone (attributable to laboratory contamination).	Soil was described as sandy lean clay from 0 to 10 feet of depth.
234A1 (sample depth: 20 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG but **Thallium was detected at 0.70 "B" milligrams per kilogram.** The thallium measurement was qualified because the result was above instrument detection limits but below reporting limits. Qualified measurements of Methylene Chloride and Acetone.	USEPA Region IX Preliminary Remediation Goals (PRGs) dated November 2000 for **Thallium**: Residential PRG: 52 mg/kg (non-cancer) Hazard Index (HI): (0.7)/(52) = 0.0135 Industrial PRG: 130 mg/kg (non-cancer) Hazard Index: (0.7)/(130) = 0.0054
234A1 (sample depth: 30 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG. Qualified measurements of Methylene Chloride and Acetone.	
234A1 (sample depth: 40 feet)	TPH-gasoline: 0.057 mg/kg	
234A1 (sample depth: 50 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG. Qualified measurements of Methylene Chloride and Acetone.	
234A1 (sample depth: 50 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG. Qualified measurement of Methylene Chloride.	
234A1 (sample depth: 60 feet)	TRPH, TPH, Semivolatile Organic Compounds (SVOCs), Pesticides: ND. Metals were not detected at or above the PRG. Qualified measurement of Methylene Chloride.	

Table 1 includes a screening risk calculation based upon the estimated concentration of thallium with USEPA Region IX Preliminary Remediation Goals (PRGs). Thallium was detected above detection limits but below reporting limits as an estimated value of 0.70 milligrams per kilogram. Thallium is found in trace amounts in the earth's crust and has been used in industrial processes (ATSDR fact sheet, September 1995). A copy of the ATSDR fact sheet is included with the RFA documentation in the Appendix. The hazard indices for thallium for the residential and industrial scenarios are each significantly less than 1.

TAA 856 was also identified in the Hazardous Materials/Hazardous Waste Management Plan (HM/HWMP) (SAIC 1994) and in the Final Environmental Baseline Survey Report (JEG 1995). A visual inspection was conducted and a photograph was taken of TAA 856 on 7 October 1993 during the development of the HM/HWMP and a copy of the photograph is included in the Appendix. The photograph on the HM/HWMP shows several drums on pallets on top of the concrete slab, and no stains or discolored areas are visible on the concrete slab. Extracts from these documents are included in the Appendix.

Representatives from the Navy conducted visual inspections of the former TAA 856 on 8 and 26 February 2002 and on 1 March 2002. It is estimated that TAA 856 was constructed at approximately the same time that Building 856 was constructed in 1988. TAA 856 was taken out of service prior to Station closure in July 1999, and therefore, TAA 856 was used for approximately 12 years. The concrete surfaces of the slab and the curb were in excellent condition, and no stains or significant cracks were observed. Photographs from the visual inspections are included in the Appendix.

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 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record. Extracts from selected documents and no further action decision documents for nearby locations of concern are included in the Appendix.

Building 856 was constructed in 1988 as a sentry building and storage facility. Most of the space within the fenced compound that included Building 856 was used for storage of electronic equipment.

The following Summary Table identifies the information pertaining to Building 856 and nearby buildings that was extracted from historical records.

Table 2. Former TAA 856 Vicinity, MCAS El Toro.

Building or Feature Identifier	Approximate Date of Construction	Comments
Building 856	1988	Sentry Building and General Storage Building (Storage area within the fenced compound was created prior to the construction of Building 856. Electrical equipment vans were stored within the compound.) TAA 856 is located southeast of Building 856. The Final Environmental Baseline Survey (EBS) Report (JEG 1995) and the Final RFA Report (JEG 1993) recommended no further action status for TAA 856.
Building 855	1988	Electrical Distribution Building
Building 170	1943	Inert Storehouse located southeast of Building 856.
Building 457	1960	Group Headquarters located southwest of Building 856. An underground fuel oil storage tank was removed from Building 457 and the tank site was closed by the Orange County Health Care Agency. PCB-contaminated soils were excavated and removed from SWMU 244 near the south side of Building 457, and SWMU 244 was closed by DTSC in 1998. Aerial photograph anomaly (APHO) 12 is located near Building 457 and within the Defense Reutilization and Marketing Office (DRMO) Yard 2, and no further action status has been designated for APHO 12.
DRMO Yard 2 (SWMU 46)		Defense Reutilization and Marketing Office (DRMO) Yard 2 (SWMU 46) is located northeast of TAA 856. Soil sampling was conducted at SWMU 46 during the RFA and radiological surveys of the site are in progress.

Regional Water Quality Control Board, Santa Ana Region Correspondence
The RWQCB letter dated 23 June 1989 (Administrative Record ID M60050.001130) addresses several solvent storage areas and drum storage areas, however, the letter does not identify Building 856. A copy of the letter is included in the Appendix.

The Hazardous Materials/Hazardous Waste Engineering Study (Roy F. Weston, February 1984/Administrative Record #M60050.000899) discuss six (6) hazardous waste accumulation areas, and none of the areas are located near Building 856 (Building 856 had not been constructed in 1984 when the study was prepared). Extracts from the 1984 study are included in the Appendix.

A list of areas where hazardous materials or wastes were generated or stored was included in the *Oil and Hazardous Substance Spill Prevention, Control, and Countermeasure Field Survey Report and SPCC Plan* (SCS Engineers 1979/Administrative Record Identifier M60050.000808). The list does not identify Building 856, and Building 856 had not been constructed in 1979 when the document was prepared. Extracts from the plan are included in the Appendix.

A list dated 1989 (AR Identifier M60050.000776) of areas where hazardous substances were used or wastes were generated does not identify Building 856. The list is included in the Appendix.

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). 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). SAIC identified anomaly 92 (SAIC 92) that is also known as APHO 12, on a photograph taken in 1958 and the anomaly was described as wet soil in an open field between East Marine Way and "Z" Street. The wet soil identified as APHO 12 has two locations - one is near Building 457 (northwest of TAA 856) and one is included within the investigation area of SWMU 46 (northeast of TAA 856). A summary report for APHO 12 was submitted in 1999 and the California Department of Toxic Substances Control and the Regional Water Quality Control Board concurred with no further action status. Extracts from the aerial photograph documentation are included in the Appendix.

2.3 Ground Water Conditions

Groundwater conditions in the vicinity of Building 856 were investigated during the investigation of former Underground Storage Tank (UST) Sites 390A and 390B that are located approximately 1,100 feet northeast of TAA 856. Groundwater is located approximately 160 feet below ground surface at these tank sites and groundwater flows approximately west-northwest. The Regional Water Quality Control Board, Santa Ana Region is the oversight agency for the response actions at former UST Sites 390A and 390B.

Section 3
Findings and Recommendations

The following findings are based upon information collected during the record search activities and from observations during the visual inspections of the vicinity of Building 856:

- TAA 856, a temporary accumulation area, was identified during Resource Conservation and Recovery Act Facility Assessment (RFA) as Solid Waste Management Unit (SWMU) 234. TAA 856 is a concrete slab, approximately 13 feet long by 13 feet wide. A visual inspection was conducted in 1991 and a sampling visit was conducted in 1992. No stains were observed on the TAA surface or on the adjacent areas during the visual inspection of 1991.
- Thallium was detected at a concentration of 0.70 milligrams per kilogram in the 20-foot sample during the sampling visit, and the hazard indices that were calculated for this metal were significantly less than 1 (residential and industrial scenarios).
- The Navy inspected TAA 856 on 8 and 26 February 2002 and 1 March 2002. No stains were observed on the concrete surfaces. No significant cracks were observed in the concrete surfaces.

Based upon the absence of evidence of a significant release at TAA 856, the screening risk calculations, and the excellent condition of the concrete surfaces, it is recommended that no further action status be designated for TAA 856 in the next BRAC Business Plan Update

Section 4
References and/or Sources of Information

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

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]

Naval Facilities Engineering Command, Southwest Division. 1997. Plant Account Record for MCAS El Toro.

NBS/Lowry Engineers - Planners. 1988. 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. [Administrative Record ID # M60050.000800]

OHM Remediation Services Corp. 1998. Closure Report, Solid Waste Management Unit 244, PCB Spill Area, MCAS El Toro. [Navy Contract N68711-93-D-1459, Delivery Order 70]

Roy F. Weston. 2000. Final Historical Radiological Assessment (HRA), Marine Corps Air Station, El Toro. May.

Roy F. Weston. 1984. Hazardous Materials/Hazardous Waste Engineering Study. [Administrative Record ID # M60050.000899]

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.

SCS Engineers. 1979. Oil and Hazardous Substance Spill Prevention, Control, and Countermeasure Field Survey Report and SPCC Plan (Administrative Record Identifier M60050.000808).

Southwest Division, Naval Facilities Engineering Command. 1999. Site Assessment Report, Former Underground Storage Tank (UST) Sites 390A and 390B, MCAS El Toro.

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

United States Geological Survey. 1963. Aerial photograph of MCAS El Toro vicinity.

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

United States Marine Corps Air Station, El Toro. Circa 1946-1999. Station Property Records, Utility Maps, Construction Drawings, Facility Maps, and Building Guides.

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

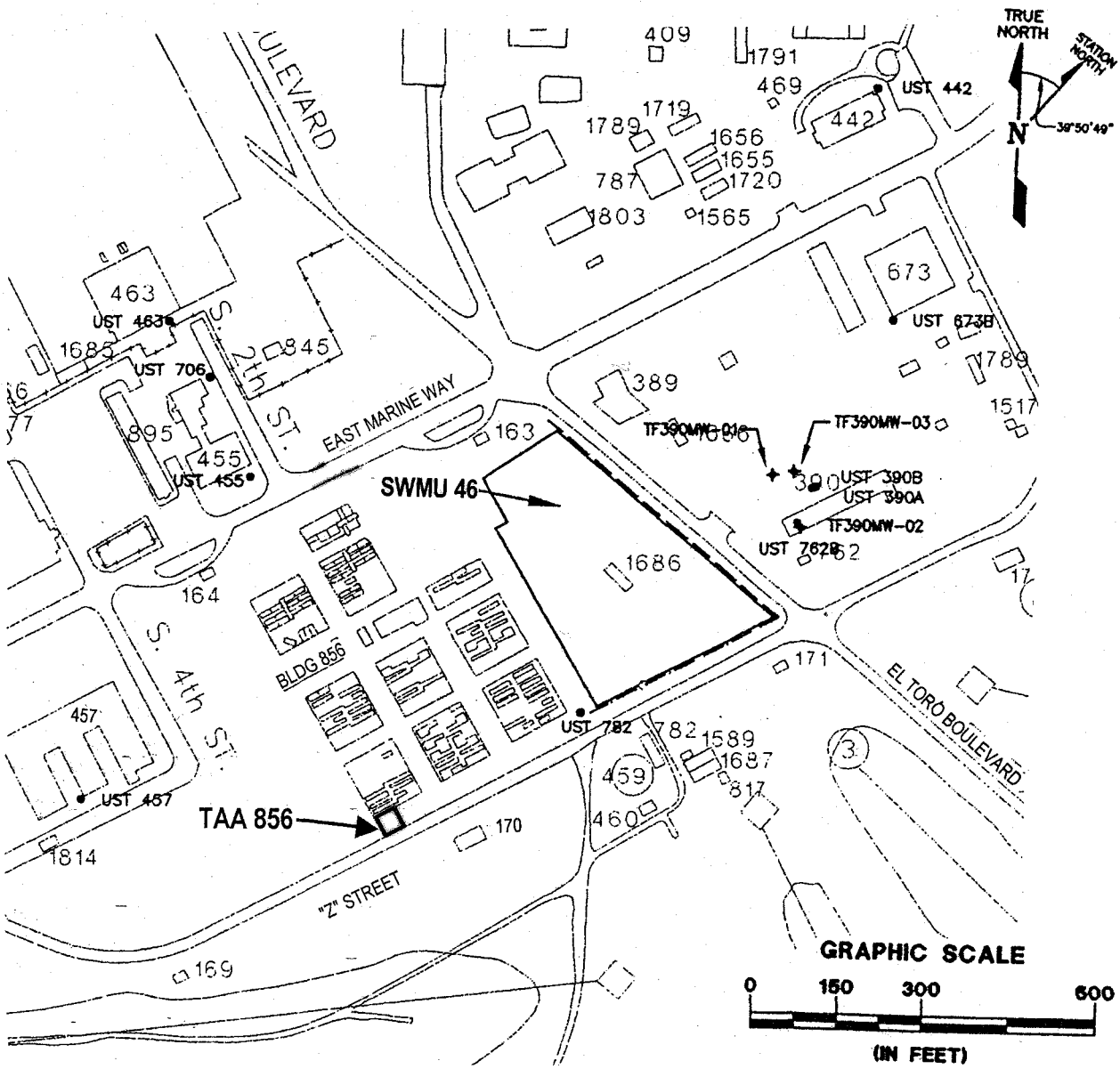
United States Marine Corps Air Station, El Toro. No Further Action correspondence for locations of concern from RWQCB, OCHCA, and/or DTSC.

M60050.002888
MCAS EL TORO
SSIC NO. 5090.3

FIGURES

SUMMARY REPORT
FORMER TEMPORARY ACCUMULATION AREA (TAA) 856, SOLID WASTE MANAGEMENT UNIT (SWMU) 234

DATED 11 MARCH 2002



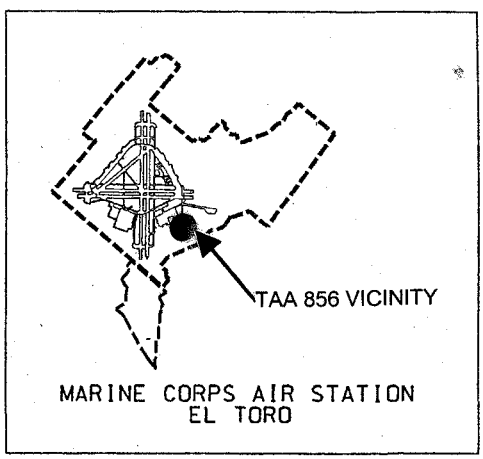


Figure 1.

TEMPORARY ACCUMULATION AREA (TAA) 856

VICINITY MAP

MARINE CORPS AIR STATION, EL TORO

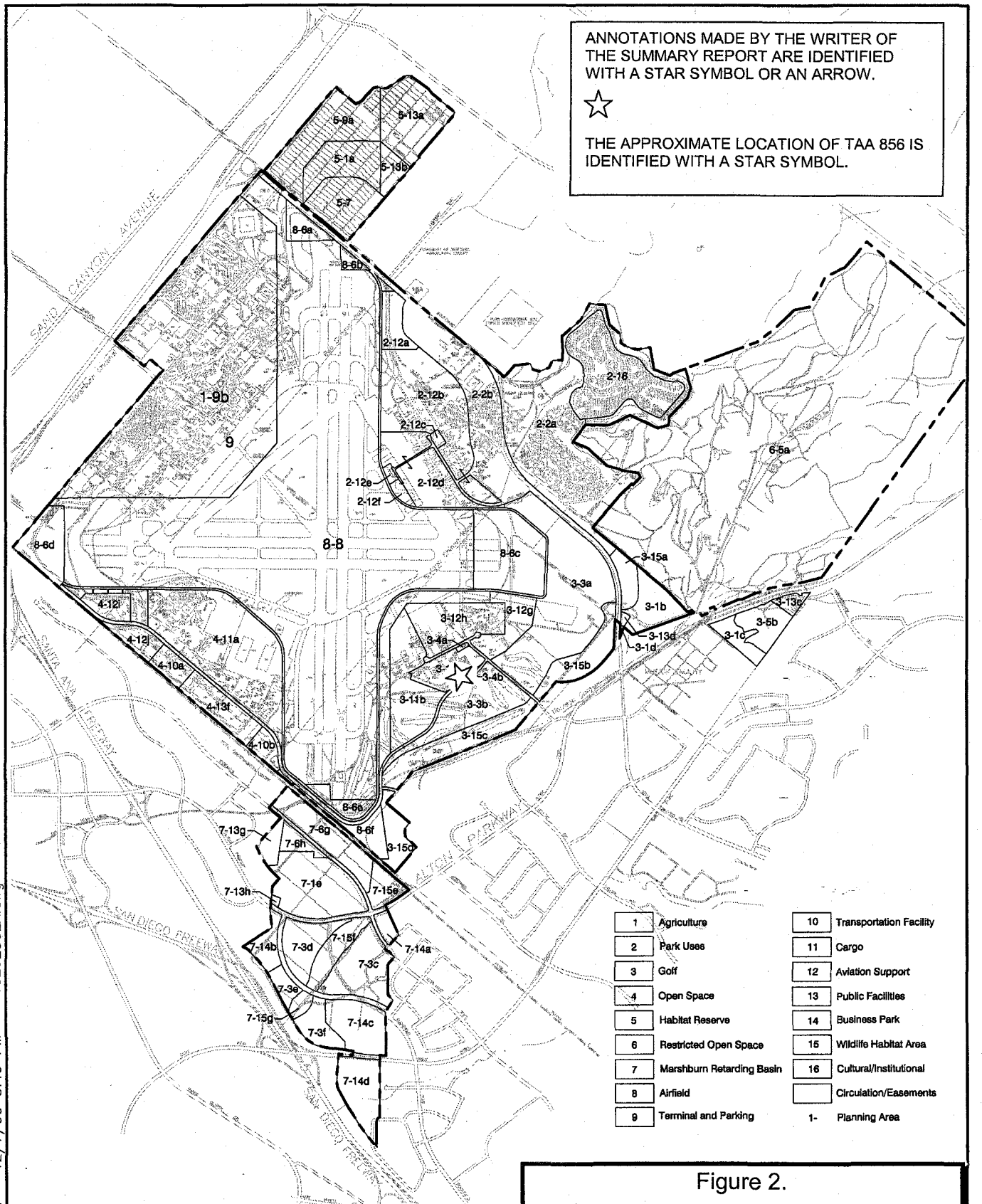


Figure 2.

TEMPORARY ACCUMULATION AREA (TAA) 856

TENTATIVE REUSE PARCEL LOCATIONS

MARINE CORPS AIR STATION, EL TORO

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Appendix

Site Photographs and Other Documentation

Site Photographs

Extracts From RFA And EBS Documentation

Extracts from historical hazardous waste management documents

Extracts from MCAS El Toro Property Records, Building Guides, and Historical Facility Maps

No Further Action Decision Documents for Nearby Locations of Concern

SOUTHWESTNAVFACENGCOM
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(619) 532-0783/Fax (619) 532-0780

File: ettaa856ph.doc

Photograph 1. Former Temporary Accumulation Area (TAA) 856
(Solid Waste Management Unit (SWMU) 234)
TAA 856 is located southeast of Building 856
Marine Corps Air Station, El Toro

Date of Photograph: 26 February 2002

SOUTHWESTNAVFACENGCOM
Code 06CC.LMH
(619) 532-0783/Fax (619) 532-0780

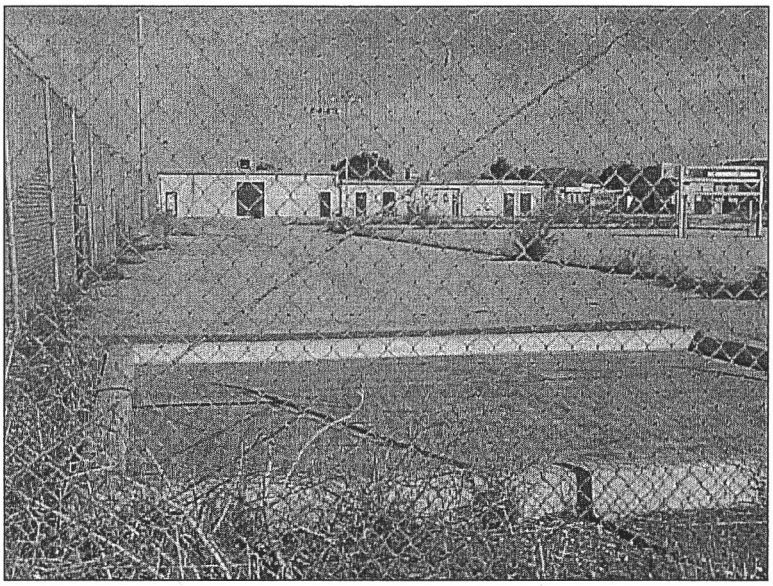
File: ettaa856ph.doc

Photograph 2. Former Temporary Accumulation Area (TAA) 856
(Solid Waste Management Unit (SWMU) 234)
Marine Corps Air Station, El Toro

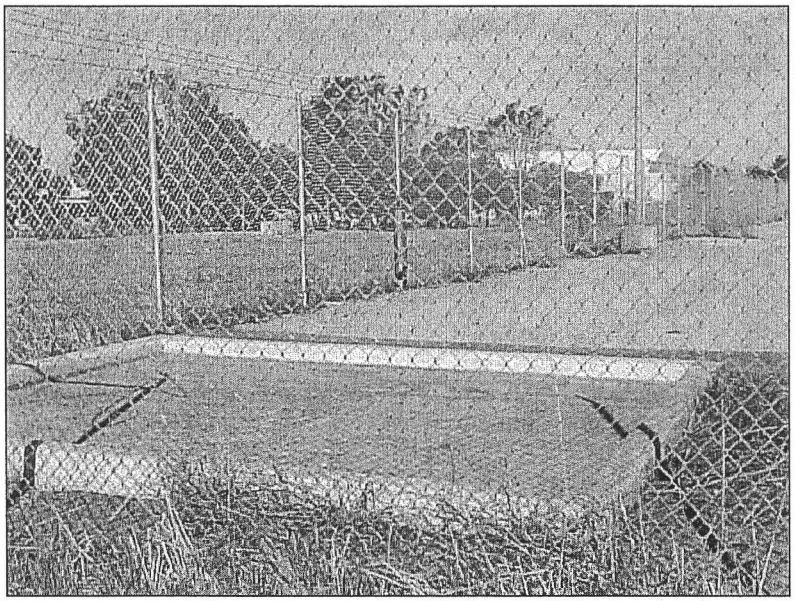
Date of Photograph: 26 February 2002

SOUTHWESTNAVFACENGCOM
Code 06CC.LMH
(619) 532-0783/Fax (619) 532-0780

Photograph 3. Former Temporary Accumulation Area (TAA) 856
With Building 856 in the Background
Marine Corps Air Station, El Toro
Date of Photograph: 26 February 2002



Photograph 4. Former Temporary Accumulation Area (TAA) 856
Marine Corps Air Station, El Toro
Date of Photograph: 26 February 2002



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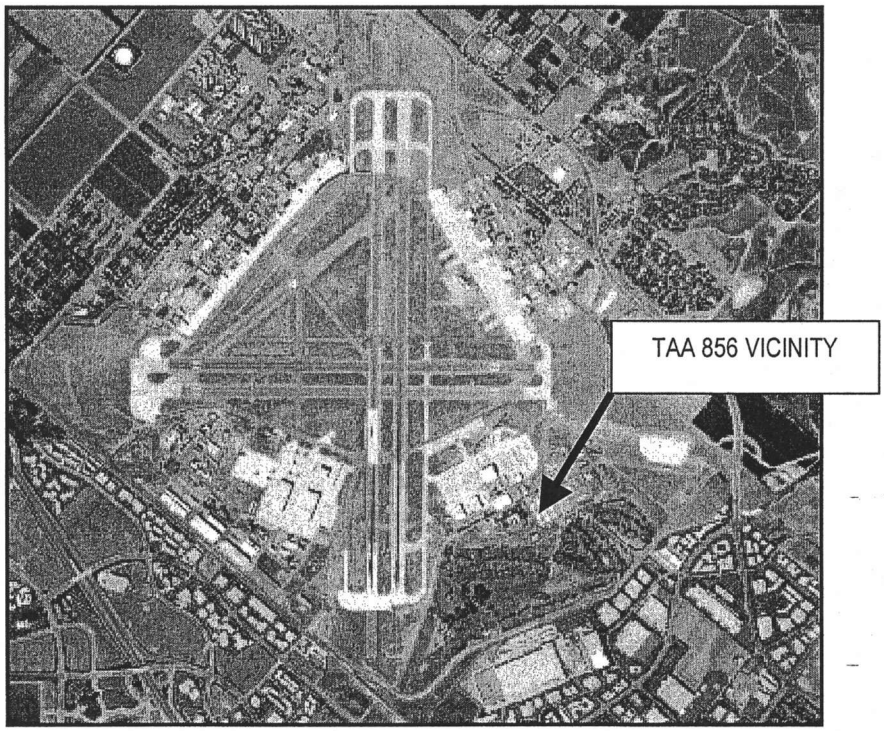
File: ettaa856ph.doc

Aerial Photograph. Vicinity of TAA 856 (SWMU 234)
Marine Corps Air Station, El Toro

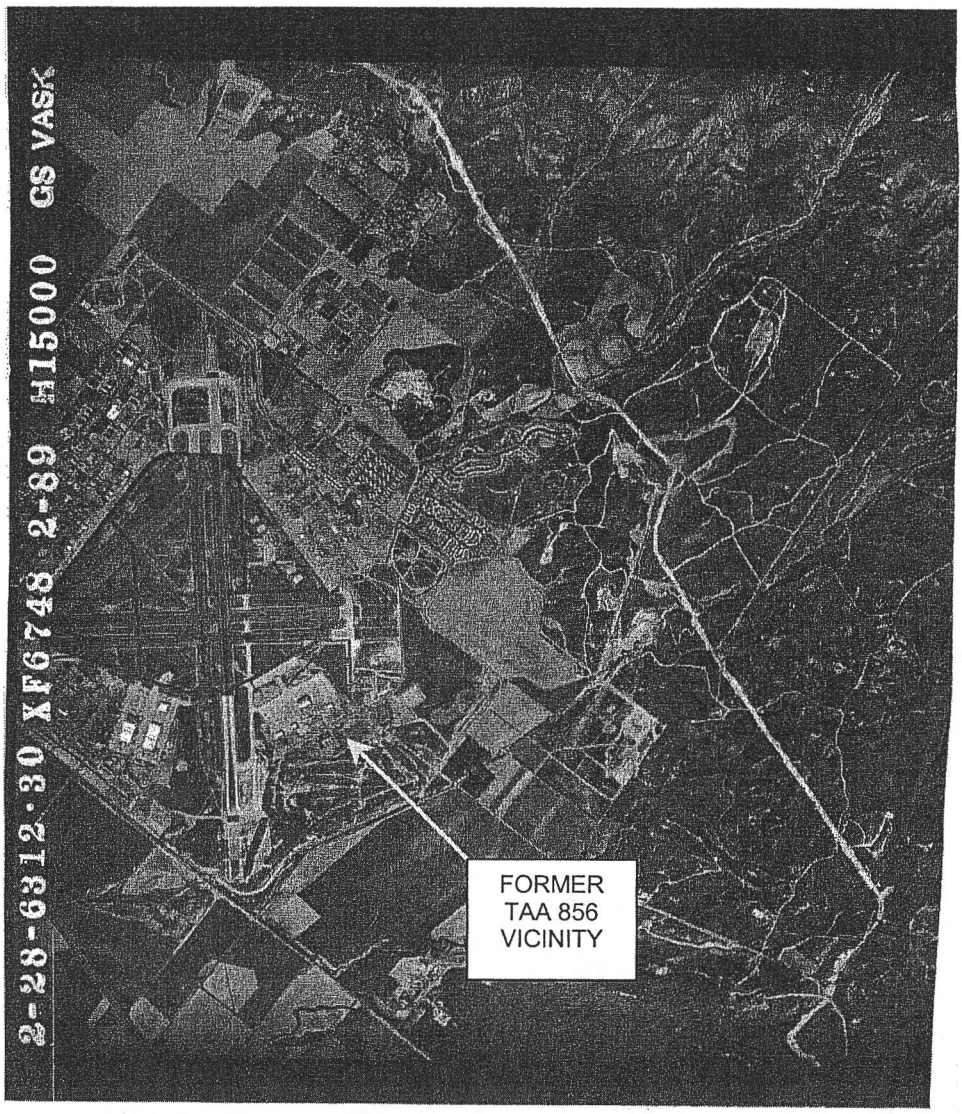
Date of Aerial Photograph: 1994

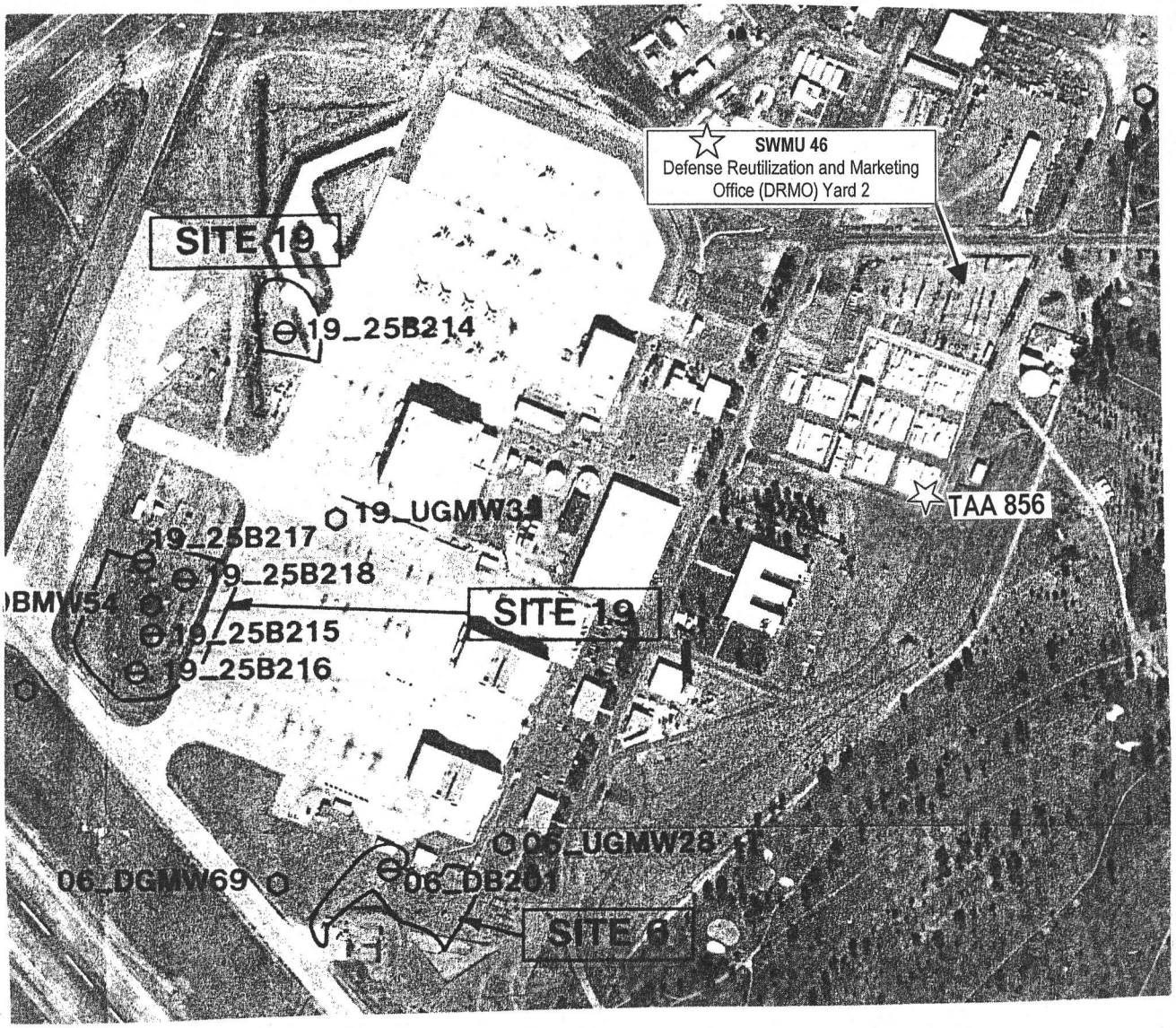


SOUTHWESTNAVFACENGCOM
Code 06CC.LMH
Telephone: (619) 532-0783/Fax (619) 532-0780

File: et1963photo1.doc

Aerial Photograph dated 28 February 1963
Source of Photograph: United States Geological Survey
(Identifier XF-6748 2-89 GS VASK)





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

☆

The approximate location of TAA 856 is identified with a star symbol.

PHOTOGRAPH FROM FINAL ENVIRONMENTAL BASELINE SURVEY REPORT (JACOBS ENGINEERING GROUP 1995)

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SAN DIEGO, CA 92101

Extracts from RFA and EBS Documentation (with ATSDR fact sheet for thallium)

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

M. W. Arends 7/16/93
Mike Arends, P.E. Date
CLEAN Project Manager
CH2M HILL, Inc.

Raoul Portillo 15 July 1993
Raoul Portillo Date
CLEAN Technical Reviewer
Jacobs Engineering Group Inc.

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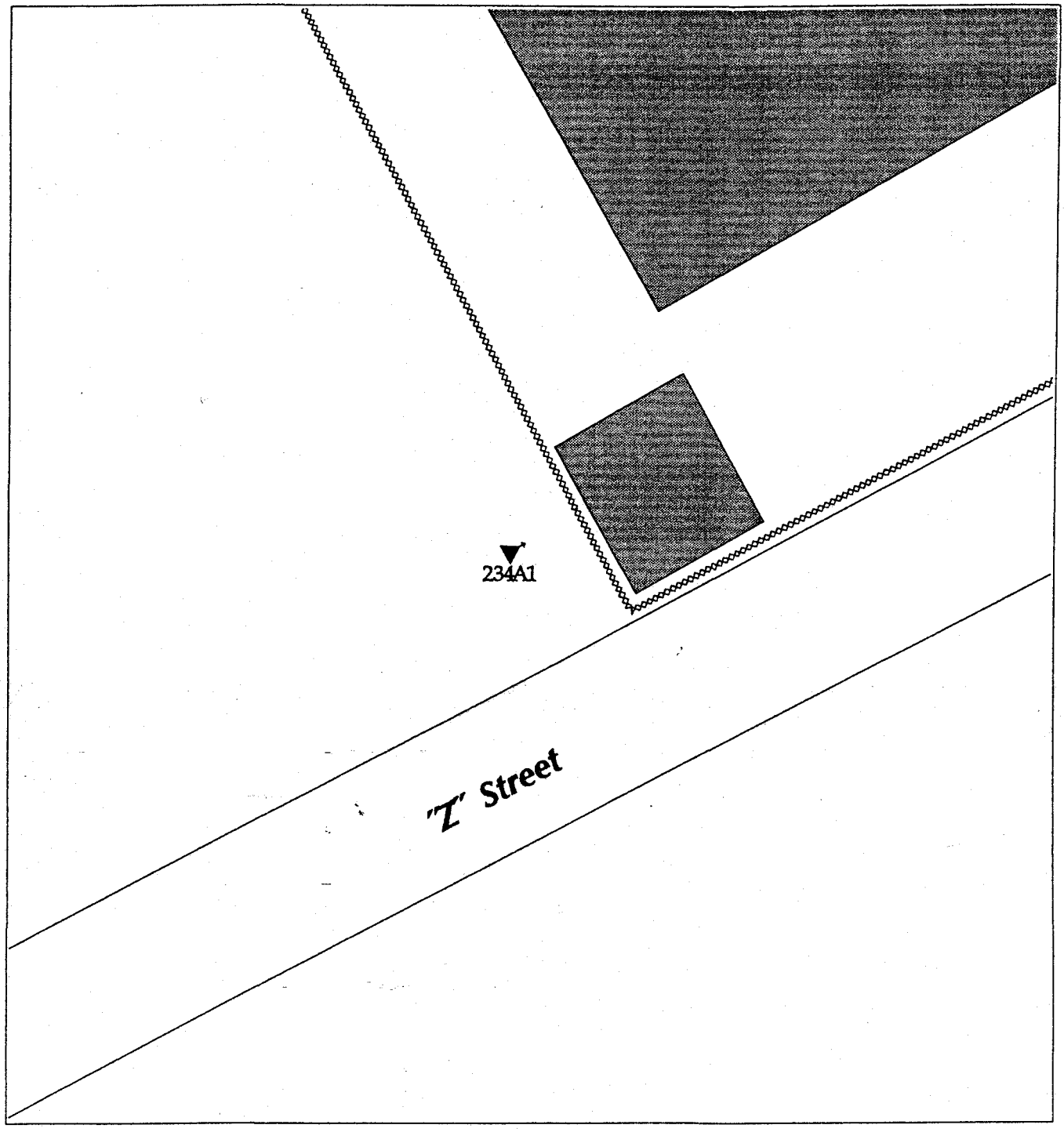


Figure 71 Sample Location Map

SWMU/AOC Number and Type:
234 - Hazardous Waste Storage Area

Boring Location and Number:

- 123H4 5′ Deep Boring
- 123B4 25′ Deep Boring
- 123A4 60′ Long, Angle Boring

Features:

- Building
- Concrete
- Fence
- Railroad

Scale

0 10 20 40 Feet

MCAS El Toro
RCRA Facility Assessment

MCAS EL TORO RCRA FACILITY ASSESSMENT -- SAMPLING VISIT RESULTS

SWMU/AOC NUMBER	SWMU/AOC TYPE (FIGURE)	BORING NUMBER	SAMPLE DEPTH (FEET)	ANALYTICAL TEST RESULTS							RECOMMENDATIONS	
				TPH (mg/kg)	TFH (mg/kg)		VOCs (ug/kg)	SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	Action	Rationale
					Gasoline	Diesel						
234	Hazardous Waste Storage Area (71)	A1	10	ND	ND	ND	Methylene Chloride-15 B * Acetone-40 *	ND	ND	Selenium-0.67 B	NFA	TPH/TFH < 100 ppm VOCs < CRDL SVOCs < CRDL Pest/PCB < CRDL Metals < ETM & PRG CRDL - Contract Required Detection Limit
			20	ND	ND	ND	Methylene Chloride-10 BJ * Acetone-21 *	ND	ND	Selenium-ND		
			30	ND	ND	ND	Methylene Chloride-7 BJ * Acetone-24 *	ND	ND	Selenium-ND		
			40	ND	0.057	ND	Methylene Chloride-9 BJ * Acetone-24 *	ND	ND	Selenium-ND		
			50	ND	ND	ND	Methylene Chloride-4 BJ * Acetone-8 J *	ND	ND	Selenium-ND		
			50 (Duplicate)	ND	ND	ND	Methylene Chloride-5 BJ *	ND	ND	Selenium-ND		
			60	ND	ND	ND	Methylene Chloride-4 BJ *	ND	ND	Selenium-ND		

[illegible]NG VISIT RESULTS

ANALYTICAL TEST RESULTS			RECOMMENDATIONS	
SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	Action	Rationale
This column presents the Semivolatile Organic Compounds detected at each depth. The concentrations are presented in ug/kg. ND - No SVOCs were detected above the CRDLs. If compounds are listed, then all other compounds not listed are below detection limits. NA - Not analyzed for SVOCs Qualifiers are defined as follows: B = Analyte is found in associated blank as well as the sample. J = Indicates an estimated value. E = Compound may be above or below linear range of instrument. D = Indicates compound has been diluted to bring the concentration into linear range. X = Indicates the compound concentration has been manually modified or the EPA qualifier has been manually modified or added. * = Indicates compound was eliminated from further consideration due to laboratory contamination.	This column presents the Pesticides/PCBs detected at each depth. The concentrations are presented in ug/kg. ND - No Pesticides/PCBs were detected above the CRDLs. If compounds are listed, then all other compounds not listed are below detection limits. NA - Not analyzed for Pesticides/PCBs Qualifiers are defined as follows: B = Analyte is found in associated blank as well as the sample. J = Indicates an estimated value. E = Compound may be above or below linear range of instrument. D = Indicates compound has been diluted to bring the concentration into linear range. C = Presence of compound has been confirmed by GC/MS analysis. P = Used for a Pesticide/PCB when there is greater than 25% difference for detected concentrations between the two GC columns. The lower value is reported.	This column presents the results of the metals analyses. Only concentrations above background threshold concentrations are presented. The concentrations are presented in mg/kg. NA - Indicates that samples were not analyzed for metals. NAB - Indicates that metals were analyzed, but concentrations are not above background threshold concentrations. Qualifiers are defined as follows: B = Reported value was less than the CRDL but greater than the IDL. E = Value was estimated due to interference. M = Duplicate injection precision not met. N = Spiked sample recovery not within control limits.	This column presents the recommended action for each site and describes the rationale that led to the recommendation. NFA = No Further Action. CRDL = Contract Required Limit. BGT = Background Threshold Value. ETM = El Toro Model. PRG = Preliminary Remedial Goals.	

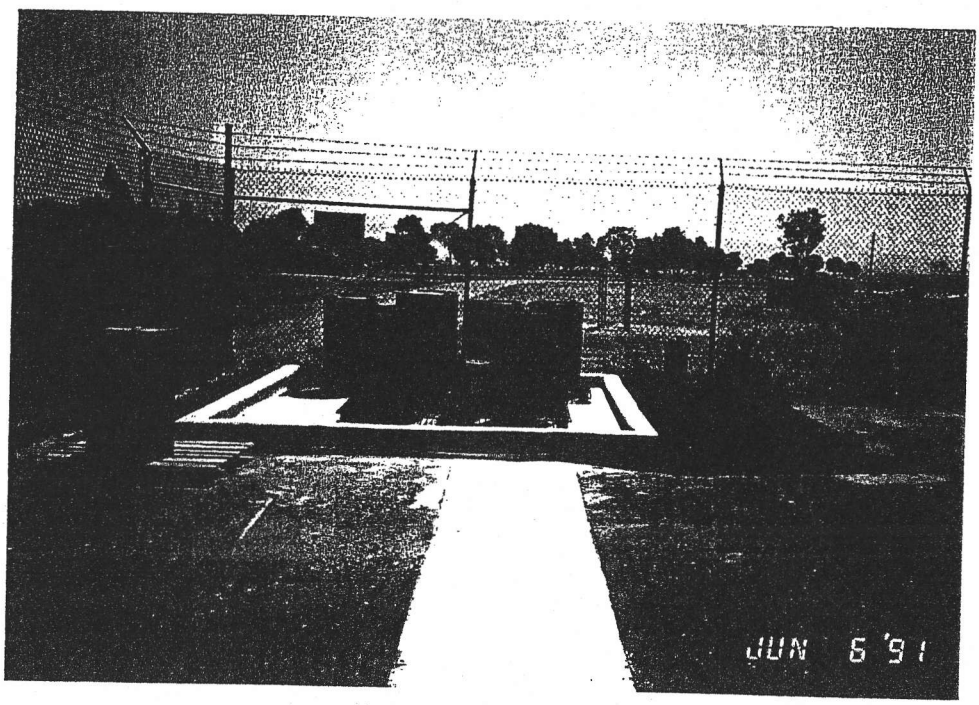
Evaluation Form
SWMU/Area of Concern
Number 234

Name: Hazardous Waste Storage Area

Location: Southwest of Building 856

Size: 169 sq ft

Date of Site Visit: 06 May 1991



Period of Operation

Currently active

Evaluation Form
SWMU/Area of Concern
Number 234

Unit Characteristics

The HWSA is located southwest of Building 856 and is identified by a 13-ft x 13-ft concrete pad. There are no stains or significant cracks inside the storage area. The HWSA is surrounded by asphalt, which has no stains. There is a shallow drainage ditch that runs 60 ft into a drain inside the yard.

Waste Characteristics

Electrical insulating oil
112-Trichloro-trifluoroethane
Coolant

Potential Migration Pathways

Soil

Evidence of Release

None observed

Exposure Potential

Authorized on-Station personnel

Recommendations

Although there was no evidence of a release outside of the storage area, the past and present HWSAs at MCAS El Toro are recommended for a sampling visit.

CH2M HILL

PROJECT NUMBER	BORING NUMBER
LA070022.S0.10	234A-1 SHEET 1 OF 2

SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

ELEVATION _____ DRILLING CONTRACTOR BEYLIK DRILLING, INC., LA HABRA, CALIFORNIA

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4" ID, 6-1/2" OD, GUS PECH BRAT-22

WATER LEVELS _____ START 10/16/92 FINISH 10/16/92 LOGGER K. HUCKRIEDE

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION
					SANDY LEAN CLAY (CL), dark brown, moist, fine sand, decreasing sand with depth.	Start drilling at 09:30.
5.0						
10.0	10.0–12.0	1-MC	1.3	10-20-22-47	LEAN CLAY WITH SAND (CL), dark brown, moist, hard, fine sand.	Headspace 0.5 ppm on OVA, 0 ppm on HNu.
15.0						
20.0	20.0–22.0	2-MC	1.7	12-18-20-45	SILTY SAND (SM), brown, moist, dense, fine grained.	Headspace 1.0 ppm on OVA, 0 ppm on HNu.
25.0						
30.0	30.0–32.0	3-MC	1.7	40-43-50-86	WELL GRADED SAND (SW), gray, dry to moist, very dense.	Headspace reading similar to background on OVA and HNu.

CH2M HILL

PROJECT NUMBER	BORING NUMBER
LA070022.S0.10	234A-1 SHEET 2 OF 2

SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

ELEVATION _____ DRILLING CONTRACTOR BEYLIK DRILLING, INC., LA HABRA, CALIFORNIA

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4" ID, 6-1/2" OD, GUS PECH BRAT-22

WATER LEVELS _____ START 10/16/92 FINISH 10/16/92 LOGGER K. HUCKRIEDE

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION
	40.0				Layer 1' to several feet thick of SILT (ML), brown, moist.	
40.0	42.0	4-MC	1.3	42-95-67-81	WELL GRADED SAND WITH GRAVEL (SW), gray, dry, very dense.	Headspace reading similar to background on OVA and HNu.
45.0	50.0					200 ppm in borehole on OVA, 0 ppm in borehole on HNu.
50.0	52.0	5-MC	1.5	33-76-77-70	WELL GRADED SAND WITH GRAVEL (SW), gray, dry, very dense, fine gravel.	Headspace reading similar to background on OVA and HNu.
	54.0	5A-MC	1.4	130-87-63-136	Similar to 5-MC.	
55.0	60.0					
60.0	62.0	6-MC	1.6	34-68-85-63	POORLY GRADED SAND (SP), gray, dry, very dense, fine to medium grained.	Headspace similar to background on OVA and HNu.
					Total Depth at 62.0 Feet.	
65.0						

TABLE 4-2
SWMUs AND AREAS OF CONCERN
RECOMMENDED FOR SAMPLING VISIT
MCAS EL TORO RFA

SWMU/ AOC NO.	TYPE	LOCATION/BUILDING
203	Oil/Water Separator	760
204	Vehicle Wash Rack	761
205	Oil/Water Separator	761
206	Underground Storage Tank	761
208	Oil/Water Separator	762
209	Underground Storage Tank	762
211	Oil/Water Separator	763
212	Underground Storage Tank	763
213	Vehicle Wash Rack	764
214	Underground Storage Tank	764
215	Oil/Water Separator	764
217 (1)	Underground Storage Tank	765
218 (1)	Oil/Water Separator	765
220	Oil/Water Separator	766
221	Underground Storage Tank	766
222	Hazardous Waste Storage Area	769
223	Hazardous Waste Storage Area	770
224	Hazardous Waste Storage Area	771
225	Hazardous Waste Storage Area	772
226	Hazardous Waste Storage Area	778
227	Hazardous Waste Storage Area	779
229	Hazardous Waste Storage Area	800
231	Underground Storage Tank	800
232	Underground Storage Tank	800
233	Oil/Water Separator	817
234	Hazardous Waste Storage Area	856
241	Drum Storage Area	155
242	Hazardous Waste Storage Area	371
243	Washrack	96
244	PCB Spill Area	457
248	Oil/Water Separator	463

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-C01-01F284-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

Table 3-7
Less Than 90-Day Accumulation Area Inventory
MCAS El Toro EBS Report - April 1995

Database Tracking	Building Number	Status	SWMU/ AOC	Comments	AREA TYPE
SAA 441	441	Inactive	256	RFA recommended NFA	3
SAA 442	442	Inactive	126	Sampling Visit Not Recommended During PR/VSI	2
SAA 445	445	Inactive	127	Sampling Visit Not Recommended During PR/VSI	2
SAA 447	447	Inactive	130	RFA recommended NFA	3
SAA 456	456	Inactive	135	Sampling Visit Not Recommended During PR/VSI	2
SAA 461	461	Active	138	RFA recommended NFA (1)	2
SAA 462	462	Active	140	Sampling Visit Not Recommended During PR/VSI	2
SAA 529	529	Inactive	144	RFA recommended NFA	2
SAA 534	534	Inactive	146	Sampling Visit Not Recommended During PR/VSI	2
SAA 602	602	Inactive	147	RFA recommended NFA	3
SAA 605	605	Active	149	RFA recommended NFA	3
SAA 606	606	Active	255	RFA recommended NFA	2
SAA 626	626	Active	158	IRP Site 20 (1)	7
SAA 634	634	Active		Identified in 1994 SPCC Plan	7
SAA 636	636	Inactive	160	RFA recommended NFA	3
SAA 651	651	Active	165	Located within SWMU/AOC 164	3
SAA 658	658	Active	171	Shallow soil borings recommended	7
SAA 671	671	Active	172	RFA recommended NFA	2
SAA 672	672	Inactive	177	Sampling Visit Not Recommended During PR/VSI	2
SAA 673	673	Active	186	RFA recommended NFA	2
SAA 693	693	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 698	698	Active		Identified in 1994 SPCC Plan	7
SAA 744	744	Active		Identified in 1994 SPCC Plan	7
SAA 746	746	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 747	747	Actvie		Identified in Station's HW Open Drum Inspection Report	7
SAA 761	761	Inactive		Located at IRP Site 6 (2)	7
SAA 765	765	Inactive	266	Sampling Visit Not Recommended During PR/VSI	2
SAA 769	769	Inactive	222	RFA recommended NFA	2
SAA 770	770	Inactive	223	RFA recommended NFA	3
SAA 771	771	Inactive	224	RFA recommended NFA	2
SAA 772	772	Inactive	225	RFA recommended NFA	3
SAA 778	778	Inactive	226	RFA recommended NFA	3
SAA 779	779	Inactive	227	RFA recommended NFA	3
SAA 800	800	Active	229	RFA recommended NFA	2
SAA 831	831	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 856	856	Active	234	RFA recommended NFA	3
SAA 900	900	Active		Environmental Office accumulation area	7

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

THE EBS STATES THAT NO FURTHER ACTION WAS RECOMMENDED FOR TAA 856 (SAA 856).

Table 3-7
Less Than 90-Day Accumulation Area Inventory
MCAS El Toro EBS Report - April 1995

Database Tracking	Building Number	Status	SWMU/ AOC	Comments	AREA TYPE

NOTES:
(1) - SWMUs/AOCs that were determined to be located within RI/FS site boundaries were eliminated from RFA sampling visits. These SWMUs/AOCs will be investigated in the IRP.
(2) - Accumulation areas are currently being evaluated for removal and/or decontamination strategies.
* - Indicates RFA recommendation of "no further action" is pending U.S. EPA approval.
PR/VSI - Preliminary Review/Visual Site Inspection performed as part of the RFA.
IRP - Installation Restoration Program
RFA - RCRA Facility Assessment
NFA - No Further Action

Sources:
Jacobs, 1993. MCAS El Toro Final RCRA Facility Assessment Report.
MCAS El Toro Hazardous Waste Open Drum Inspection Report Sheet
SAIC, 1994. Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan (SPCC).

THALLIUM
CAS # 7440-28-0

Agency for Toxic Substances and Disease Registry ToxFAQs September 1995

This fact sheet answers the most frequently asked health questions (FAQs) about thallium. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to thallium occurs mainly from eating food. Exposure to higher levels of thallium may occur in the workplace. Breathing high levels of thallium may result in effects on the nervous system, while ingesting high levels of it results in vomiting, diarrhea, temporary hair loss, and other effects. This chemical has been found in at least 210 of 1,416 National Priorities List sites identified by the Environmental Protection Agency.

What is thallium?

(Pronounced thăl′ē-əm)

Pure thallium is a bluish-white metal that is found in trace amounts in the earth's crust. In the past, thallium was obtained as a by-product from smelting other metals; however, it has not been produced in the United States since 1984. Currently, all the thallium is obtained from imports and from thallium reserves.

In its pure form, thallium is odorless and tasteless. It can also be found combined with other substances such as bromine, chlorine, fluorine, and iodine. When it's combined, it appears colorless-to-white or yellow.

Thallium is used mostly in manufacturing electronic devices, switches, and closures, primarily for the semiconductor industry. It also has limited use in the manufacture of special glass and for certain medical procedures.

What happens to thallium when it enters the environment?

- Thallium enters the environment primarily from coal-burning and smelting, in which it is a trace contaminant of the raw materials.
- It stays in the air, water, and soil for a long time and is not broken down.
- Some thallium compounds are removed from the atmosphere in rain and snow.
- It's absorbed by plants and enters the food chain.
- It builds up in fish and shellfish.

How might I be exposed to thallium?

- Eating food contaminated with thallium may be a major source of exposure for most people.
- Breathing workplace air in industries that use thallium
- Smoking cigarettes.
- Living near hazardous waste sites containing thallium (may result in higher than normal exposures).
- Touching or, for children, eating soil contaminated with thallium.
- Breathing low levels in air and water.

How can thallium affect my health?

Exposure to high levels of thallium can result in harmful health effects. A study on workers exposed on the job over several years reported nervous system effects, such as numbness of fingers and toes, from breathing thallium.

Studies in people who ingested large amounts of thallium over a short time have reported vomiting, diarrhea, temporary hair loss, and effects on the nervous system, lungs, heart, liver,

and kidneys. It has caused death. It is not known what the effects are from ingesting low levels of thallium over a long time.

Birth defects were not reported in the children of mothers exposed to low levels from eating vegetables and fruits contaminated with thallium. Studies in rats, however, exposed to high levels of thallium, showed adverse developmental effects.

It is not known if breathing or ingesting thallium affects human reproduction. Studies showed that rats that ingested thallium for several weeks had some adverse reproductive effects. Animal data suggest that the male reproductive system may be susceptible to damage by low levels of thallium.

There is no information available on the health effects of skin contact with thallium in people or animals.

How likely is thallium to cause cancer?

The Department of Health and Human Services, the International Agency for Research on Cancer, and the Environmental Protection Agency (EPA) have not classified thallium as to its human carcinogenicity.

No studies are available in people or animals on the carcinogenic effects of breathing, ingesting, or touching thallium.

Is there a medical test to show whether I've been exposed to thallium?

There are medical tests available to measure levels of thallium in urine and hair. In addition, thallium can also be measured in blood; however, this is not a good indicator of exposure since thallium only stays in blood a very short time.

These tests require special equipment that is not usually available in most doctor's offices. In addition, these tests cannot determine if adverse health effects will occur from the exposure to thallium.

Has the federal government made recommendations to protect human health?

The EPA requires that discharges or accidental spills into the environment of 1,000 pounds or more of thallium be reported.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 0.1 milligrams per cubic meter (0.1 mg/m^3) for thallium in workplace air. The American Conference of Governmental Industrial Hygienists (ACGIH) has established the same guidelines as OSHA for the workplace.

The National Institute for Occupational Safety and Health (NIOSH) has recommended that 15 mg/m^3 of thallium be considered immediately dangerous to life and health. This is the exposure level of a chemical that is likely to cause permanent health problems or death.

Glossary

Carcinogenicity: Ability to cause cancer.

Ingesting: Taking food or drink into your body.

Milligram (mg): One thousandth of a gram.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1992. Toxicological profile for thallium. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-639-6359. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Southwest Division
Naval Facilities Engineering Command
Contracts Department
1220 Pacific Highway, Room 135
San Diego, CA 92132-5187

Contract No. N68711-92-D-4670

Extracts

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY

CLEAN II

FINAL ADDENDUM TO THE RCRA FACILITY ASSESSMENT MCAS EL TORO, CALIFORNIA (VOLUME 6 OF THE FINAL RFA REPORT)

CTO-0065/0170

May 1996

Prepared by:

BECHTEL NATIONAL, INC.
401 West A Street, Suite 1000
San Diego, CA 92101

Signature: _____ Date: 31 May 1996
Jacques Lord, CTO Leader

ACCUMULATION AREA EVALUATION CHECKLIST

(CIRCLE AS APPROPRIATE AND FILL IN COMPLETELY)

JOB 22214 CTO-0065
NAVY CLEAN II MCAS EL TORO RFA CONFIRMATION ACTIVITIES

GENERAL DESCRIPTION:

SWMU #: 234 Accumulation Area (AA) #: 856
Location (bldg): HWSA/Bldg. 856
Site Contact: DMO Mgr. at guardhouse Ext: N/A
Permission for Access? ~~Y~~ N If yes, explain: N/A.
Type of Wastes Observed None

TYPE: (CIRCLE AS APPROPRIATE)

~~Locker~~ ~~Cabinet~~ Pad Concrete ~~Soil/Asphalt~~ floor
Berm Fence Fence Type: cyclone ~~Indoor~~
Pallets ~~Drum(s)~~ ~~No. of Drums~~: Outdoor

CONDITION:

Stain(s) ~~Odor(s)~~ ~~Crack(s)~~
Placards/Labels: ~~Y~~ N If Yes, list: Sylgard 170 Adhesive Polyurethane Paint thinner Removed as of 11-10-95

Observations: Concrete pad with minor rust spot.
Status: Area clear as of 11-10-95.

DIMENSIONS: (ESTIMATED SIZE OR AREA IN FT)

AA/SWMU: 15x15 ft.
"Stain(s)" : 1x2 ft rust spot.
Any Restrictions To Access?: Tarp roof and fence.

EVALUATION OF REMOVAL/DECONTAMINATION STRATEGY (CIRCLE AS APPROPRIATE)

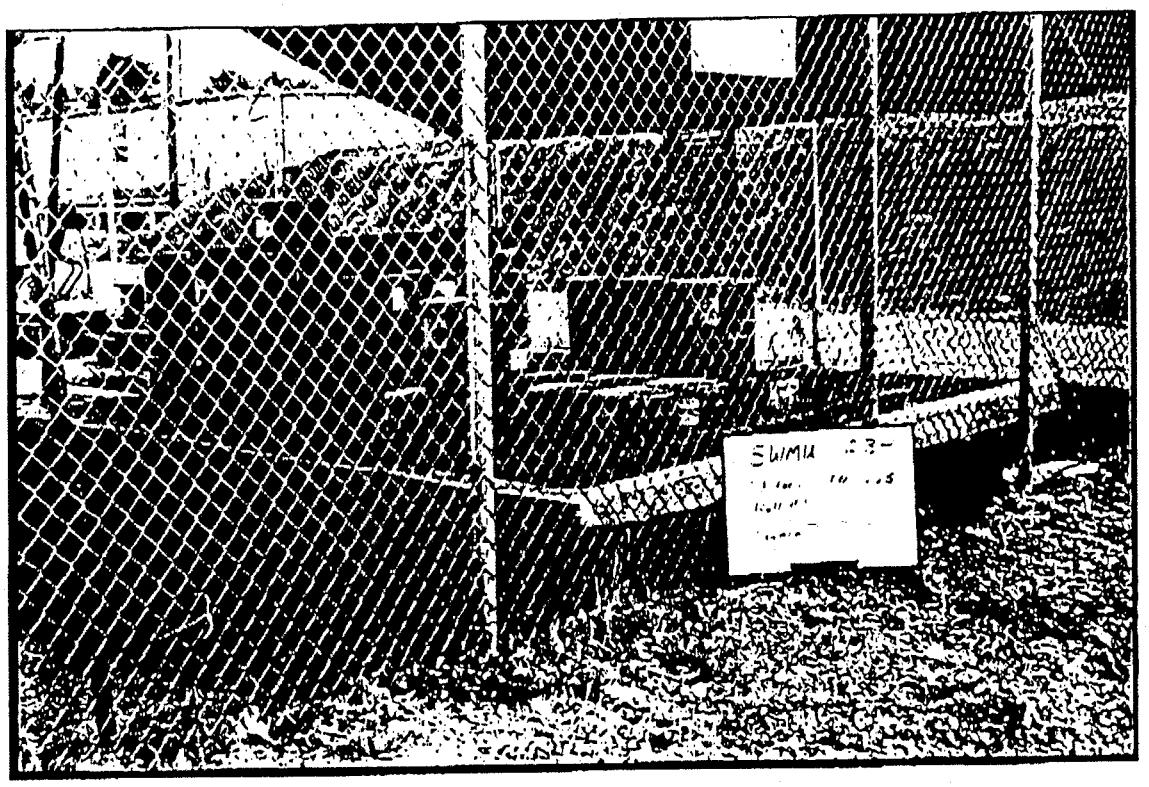
Yes No Potential for release evident based on this surveillance
Yes No Potential for simple removal
Yes No Potential for decontamination activities prior to removal
Yes No Potential for sampling (describe:)
Yes No Potential for removal after additional assessment activities

SKETCH: (MAKE A SKETCH or ATTACH PHOTO(S) OF RELEVANT ACCESS, OBJECTS, WORK SPACE, ETC., AS APPROPRIATE, ON REVERSE OF THIS FORM)

DATE/TIME OF SURVEILLANCE: 12-6-94/08:30
UPDATED: 11-10-95/14:00
SURVEILLANCE PERFORMED BY: Larry Bauman

11/21/95, 2:23 PM, cjg s:\cto65\taaforms\tmas\eval234.doc

PHOTO LOG



SWMU #: 234

PHOTO DATE: 12-14-94

SOUTHWESTNAVFACENGCOM
CODE 06CC.LMH
SAN DIEGO, CA 92101

Extracts from historical hazardous waste management documents

M60050.000808
MCAS El Toro
M60050.000808

DUPLICATE

TITLE: OIL & HAZARDOUS SUBSTANCE SPILL PREVENTION, CONTROL & COUNTERMEASURE FIELD SURVEY REPORT & SPCC PLAN

AUTHOR: SCS ENGINEERS

DATE: 11/01/79

CATEGORY: 1.2

EXTRACTS

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

☆ The SPCC document does not identify sites near the current Building 856. Building 856 had not been constructed at the time the SPCC document was prepared.

SCS ENGINEERS

STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.

Table 2. Hazardous Wastes Generated at El Toro Marine Base Activities

Activity	Hazardous Wastes*	ROM Quantity
Auto vehicle maintenance shops	2, 3, 4	20,000 gal/yr
Aircraft maintenance hangers	2, 3, 4	15,000 gal/yr
Equipment and other maintenance areas	1, 2, 3, 4, 5, 10	2,000 gal/yr 100 batteries/yr
Painting and corrosion control	2, 5	3,000 gal/yr
Public Works (pest and weed control)	6	200 containers/yr
Aircraft defueling operations	9	200,000-2,000,000 gal/yr
Oil/water separator and sump maintenance	11	50,000 gal/yr
Station sick bay	7	Unknown
Miscellaneous aircraft-related activities	8	Unknown

*Hazardous Waste Categories:

1. Waste chlorinated hydrocarbons
2. Waste organic solvents
3. Waste lubricating oil
4. Waste hydraulic or cutting oil
5. Paint wastes (such as slops, latex sludge, etc.)
6. Containers unless triple-rinsed, which have contained pesticides, herbicides, poisons, and other hazardous materials
7. Infectious wastes
8. Radioactive wastes
9. Contaminated fuels
10. Corrosive wastes
11. Detergents, oils, and water mixtures from oil/water separator and sump pump-outs

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
Fueling Stations							
R-4	Tank Farm #2 Truck Fueling Stations (2)	Fuel oil #2	S3	SW to storm sewer new "J" St. to Bee Canyon Wash	Yes	Yes	(3) (10) Repair shut-off valves and fittings on swing arms. Repair leaky filters
N-7	Tank Farm #4 (SW) Truck Fueling Station	Fuel oil #2	S3	SW over taxiway to storm sewer in runway N field - to Aqua Chinon Wash	Yes	Yes	(3) (10)
N-7	Aircraft Dispensing Station	JP-4	S3	SW over taxing to storm sewer in runway in field - to Aqua Chinon Wash	Yes	Yes	(3) (10)
M-7	Tank Farm #4 (NE) Truck Fueling Stations (2)	Fuel Oil #1, Diesel	S3	SW overland indirect to Aqua Chinon Wash	Yes	Yes	(3) (10) Plug drains on truck pad
N-10	Tank Farm #5 Truck Fueling Stations (3 operational) (1 abandoned)	JP-5	S3	Directly to drains indirect via open ditch and storm sewer to Aqua Chinon Wash	Yes	Yes	(3) (10) Redirect drain pipes to oil-water separator.
N-10, O-10	Tank Farm #6 Truck Fueling Station (2)	Contaminated JP-5, MoGas	S3	SW over taxiway indirect via storm sewer to Aqua Chinon Wash	Yes	Yes	(3) (10)
K-12	Tank Farm #555 Truck Loading Stands	JP-5, JP-4	S3	SW to open ditch along Quarry Rd. Indirect to Borrego Canyon Wash	Yes	Yes	Construct curbing at either end of concrete trench
N-8	Aircraft Direct Fueling Station #574	JP-5	S3	Directly to drain to storm sewer to Aqua Chinon Wash	Yes	Yes	(4)
O-8	Aircraft Direct Fueling Station #575	JP-5	S3	Directly to drain to storm sewer to Aqua Chinon Wash	Yes	Yes	(4)
O-9	Aircraft Direct Fueling Station #576	JP-5	S3	Directly to drain to storm sewer to Aqua Chinon Wash	Yes	Yes	(4)
O-9	Aircraft Direct Fueling Station #577	JP-5	S3	Directly to drain to storm sewer to Aqua Chinon Wash	Yes	Yes	(4)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
Aircraft Maintenance Hangers							
N-7	Aircraft Maintenance Hanger #605	JP-5, Lube oil	S2	SW to storm sewers in apron to Aqua Chinon Wash	Minor	Yes	(9)
N-8	Aircraft Maintenance Hanger #606	JP-5, Lube oil	S2	SW to storm sewers in apron to Aqua Chinon Wash	Minor	Yes	(9)
N-9	Aircraft Maintenance Hanger #114	JP-5, Lube oil	S2	SW to storm sewers in apron to Aqua Chinon Wash	Minor	Yes	(9)
N-9	Aircraft Maintenance Hanger #115	JP-5, Lube oil	S2	SW to storm sewers in apron to Aqua Chinon Wash	Minor	Yes	(9)
Q-11	Aircraft Maintenance Hanger #371	JP-5, Lube oil	S2	Variable to interior grated trench drains to Aqua Chinnon Wash	Minor	Yes	(9)
Q-11	Aircraft Maintenance Hanger #463	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Aqua Chinnon Wash	Minor	Yes	(9)
R-11	Aircraft Maintenance Hanger #461	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Aqua Chinnon Wash	Minor	Yes	(9)
R-11	Aircraft Maintenance Hanger #462	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Aqua Chinnon Wash	Minor	Yes	(9)
S-8	Aircraft Maintenance Hanger #295	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Aqua Chinnon Wash	Minor	Yes	(9)
T-8	Aircraft Maintenance Hanger #297	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Bee Canyon Wash	Minor	Yes	(9)
T-9	Aircraft Maintenance Hanger #296	JP-5, Lube oil	S2	Variable to exterior grated trench drains to Aqua Chinon Wash	Minor	Yes	(9)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
Vehicle Maintenance Area							
M-3	Auto Hobby Shop #625	Lube oil, Hydraulic fluid, Misc. oils	S1	SW to open ditch via oil-water separator to Rifle Range Rd. Ditch	Minor	No	
M-9	Auto Organizational Shop #392	Lube oil, Hydraulic fluid, Misc. oils	S1	SW to storm sewer to Aqua Chinon Wash	Minor	No	
N-9	Vehicle Equipment Shop #127	Lube oil, Hydraulic fluid, Misc. oils	S1	SW to storm sewer to Aqua Chinon Wash	Minor	No	
O-2	Auto Exchange Repair Shop #651	Lube oil, Hydraulic fluid, Misc. oils	S1	SW indirect to Rifle Range Rd. Ditch	Minor	No	
P-5	Auto Organizational Shop #5	Lube oil, Hydraulic fluid, Misc. oils	S1	SW indirect to Rifle Range Rd. Ditch	Minor	No	
P-12	Ground Support Equipment Shop #673	Lube oil, Hydraulic fluid, Misc. oils	S1	N to drainage swale indirect to Aqua Chinon Wash	Minor	No	
P-13	Auto Organizational Shop #390	Lube oil, Hydraulic fluid, Misc. oils	S1	SW indirect to Aqua Chinon Wash	Minor	No	
R-5	Auto Organizational Shop #10	Lube oil, Hydraulic fluid, Misc. oils	S1	SW indirect via oil-water separator to Rifle Range Rd. Ditch	Minor	No	
U-7	Auto Organizational Shop #655	Lube oil, Hydraulic fluid, Misc. oils	S1	Directly to floor drains to Bee Canyon Wash	Minor	Yes	Plug floor drains
U-7	Auto Vehicle Maintenance Shop #298	Lube oil, Hydraulic fluid, Misc. oils	S1	SW to storm sewer to Bee Canyon Wash	Minor	No	
U-8	Auto Organizational Shop #388	Lube oil, Hydraulic fluid, Misc. oils	S1	SW to indirect storm sewer to Bee Canyon Wash	Minor	No	
Wash Areas							
N-3	Exchange Car Wash	Oily rinses, Detergents, Cleaning solvents	D	Directly to storm sewer via grease trap to Rifle Range Rd. Ditch	Yes	Yes	(4)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
M-3	Auto Hobby Shop # 626 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	To seepage pit - overflow indirect to Rifle Range Rd. Ditch	Yes	Yes	(1)
M-9	Auto Organizational Shop # 392 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	Directly to drain to Aqua Chinon Wash	Yes	Yes	(1)
N-9	Vehicle Equipment Shop # 127 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	Directly to storm sewer via grease trap to Aqua Chinon Wash	Yes	Yes	(1)
O-2	Auto Repair Shop #651 Steam Cleaning and Washing Area	Oily rinses, Grease	D	To sanitary sewer via oil-water separator	Minor	No	
P-5	Auto Organizational Shop #5 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	SW to storm sewer and indirect to Rifle Range Rd. Ditch	Yes	Yes	(1)
P-12	Ground Support Equipment Shop #673 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	Sanitary sewer via grease trap	Yes	Yes	(1)
P-13	Auto Organizational Shop #390 Wash Rack	Oily rinses, Detergents, Cleaning solvents	D	Directly to drain to Aqua Chinon Wash	Yes	Yes	(1)
R-5	Heavy Equipment Vehicle Wash Area	Oily rinses, Grease	D	SW to storm sewer via oil-water separator to Rifle Range Rd. Ditch	Minor	No	
T-7	Construction Equipment Shop #386 Steam Cleaning Area	Oily rinses, Grease	D	Directly to drain to sanitary sewer system	Yes	Yes	Discontinue operation. Use new auto truck wash area for building #1589
U-7	Public Works Compound Vehicle Washing Area	Oily rinses, Detergents	D	Directly to storm sewer to Bee Canyon Wash	Yes	Yes	(4)
U-7	Public Works Compound Vehicle Washing Area (SE)	Oily rinses, Detergents	D	Directly to drain via grease trap to Bee Canyon Wash	Yes	Yes	Discontinue operation. Consolidate with other PW compound wash area

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
U-7	Auto Vehicle Maintenance Shop #298 Steam Cleaning Area	Oily rinses, Greases	D	Directly to storm sewer via grease trap to Bee Canyon Wash	Yes	Yes	Discontinue operation. Consolidate with proposed washing area at Building #1589
U-8	Storage Building #359 Wash Area	Oily rinses, Greases	D	Directly to storm drain to Bee Canyon Wash	Yes	Yes	(1)
U-8	Auto Organizational Shop #388 Wash Rack	Oily rinses, Greases, Cleaning Solvents	D	SE to storm sewer to Bee Canyon Wash	Yes	Yes	(1)
U-9	Combat Ready Vehicle Storage Wash Area	Oily rinses, Detergents, Cleaning solvents	D	Directly to drain to Aqua Chinon Wash	Yes	Yes	(4)
N-7	ACFT Wash Area Hanger #605	Oily rinses, Detergents	D	To storm sewer via grease trap to Aqua Chinon Wash	Yes	Yes	(1)
N-8	ACFT Hanger #606 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer via grease trap to Aqua Chinon Wash	Yes	Yes	(1)
N-9	ACFT Hanger #114 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer via grease trap to Aqua Chinon Wash	Yes	Yes	(1)
Q-11	ACFT Hanger #463 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer via grease trap to Aqua Chinon Wash	Yes	Yes	(1)
R-11	ACFT Hanger #461 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer to Aqua Chinon Wash	Yes	Yes	(1)
S-9	ACFT Hanger #295 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer via grease trap to Bee Canyon Wash	Yes	Yes	(1)
T-8	ACFT Hanger #297 Wash Area	Oily rinses, Detergents	D	Directly to storm sewer to Bee Canyon Wash	Yes	Yes	(1) (4)
Hazardous and Flammable Storage							
M-9	Corrosion Control Building #130 Paint Shed (5 gal and smaller containers or racks)	Organics Paints Glycolether	SI	SW to storm sewer on 9th St. to Aqua Chinon Wash	No	No	

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
M-9	Hazardous and Flammable Storage #143	Empty	N/A	SW to storm sewer	No	No	
O-4	Hazardous and Flammable Storage #1808 (1 gal and qt. containers/on racks)	Solvents Mops	S1	SW overload - infiltration	No	No	
P-4	Hazardous and Flammable Storage #1507 (5-gal drums on racks)	Paints Adhesive	S1	SW overload infiltration	No	Yes	Store all paints and adhesions within shed
P-4	Hazardous and Flammable Storage #1528 (5 gal and smaller containers on racks)	Paints	S1	W overland - infiltration	No	No	
P-10	Hazardous and Flammable Storage #343	Empty	N/A	Building to be destroyed	No	No	
P-12	Hazardous and Flammable Storage #1789	Training Aids	N/A	Building to be destroyed	No	No	
R-4	Aero Club Facility Paint Shed (5 gal and smaller containers on racks)	Paints, Solvents	S1	SW overland - infiltration	No	No	
R-5	Paint Shed #103	Paints, Solvents	S1	SW overland - infiltration	No	No	
R-5	Battery Shed #1519	Batteries	S1	SW overland - infiltration	No	No	
R-11	Hazardous and Flammable Storage	Guns, Ammunition	N/A		No	No	

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
R-11	MAG 13 Paint Sheds (1-gal and 1-qt containers)	Paints, Solvents	S1	S overland - infiltration	Minor	Yes	Relocate paint shed away from storm sewer
S-5	Hazardous Material Storage Locker (1 gal jugs on racks)	Unidentified liquid mattresses	S1	SW overland - infiltration	No	No	
T-6	Public Works Pesticide Storehouse (30-, 10-, 5- & 1-gal drums on racks)	Organics, Insecticides	N/A	Contained	No	No	
T-6	Hazardous and Flammable Storage #1596 (5-& 10-gal drums on racks)	Paints, Roofing Compound	S1	SW overland - infiltration	Minor	Yes	Drums stored outside building should be moved inside on pallets
T-7	Public Works Capaciter and Transformer Storage Area (15 oil-filled transformers on concrete pad)	Transformer oil	S2	SW to storm sewer to Bee Canyon Wash	Minor	Yes	Construct curbing around concrete pavement and provide drain outlet
U-6	Hazardous and Flammable Storage #534 (5-gal drums on pallets)	HCL	S1	SW overland - infiltration	Minor	Yes	Construct curbing around entrance way
U-6	Hazardous Storage #493 (5-and 10-gal drums on pallets and racks)	Herbicides	S1	W overland - infiltration	Minor	Yes	Construct curbing around entrance way
U-7	Hazardous and Flammable Storehouse #320 (5-and 10-gal drums on racks)	Organics, Solvents Trichloroethylene	S1	Various inside building	Minor	Yes	Construct curbing around loading entrance

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
U-9	Hazardous and Flammable Storehouse #325	Empty	S1	SW overland - infiltration	No	No	
U-9	Hazardous and Flammable Storage #357 (55-gal drums)	Cleaning Compound Solvents	S1	SW to storm sewer to Bee Canyon Wash	Minor	Yes	Construct curbing around loading dock
Miscellaneous							
P-6	Crash Crew Burn Pit	Waste oils	S3	W to storm sewer to Bee Canyon Wash	Yes	Yes	(8)
U-5	Bee Canyon Oil-Water Separator	Misc. waste oils	S2	Directly to Bee Canyon Wash	Yes	Yes	(2)
V-10	Aqua Chinon Oil-Water Separator	Misc. waste oils	S2	Directly to Aqua Chinon Wash	Yes	Yes	(2)
N-8	Fixed Aircraft Start System Building #643 (Compressor Bleedoff)	Waste oils, Greases	S2	Directly to storm sewer via oil-water separator to Aqua Chinon Wash	Minor	Yes	(1)
N-10	Test Cell Building #658	JP-5	S1	Directly to floor drain to Aqua Chinon Wash	Minor	Yes	(1)
Q-11	Test Cell Building #447	JP-5	S1	Directly to floor drain to Aqua Chinon Wash	Minor	Yes	(1)
M-9	Corrosion Control Hanger #130 Water Wall Paint Spray Booth	Paints	D	Directly to storm sewer to Aqua Chinon Wash	Minor (however, not presently in operation)	Yes	(1)
T-6	Public Works Shop #370 Water Wall Paint Spray Booth	Paints	D	Directly to storm sewer to Bee Canyon Wash	Minor - if reactivated	None - unless reactivated	

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
U-8	Corrosion Control Building #359 (Paint shop and 2 degreasing tanks)	Paints, Trichloroethylene	S3	Various in building	Minor	No	
U-9 & U-10	Refueling Vehicle Maintenance Facility #672 - Vehicle Fuel Tank Cleaning Area	JP-5 JP-4 AV-Gas	D	Directly to storm sewer via oil-water separator to Aqual Chinon Wash	Yes	Yes	(1)
U-9, U-10	Refueling Vehicle Maintenance Facility #672 - Vehicle Storage Area	JP-5 JP-4 AV-Gas Misc. oil Greases	S3	W to storm sewer to Aqua Chinon Wash	Yes	Yes	(4)
Various Locations	55-gal drum heating oil (1 drum mounted horizontally on rack)	Heating oil	S2	Various - infiltration	Minor	No	
M-3	55-gal drums NE of Building #626 and Vehicle Maintenance Area Building #625	Lube oil Grease	S2	SW to oil-water separator indirect to Rifle Rage Road Ditch	Minor	Service	Pump out oil-water separator regularly
M-9	55-gal drum storage NE of Building #392	Lube oil, Misc. oil Solvents Hydraulic fluid	S2	W and SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(5)(6)
M-9	55-gal drum storage SE of Building #602	Methyl chloroform	S2	SW overland - infiltration	Yes	Yes	(7)
M-9	(8) 55-gal drums W of Building #130	Cleaning compound, Misc. oils	S2	W to storm sewer to Aqua Chinon Wash	Yes	Yes	(7)
O-8	(3) 55- gal drums SW of Building #1793	Misc. oils	S2	SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(5)(6)
P-5	55- gal drum storage NE of Building #5	Lube oil, Hydraulic fluid, Misc. oils	S2	W overland indirect to Rifle Range Road Ditch	Yes	Yes	(5)(6)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
P-5	Vehicle and generator storage area SW and NE of Building #5	MoGas, Misc. oils, Grease	S2	SW to storm sewer or indirect to Rifle Range Road Ditch	Minor	Yes	(9)
P-12	55-gal drum storage SW of Building #673	Lube oil, Cleaning compounds	S2	S to low spot-infiltration	Yes	Yes	(5)(6)
P-12	Vehicle storage area E of Building #673	Misc. oils, Greases	S2	NE indirect via open ditch to Aqua Chinon Wash	Yes	Yes	(4)
P-12	55-gal drum storage at unloading Rack #388	Lube-oil, Hydraulic fluid	S2	SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(5)(6)
R-4	55-gal drum storage SW of Building #10	Lube oil, Hydraulic fluid, Freon	S2	W and SW indirect to Rifle Range Road Ditch	Yes	Yes	(5)(6)
R-5	Vehicle storage area SW of Building #10	Lube oil, Grease	S2	SW to oil-water separator to Rifle Range Road Dtich	Minor	No	
R-11	55-, 10-and 5-gal drum storage between Buildings #454 and 456	Misc. oils, Paints, Solvents, Freon	S2	E to storm sewer to Bee Canyon Wash	Yes	Yes	(5)(6)
R-11	(10) 55-gal drums NE of Building #461	Lube oil	S2	SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(7)
R-11	(6) 55-gal drums S of Building #1684	Lube oil	S2	SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(7)
S-4	(12) 55-gal drums and (12) 10-gal containers SW corner Tank Farm #2	Waste oil, Germicidal disinfectants	S2	W to storm sewer to Bee Canyon Wash	Yes	Yes	(7)
S-4	(6) 55- gal drums SW of Building #29	Lube oil, Waste oil	S2	SW overland - infiltration	Yes	Yes	(7)
S-8	55- gal drum storage N of Hanger #295	Lube oil, Hydraulic fluid, Cleaning compound	S2	Directly to storm sewer to Aqua Chinon Wash	Yes	Yes	(5)(6)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
T-7	55-gal drum storage area 500-gal Bowser NE of Building #386	Lube oil, Waste oil	S2	W to storm drain to sanitary sewer system	Yes	Yes	(5)(6)(7)
U-6	(5) 55-gal drums NW of Building #529	Lube oil, Hydraulic fluid	S2	SW overland - infiltration	Yes	Yes	(7)
U-7	(10) 55-gal drums on Building #298 wash pad	Lube oil, Waste oil	S2	Directly to storm drain to Bee Canyon Wash	Yes	Yes	(7)
U-7	55-gal drum storage area NE of Building #317	Paints, Petroleum distillery, Cleaning solvents	S2	SW to storm sewer to Bee Canyon Wash	Yes	Yes	(5)(6)
U-7	55-gal drum storage area NW of Building #320	Lube oil, Hydraulic fluid, Cleaning solvents	S2	NE overland indirect via swale to Bee Canyon Wash	Yes	Yes	(7)
U-7	55-gal drum storage S of Building #534	Lube oil, Cleaning compound, Hydraulic fluid	S2	E and SW to storm sewer to Bee Canyon Wash	Yes	Yes	(7)
U-7	Corrosion control rack at Building #655	Undercoating, Lube oil, Hydraulic fluid	S2	Directly to storm drain to Bee Canyon Wash	Yes	Yes	(4)
U-8	55-gal drum storage N and W of Building #655 Dempsey Dumpster	Lube oil, Waste oil, Hydraulic fluid	S2	SW to drainage swale to storm sewer to Bee Canyon Wash	Yes	Yes	(7)
U-8	55-gal drum storage NE of Building #655	Undercoating, Waste oil, Cleaning compound	S2	SW to storm sewer to Bee Canyon Wash	Yes	Yes	(5)(6)
U-8	(12) 55-gal drums NE of Building #388	Lube oil, Hydraulic fluid	S2	S to storm sewer to Bee Canyon Wash	Yes	Yes	(7)
U-8	(5) 55-gal drums E of Building #359	Waste oil, Lube oil, Hydraulic fluid, Solvents	S2	NW to storm sewer to Bee Canyon Wash	Yes	Yes	(7)

SPCC Key Map Quadrant	Activity Description	Item Stored or Handled	Spill or Discharge*	Path to Waterway	Potential Impact	Improvements Required	Corrective Measures-Improvements (see notes)
U-9	(11) 55-gal drums E of Building #631	Lube oil, Waste oil	S2	SW overland indirect to Bee Canyon Wash	Yes	Yes	(7)
U-9	55-gal drum storage in Salvage Yard	Waste oils, Misc. oils, Hydraulic fluid, Lube oil	S2	W to drainage swale to Bee Canyon Wash	Yes	Yes	(5)(6)
U-9	55-gal drum storage SW Building #1749	Waste oils, Lube oil	S2	SW to storm sewer to Aqua Chinon Wash	Yes	Yes	(5)(6)
U-9	Leak in storm sewer line SE corner of Combat Ready Vehicle Storage Compound	Sewage containing oils and grease	D	SE overland to Aqua Chinon Wash	Yes	Yes	Repair leak in sewer line.

*S = Potential Spill Source (1 = 0-10 gal, 2 = 10-100 gal, 3 = 100-1000 gal, 4 = greater than 1000 gal).
D = Active Source of Discharge

1. Environmental Pollution Abatement Project P-325 should be implemented.
2. Inspect and provide necessary maintenance to insure proper operation.
3. Construct impervious berm or curbing around facility and direct drainage to sump or oil-water separator with sufficient capacity to contain maximum spill.
4. Provide an oil water separator system to treat discharges prior to release into waterways.
5. Provide centralized 55-gal drum storage with secondary containment at strategic points around the base. Issue memorandum to tenants on base requiring stricter drum inventories.
6. Provide shelter over facility to eliminate rain water infiltration.
7. Position storage containers and/or drums, within pens with secondary containment.
8. Construct permanent concrete crash crew pit with secondary containment and oil-water separator.
9. Discontinue spill washdown operations unless emergency situation exists - contain and control spills with absorbent materials.
10. Provide adequate lighting at facility.

CLF-CO1-[illegible]-AZ-0006

M60050.000899 M60050.000899
MCAS El Toro

DUPLICATE

Environmental Quality Division
Naval Facilities Engineering Command
Alexandria, Virginia

EXTRACTS

Hazardous Materials/Hazardous Waste Engineering Study

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

☆ The document does not identify hazardous waste storage in the vicinity of the current Building 856. Building 856 had not been constructed at the time the document was prepared.

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

WESTON
DESIGNERS CONSULTANTS

Table 2.5

Aggregate Annual Hazardous Waste Generation Rates
DPDO El Toro

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

[1] Industrial wastes have been included in this list. Since they have not been tested, a conservative RCRA hazard category has been assigned.

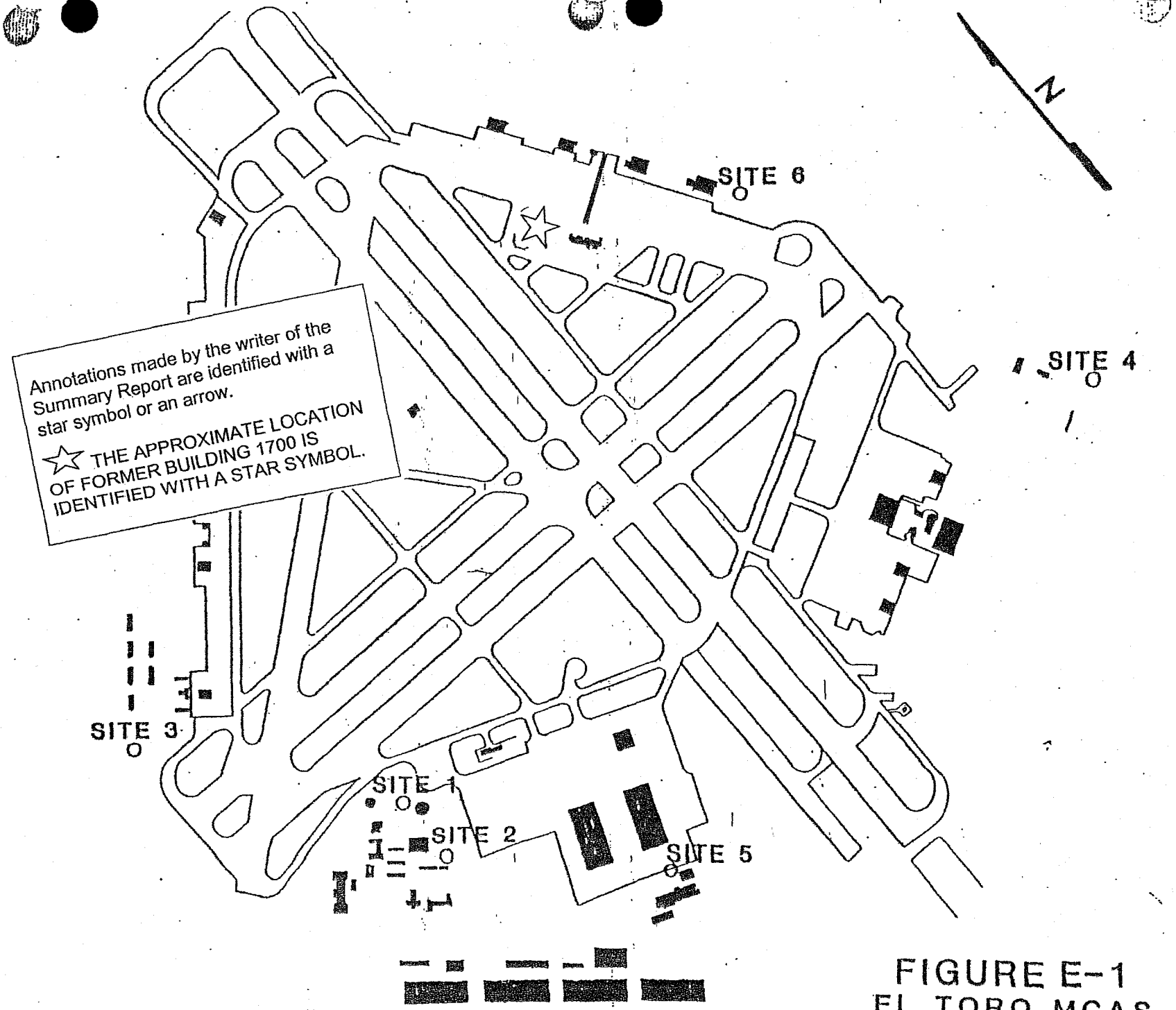
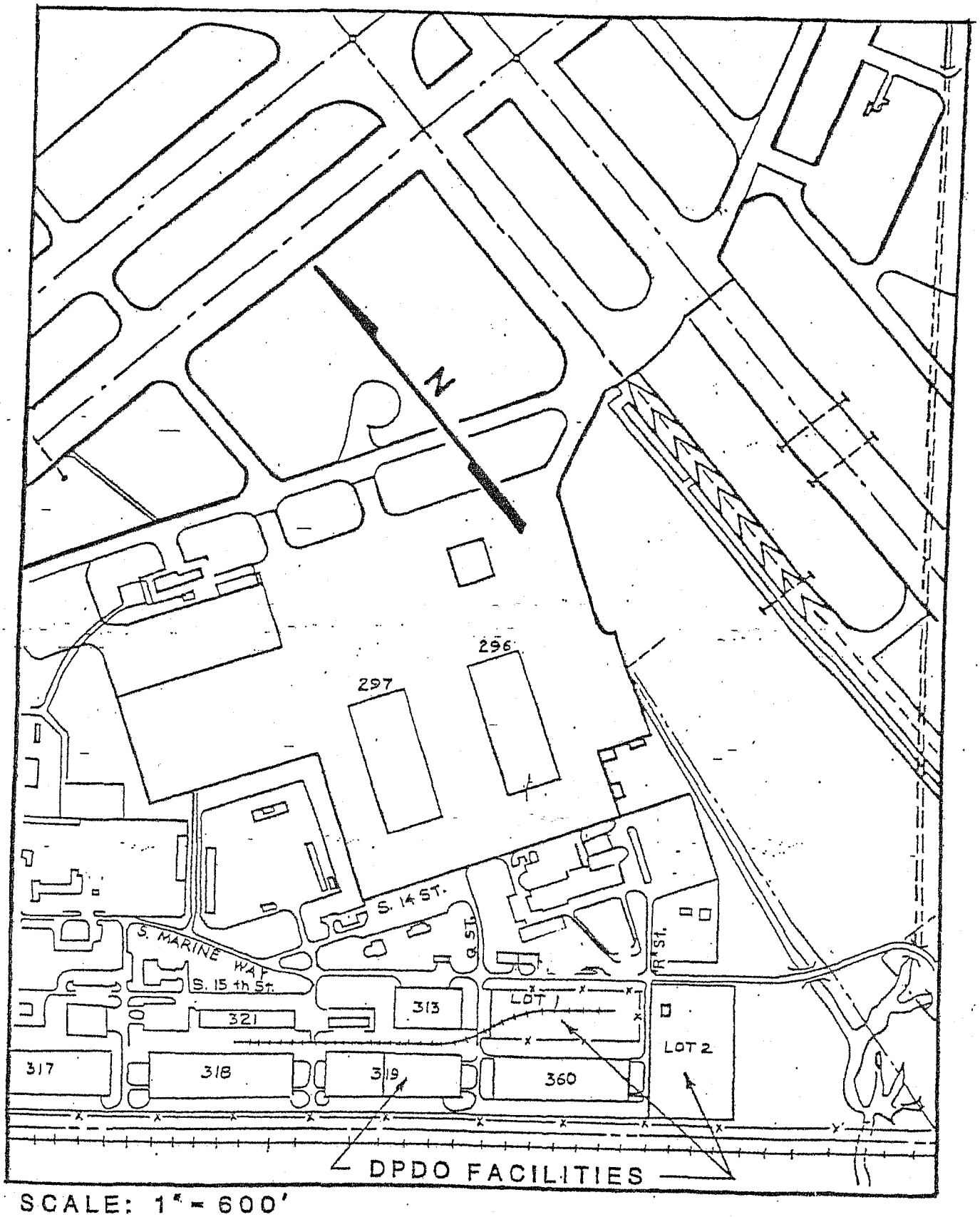
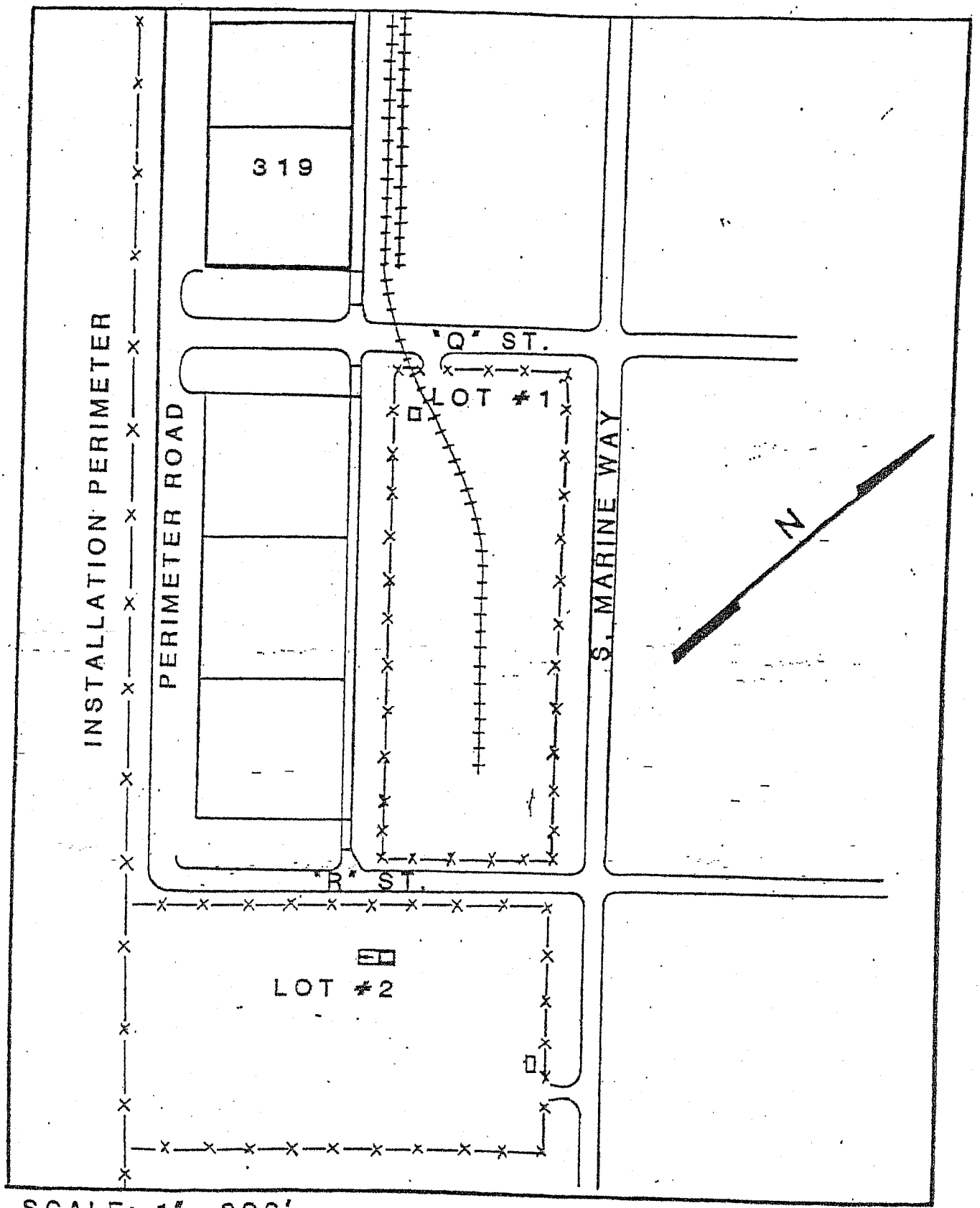


FIGURE E-1
EL TORO MCAS
HW STORAGE AREAS



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

M60050.000776 (1-2)
4/17/89 TDP ~~776~~

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

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

☆

The April 1989 List does not identify Building 856.

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	

STATE OF CALIFORNIA

GEORGE DEUKMEJIAN, Governor

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

M60050.001130

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

☆ The June 1989 Letter does not identify Building 856.

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

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

EXTRACTS

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.

5.34 DRAINAGE BASIN 34

This drainage basin has an area of about 15 acres. This is an agricultural area and there were no industrial pollutants or activities observed. For agricultural operations, a non-point source survey and monitoring program is recommended to assess potential contributions of pollutants in storm water run-off.

5.35 DRAINAGE BASIN 35

This drainage basin comprises some buildings in Area 13 and part of the flight line. It has an area of about 8 acres. There are no industrial buildings or industrial activities occurring in this area. A more detailed discussion is provided in Section 5.38, Flight Line.

5.36 DRAINAGE BASIN 36

This drainage comprises some buildings in Areas 17 and 22. It has a total area of about 49 acres.

5.36.1 Buildings of Limited Concern

The following building does not use, handle, transport or store quantities of industrial materials nor does it generate significant amounts of liquid or solid pollutants and does not appear to be of concern to the quality of storm water discharge:

TABLE 5-36
BASIN 36
BUILDINGS OF LIMITED CONCERN

BLDG #	DESCRIPTION	TENANT
244*	Historical Collection	Training

* 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 5-37
BASIN 37
BUILDINGS OF LIMITED CONCERN

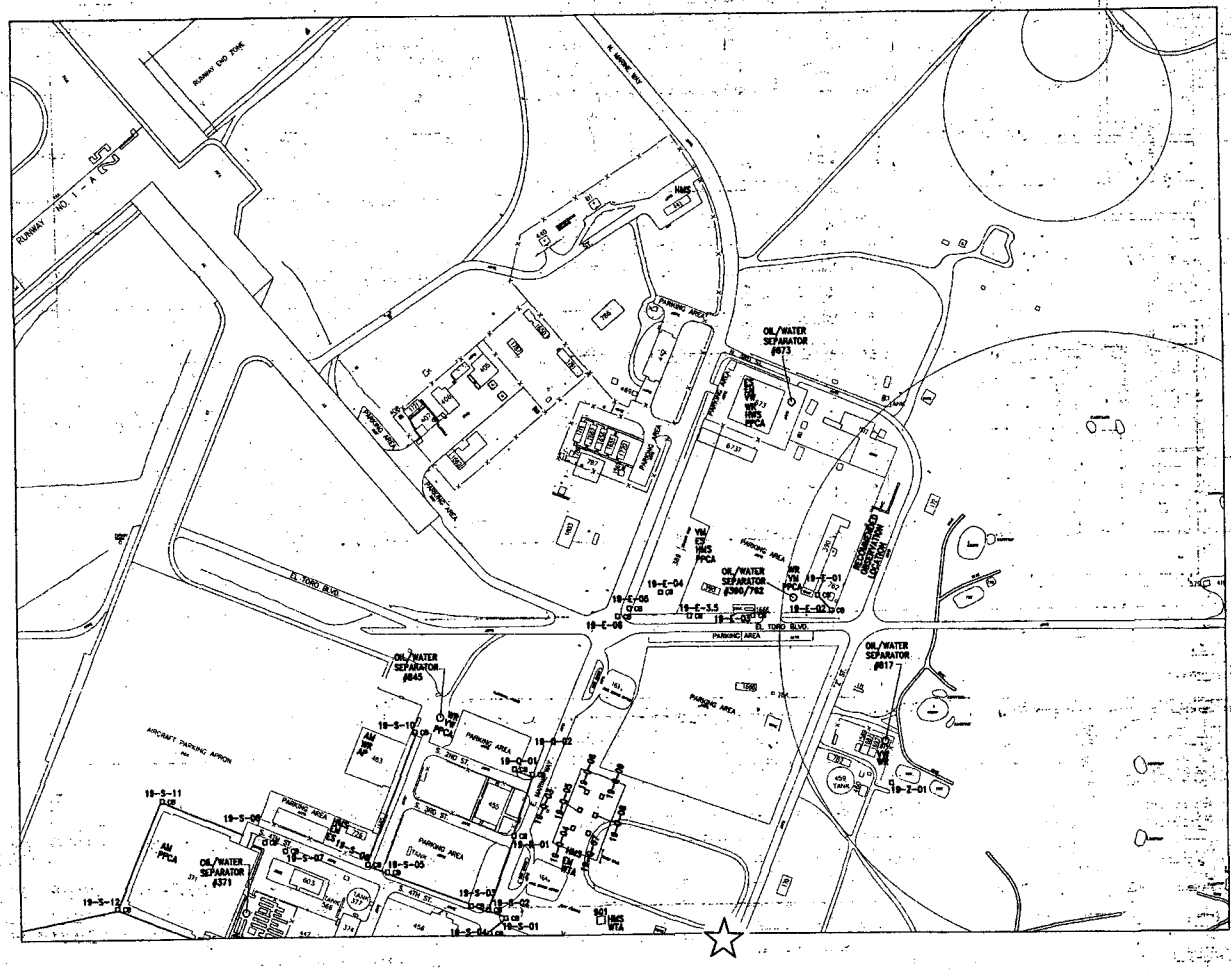
BLDG #	DESCRIPTION	TENANT
459*	Storage Tank/Nonpotable	MWR-Rec
460*	Water Supply Building/Nonpotable	MWR-Rec
469	Equipment Storage Building	MALS-11
566	Storage Tank/Nonpotable Water	Installation
611*	Missile Magazine	Station Ordnance
711	Power Ck Pad w/out Sound Suppression	Vacant
712	Power Ck Pad w/out Sound Suppression	Vacant
728*	Aircraft Line Operations Building	HMM-165
782*	Golf Course Maintenance Building	MWR-Rec
784	DRMO Field Office Lot #2	DRMO
785*	Aviation Maintenance Building	VMFAT-101
786*	Aviation Armament	MALS-11
787*	NBC Defense Training	MWHS-3
789*	Sewage Monitoring Station	Installation
816	Computer Van Pad	MAG-11
826	Inert Weapon/Training Building	FREST/VMFAT-101
832*	NBC Gas Chamber	MWHS-3
847	Pumphouse	VMFAT-101
848	Utility Building	VMFAT-101
849	Water Storage Tank	VMFAT-101
854*	Electronics Communications Maint. Shop	MAG-11
	Paint Spray Booth	MAG-11
856	General Storage Shed	MALS-11
	Sentry Building	Security
	Public Toilet	MAG-11

TABLE 5-38

BASIN 37

SUMMARY OF BMPs

BLDG #	BASIN	BUILDING DESCRIPTION	TENANT	Concern Level	BMP STATUS	BMP #	BMP Description
856	37	General Storage Shed Sentry Building Public Toilet	MALS-11 Security MAG-11	Limited			No Additional BMPs Recommended
868	37	Sentry House #6	Security	Limited			No Additional BMPs Recommended
870	37	Sentry House #8	Security	Limited			No Additional BMPs Recommended
895	37	Operations Trainer Facility	Station	Limited			No Additional BMPs Recommended
901	37	Haz/Flam Storehouse	Environment	Concern	Existing Existing Existing	009 112 065	Personnel Training Spill Prevention, Control, Countermeasures Plan Place Spill Kit in Area
916	37	Haz/Flam Storehouse	HMM-165	Concern	Existing Existing Existing	009 112 065	Personnel Training Spill Prevention, Control, Countermeasures Plan Place Spill Kit in Area
917	37	Haz/Flam Storehouse	HMM-164	Concern	Existing Existing Existing	009 112 065	Personnel Training Spill Prevention, Control, Countermeasures Plan Place Spill Kit in Area
1650	37	Aviation Armament	MALS-11	Previous			No Additional BMPs Recommended
1655	37	Squadron Headquarters	NBC	Limited			No Additional BMPs Recommended



'MCAS' EL TORO - AREA 19

SCALE: 1"=150'-0"

ANNOTATIONS MADE BY THE WRITER OF THE SUMMARY REPORT ARE IDENTIFIED WITH A STAR SYMBOL OR AN ARROW.

☆

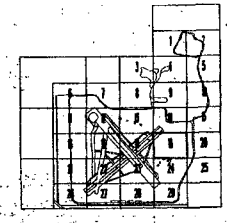
THE APPROXIMATE LOCATION OF TAA 856 IS IDENTIFIED WITH A STAR SYMBOL.

REVISIONS

SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED

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
OWS	-	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

1"=150'-0" SCALE 150 0 150 300 FEET

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

IEM
INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.

PROJECT NO.

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
EL TORO — CALIFORNIA
MARINE CORPS AIR STATION — EL TORO, CA.

"MCAS" EL TORO

AREA 19 - STORM DRAINS

SIZE: D

STWTRAREA19.PDF

F:\TEDIVEL_DRAV\TED Mon Jun 9 14:31:13 1997 by Maria E.

Final

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

August 1994

EXTRACTS

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

TABLE 6-1
GENERATORS OF HAZARDOUS WASTE
AT MCAS EL TORO

Aero Club
Armory
Auto Hobby Shop
Combat Service Support Detachment 14 (CSSD 14)
Facilities Maintenance Department Shops, Bldg. 1601 (FMD)
Headquarters & Headquarters Squadron 38 (H&HS 38)
Marine Aerial Refueler/Transport Squadron 352 (VMGR 352)
Marine Air Control Group 38 (MACG 38)
Marine Aircraft Group 46 (MAG 46)
Marine Aircraft Group 46 (MAG 46), Fixed Wing
Marine Aircraft Group 46 (MAG 46), Helo Mals 11
Marine All Weather Fighter Attack Squadron 121 (VFMA (AW) 121)
Marine All Weather Fighter Attack Squadron 225 (VFMA (AW) 225)
Marine All Weather Fighter Attack Squadron 242 (VFMA (AW) 242)
Marine Aviation Logistics Squadron 11 (MALS 11), Air Frames
Marine Aviation Logistics Squadron 11 (MALS 11), Avionics
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics
Marine Aviation Logistics Squadron 11 (MALS 11), GSE North
Marine Aviation Logistics Squadron 11 (MALS 11), Ordnance
Marine Aviation Logistics Squadron 11 (MALS 11), Power Plant
Marine Aviation Logistics Squadron 11 (MALS 11), Supply
Marine Fighter Attack Squadron 314 (VFMA 314)
Marine Fighter Attack Squadron 323 (VFMA 323)
Marine Fighter Attack Training Squadron 101 (VFMAT 101)
Marine Wing Headquarters Squadron 3 (MWHS 3)
Marine Wing Support Squadron 373 (MWSS 373), Headquarters
Marine Wing Support Squadron 373 (MWSS 373), Refuelers
Marine Wing Support Squadron Utilities (MWSS Utilities)
Maytag Aircraft Corporation
MOD Team
Morale, Welfare & Recreation Department (MWR), Auto #1
Morale, Welfare & Recreation Department (MWR), Golf Course
Motor Pool (G-4) Bldg. 770
Photolab
Squadron Operations & Maintenance Squadron (SOMS), Headquarters
Squadron Operations & Maintenance Squadron (SOMS), Maintenance
Squadron Operations & Maintenance Squadron (SOMS), Recovery
Supply

▲ HAZARDOUS MATERIALS STORAGE

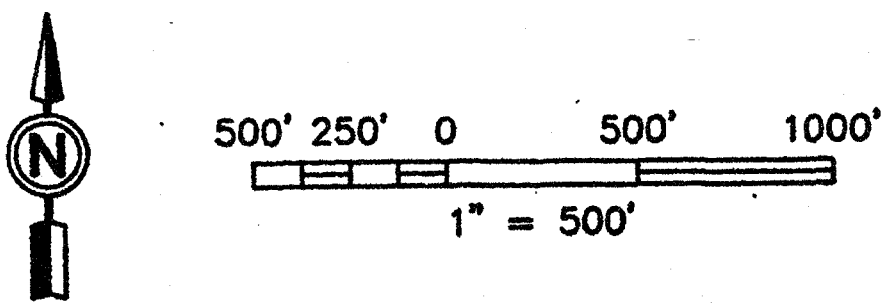
● HAZARDOUS WASTE ACCUMULATION POINT

■ ONE YEAR PERMITTED HAZARDOUS WASTE STORAGE AREA

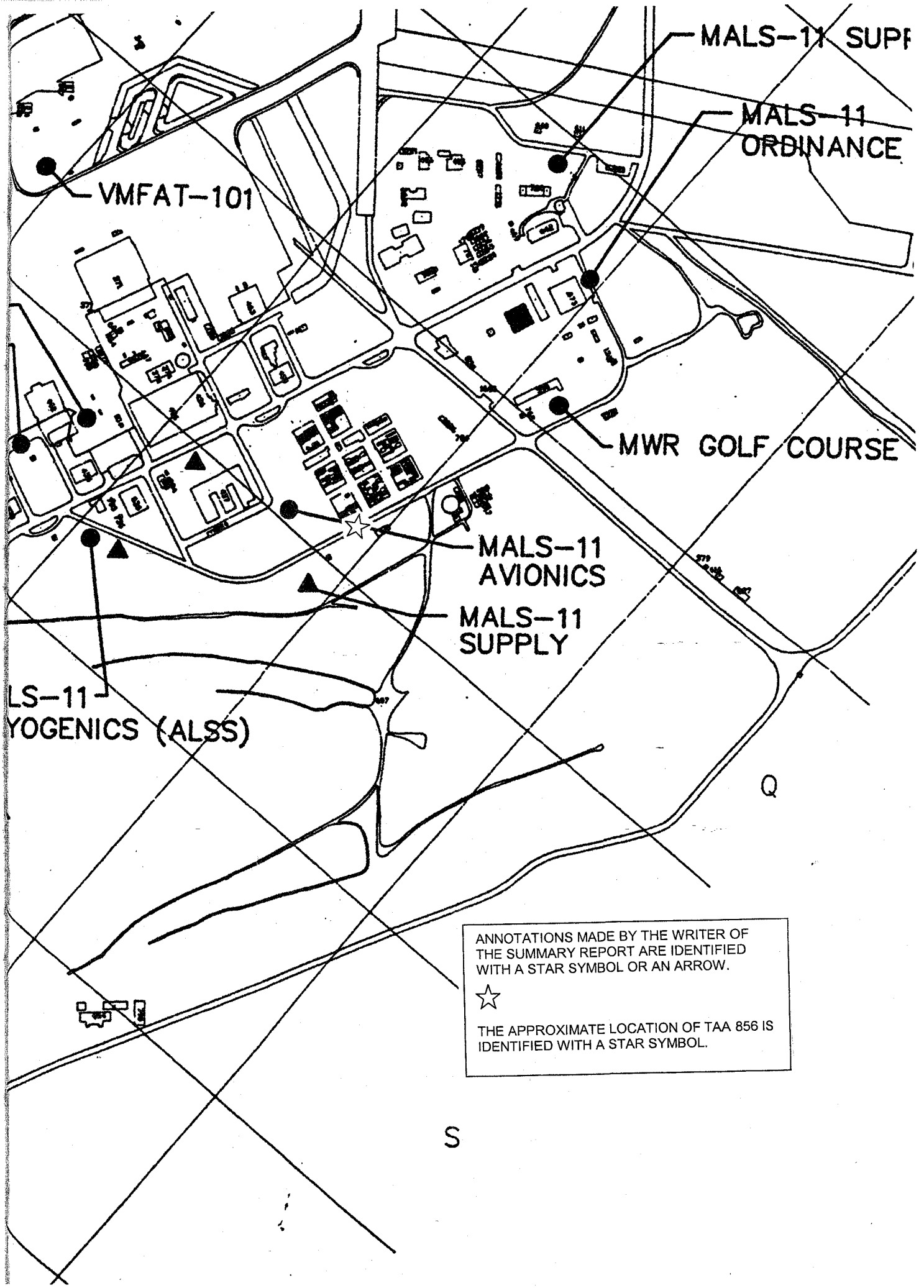
MCAS El Toro
Santa Ana, California

HAZARDOUS WASTE ACCUMULATION POINTS AND HAZARDOUS MATERIAL STORAGE LOCATIONS

NOVEMBER 5, 1993

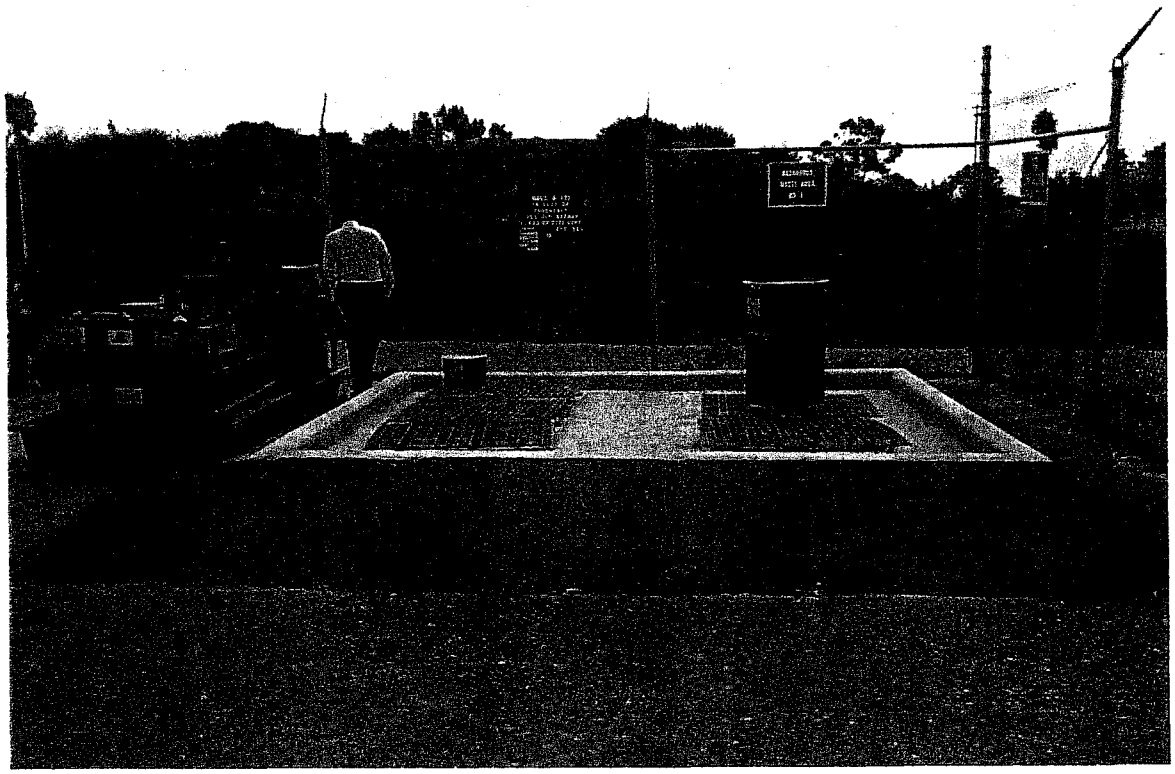


Science Applications International Corporation
An Employee-Owned Company

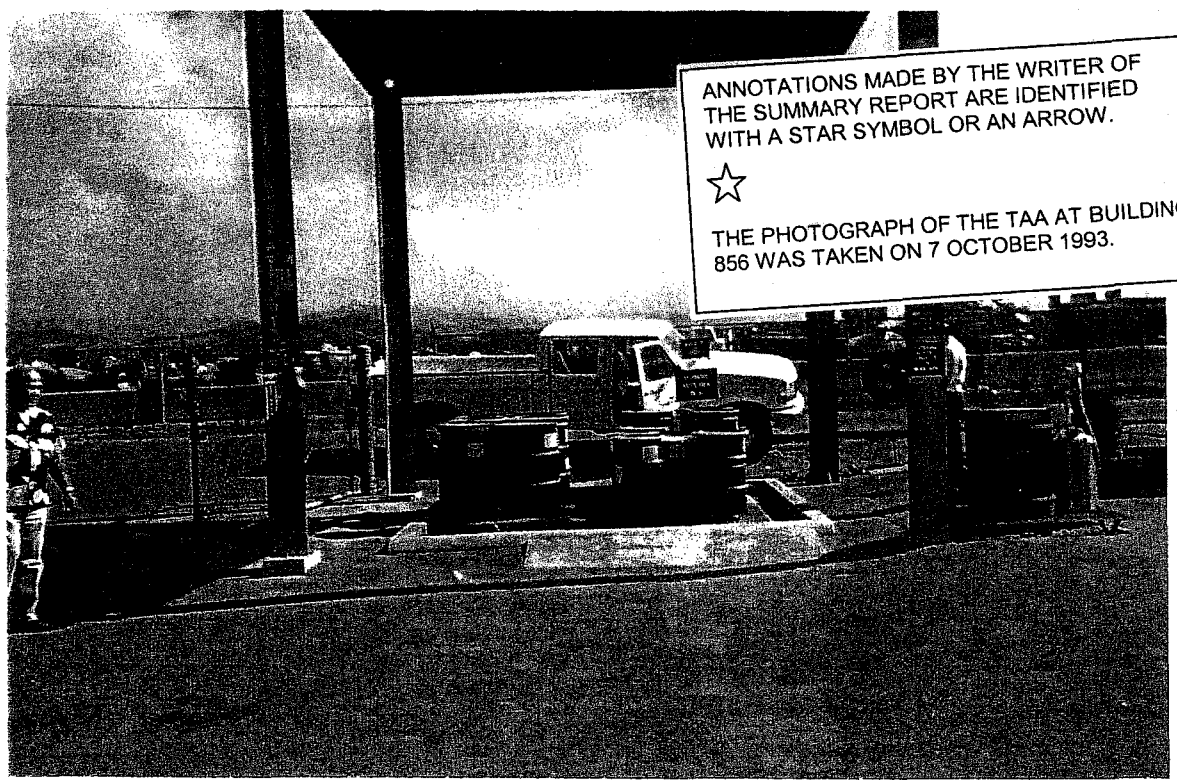

MALS-11 SUPP
MALS-11
ORDINANCE
VMFAT-101
MWR GOLF COURSE
MALS-11
AVIONICS
MALS-11
SUPPLY
LS-11
YOGENICS (ALSS)
Q
S
ANNOTATIONS MADE BY THE WRITER OF THE SUMMARY REPORT ARE IDENTIFIED WITH A STAR SYMBOL OR AN ARROW.
THE APPROXIMATE LOCATION OF TAA 856 IS IDENTIFIED WITH A STAR SYMBOL.

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	O4
MAG-46 Fixed Wing	296	T9
MAG-46 Helo Mals-46	295	S8
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 Ordinance	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

One Year Permitted Hazardous Waste Storage Areas		
Unit	Bldg #	Coordinates
Building 673T3	673T3	C5



Marine Aviation Logistics Squadron 11 (MALS 11), Avionics Bldg 856



ANNOTATIONS MADE BY THE WRITER OF THE SUMMARY REPORT ARE IDENTIFIED WITH A STAR SYMBOL OR AN ARROW.

☆

THE PHOTOGRAPH OF THE TAA AT BUILDING 856 WAS TAKEN ON 7 OCTOBER 1993.

Marine Aviation Logistics Squadron 11 (MALS 11), Ordnance Bldg 673

SOUTHWESTNAVFACENGCOM
CODE 06CC.LMH
SAN DIEGO, CA 92101

Extracts from MCAS El Toro Property Records, Building Guides, and Historical Facility Maps

BLDG

C L A S S 2 P R O P E R T Y R E C O R D

TIME: 08:25:33

DATE: 95/09/16

(004) UIC..M60050
MCAS EL TORO SANTA ANA CA

(001) PR NO.....203256
(005) FACILITY NO..856
(106) SPEC AREA....

(604) EXCESS CODE..
(605) EXCESS DATE..

PR LAST UPDATED....13 SEP 1995

L O C A T I O N

(101) COUNTRY..US UNITED STATES
(102) STATE....06 CALIFORNIA
(103) COUNTY...059 ORANGE
(104) CITY.....1155 EL TORO
(107) MAP GRID.Q-12

GENERAL I N F O R M A T I O N

(007) ACTION.....CORRECTION
(008) FAM HOUSING....NO
(009) EE DATE.....
(011) PR REVIEW DATE.16 AUG 1990
(010) FACILITY NAME..
SENTRY BOOTH

A C Q U I S I T I O N

(201) ESTATE.....11 MCON
(202) ACQ CONTRACT...N6247484C4102
(203) ACQ DATE.....13 SEP 1988
(204) GOVT COST..... $555,049
(CONST, DESIGN, OVERHEAD & OTHER)
(205) APPR/EST.....
(206) APPR/EST DATE..
(207) LAND CCN.....91140
(014) NATO JFAI.....

I N G R A N T S

(208) DOD INSTL.....
(209) RENT PAID.....
(210) REF PR NO.....
(211) IG EFF DATE....

(212) IG EXP DATE....
(213) IG MAX TERM....
(233) IG EFD CONTR...
(234) IG LESSOR NAME.

M E A S U R E M E N T S

		ENGLISH	METRIC	
(301)	LENGTH....	122 FT		37 M
+(302)	WIDTH.....	35 FT	+	10 M
(303)	HEIGHT....	14 FT		4 M
+(304)/(308)	AREA/UM...	3,624 SF	+	336 m2
(305)	STORIES...	01		
(307)	IRREGULAR.	YES		

C O N S T R U C T I O N

(401) YEAR BUILT.....1988
(402) CONSTRUCTION TYPE..PERMANENT
(403) YEAR IMPROVED.....

(404) ABMP CODE.....
(409) CURR PROJ ID...P441
(411) ORIG PROJ ID...

(410) HISTORIC IND...

M A I N T E N A N C E

(701) MAINT UIC..M60050 (702) PRIME USE....73075 (703) MFC...4 USMC

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

☆ Property Record for Building 856.

FM28P/27MAR83

BLDG C L A S S 2 P R O P E R T Y R E C O R D

TIME: 08:25:33 DATE: 95/09/16

(C-O-N-T-I-N-U-A-T-I-O-N)

(004) UIC..M60050
MCAS EL TORO SANTA ANA CA

(001) PR NO.....203256
(005) FACILITY NO..856
(106) SPEC AREA....

(604) EXCESS CODE..
(605) EXCESS DATE..

PR LAST UPDATED....13 SEP 1995

S T A T U S / U T I L I Z A T I O N

(502) CATEGORY CODE...44135 (501) USE..GENERAL STORAGE SHED
(510) USE UIC.....M09111.....MALS 11
(511) USE LAST UPDATED.13 SEP 1995

ENGLISH	AREA/SF*	OTHER/TC	ALT/SH	DEF CODES
+ADEQ (515)	.....1,608.00	(516)	(517)	(524)
SBST (518)		(519)	(520)	(525)
INAD (521)		(522)	(523)	(526)
TOTAL	1,608.00			

METRIC	AREA/m2*	OTHER/m3	ALT/m	
+ADEQ (515)	.....149.39	(516)	(517)	(524)
SBST (518)		(519)	(520)	(525)
INAD (521)		(522)	(523)	(526)
TOTAL METRIC	149.39			

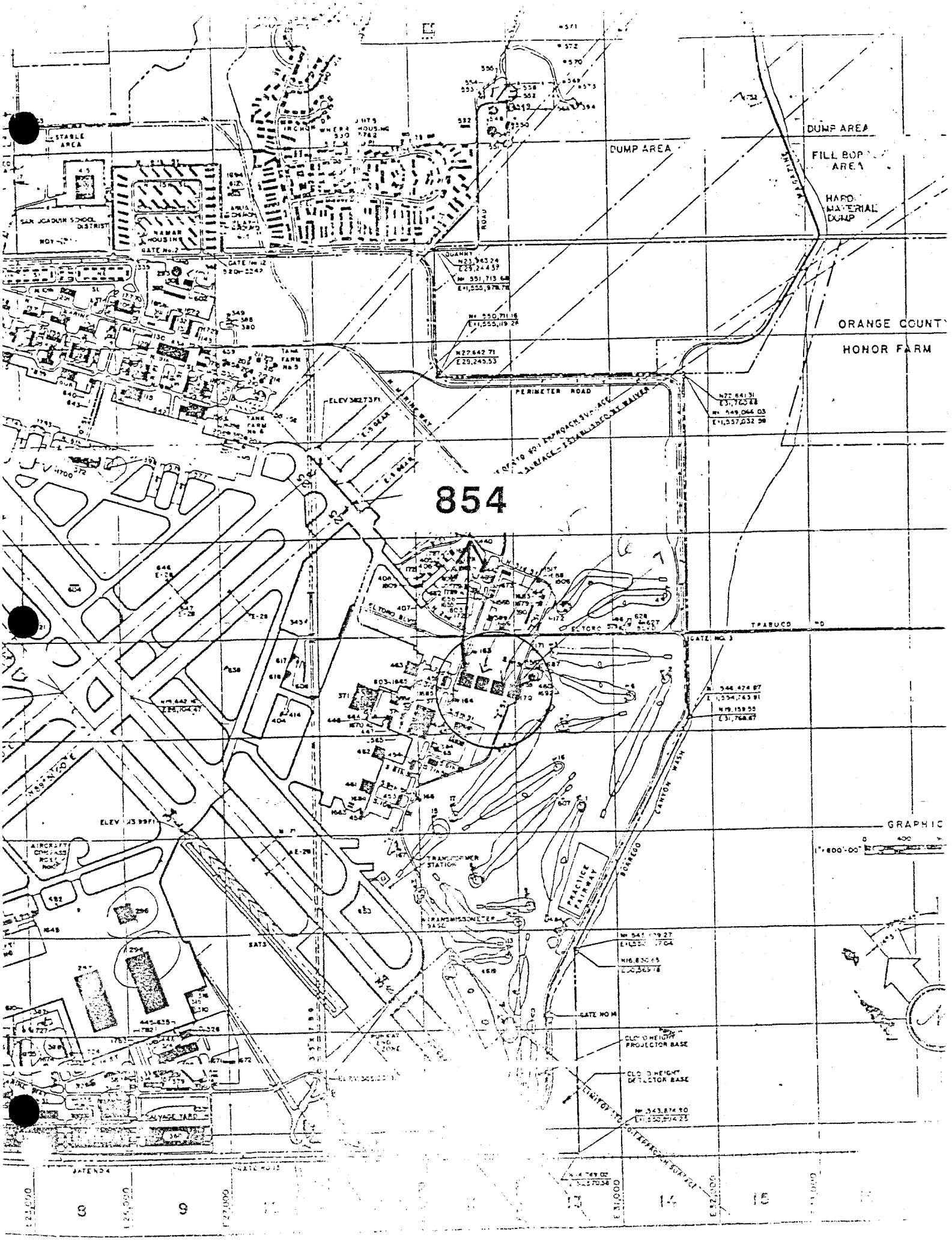
---

(502) CATEGORY CODE...73075 (501) USE..PUBLIC TOILET
(510) USE UIC.....M09111.....MALS 11
(511) USE LAST UPDATED.13 SEP 1995

ENGLISH	AREA/SF*	OTHER/PN	ALT/	DEF CODES
+ADEQ (515)	.....2,016.00	(516)	(517)	(524)
SBST (518)		(519)	(520)	(525)
INAD (521)		(522)	(523)	(526)
TOTAL	2,016.00			

METRIC	AREA/m2*	OTHER/PN	ALT/	
+ADEQ (515)	.....187.29	(516)	(517)	(524)
SBST (518)		(519)	(520)	(525)
INAD (521)		(522)	(523)	(526)
TOTAL METRIC	187.29			

FM28P/27MAR83


854
DUMP AREA
DUMP AREA
FILL BOP AREA
HARD MATERIAL DUMP
ORANGE COUNTY
HONOR FARM
STABLE AREA
SAN JOAQUIN SCHOOL DISTRICT
NAMAR HOUSING
GATE No. 2
QUARRY
TANK FARM No. 5
TANK FARM No. 6
PERIMETER ROAD
ELTORO BLVD
TRABUCO RD
GATE NO. 3
CANYON WASH
GRAPHIC
TRANSFORMER STATION
TRANSMISSOMETER BASE
PRACTICE FAIRWAY
GATE NO. 4
CLOUD HEIGHT PROJECTOR BASE
CLOUD HEIGHT DETECTOR BASE
AIRCRAFT OPERATIONS
AVIONICS YARD
8
9
10
13
14
15

El Toro Building Guide

BLDG	GRI	DESCRIPTION	TENANT	CATCO	CAC	SIZE
844	P4	Comm/Elect Facility	MWCS-38	21710	EBBO	10176
845	Q12	Washrack Util Bldg	VMFAT-101	89009	EAPO	832 SF
847	Q11	Pumphouse	VMFAT-101	84320	EHEO	925 SF
848	Q11	Utility Bldg	VMFAT-101	89077	EAPO	683 SF
849	Q11	Water Storage Tank	VMFAT-101	84330	EAUO	260000
850	P6	Crash Crew Burn Pit	Crash Crew	17950	ECFO	1 EA
851	P6	Crash Crew Burn Pit	Crash Crew	17950	ECFO	1 EA
852	O2	BEQ Boiler Bldg	Installation	81209	EBPO	2576 SF
853	U7	Loading Ramp	Supply	85115	EDAO	1 EA
854	Q12	Electronics Comms Maint	MAG-11	21931	EBBO	940 SF
854	Q12	Paint Spray Booth	MAG-11	44130	EBDO	1008 SF
855	Q12	Electrical Distr Bldg	Installation	81320	EHAO	500 KV
856	Q12	General Storage Shed	MALS-11	44135	EBDO	64 SF
856	Q12	Public Toilet	MAG-11	73075	EBLO	1550 SF
856	Q12	Sentry Building	PMO	73025	EBLO	1976 SF
858	M11	Guard House - Gate #2	PMO	73020	EBLO	96 SF
859	U6	Rec Vehicle Dump Site	MWR/Rec	83000	EAGO	1 EA
860	O7	PAR Platform	Sta/G-6	13470	ECXO	1 EA
861	07	Aircraft Line Opns Bldg	Sta/G-6	14130	EBDO	240 SF
862	U6	Haz Waste Storage Transf	Environment	83141	EAQO	739 SF
863	N5	Sentry House #1	Security	73025	EBLO	75 SF
864	O5	Sentry House #2	Security	73025	EBLO	75 SF
865	T3	Sentry House #3	Security	73025	EBLO	75 SF
866	U8	Sentry House #4	Security	73025	EBLO	75 SF
867	T9	Sentry House #5	Security	73025	EBLO	75 SF
868	Q11	Sentry House #6	Security	73025	EBLO	75 SF
869	R11	Sentry House #7	Security	73025	EBLO	75 SF
870	P12	Sentry House #8	Security	73025	EBLO	75 SF
871	N8	Sentry House #9	Security	73025	EBLO	75 SF
872	R11	Sentry House #10	Security	73025	EBLO	75 SF
873	P3	Child Development Center	Sta/G-1	74074	EBLO	23375
874	M3	Obstacle Course	SNCO	17950	ECFO	1 EA
875	T7	Wt Handling Equip Shop	Station	21820	EBBO	344 SF
876	M3	Zoonosis Central Clinic	Naval Hosp	53045	EBEO	600 SF
877	S6	Arresting Gear R/W 7L	SOMS	14930	ECEO	1 EA
878	R6	Arresting Gear R/W 7R	SOMS	14930	ECEO	1 EA
879	S10	Arresting Gear R/W 34L	SOMS	14930	ECEO	1 EA
880	S10	Arresting Gear R/W 34R	SOMS	14930	ECEO	1 EA
881	L7	Horse Stables	MWR/Rec	74079	EBLO	7700 SF
882	L7	Rental Office (Stables)	MWR/Rec	74079	EBLO	1152 SF
883	L7	Tractor Shed (Stables)	MWR/Rec	74079	EBLO	965 SF
884	L8	Bunk House (Stables)	MWR/Rec	74079	EBLO	759 SF
885	L7	Sun Shade at Station Stables	MWR/Rec	74079	EBLO	585 SF
886	P11	Aircraft Direct Fueling Sta	MAG-11	12110	ECWO	600 GM
887	P11	Aircraft Direct Fueling Sta	MAG-11	12110	ECWO	600 GM
889	S4	Vintage Acft Display Shelter	Station	74078	EBLO	156 SF

e No. 15
.14/94

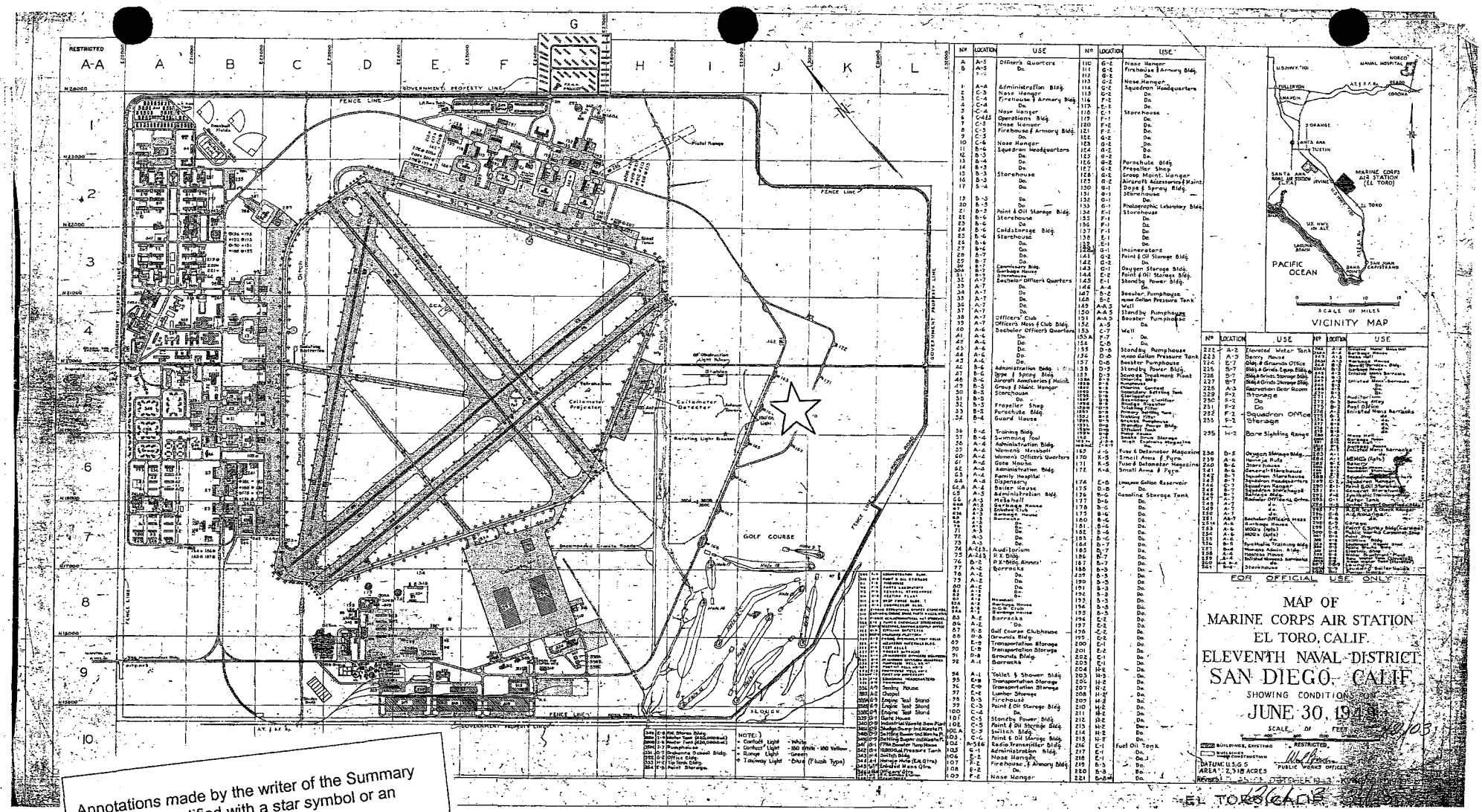
MCAS EL TORO BUILDING GUIDE

FAC NO.	MAP GRID	DESCRIPTION	TENANT	CAT CODE NUMB	COST ACCT CODE	SIZE	
842	O2	Bachelor Enlisted Quarters	Station	72111	EBGO	216	FN
843	P12	Tactical Support Van Pad	MAG-11	11665	EDCO	1044	SY
844	P4	Comm/Elect Facility	MWCS-38	21710	EBBO	10176	SF
845	Q12	Washrack Util Bldg	VMFAT-101	89009	EAPO	810	SF
847	Q11	Pumphouse	VMFAT-101	84320	EHEO	946	SF
848	Q11	Utility Bldg	VMFAT-101	89077	EAPO	683	SF
849	Q11	Water Storage Tank	VMFAT-101	84330	EAUO	260000	GA
850	P6	Crash Crew Burn Pit	Crash Crew	17950	ECFO	1	EA
851	P6	Crash Crew Burn Pit	Crash Crew	17950	ECFO	1	EA
852	O2	BEQ Boiler Bldg	Installation	81209	EBPO	2576	SF
853	U7	Loading Ramp	Supply	85115	EDAO	1	EA
854	Q12	Paint Spray Booth	MAG-11	44130	EBDO	1008	SF
854	Q12	Electronics Comms Maint Shop	MAG-11	21931	EBBO	940	SF
855	Q12	Electrical Distr Bldg	Installation	81320	EHAO	500	KV
856	Q12	Sentry Building	FMO	73025	EBLO	1976	SF
856	Q12	General Storage Shed	MALS-11	44135	EBDO	64	SF
856	Q12	Public Toilet	MAG-11	73075	EBLO	1550	SF
858	M11	Guard House - Gate #2	FMO	73020	EBLO	96	SF
859	U6	Rec Vehicle Dump Site	MWR (Rec)	83000	EAGO	1	EA
860	O7	PAR Platform	Sta/G-6	13470	ECXO	1	EA
861	O7	Aircraft Line Opns Bldg	Sta/G-6	14130	EBDO	240	SF
862	U6	Haz Waste Storage Transf Tank	Environment	83141	EAQO	739	SF
863	N5	Sentry House #1	Security	73025	EBLO	75	SF
864	O5	Sentry House #2	Security	73025	EBLO	75	SF
865	T3	Sentry House #3	Security	73025	EBLO	75	SF
866	U8	Sentry House #4	Security	73025	EBLO	75	SF
867	T9	Sentry House #5	Security	73025	EBLO	75	SF
868	Q11	Sentry House #6	Security	73025	EBLO	75	SF
869	R11	Sentry House #7	Security	73025	EBLO	75	SF
870	P12	Sentry House #8	Security	73025	EBLO	75	SF
871	N8	Sentry House #9	Security	73025	EBLO	75	SF
872	R11	Sentry House #10	Security	73025	EBLO	75	SF
873	P3	Child Development Center	Sta/G-1	74074	EBLO	23375	SF
874	M3	Obstacle Course	Sta/G-6, Trng	17950	ECFO	1	EA
875	T7	Wt Handling Equip Shop	Station	21820	EBBO	344	SF
876	M3	Veterinary Facility	Naval Hosp	53045	EBEO	600	SF
877	S6	Arresting Gear R/W 7L	SOMS	14930	ECEO	1	EA
878	R6	Arresting Gear R/W 7R	SOMS	14930	ECEO	1	EA
879	S10	Arresting Gear R/W 34L	SOMS	14930	ECEO	1	EA
880	S10	Arresting Gear R/W 34R	SOMS	14930	ECEO	1	EA
1	L7	Horse Stables	MWR	74079	EBLO	7700	SF
2	L7	Rental Office (Stables)	MWR	74079	EBLO	1500	SF
883	L7	Tractor Shed (Stables)	MWR	74079	EBLO	800	SF
884	L8	Bunk House (Stables)	MWR	74079	EBLO	400	SF
885	L7	Sun Shade at Station Stables	MWR-Rec	74079	EBLO	585	SF
886	P11	Aircraft Direct Fueling Sta	MAG-11	12110	ECWO	600	GM
887	P11	Aircraft Direct Fueling Sta	MAG-11	12110	ECWO	600	GM
889	S4	Vintage Acft Display Shelter	Station	74078	EBLO	156	SF

	75057	TOT LOTS (C)	N6247484C4634	19871101		0	0	0	0	$3,037	$3,798	1987	
	75057	TOT LOTS (J)	N6247484C4634	19871101		0	0	0	0	$3,037	$3,798	1987	
	75057	TOT LOTS (L)	N6247484C4634	19871101		0	0	0	0	$3,037	$3,798	1987	
	75057	TOT LOTS (D)	N6247484C4634	19871101		0	0	0	0	$1,537	$1,921	1987	
	75057	TOT LOTS (G)	N6247484C4634	19871101		0	0	0	0	$1,537	$1,921	1987	
	75057	TOT LOTS (E)	N6247484C4634	19871101		0	0	0	0	$9,116	$11,401	1987	
	75010	TENNIS CRTS RECREATION AREA	N6247484C4634	19871101		0	0	0	0	$24,386	$30,493	1987	
	75010	TENNIS CRTS - NR REC AREA #5	N6247484C4634	19871101		0	0	0	0	$24,386	$30,493	1987	
	75010	BASKETBALL CRTS - AREA #1	N6247484C4634	19871101		0	0	0	0	$9,653	$12,287	1987	
	75010	BASKETBALL CRTS - AREA #2	N6247484C4634	19871101		0	0	0	0	$4,826	$6,143	1987	
	75010	BASKETBALL CRTS - REC AREA	N6247484C4634	19871101		0	0	0	0	$4,826	$6,143	1987	
	75010	BASKETBALL CT - AREA #3	N6247484C4632	19871101		0	0	0	0	$4,827	$6,227	1987	
	75010	BASKETBALL CTS - AREA #4	N6247484C4634	19871101		0	0	0	0	$4,826	$6,143	1987	
	75010	BASKETBALL CTS - AREA #5	N6247484C4634	19871101		0	0	0	0	$4,827	$6,144	1987	
	75010	BASKETBALL CRTS - AREA #6	N6247484C4634	19871101		0	0	0	0	$4,827	$6,144	1987	
850	17950	CRASH CREW BURN PIT	N6247487C7581	19880101		0	0	0	0	$31,788	$38,750	1988	
839	17120	COMBAT TRAINING POOL (NAVY)	N6247484C4343	19871201	SF	20,820	179	104	16	$2,145,590	$2,613,544	1988	1990
	81320	TRANSFORMER	N6247484C4343	19871208		0	0	0	0	$13,686	$16,683	1988	
	11656	A/C LOAD AR-5 BLAST WALLS	N6247483C2014	19870901	SY	39,500	0	0	0	$2,381,813	$3,072,539	1987	
841	42510	VEHICLE SHADE SCREEN	N6247483C2014	19870901	SY	210	0	0	0	$308,696	$398,218	1987	
840	61010	ORDNANCE HANDLING OFFICE	N6247483C2014	19870901	SF	928	48	19	11	$129,015	$166,429	1987	
	81320	SUBSTATION	N6247486C0376	19880201		0	0	0	0	$51,248	$62,471	1988	
	81110	DIESEL GENERATOR	N6247486C0376	19880201		0	0	0	0	$50,180	$61,169	1988	
851	17950	CRASH CREW BURN PIT	N6247487C7581	19880101		0	0	0	0	$31,789	$38,751	1988	
	81212	TRANSFORMER	N6247483C2014	19870901		0	0	0	0	$25,072	$32,343	1987	
843	11665	TACTICAL SUPPORT VAN PADS	N6247486C0216	19880129	SY	1,044	0	0	0	$662,632	$798,557	1988	
	81212	TRANSFORMER	N6247486C0216	19880129		0	0	0	0	$70,664	$86,139	1988	
	83116	RUNOFF OIL/WTR SEPARATOR	N6247487C7581	19880101		0	0	0	0	$913,043	$1,112,999	1988	
	81212	TRANSFORMER	N6247487C7581	19880101		0	0	0	0	$8,866	$10,808	1988	
	81212	TRANSFORMER (BLDG 833)	N6247485C5499	19880725		0	0	0	0	$9,142	$11,144	1988	
845	89009	WASHRACK UTILITY BLDG	N6247484C4327	19880706	SF	832	32	26	10	$170,000	$207,230	1988	
847	84320	PUMPHOUSE	N6247484C4327	19880706		925	37	25	16	$659,773	$804,263	1988	
848	89077	UTILITY BLDG	N6247484C4327	19880706	SF	683	32	26	16	$320,723	$390,961	1988	
849	84330	WATER STORAGE TANK	N6247484C4327	19880706		0	0	0	0	$244,796	$298,406	1988	
	81212	TRANSFORMER	N6247485C5804	19880708		0	0	0	0	$13,904	$16,949	1988	
844	21710	COMM/ELEC FACILITY	N6247484C4341	19880801	SF	10,176	144	71	15	$1,746,835	$2,129,296	1988	1990
	81320	SUBSTATION (B. 844)	N6247485C4341	19880801		0	0	0	0	$32,977	$40,199	1988	
	81320	TRANSFORMER (B.634)	N6247485C5174	19880527		0	0	0	0	$191,526	$247,069	1987	
856	73075	SENTRY BOOTH	N6247484C4102	19880913	SF	3,624	122	35	14	$555,049	$667,846	1988	
854	44130	PAINT SPRAY BOOTH	N6247484C4102	19880913	SF	1,948	73	30	22	$397,031	$479,178	1988	
	11665	TACTICAL VAN PADS	N6247484C4102	19880913	SY	7,424	0	0	0	$628,852	$758,822	1988	
855	81320	SUBSTATION	N6247484C4102	19880913		0	0	0	0	$108,622	$132,410	1988	
874	17950	OBSTACLE COURSE		19890115		0	0	0	0	$13,000	$15,678	1989	
875	21820	WEIGHT HANDLING EQUIP SHOP	NOY9453	19720601	SF	336	24	14	9	$2,000	$6,316	1972	
842	72111	UEPH E-1 THRU E-4	N6247483C2771	19890715	SF	271,550	582	237	43	$16,153,686	$19,391,987	1989	
852	89009	MECHANICAL BLDG. AREA "G"	N6247483C2771	19890715	SF	2,576	56	46	16	$149,337	$179,503	1989	
	81320	SUBSTATION AT BLDG [illegible]	[illegible]771	19890715		0	0	0	0	$122,185	$146,866	1989	
863	[illegible]	[illegible]	[illegible]299	19890401	SF	75	8	8	10	$152,839	$186,311	1988	
864	[illegible]	[illegible]	[illegible]299	19890401	SF	75	8	8	10	$152,839	$186,311	1988	
865	[illegible]	[illegible]	[illegible]299	19880401	SF	75	8	8	10	$152,839	$186,311	1988	
866	[illegible]	[illegible]	[illegible]99	19880401	SF	75	8	8	10	$152,839	$186,311	1988	
867	[illegible]	[illegible]	[illegible]99	19880401	SF	75	8	8	10	$152,839	$186,311	1988	
868	[illegible]	[illegible]	[illegible]99	19880401	SF	75	8	8	10	$152,839	$186,311	1988	

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

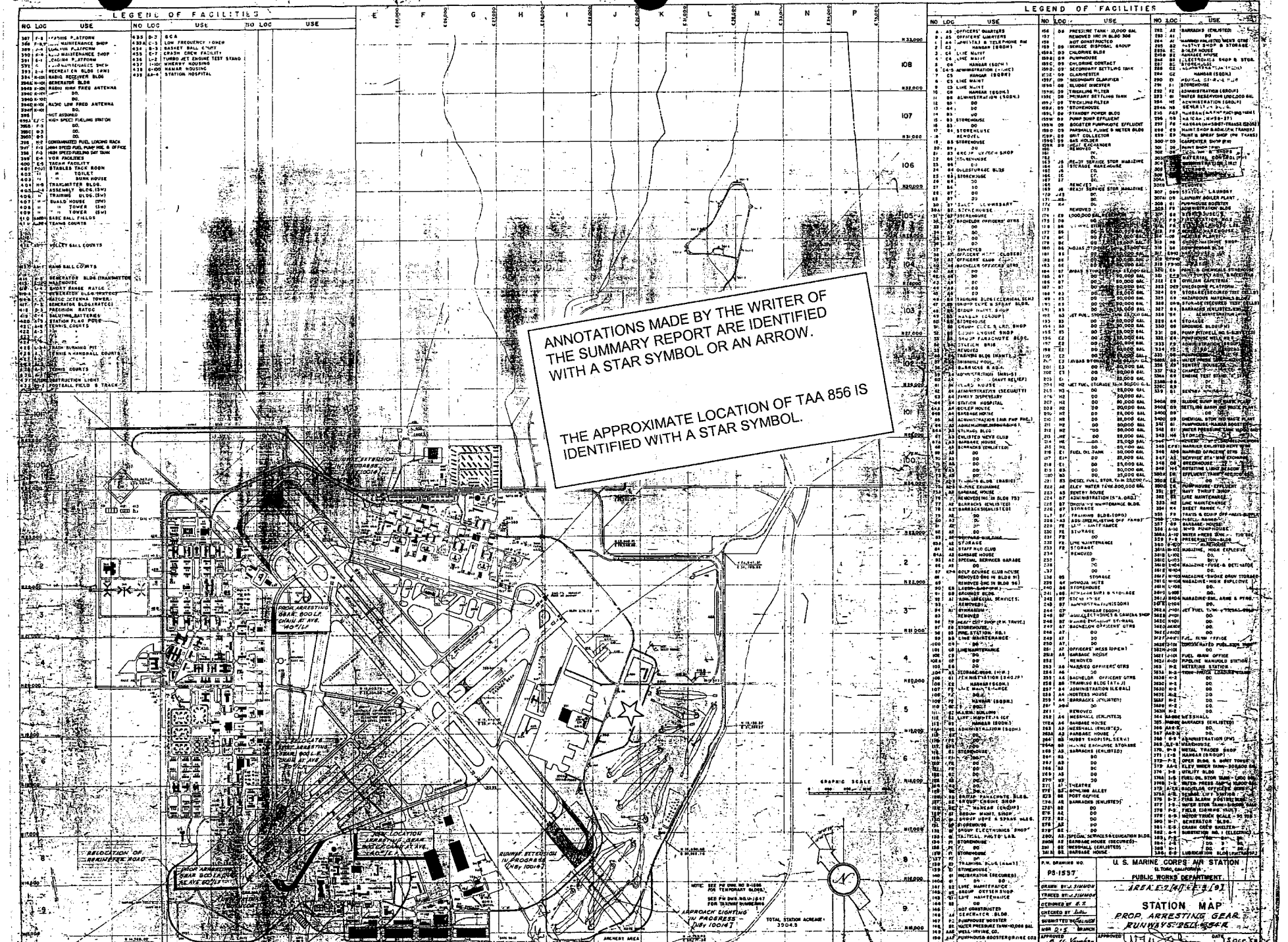
☆ Plant Account Record for Building 856.



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

The vicinity of TAA 856 is identified with a star symbol. Building 856 had not been constructed at the time the map was prepared.

1949 FACILITY MAP


LEGEND OF FACILITIES
ANNOTATIONS MADE BY THE WRITER OF THE SUMMARY REPORT ARE IDENTIFIED WITH A STAR SYMBOL OR AN ARROW.
THE APPROXIMATE LOCATION OF TAA 856 IS IDENTIFIED WITH A STAR SYMBOL.
PROP. ARRESTING GEAR
RUNWAYS 25L-34R
U. S. MARINE CORPS AIR STATION
PUBLIC WORKS DEPARTMENT
STATION MAP
PS-1537
1958 FACILITY MAP

United States Marine Corps

Base Realignment and Closure Business Plan

EXTRACTS

For

Marine Corps Air Station El Toro, CA

March 2001

Table 2
Site Summary
(Sheet 29 of 43)

Database Tracking	Reuse Parcel	Description	Material Disposed	Date of Operation	Status	Regulatory Mechanism	NFA	NFA Date	Comments	ECP Area Type	Approx. ECP Area (acres)
TAA 636	13E	< 90-day accumulation area-Bldg. 636			Inactive				SWMU/AOC 160	6	0.18
TAA 651	9B	< 90-day accumulation area-Bldg. 651			Inactive				SWMU/AOC 165	6	0.18
TAA 658	12B	< 90-day accumulation area-Bldg. 658			Inactive	DTSC			SWMU/AOC 171	3	0.18
TAA 671	11A	< 90-day accumulation area-Bldg. 671			Inactive				SWMU/AOC 172	6	0.18
TAA 672	11A	< 90-day accumulation area-Bldg. 672			Inactive				SWMU/AOC 177	6	0.18
TAA 673	12G	< 90-day accumulation area-Bldg. 673			Inactive				SWMU/AOC 186	6	0.18
TAA 698	12D	< 90-day accumulation area-Bldg. 698			Inactive					7	0.18
TAA 744	12H	< 90-day accumulation area-Bldg. 744			Inactive					7	0.18
TAA 761	11B	< 90-day accumulation area-Bldg. 761			Inactive				SWMU/AOC 236	7	0.18
TAA 765	8	< 90-day accumulation area-Bldg. 765			Closed		X	11/17/98	SWMU/AOC 266	4	0.18
TAA 769	11A	< 90-day accumulation area-Bldg. 769			Inactive				SWMU/AOC 222	7	0.18
TAA 770	11A	< 90-day accumulation area-Bldg. 770			Inactive				SWMU/AOC 223	7	0.18
TAA 771	8	< 90-day accumulation area-Bldg. 771			Inactive	DTSC			SWMU/AOC 224	6	0.18
TAA 772	3A	< 90-day accumulation area-Bldg. 772			Inactive	DTSC			SWMU/AOC 225	6	0.18
TAA 778	11A	< 90-day accumulation area-Bldg. 778			Inactive				SWMU/AOC 226	7	0.18
TAA 779	12D	< 90-day accumulation area-Bldg. 779			Inactive				SWMU/AOC 227	7	0.18
TAA 800	10B	< 90-day accumulation area-Bldg. 800			Inactive				SWMU/AOC 229	7	0.18
TAA 831	13E	< 90-day accumulation area-Bldg. 831			Inactive					7	0.18
TAA 856	13E	< 90-day accumulation area-Bldg. 856			Inactive				SWMU/AOC 234	6	0.18

SOUTHWESTNAVFACENGCOM
CODE 06CC.LMH
SAN DIEGO, CA 92101

No Further Action Decision Documents for Nearby Locations of Concern

Department of Toxic Substances Control

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

August 10, 1999

Winston H. Hickox
Secretary for
Environmental
Protection

Gray Davis
Governor

Mr. Dean Gould
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
P. O. Box 51718
Irvine, California 92619-1718

CLOSURE REPORT APPROVAL: SOLID WASTE MANAGEMENT UNIT (SWMU) 46 AT MARINE CORPS AIR STATION (MCAS) EL TORO

Dear Mr. Gould:

The Department of Toxic Substances Control (DTSC) has reviewed the closure report for the above subject site dated May 28, 1999, prepared by OHM Remediation Services Corp. We also reviewed a Supplement to the Closure Report dated July 30, 1999 pertaining to the risk characterization. The report summarizes the results of the field verification activities conducted at SWMU 46, a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) site referred to as "Defense Reutilization and Marketing Office (DRMO), Yard 2" at MCAS El Toro. The SWMU 46 site is located in the southeast quadrant of the Station, west of Borrego Canyon Wash, and north of the golf course. The former DRMO equipment storage yard consists of a fenced area, approximately 3 acres in size, with an unpaved gravel surface.

Based on the report, the site related residential cancer risk and non cancer hazard indexes are within the acceptable ranges. DTSC, therefore concurs with the findings and conclusions of the closure report, and the report is hereby approved.

If you have any questions, please contact Mr. Tayseer Mahmoud, Remedial Project Manager, at (714) 484-5418.

Sincerely,

Sharon Fair, Unit Chief
Base Closure Unit
Office of Military Facilities

cc: See next page

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

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

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

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

Mr. Bill Sedlak
IT Corporation
3347 Michelson Drive, Suite 200
Irvine, California 92612-1692

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

Department of Toxic Substances Control

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

Winston H. Hickox
Secretary for
Environmental
Protection

Gray Davis
Governor

Feberuary 1, 2000

Mr. Dean Gould
BRAC Environmental Coordinator
Marine Corps Air Station El Toro
BRAC Operations Office
1220 Pacific Highway
San Diego, California 92132-5190

SUMMARY REPORT FOR AERIAL PHOTOGRAPH ANOMALY APHO 12, MARINE CORPS AIR STATION (MCAS) EL TORO

Dear Mr. Gould:

The Department of Toxic Substances Control (DTSC) reviewed the above report dated November 15, 1999 and received by this office on November 22, 1999. The report presents the results of the record search activities and visual inspection of APHO 12 (also referenced as Science Applications International Corporation (SAIC) 92). APHO 12 consists of two separate areas, one within the boundary of the Defense Reutilization and Marketing Office (DRMO) Yard 2 and the other at Building 457. The anomaly was identified on an aerial photograph dated February 21, 1958 and described as wet soils in the open field between East Marine Way and Z Street.

The report recommends a no further action status for APHO 12 based on evaluation of field inspection results, environmental program documents, and historical property records. Evidence of wet soil or staining was not observed during the visual site inspection conducted by the Navy on November 10, 1999.

APHO 12 includes two sites that were investigated under the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) Program, Solid Waste Management Unit (SWMU) 46 (also referenced as Defense Reutilization and Marketing Office (DRMO) Yard 2) and SWMU 244 (a polychlorinated biphenyl (PCB) spill area at Building 457). DTSC concurred with a status of no further action for both sites.

Additionally, the report recommends that the comments for APHO 12 in Table 3-2 in the Base Realignment and Closure (BRAC) Cleanup Plan (BCP) be revised to correlate to the description provided in the SAIC *Final Report, Aerial Photograph Assessment, MCAS El Toro* as follows: "APHO 12, identified on a 1958 photograph as SAIC 92, is described as wet soils in two areas: one area in the southeast section of DRMO Yard 2 and one area at Building 457." Based on clarification provided by the Navy, DTSC understands that these revisions are necessary to correct previous transcription errors from the SAIC Final Report to the BCP.

Based on review of the summary report, DTSC concurs with the proposed no further action status designation and comment revision for APHO 12. The no further action status and revised comment in Table 3-2 must be documented in the next BCP update.

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

Sincerely,

Triss M. Chesney

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

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

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

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

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

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

California Regional Water Quality Control Board
Santa Ana Region

Winston H. Hickox
Secretary for Environmental Protection

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

Gray Davis
Governor

October 18, 2000

Mr. Dean Gould
BRAC Environmental Coordinator
MCAS El Toro
P O Box 51718
Irvine, CA 92619 -1718

COMMENTS ON SUMMARY REPORTS, AERIAL PHOTOGRAPH ANOMALIES, MARINE CORPS AIR STATION, EL TORO

Dear Mr. Gould:

We have completed our review of the documents referenced below. We have no significant comments on these reports, and concur with the recommendations for no further action.

Aerial Photograph Anomaly	Date of Document	Date Received
APHO 1	January 27, 2000	January 26, 2000
APHO 1 Addendum	April 11, 2000	April 28, 2000
APHO 5	June 21, 1999	June 21, 1999
APHO 7	July 14, 1999	July 17, 1999
Area 1 (APHO 54, 55, 56, 57)	November 19, 1999	December 10, 1999
Area 2 (APHO 23, 27, 58)	March 7, 2000	March 15, 2000
APHO 12	November 15, 1999	November 22, 1999
APHO 15	February 8, 2000	February 14, 2000
APHO 53	October 4, 1999	October 15, 1999
APHO 51	February 24, 2000	March 6, 2000
APHO 42	December 15, 1999	December 23, 1999
APHO 39 and APHO 49	October 18, 1999	October 28, 1999
APHO 29 and APHO 52	July 2, 1999	July 16, 1999
APHO 24	June 13, 2000	June 19, 2000
APHO 22	May 30, 2000	June 8, 2000

For any questions on this review or related matters, please call me at (909) 782-4494.

Sincerely,

John Broderick
SLIC/DoD/AGT Section

cc: Ms. Triss Chesney, Department of Toxic Substances Control, OMF
Mr. Gregory F. Hurley, El Toro RAB Co-Chair
Ms. Lynn Hornecker, Naval Facility Engineering Command, SWDIV
Mr. Glenn Kistner, U.S. EPA, Region IX

Extracts

Summary Report

Aerial Photograph Anomaly APHO 12

Aerial Photograph Anomaly Program

Marine Corps Air Station, El Toro, California

15 November 1999

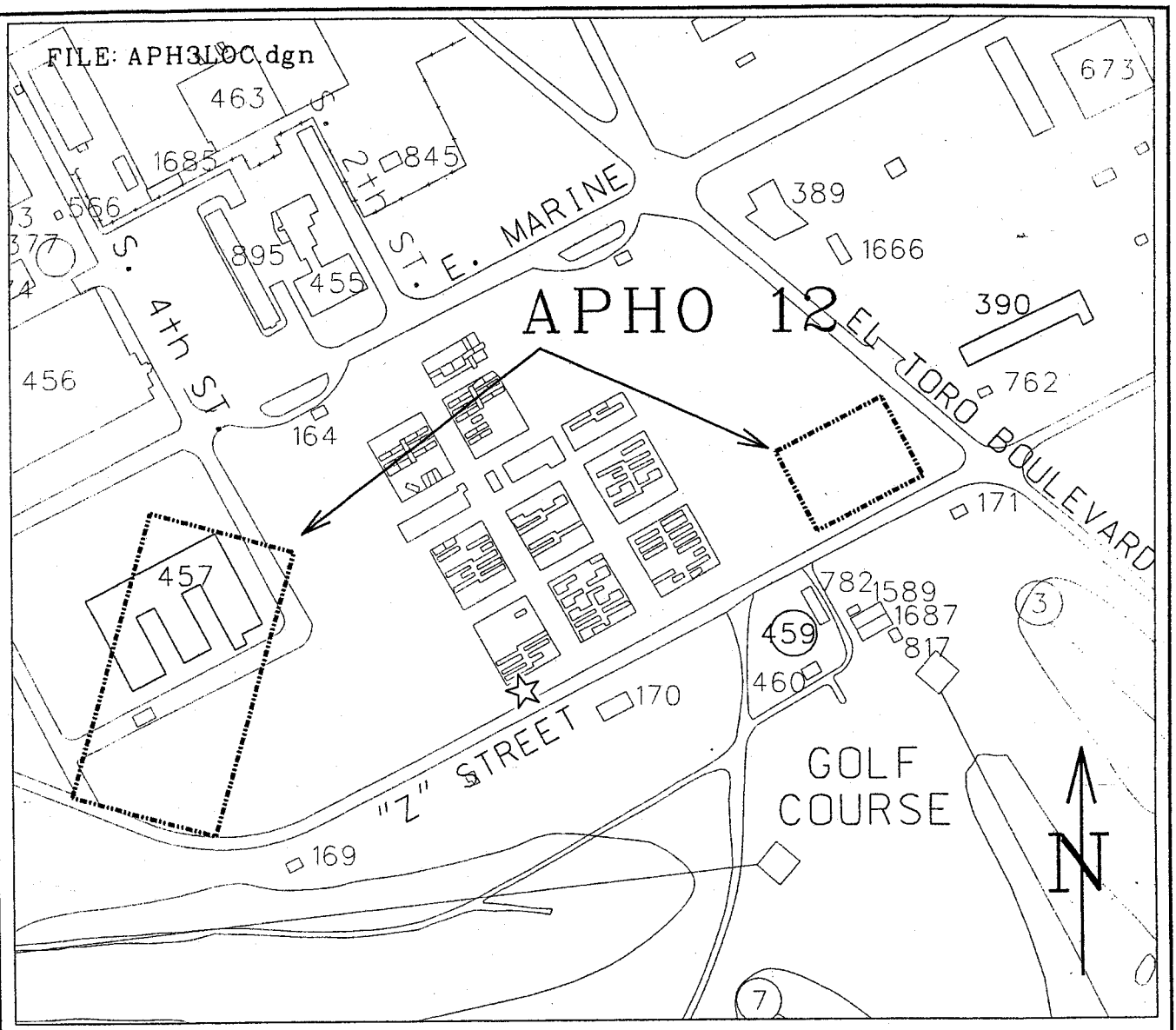
Prepared by

Southwest Division, Naval Facilities Engineering Command

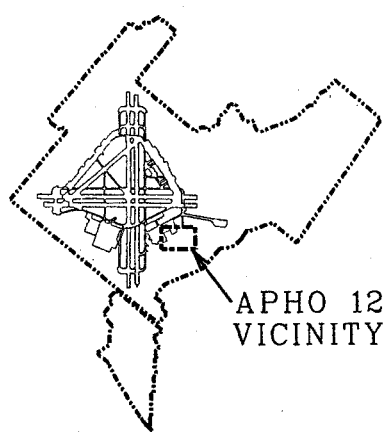
BRAC Program Office

1420 Kettner Boulevard, Suite 501

San Diego, CA 92101-2404



APPROXIMATE SCALE:
1 inch = 260 feet



MARINE CORPS AIR STATION
EL TORO

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

☆ The approximate location of TAA 856 is identified with a star symbol.

Figure 1.

AERIAL PHOTOGRAPH ANOMALY PROGRAM

APHO 12 VICINITY MAP

MARINE CORPS AIR STATION, EL TORO

SOUTHWESTNAVFACENGCOM
CODE 5BME.LMH
SAN DIEGO, CA 92101

CHECK LIST

Aerial Photograph Anomaly Program, Marine Corps Air Station, El Toro

Anomaly Identification Information:

Date of Photograph: 21 February 1958

APHO (from the BRAC Cleanup Plan)	SAIC	EPA
12	92	

Recommendation: ***No Further Action Status***

Anomaly Description (from source document(s) *Site Analysis, El Toro MCAS* (EPA, 1991) or *Final Report, Aerial Photograph Assessment* (SAIC, 1993)):
SAIC 92: *There is wet soil (WS) in the open field between East Marine Way and Z Street. Additional investigation is recommended.*

Visual Inspection Date (s): **10 November 1999.**

Participant(s) (with affiliation(s)) in inspection(s): *Lynn Marie Homecker*
US Navy

Current Site Conditions: *APHO 12 includes two separate areas: one in the southeast section of the Former DRMO Yard 2(identified as Solid Waste Management Unit (SWMU) 46 during the Resource Conservation and Recovery Act Facility Assessment (RFA)) and one in the area of Building 457 (A former group headquarters and mess hall building).*
The APHO 12 area at SWMU 46 is primarily covered with gravel and no items were being stored in this area during the visual inspection. No wet soils were observed and no stains were visible.
The APHO 12 area at Building 457 includes paved areas (the parking lot and access roads adjacent to the building lawn), the building footprint, and the lawn and landscaped areas surrounding the building. No wet soils and no stains were observed during the inspection. The building and parking areas were vacant at the time of the inspection.

Is there visual evidence of the anomaly identified in the photograph present at the site? *No.*

Is there evidence of past releases? *No.*

Are there indications of potential or current releases? *No.*

Description of photograph(s): *Photographs of APHO 12 vicinity at SWMU 46 and at Building 457.*

Date of preparation of check list: ***10 November 1999***

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 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

December 9, 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 #457
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 May 27, 1993, 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

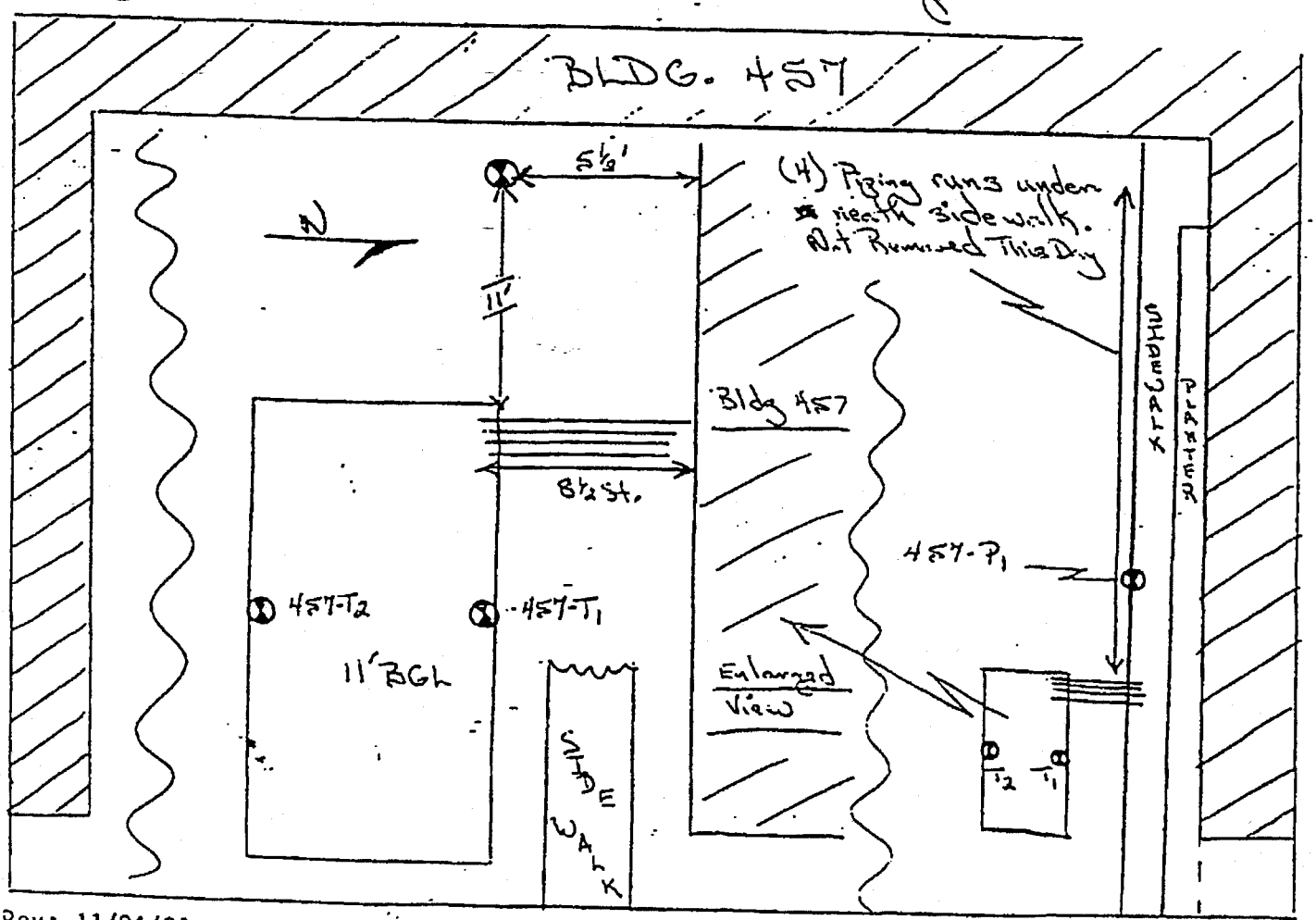
Facility Name: MCAS El Toro Address: Bldg. 457

PC # 92-283 TI # LUST # IR #

Inspector: JRHendron Date: 5-27-93 Time:

Field Activity: Removal of 2000 gallon SW Steel Tank & SW Steel Piping → Both w/ Asphalt/Tar Coatings.

- Direct Tank Fill.
- Tank had -4- Product Pipes attached to it. Contractor cut pipes at Tank Wall. Piping runs under sidewalk. One area was exposed & sampled (457-P1). Piping was NOT removed this day.
- Tank pit had concrete tie-down slab. Samples taken at edge of slab, approx 2 ft. down.
- Spoils was all sand and was not sampled.



Department of Toxic Substances Control

Jesse R. Huff, Director
5796 Corporate Avenue
Cypress, California 90630

Pete Wilson
Governor

December 17, 1998

Peter M. Rooney
Secretary for
Environmental
Protection

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
AC/S, Environmental (1AU), BRAC Building #899
P. O. Box 95001
Santa Ana, California 92709-5001

Dear Mr. Joyce:

CLOSURE REPORT APPROVAL: SOLID WASTE MANAGEMENT UNIT 244 AT MARINE CORPS AIR STATION (MCAS) El TORO

The Department of Toxic Substances Control (DTSC) has reviewed the closure report for the above subject site dated October 28, 1998, prepared by OHM Remediation Services Corp. The report summarizes the results of the field remedial activities conducted at Solid Waste Management Unit (SWMU) 244, a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) site referred to as "Polychlorinated biphenyl (PCB) Spill Area" at MCAS El Toro. The SWMU 244 site is located in the southeast quadrant of the Station and was used for storage of a transformer; according to the Station's record, a PCB release occurred from the transformenr into the surrounding soil.

Based on the report, impacted soils have been excavated and removed from the site. Also, confirmation sampling analytical results were below residential cleanup goals. DTSC, therefore concurs with the findings and conclusions of the closure report, and the report is hereby approved.

If you have any questions, please contact Mr. Tayseer Mahmoud, Remedial Project Manager, at (714) 485-5418.

Sincerely,

Sharon Fair
Unit Chief
Base Closure Unit
Office of Military Facilities

cc: See next page

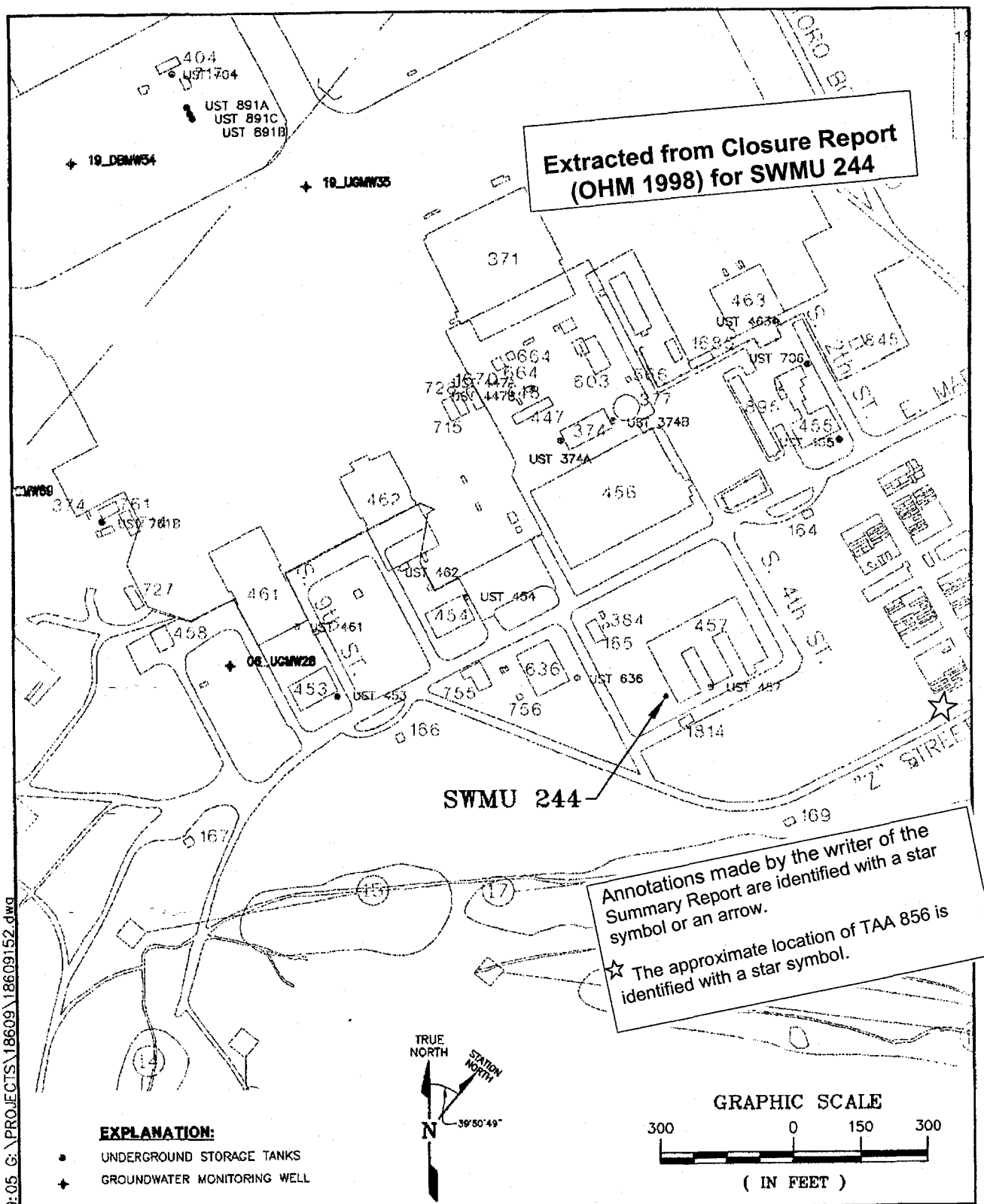
cc: Mr. Glenn Kistner, SFD-8-2
Remedial Project Manager
U. S. Environmental Protection Agency
Region IX
Superfund Division
75 Hawthorne Street
San Francisco, California 94105-3901

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

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

Mr. Bill Sedlak
OHM Remediation Services Corp.
2031 Main Street
Irvine, California 92614

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



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

☆ The approximate location of TAA 856 is identified with a star symbol.

OHM Remediation Services Corp. A Subsidiary of OHM Corporation SAN DIEGO, CA	DRAWN BY R. PIRMORADIAN	DATE 10/22/98	LOCATION MAP SWMU 244				
	CHECKED BY	DATE					
	APPROVED BY DR	DATE 10/22/98					
CONTRACT NAME SWDIV	PROJECT MANAGER	DATE 10/23/98	MARINE CORPS AIR STATION EL TORO, CALIFORNIA				
AUTOCAD FILE No. 18609152.DWG	PLOT SCALE 1=1	SHEET 1 OF 1	SCALE AS NOTED	DOCUMENT CONTROL No. SW5976	OHM PROJECT No. 18609	FIGURE No. FIG 1-2	REVISION 0

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