M60050.002803
MCAS EL TORO
SSIC #5090.3

Summary Report

Phantom Temporary Accumulation Area (TAA) 831
Marine Corps Air Station, El Toro, California

25 February 2002

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

Summary Report

Phantom Temporary Accumulation Area (TAA) 831
Marine Corps Air Station, El Toro, California

25 February 2002

Prepared by:

Lynn Marie Hornecker
Project Manager

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

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File: eltoroar.doc

TRANSMITTAL

Date: 5 August 2002

From: Lynn Marie Hornecker
MCAS El Toro

To: Diane Silva
Code ~~0HS.DS~~ Code 05G.DS

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

Installation: Marine Corps Air Station, El Toro

UIC Number: M60050

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Author: TRISS Chesney DTSC

Recipient: Dean Gould

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SOUTHWESTNAVFACENGCOM
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File: etTAA831ltr.doc

Transmittal

Date: 25 February 2002

From: Lynn Marie Hornecker

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: Phantom Temporary Accumulation Area (TAA) 831
Marine Corps Air Station, El Toro

Provided for your review as the attachment is the Summary Report for Temporary Accumulation Area (TAA) 831, a phantom or non-existent temporary accumulation area at the Marine Corps Air Station, El Toro. TAA 831 was reportedly identified at or near Building 831 on one of the Station's open drum reports according to the Final Environmental Baseline Survey (EBS) Report of 1995. Building 831 was a cryogenics facility, and several above-ground storage tanks for liquid oxygen and nitrogen were located adjacent to Building 831 within a fenced compound. Building 831 and the nearby Building 636 were identified as cryogenics facilities according to the Station's building guides.

We reviewed historical building guides, facility maps, and photographs, and we conducted visual inspections of the Building 831 vicinity. Based upon the review of historical information and the results of our visual inspections, we have determined that TAA 831 is a phantom or non-existent site. It is probable that one of the adjacent temporary accumulation area sites associated with the nearby Building 636 was designated as TAA 831 during the preparation of the EBS of 1995. Our photographs show the proximity of the TAA sites at Building 636 to Building 831. We recommend that TAA 831 be deleted from the list of Locations of Concern 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 recommendations to designate TAA 831 a phantom or non-existent site and to delete TAA 831 from the list of Locations of Concern.

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

SOUTHWESTNAVFACENGCOM
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1220 Pacific Highway
San Diego, California 92132-5190

File: etTAA831ltr.doc

Attachment
Summary Report (SWDIV, February 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 a phantom or non-existent temporary accumulation area (TAA), designated as TAA 831 at the Marine Corps Air Station (MCAS), El Toro. TAA 831 was identified near Building 831 in the southeastern section of the Station during the preparation of the Final Environmental Baseline Survey (EBS) Report (Jacobs Engineering Group (JEG), 1995). The EBS states that the source of the information pertaining to TAA 831 is an open drum report. Building 831 and the nearby Building 636 are identified as cryogenics facilities or offices in the building guides for MCAS El Toro.

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). Building 831 is located near the intersection of "Z" Street and East Marine Way within a parcel tentatively designated for future use as public facilities. Building 831 and the paved areas adjacent to Building 831 are located within a fenced compound.

The location of Building 831 and the locations of reuse parcels are shown on Figures 1 and 2, respectively.

Historical facility records and documentation from the environmental compliance program were acquired and reviewed, and the vicinity of Building 831 was visually inspected. Two accumulation areas associated with Building 636 are located in the general vicinity of Building 831, and these sites are being addressed as TAA 636. It is probable that one of the TAAs associated with Building 636 was designated as TAA 831 in the EBS of 1995. The concrete pavement that surrounds much of Building 831 was visually inspected. No stains or discolored areas were observed on the paved surfaces. Based upon the review of historical information and the results of the visual inspections, it is recommended that TAA 831 (a temporary accumulation area near Building 831) be considered a phantom or non-existent site. It is also recommended that TAA 831 be deleted from the list of Locations of Concern in the next BRAC Business Plan update.

Section 2
Field Inspections and Historical Records

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

TAA 831 was reported as a temporary accumulation area near Building 831 in the EBS (JEG 1995). The source of the identification is an open drum report from the Station's files. A copy of the open drum report is included with the EBS documentation in the Appendix. The Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) records review and visual inspections did not address TAA 831.

During the visual inspections that were conducted in January and February 2002, two former temporary accumulation area sites associated with Building 636 were observed in the general vicinity of Building 831. Building 636 is located northeast of Building 831. Much of the area surrounding Building 831 is paved with portland cement concrete, and the paved surfaces are in good condition. No stains or discolored areas were observed on the pavement. The facility has been vacant for approximately 2.5 years, and some vegetation is growing through some of the construction joints in the concrete pavement. A small unpaved lawn area is located on the northwest side of the building, and no stains were observed on the unpaved area.

The Building 831 vicinity was also inspected and photographs were taken in March 2001 when two of the former above-ground tanks that were used for storage of liquid oxygen (LOX) and nitrogen oxide (NOX) were removed. The LOX and NOX were used in various aircraft components. The photographs show that the concrete pavement surrounding Building 831 was in good condition and that there were no stains on the pavement.

Photographs of the vicinity of Building 831, the nearby Building 636, and former above-ground tanks, 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 831 was constructed in 1987 as a cryogenics facility by the Marine Aviation Logistics Squadron (MALS) – 11, and the adjacent Building 636 was also used as a cryogenics facility by MALS 11.

The following Summary Table identifies the information that was extracted from historical records.

Summary Table. Phantom TAA 831 Vicinity, MCAS El Toro.

Building or Feature Identifier	Approximate Date of Construction or Identification	Comments
Building 831	1987	Cryogenics/Vehicle Shop Two 2,000-gallon compressed gas storage tanks were located near Building 831; one tank was located on the northeast side of the building and one tank was located on the southeast side of the building. The tanks were removed during the year 2001. Photographs were taken in March 2001 prior to the removal of the tanks, and one of the photographs shows a clean concrete surface in excellent condition. Copies of the photographs are included in the Appendix.
Building 636	1969	Survival Equipment Shop and Cryogenics Office Facility according to the 1994 and 1997 Building Guides. Two former temporary accumulation area sites (TAA 636) are associated with Building 636. The HM/HWMP (SAIC 1994) identifies hazardous waste storage and hazardous materials storage near Building 636. The TAA sites were visually inspected during the RFA, and a sampling visit was conducted at one of the TAA sites. An underground storage tank (UST 636) was removed near Building 636 with oversight by the Orange County Health Care Agency (OCHCA), and OCHCA closed the tank site in 1997.
Building 755	1983	LOX/NOX Building
Building 756	1983	LOX/NOX Shed (former location of liquid oxygen or nitrogen tanks)
Building 453	1960	Maintenance squadron headquarters An underground storage tank (UST 453) was removed near Building 453 with oversight by OCHCA, and OCHCA closed the site in 1997.
Building 454	1960	Maintenance squadron headquarters UST 454 was removed near Building 454 and OCHCA closed the site in 1997,
Building 166	1943	Former munitions magazine Building 166 was a high explosives magazine according to a 1950 facility map. Building 166 was a small arms & pyrotechnic magazine according to a 1973 building list.

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 831. 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 636 (Building 831 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 636, and Building 831 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 831. Additionally, the list does not identify Building 636. The list is included in the Appendix.

Temporary Accumulation Areas
Temporary Accumulation Area (TAA) 636, located southeast of Building 831, has two components – an original TAA located on the southwest side of "Z" Street and a concrete pad that was constructed on the northeast side of "Z" Street. The TAA sites were investigated during the RFA as Solid Waste Management Unit (SWMU) 160.

The Hazardous Materials/Hazardous Waste Management Plan (SAIC 1993) includes photographs of the hazardous waste accumulation areas that were investigated during the RFA.

The Building 636 accumulation areas are under evaluation as of February 2002.

Photographs of the TAA 636 vicinity and the Building 831 compound are included in the Appendix.

2.3 Ground Water Conditions

Groundwater conditions in the vicinity of Building 831 were investigated during the investigations of Installation Restoration Program (IRP) Site 6. Monitoring well 06_UGMW_32 is located west-northwest of and within approximately 500 feet of Building 831. A No Action Record of Decision was signed for IRP Site 6 in 1997.

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 831:

- TAA 831, a temporary accumulation area, was identified during the preparation of the Environmental Baseline Survey of 1995, and the survey documentation states that an open drum report identified a temporary accumulation area near Building 831.
- Visual inspections were conducted at the vicinity of Building 831 and Building 636 during January and February 2002. Two accumulation areas associated with Building 636 are located in the general vicinity of Building 831, and these sites are being addressed as TAA 636. The concrete pavement that surrounds much of Building 831 was visually inspected. No stains or discolored areas were observed on the paved surfaces near Building 831 and the pavement was in good condition at the time of the inspections. Two or more above-ground tanks were previously in use at Building 831; these tanks were used for storage of liquid oxygen and/or nitrogen and the tanks were removed in March 2001.
- Due to the proximity of the TAA 636 sites to Building 831, it is probable that one of the TAA sites near Building 636 was designated as TAA 831.

Based upon the absence of evidence of the existence of a temporary accumulation at Building 831, the proximity of two accumulation areas associated with Building 636, and the management of the TAA sites at Building 636 under the RFA program, it is recommended that TAA 831 be considered a phantom or non-existent site. Deletion of TAA 831 from the inventory of locations of concern in the next BRAC Business Plan Update is recommended.

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]

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).

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

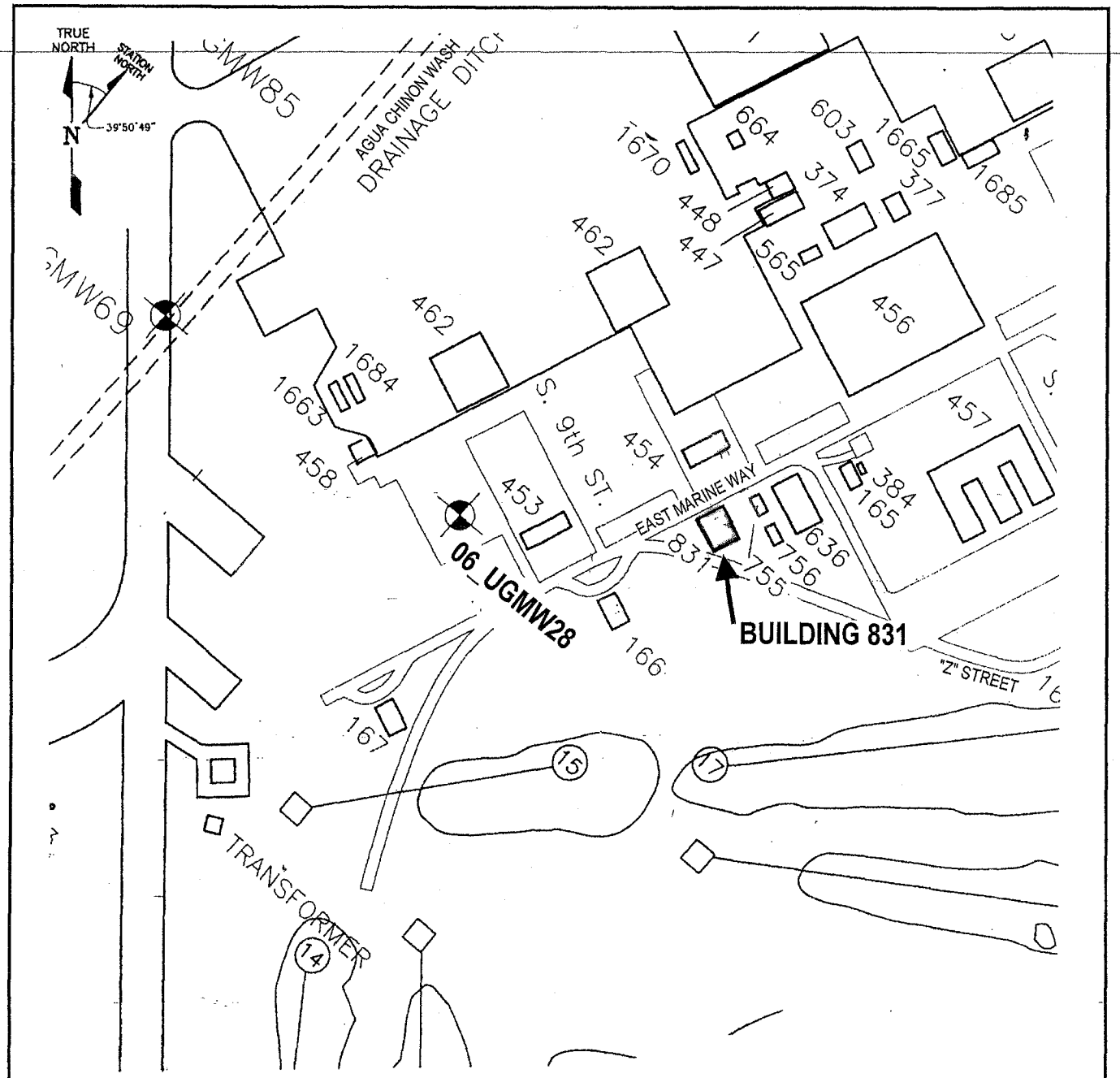
United States Marine Corps Air Station, El Toro. 2001. Base Realignment and Closure (BRAC) Business Plan.

United States Marine Corps Air Station, El Toro. 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. 1994. Marine Air Group (MAG) 11, MALS -11 Weekly HW Drum Report dated 31 August 1994.

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



EXPLANATION:

GROUNDWATER MONITORING WELL

GRAPHIC SCALE

300 0 150 300

(IN FEET)

Figure 1.

TEMPORARY ACCUMULATION AREA (TAA) 831

VICINITY MAP

MARINE CORPS AIR STATION, EL TORO

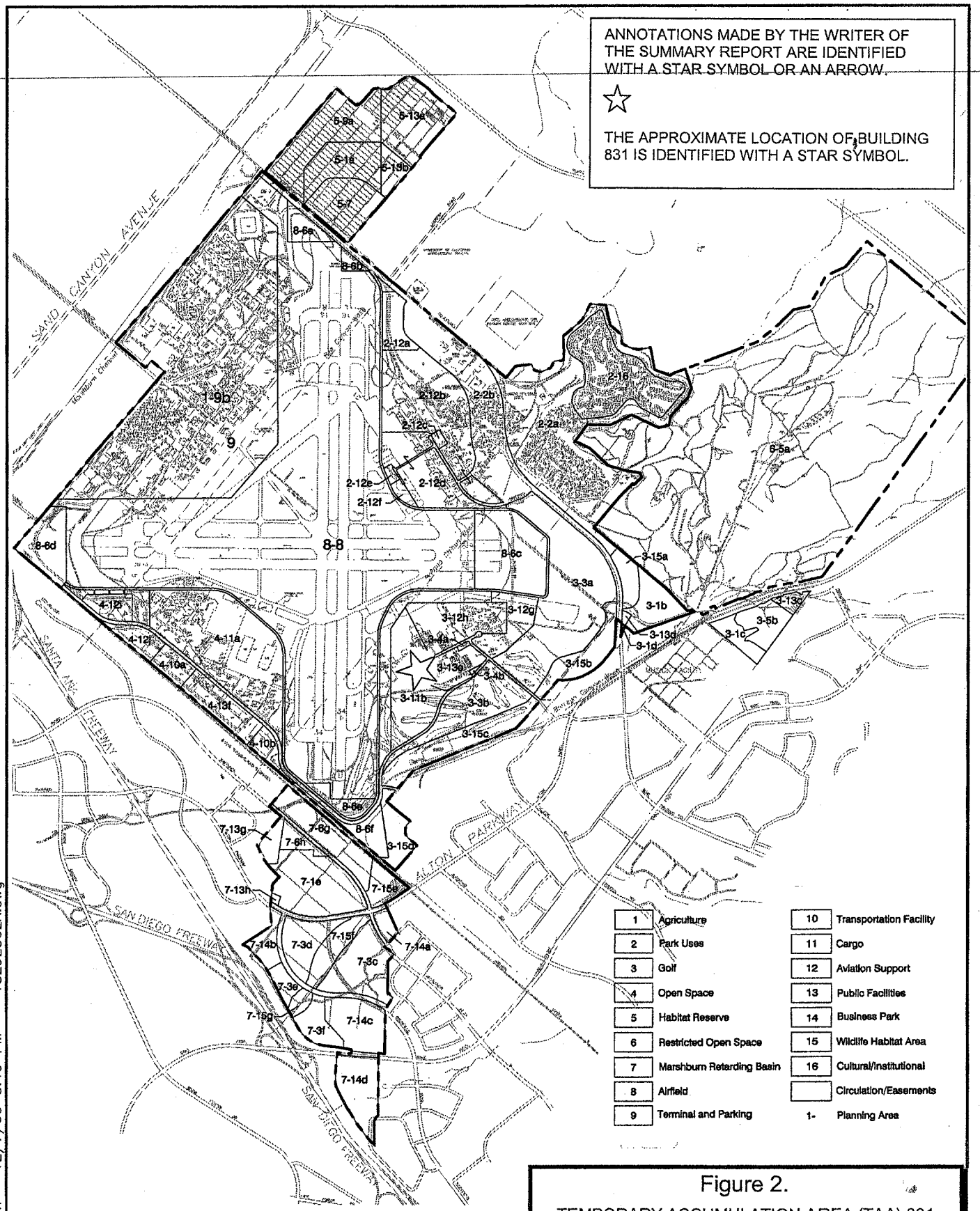


Figure 2.

TEMPORARY ACCUMULATION AREA (TAA) 831

TENTATIVE REUSE PARCEL LOCATIONS

MARINE CORPS AIR STATION, EL TORO

Witzel-Yanez Design 12/7/99 3:49 PM 18292502A.dwg

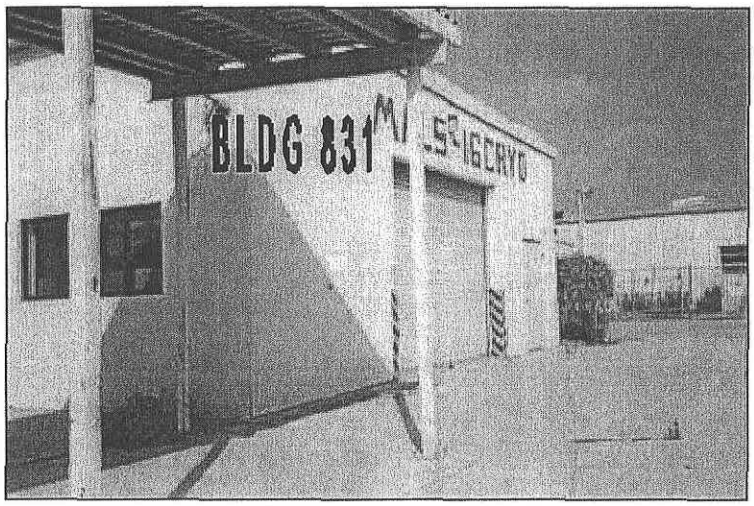
APPENDIX

SITE PHOTOGRAPHS AND OTHER DOCUMENTATION

DATED 25 FEBRUARY 2002

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

Photograph 1. Phantom Temporary Accumulation Area (TAA) 831
Southeast side of Building 831 - Cryogenics Facility
Marine Corps Air Station, El Toro Date of Photograph: 8 February 2002



Photograph 2. Phantom Temporary Accumulation Area (TAA) 831
Building 755 (LOX/NOX Building) on the northeast side of Building 831
Marine Corps Air Station, El Toro Date of Photograph: 8 February 2002

SOUTHWESTNAVFACENGCOM
Code 06CC.LMH
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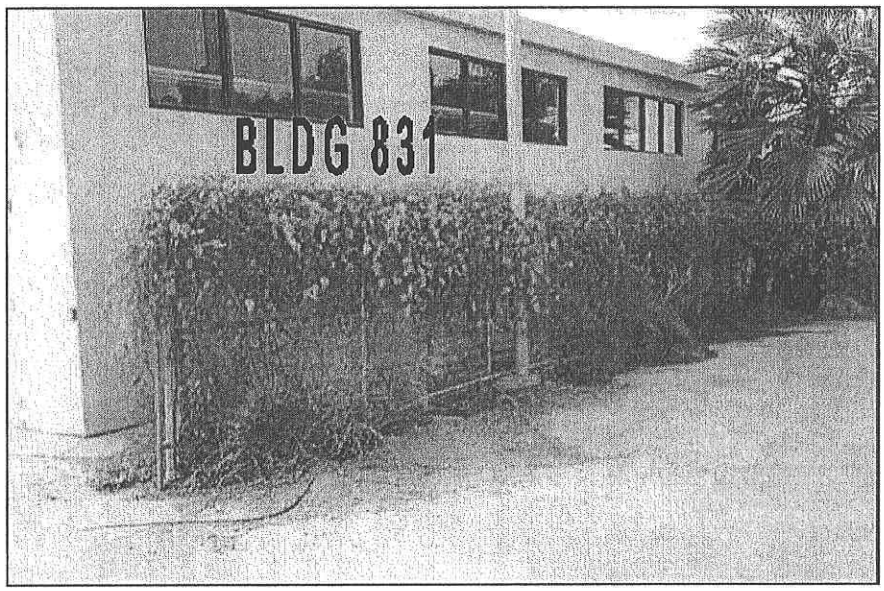
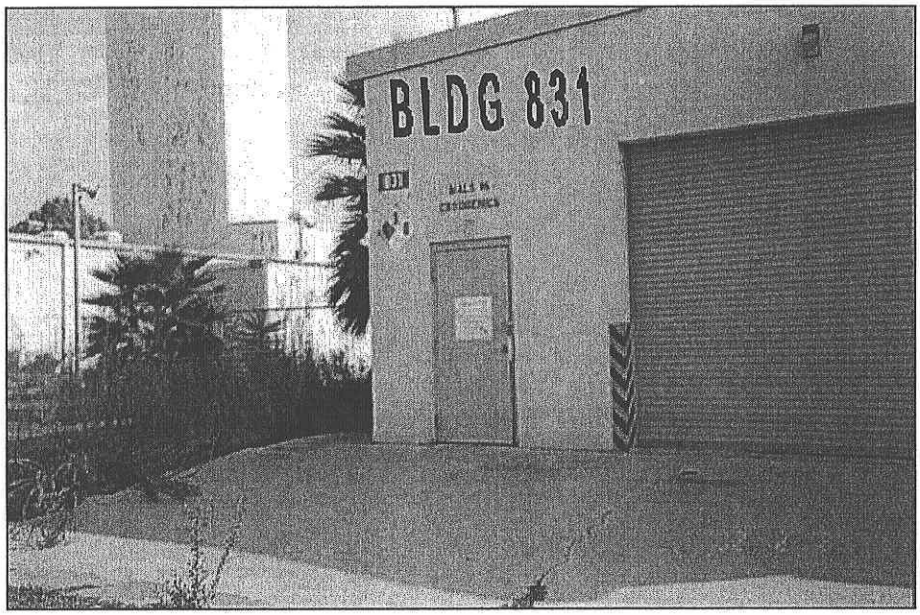
Photograph 3. Phantom Temporary Accumulation Area (TAA) 831
Former location of LOX tank at the center of the photograph on the northeast side of Building 831
Marine Corps Air Station, El Toro Date of Photograph: 8 February 2002



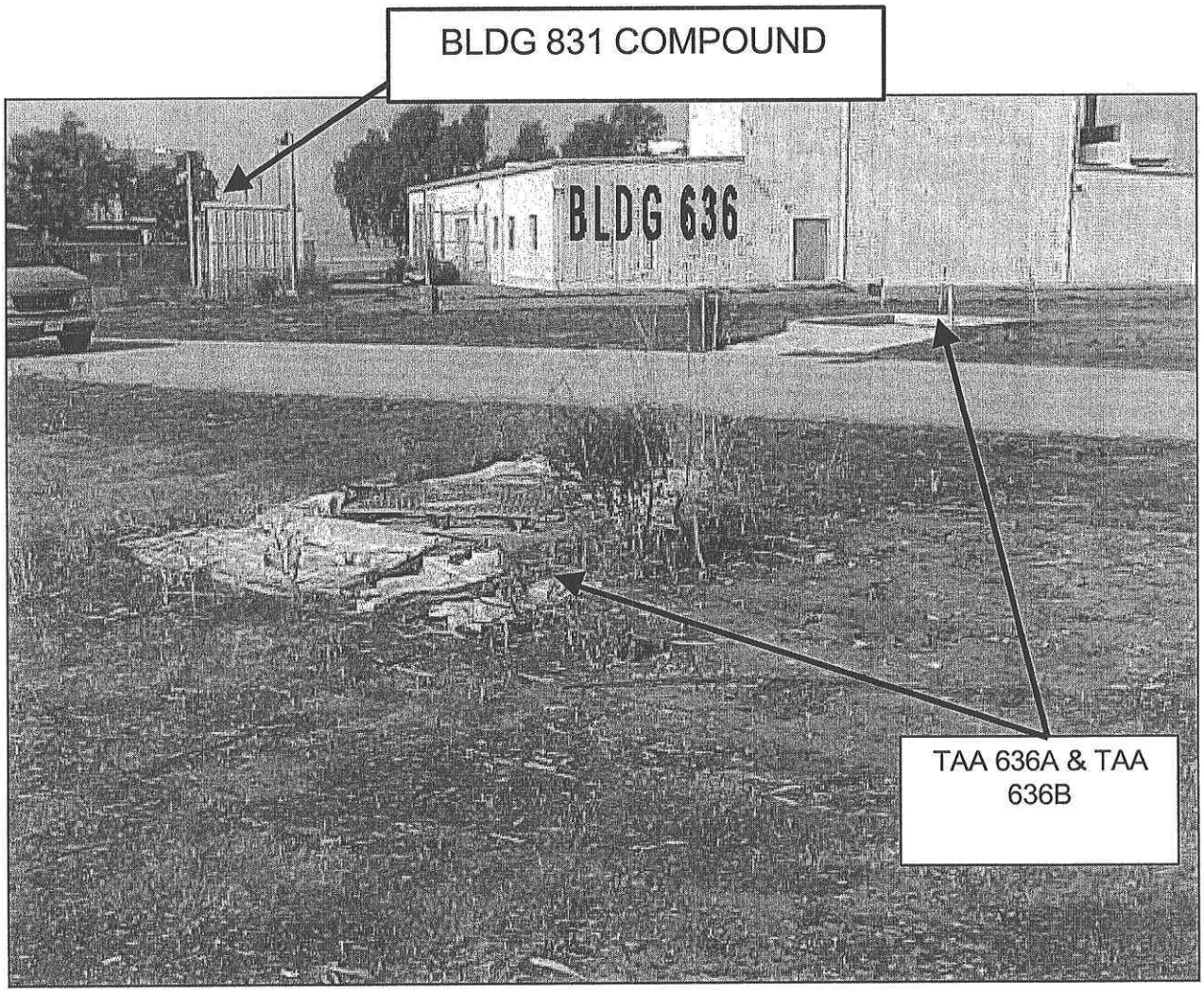
Photograph 4. Phantom Temporary Accumulation Area (TAA) 831
Southwest side of Building 831 - Cryogenics Facility
Marine Corps Air Station, El Toro Date of Photograph: 8 February 2002



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

Photograph 5. Phantom Temporary Accumulation Area (TAA) 831 Southeast Side of Building 636 – Former Training Facility with original TAA in foreground and recently constructed TAA with concrete foundation near the center right of the photograph. The chain-link fence that surrounds the Building 831 compound is at the left side of the photograph.

Marine Corps Air Station, El Toro Date of Photograph: February 2002



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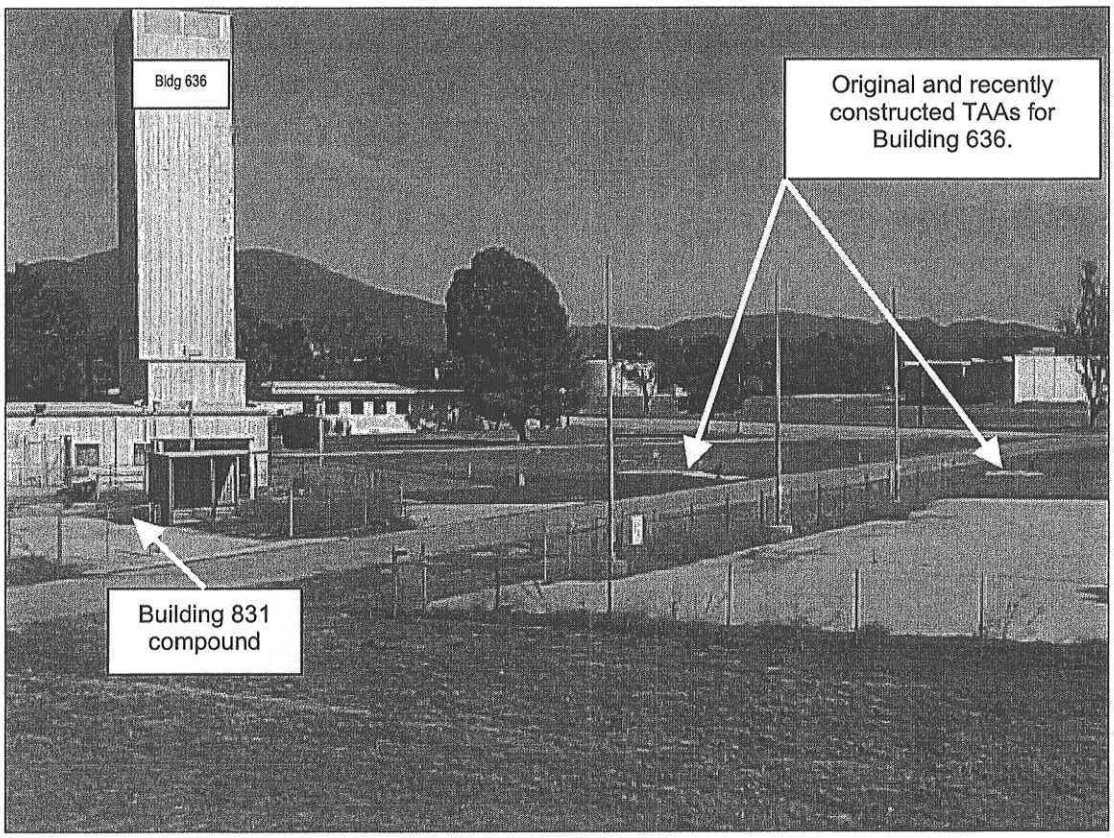
1220 Pacific Highway
San Diego, CA 92132

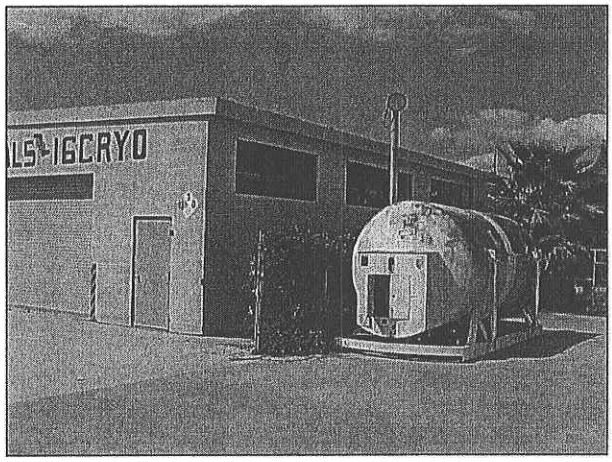
Photograph 6. Phantom Temporary Accumulation Area (TAA) 831

View Looking Approximately Southeast
Building 831 Compound and Building 636 (and associated TAAs)
Marine Corps Air Station, El Toro

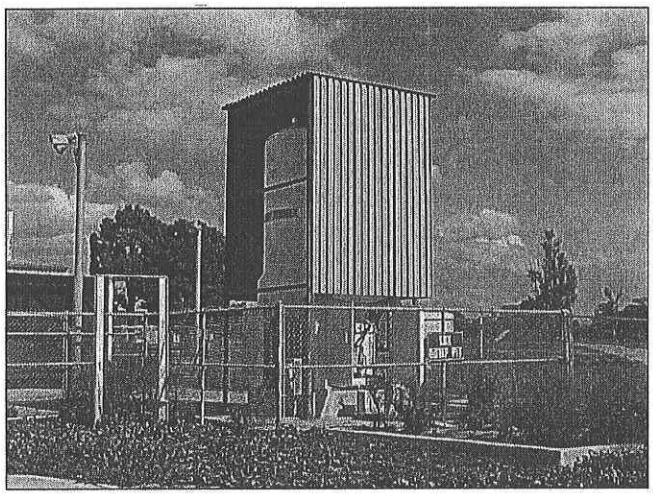
Date of Photograph: 21 February 2002



Photograph 7. Phantom Temporary Accumulation Area (TAA) 831
Former 2,000 Gallon Liquid Oxygen (LOX) Tank on northeast side of Building 831
Marine Corps Air Station, El Toro
Date of Photograph: 12 March 2001



Photograph 8. Phantom Temporary Accumulation Area (TAA) 831
Former 2,000-Gallon LOX/Nitrogen Tank with shelter on southeast side of Building 831 near "Z" Street
Marine Corps Air Station, El Toro
Date of Photograph: 12 March 2001



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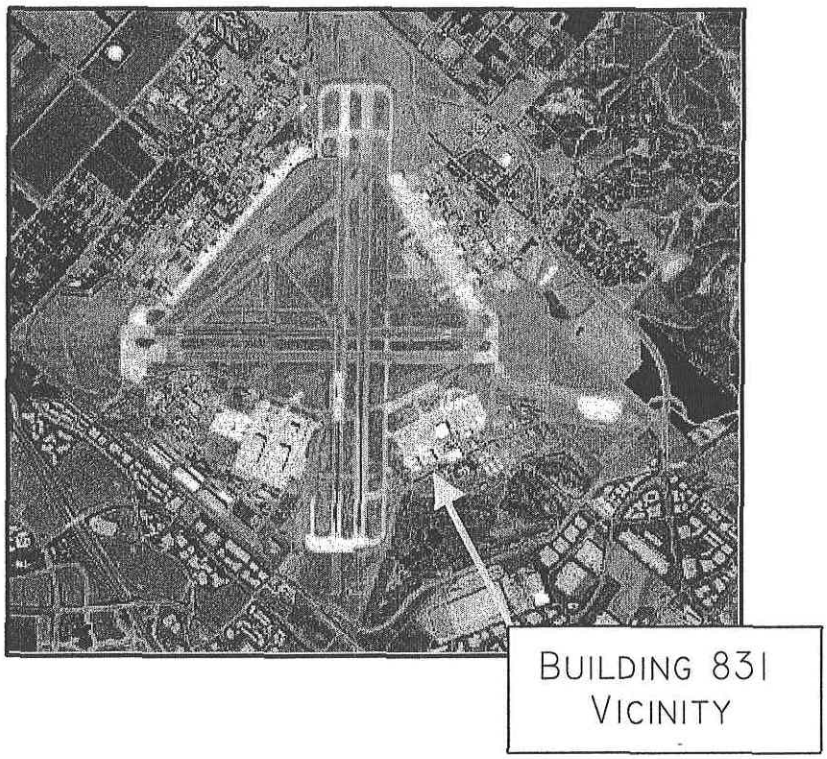
Aerial Photograph
Vicinity of TAA 831 (Building 831)
Marine Corps Air Station, El Toro

Date of Aerial Photograph: 1994



Extracts from EBS Documentation and Drum Report dated 31 August 1994

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

01 April 1995

Revision 0

EXTRACTS

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

M. W. Arends 3/31/95

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

Max Pan 3-31-95

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

SCO100217CD.WP5\95\MA

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
			34	RFA recommended NFA	3
				Environmental Office accumulation area	7

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

TAA 831 WAS IDENTIFIED FROM AN OPEN DRUM REPORT.

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

THE EBS STATES THAT THE RFA RECOMMENDED NO FURTHER ACTION FOR TAA 636 (SAA 636).

C C B

MAG-11 WEEKLY HW DRUM REPORT

Date: 31 AUG 1994
Squadron: MALS-11 ALSS
Site/Bldg #: 09 / 831
POC/ext.: CPL. RENE G. COCHRAN / 2413

1. Total number of HW drums on-site: 8
2. Total number of full HW drums: 0
3. HW drums with accumulation dates of 1 - 30 days: 4
4. HW drums with accumulation dates of 31 - 45 days: 4
5. HW drums with accumulation dates of 46 - 60 days: 0
6. HW drums with accumulation dates of 61 - 90 days : 0
7. HW drums with accumulation dates over 90 days : 0

This report must be delivered to the MALS-11 HM/HW Manager NLT closeof business every Wednesday for consolidation/verification and subsequent submission to Station Environmental by 1200 every Thursday.

Contents	Size	Accum. dt.
864/ADHESIVE PART A 3	5 GL	28 JULY 1994
865/ADHESIVE PART B 3	5 GL	28 JULY 1994
866/ADHESIVE PART B(ETHANOL) 3	5 GL	28 JULY 1994
867/SEALING COMPOUND	5 GL	28 JULY 1994
868/DESSICANT 9	5 GL	18 AUG 1994
869/PETROLEUM OIL COMBUSTIBLE LIQ	55 GL	29 AUG 1994
870/AER PAINT DISPENSERS 2,1	16 GL	29 AUG 1994
871/RAGS W/ FUEL AND OIL 9	55 GL	29 AUG 1994

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

☆

THE WEEKLY HW DRUM REPORT DATED 31 AUGUST 1994 IDENTIFIES THE SITE AS BUILDING 831.

enclosure (7)

Extracts from historical hazardous waste management documents

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.

1002073R.SCO\93\MA

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

SWMU/ AOC NO.	TYPE	LOCATION/BUILDING
145	Underground Storage Tank	529
147	Drum Storage Area	602
149	Drum Storage Area	605
151	Oil/Water Separator	605
160	Hazardous Waste Storage Area	636
162	Underground Storage Tank	643
[illegible]	[illegible]	643
[illegible]	[illegible]	651
[illegible]	[illegible]	651
[illegible]	[illegible]	658
[illegible]	[illegible]	671
[illegible]	Oil/Water Separator	671
175	Underground Storage Tank	672
176	Underground Storage Tank	672
179	Oil/Water Separator	673
180	Underground Storage Tank	673
181	Landfarming site	673
186	Hazardous Waste Storage Area	673
187	Underground Storage Tank	674
188	Underground Storage Tank	675
189	Oil/Water Separator	676
193	Oil/Water Separator	716
194	Former Incinerator Site	746
195	Vehicle Wash Rack	758
196	Oil/Water Separator	758
197	Underground Storage Tank	758
198	Vehicle Wash Rack	759
199	Oil/Water Separator	759
200	Underground Storage Tank	759
201	Vehicle Wash Rack	760
202	Underground Storage Tank	760

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

SWMU 160 IS LOCATED NEAR BUILDING 831 AND IS ASSOCIATED WITH BUILDING 636.

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

SWMU	SMWU TYPE	SOURCE (1)	LOCATION/BUILDING	COMMENTS	DATE	SIZE	MATERIAL	CONTENTS
151	Oil/Water Separator	f	605	Active	1984	100 gal	Steel	
152	Aircraft Wash Area	a	606					
153	Drum Storage Area	a	606	Possible Duplicate of SWMU/AOC 255				
154	Oil/Water Separator	f	606	Duplicate of SWMU/AOC 163	1965	100 gal	Concrete	
155	Vehicle Wash Rack	a	616	Duplicate of SWMU/AOC 195				
156	Underground Storage Tank	f	625	Active, RI/FS Site	1967	500 gal	Cath. Prot. Steel	Waste Oil
157	Vehicle Wash Rack	a	626	RI/FS Site				
158	Drum Storage Area	a,b	626	RI/FS Site				
159	Oil/Water Separator	f	626	Active, RI/FS Site	1967		Concrete	
160	Hazardous Waste Storage Area	Active	636					
161	Hazardous Waste Storage Area	Active	641	Duplicate of SWMU/AOC 39				
162	Underground Storage Tank	f	643	Active	1982	185 gal	Cath. Prot. Steel	Waste Oil
163	Oil/Water Separator	f	643	Active	1982	100 gal	Concrete	
164	Vehicle Wash Rack	a	651					
165	Drum Storage Area	a	651	Located within SWMU/AOC 164				
166	Underground Storage Tank	f	651	Active	1971	500 gal	Steel	Product Oil
167	Underground Storage Tank	f	651	Active	1971	500 gal	Steel	Product Oil
168	Underground Storage Tank	f	651	Active	1971	500 gal	Steel	Waste Oil
169	Underground Storage Tank	f	651		1971	500 gal	Concrete	
170	Drum Storage Area (2)	a,b	655					
171	Hazardous Waste Storage Area	Active, a	658					
172	Hazardous Waste Storage Area	Active	671					
173	Oil/Water Separator	f	671					
174	Underground Storage Tank (2)	f	672	Active	Unknown	500 gal	Steel	Waste JP-5
175	Underground Storage Tank	f	672	Active	1982	100 gal	Steel	
176	Underground Storage Tank	f	672	Active	1982	1,000 gal	Steel	Waste Oil
177	Drum Storage Area	c	672			360 gal		
178	Vehicle Wash Rack	a	673					
179	Oil/Water Separator	f	673	Active	1982	100 gal	Steel	
180	Underground Storage Tank	f	673	Active	1982	300 gal	Steel	Waste Oil

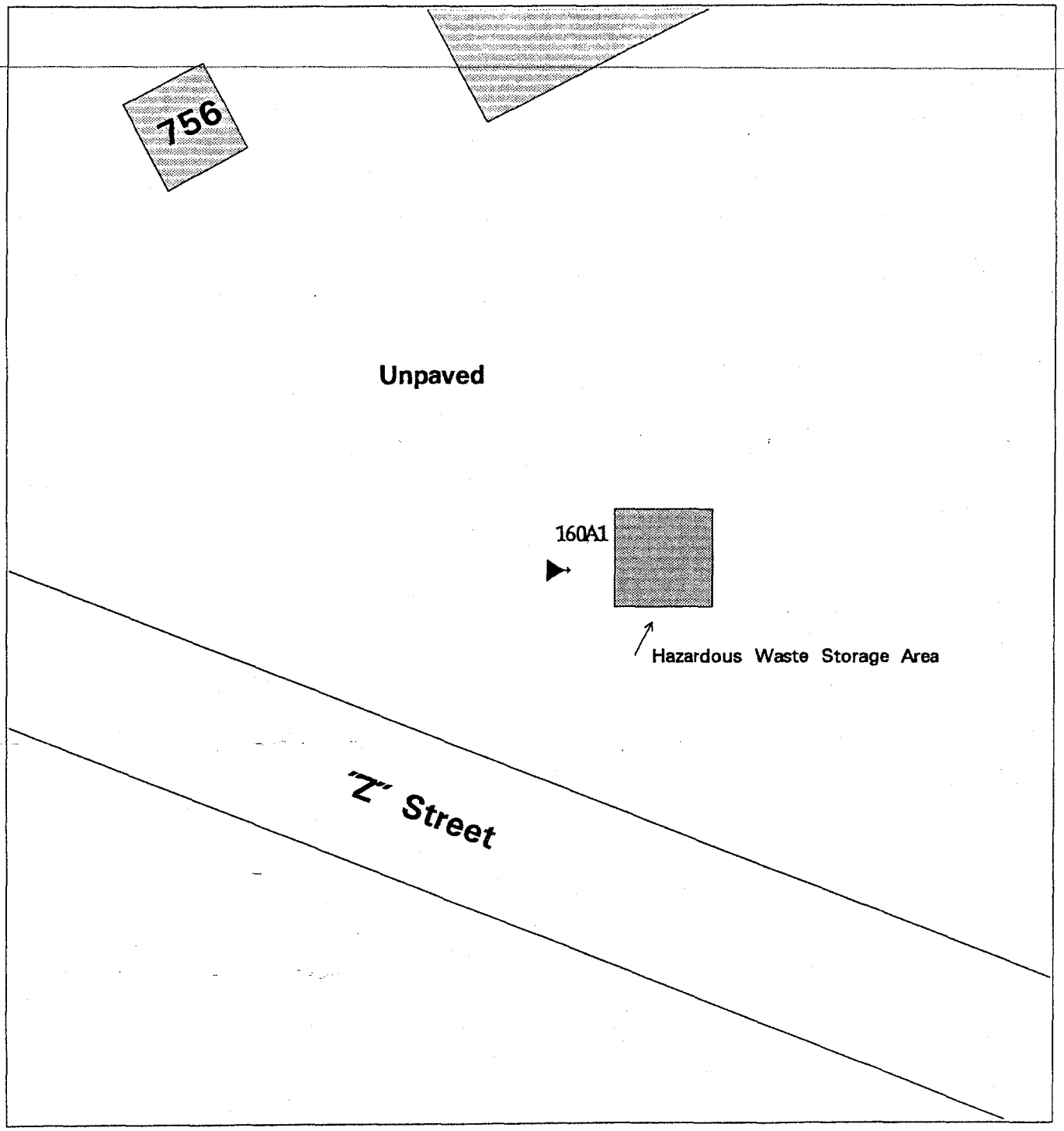


Figure 49 Sample Location Map

SWMU/AOC Number and Type:
160 - 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)	TPH (mg/kg)		VOCs (ug/kg)	SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	Action	Rationale
					Gasoline	Diesel						
160	Hazardous Waste Storage Area (49)	A1	10	ND	ND	ND	Methylene Chloride-5 J * Acetone-8 BJ *	Di-n-butylphthalate-2200 * Bis(2-Ethylhexyl)phthalate-490 B * Butylbenzylphthalate-2900	ND	NAB	NFA	TPH/TFH < 100 ppm VOCs < CRDL SVOCs < ETM & PRG Pest/PCBs < CRDL Metals < BGT CRDL - Contract Required Detection Limit BGT - Background Threshold Value
			20	ND	ND	ND	Methylene Chloride-3 J *	Di-n-butylphthalate-2600 * Bis(2-Ethylhexyl)phthalate-370 B * Butylbenzylphthalate-2600	ND	NAB		
			20 (Duplicate)	ND	ND	ND	Methylene Chloride-3 J * Acetone-4 BJ *	Bis(2-Ethylhexyl)phthalate-480 B *	ND	NAB		
			30	ND	ND	ND	Methylene Chloride-4 BJ * Acetone-3 BJ * 2-Butanone-2 BJ *	Di-n-butylphthalate-5500 * Bis(2-Ethylhexyl)phthalate-350 B * Butylbenzylphthalate-920	ND	NAB		
			40	ND	ND	ND	Methylene Chloride-3 BJ * Acetone-2 BJ * 2-Butanone-1 BJ *	Di-n-butylphthalate-3500 * Bis(2-Ethylhexyl)phthalate-350 B * Butylbenzylphthalate-2200	ND	NAB		
			50	ND	ND	ND	Methylene Chloride-4 BJ * Acetone-3 BJ * 2-Butanone-2 BJ *	Di-n-butylphthalate-2200 * Bis(2-Ethylhexyl)phthalate-380 B * Butylbenzylphthalate-860	ND	NAB		
			60	ND	ND	ND	Methylene Chloride-4 BJ * Acetone-3 BJ * 2-Butanone-2 BJ *	Bis(2-Ethylhexyl)phthalate-440 B *	ND	NAB		

Evaluation Form
SWMU/Area of Concern
Number 160

Name: Hazardous Waste Storage Area

Location: South of Building 636

Size: 176 sq ft

Date of Site Visit: 01 May 1991

Period of Operation

Currently active

Evaluation Form
SWMU/Area of Concern
Number 160

Unit Characteristics

A HWSA is located approximately 65 ft southeast of Building 636. The HWSA consists of a sandbag berm encompassing an 11-ft x 16-ft area. The berm is 1 to 2 ft in height. A canvas sheet is draped over the berm and provides the lining for the HWSA. The HWSA is located on an unpaved, unprotected soil area. The canvas is darkly stained within the bermed area. A tear in the canvas liner was observed near the southeastern corner within the HWSA. Drums within the HWSA are stored on metal pallets. The HWSA is bordered on all sides by grassy or bare soil areas. No stains on the unpaved areas in proximity to the HWSA were visually observed.

Two 55-gallon drums were located outside of the bermed area on unpaved ground. One drum contained solids, the other drum was empty. Two metal storage lockers for storage of flammable materials were located to the north and south of the HWSA. The contents of these lockers is unknown.

Waste Characteristics

Waste oil
Absorbent with waste fuel and oil

Possible Migration Pathways

Soil

Evidence of Release

Stains on the canvas liner of the HWSA

Exposure Potential

On-Station personnel

Recommendations

Since this HWSA is located on unpaved soil covered by a liner, which is stained and has a torn section, it is likely that soil may have been impacted by spills. This HWSA is recommended for a sampling visit.

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, Governo

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

MLCCSO.001130

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

The RWQCB letter does not identify Building 831 or Building 636.

CATE

June 23, 1989

LTJG Michael Rehor, Environmental Di
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

Kurt V. Berchtold
Supervising Engineer

cc: OCWD - Jim Reilly

TDP/mcaset2

CLF-CC1-[illegible]-AZ-000[illegible]

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.

This document does not identify Building 831 or Building 636.

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.

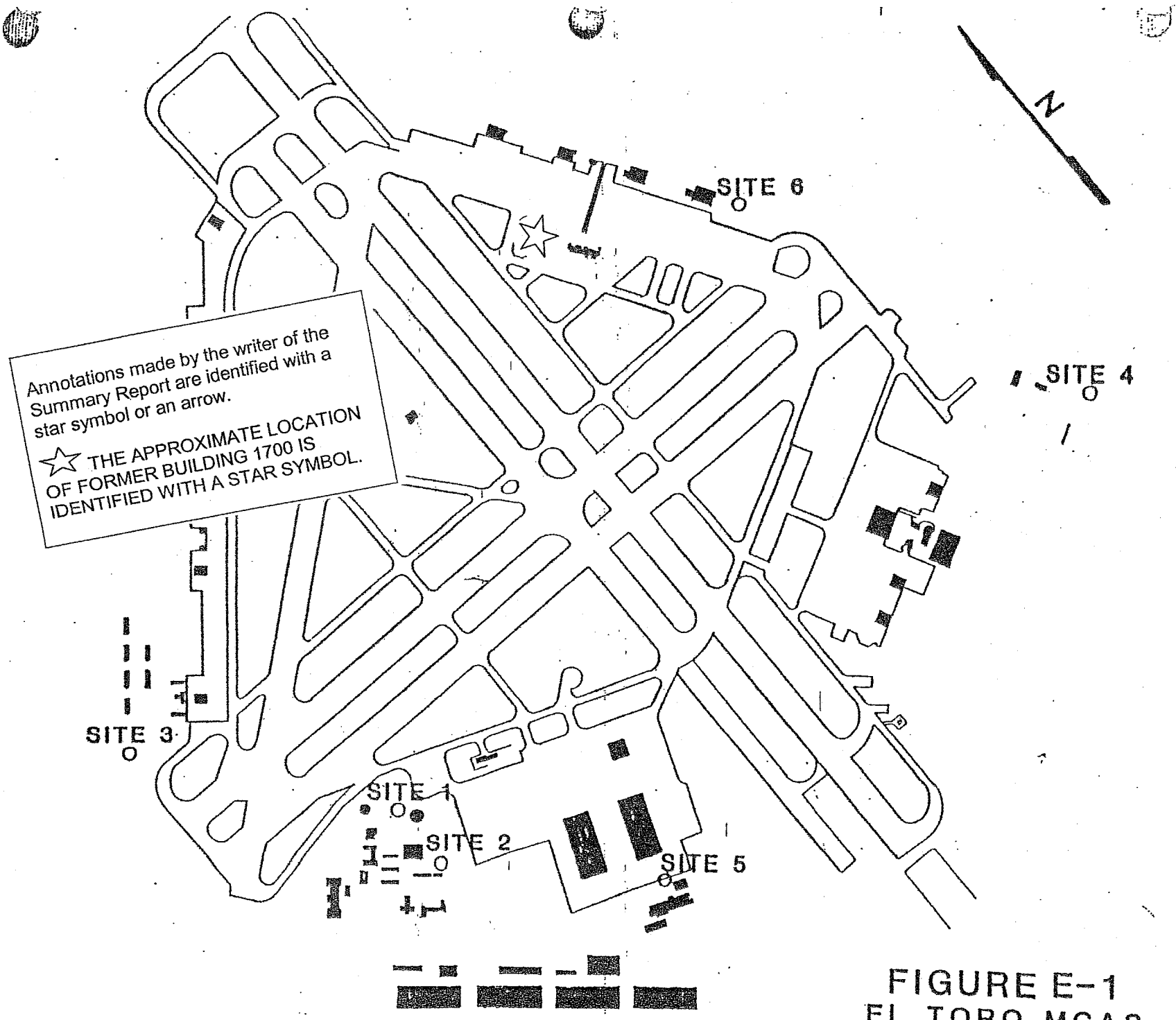
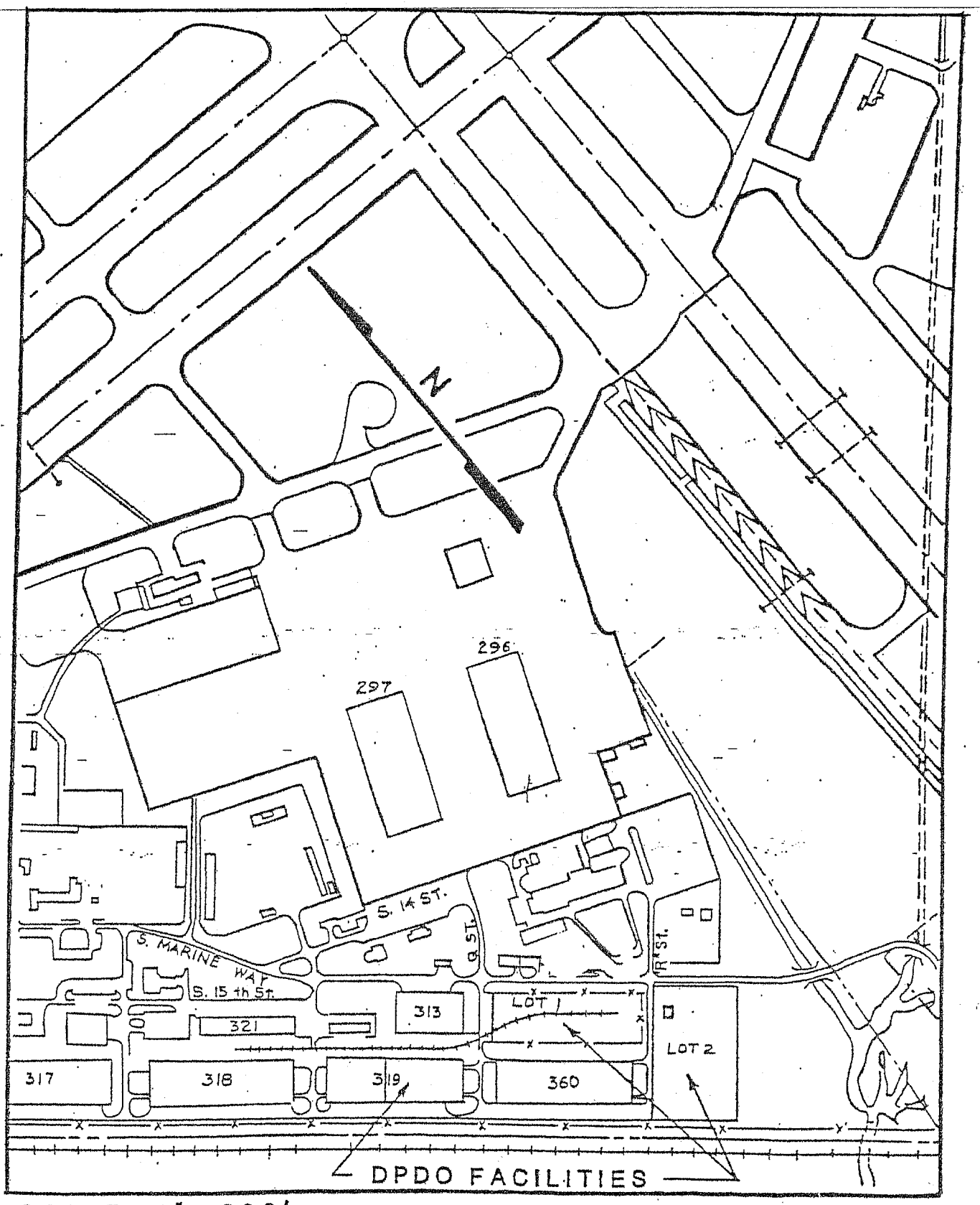
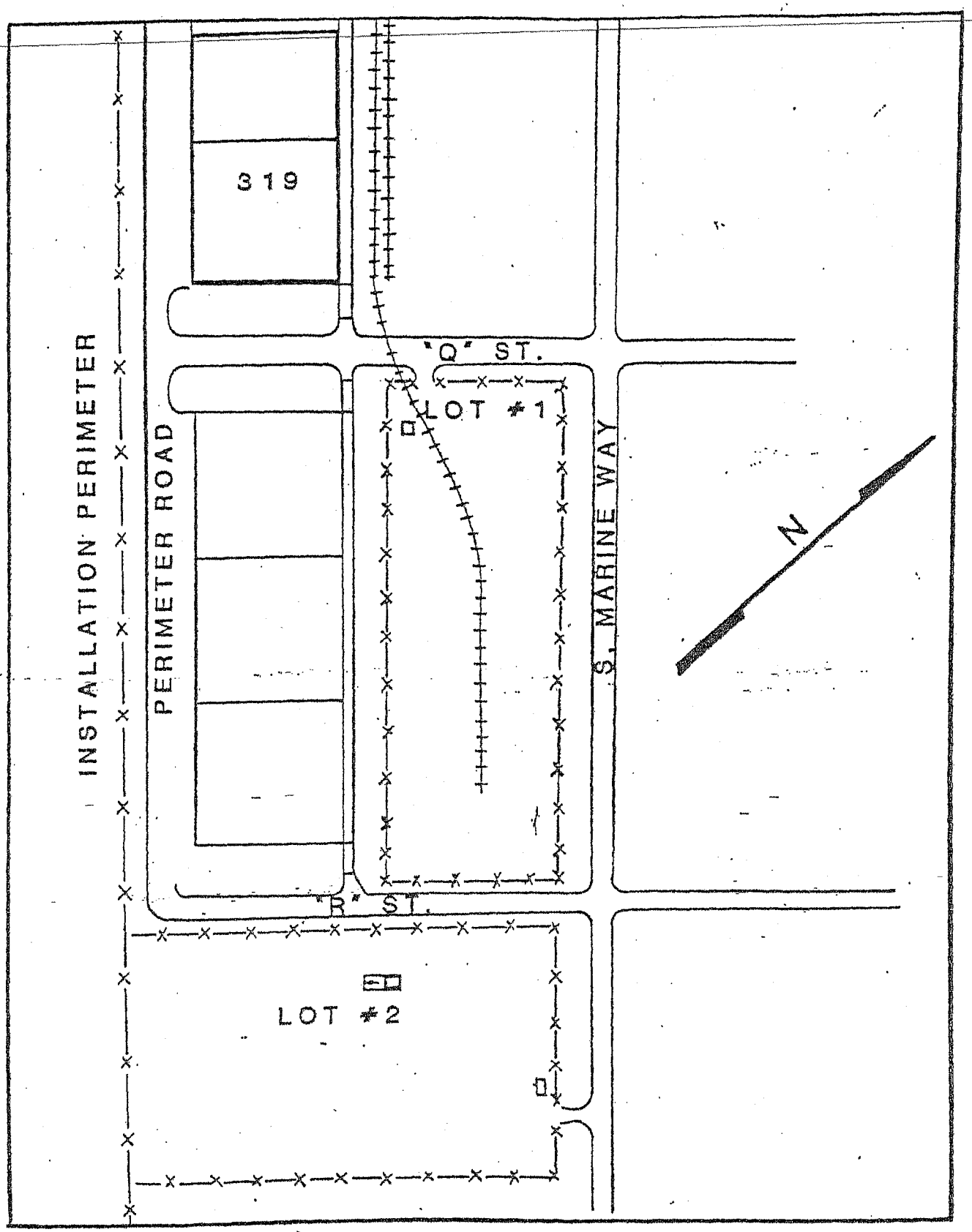


FIGURE E-1
EL TORO MCAS
HW STORAGE AREAS



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

M60050.000808
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.

☆ BUILDING 831 HAD NOT BEEN CONSTRUCTED AT THE TIME THIS DOCUMENT WAS PREPARED.

THIS DOCUMENT DOES NOT IDENTIFY BUILDING 636 WHICH IS LOCATED NEAR BUILDING 831.

SCS ENGINEERS

STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.

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

Prepared for

DEPARTMENT OF THE NAVY
WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA 92132

Prepared by

SCS ENGINEERS
4014 Long Beach Boulevard
Long Beach, California 90807
(213) 426-9544

CONTRACT NO. N62474-78-C-0776

NOVEMBER 1979

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	SI	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	SI	SW to storm sewer to Aqua Chinon Wash	Minor	No	
N-9	Vehicle Equipment Shop #127	Lube oil, Hydraulic fluid, Misc. oils	SI	SW to storm sewer to Aqua Chinon Wash	Minor	No	
O-2	Auto Exchange Repair Shop #651	Lube oil, Hydraulic fluid, Misc. oils	SI	SW indirect to Rifle Range Rd. Ditch	Minor	No	
P-5	Auto Organizational Shop #5	Lube oil, Hydraulic fluid, Misc. oils	SI	SW indirect to Rifle Range Rd. Ditch	Minor	No	
P-12	Ground Support Equipment Shop #673	Lube oil, Hydraulic fluid, Misc. oils	SI	N to drainage swale indirect to Aqua Chinon Wash	Minor	No	
P-13	Auto Organizational Shop #390	Lube oil, Hydraulic fluid, Misc. oils	SI	SW indirect to Aqua Chinon Wash	Minor	No	
R-5	Auto Organizational Shop #10	Lube oil, Hydraulic fluid, Misc. oils	SI	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	SI	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	SI	SW to storm sewer to Bee Canyon Wash	Minor	No	
U-8	Auto Organizational Shop #388	Lube oil, Hydraulic fluid, Misc. oils	SI	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.

Final

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

August 1994

EXTRACTS

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

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 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

N

500' 250' 0 500' 1000'

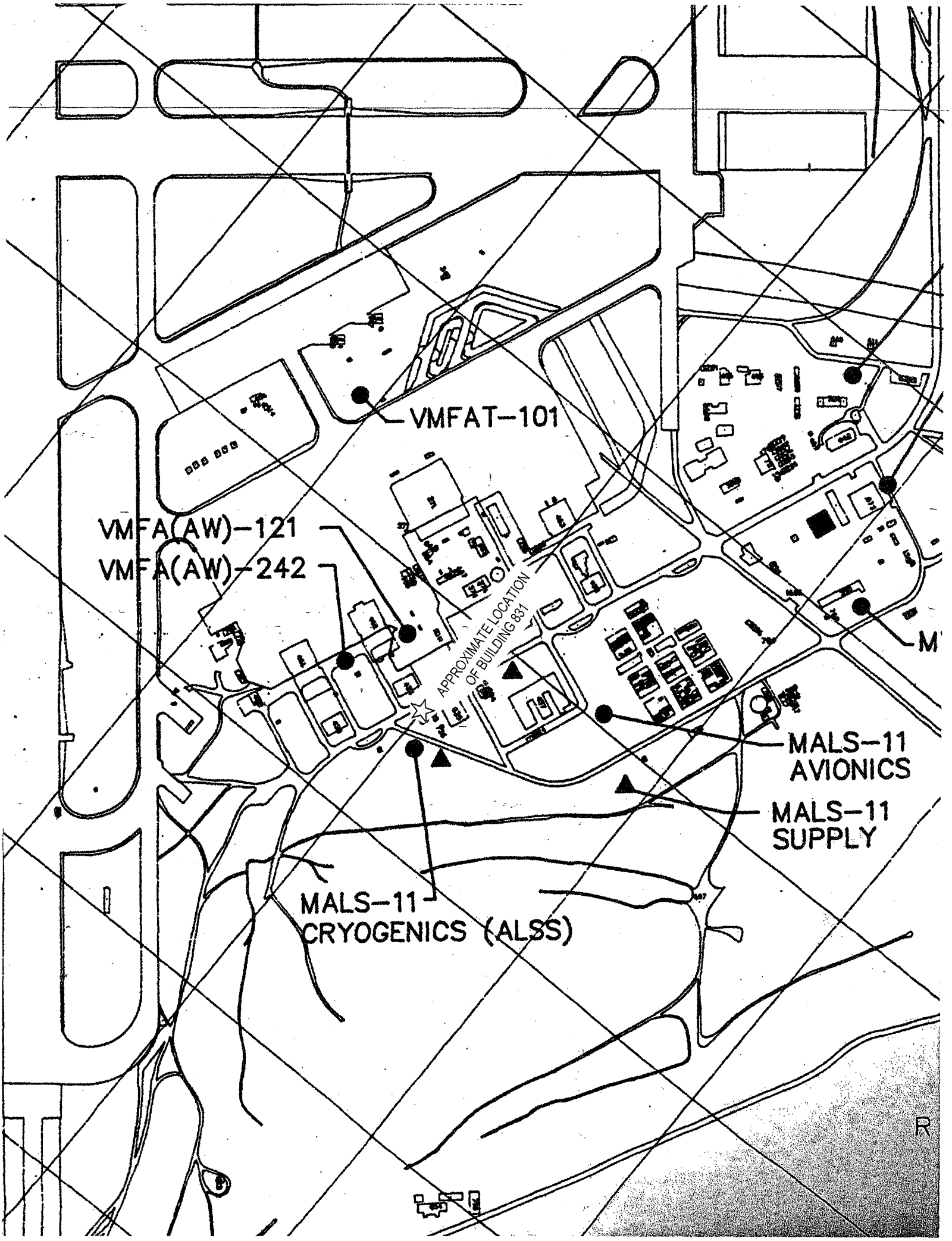
1" = 500'

Science Applications International Corporation
An Employee-Owned Company

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

☆ THE NEAREST ACCUMULATION POINT IS AT BUILDING 636 - CRYOGENICS.

Hazardous Waste Accumulation Point Summary		
Unit	Bldg #	Coordinates
Aero Club	10	R5
Armory	744	O2
Auto Hobby Shop	626	M3
CSSD-14	388	U8
Environmental Above Ground Storage Tank	n/a	U6
FMD Shops, Bldg 1601	370	T6
Fuels Division	314	U9
H&HS 38	22	R4
MACG-38 MWCS 38	HGR 5	R4
MAG-46	51	Q4
MAG-46 Fixed Wing	296	T9
MAG-46 Helo Mals-46	295	S6
MALS-11 Air Frames	130	M9
MALS-11 Avionics	656	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	O5
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


VMFAT-101
VMFA(AW)-121
VMFA(AW)-242
APPROXIMATE LOCATION OF BUILDING 831
MALS-11 AVIONICS
MALS-11 SUPPLY
MALS-11 CRYOGENICS (ALSS)

Final

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

August 1994

Appendix I
Photographs of Accumulation Points and Hazardous Material Storage Areas

Prepared for:

Southwest Division Naval Facilities Engineering Command
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Prepared by:

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Engineering Sciences Division
10260 Campus Point Drive
San Diego, CA 92121

Contract No. N68711-92-D-4658
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Accumulation Points and Hazardous Material Storage Locations

MCAS El Toro

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Motor Pool (G-4) Bldg 770 1
Motor Pool (G-4) Bldg 770 1
Motor Pool (G-4) Bldg 770 2
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Facilities Maintenance Department Shops, Bldg 1601 (FMD) 3
Facilities Maintenance Department Shops, Bldg 1601 (FMD) 3
Supply 4
Supply 4
Combat Service Support Detachment 14 (CSSD 14) 5
Combat Service Support Detachment 14 (CSSD 14) 5
Marine Aerial Refueler/Transport Squadron 352 (VMGR 352) 6
Marine Aerial Refueler/Transport Squadron 352 (VMGR 352) 6
Marine Aircraft Group 46 (MAG 46), Fixed Wing 7
Marine Aircraft Group 46 (MAG 46), Fixed Wing 7
Marine Aircraft Group 46 (MAG 46), Helo Mals 11 8
Marine Aircraft Group 46 (MAG 46), Helo Mals 11 8
Marine Wing Support Squadron 373 (MWSS 373), Refuelers 9
Marine Wing Support Squadron 373 (MWSS 373), Headquarters 9
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Morale, Welfare & Recreation Department (MWR), Golf Course 10
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics 11
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics 11
Marine All Weather Fighter Attack Squadron 242 (VFMA (AW) 242) 12
Marine All Weather Fighter Attack Squadron 121 (VFMA (AW) 121) 12
Marine Fighter Attack Training Squadron 101 (VFMAT 101) 13
Marine Fighter Attack Training Squadron 101 (VFMAT 101) 13
Marine Aviation Logistics Squadron 11 (MALS 11), Avionics 14
Marine Aviation Logistics Squadron 11 (MALS 11), Ordinance 14
Marine Aviation Logistics Squadron 11 (MALS 11), Power Plant 15
Marine All Weather Fighter Attack Squadron 225 (VFMA (AW) 225) 15
Maytag Aircraft Corporation 16
Maytag Aircraft Corporation 16
MOD Team 17
Marine Fighter Attack Squadron 323 (VFMA 323) 17
Marine Fighter Attack Squadron 314 (VFMA 314) 18
Marine Aviation Logistics Squadron 11 (MALS 11), Power Plant 18
Marine Aviation Logistics Squadron 11 (MALS 11), Air Frames 19
Marine Aviation Logistics Squadron 11 (MALS 11), GSE North 19
Marine Aviation Logistics Squadron 11 (MALS 11), GSE North 20
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Marine Wing Support Squadron Utilities (MWSS Utilities) 21

Accumulation Points, El Toro (Continued)

Page No.

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Marine Aircraft Group 46 (MAG 46) 24
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Squadron Operations & Maintenance Squadron (SOMS), Maintenance 25
Squadron Operations & Maintenance Squadron (SOMS), Headquarters 26
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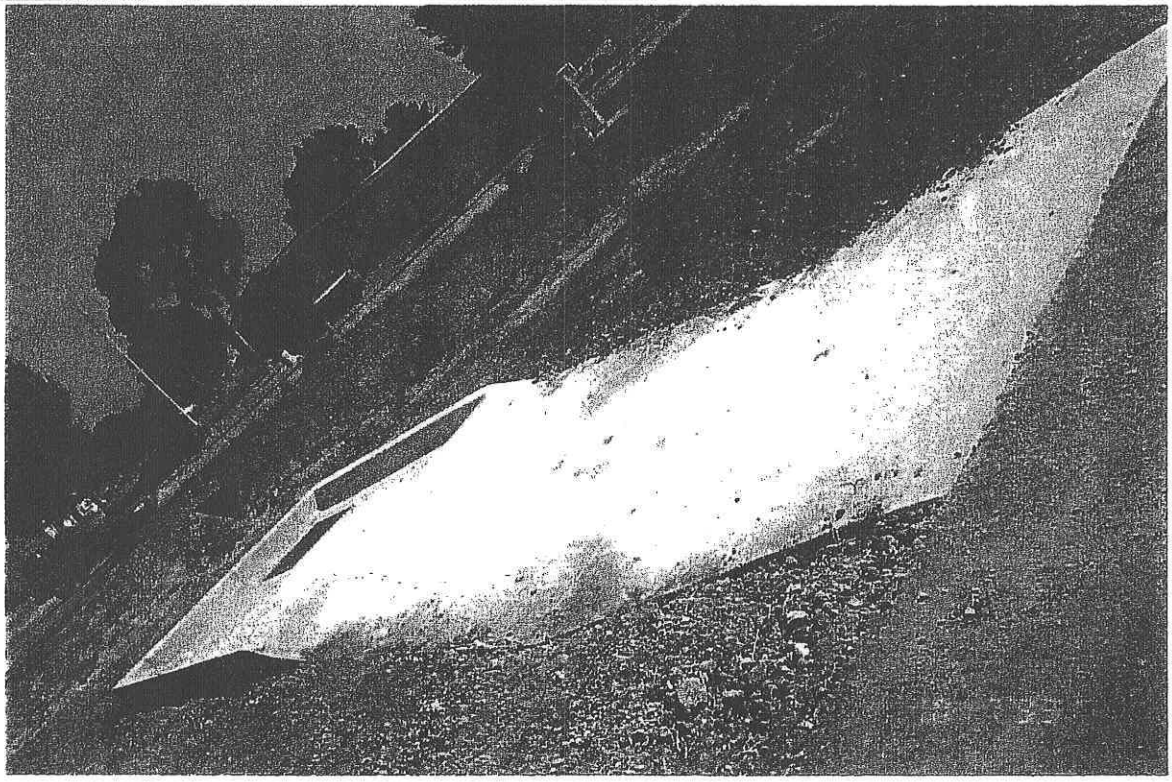
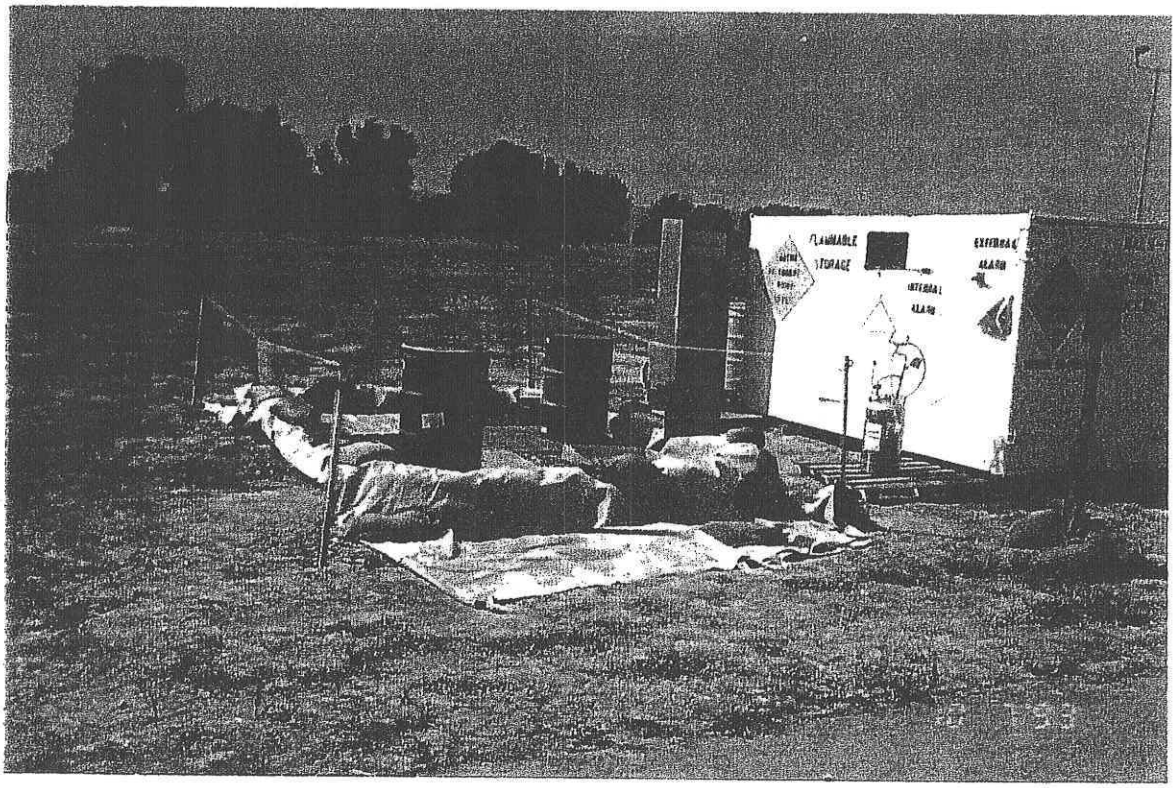
Auto Hobby Shop 27
Armory 27
Building 673-T3, Hazardous Waste Storage 28
Building 673-T3, Hazardous Waste Storage 28
Building 673-T3, Hazardous Waste Storage 29
Environmental Above Ground Storge Tank 29
Environmental Above Ground Storge Tank 30

Hazardous Materials Storage Areas, El Toro

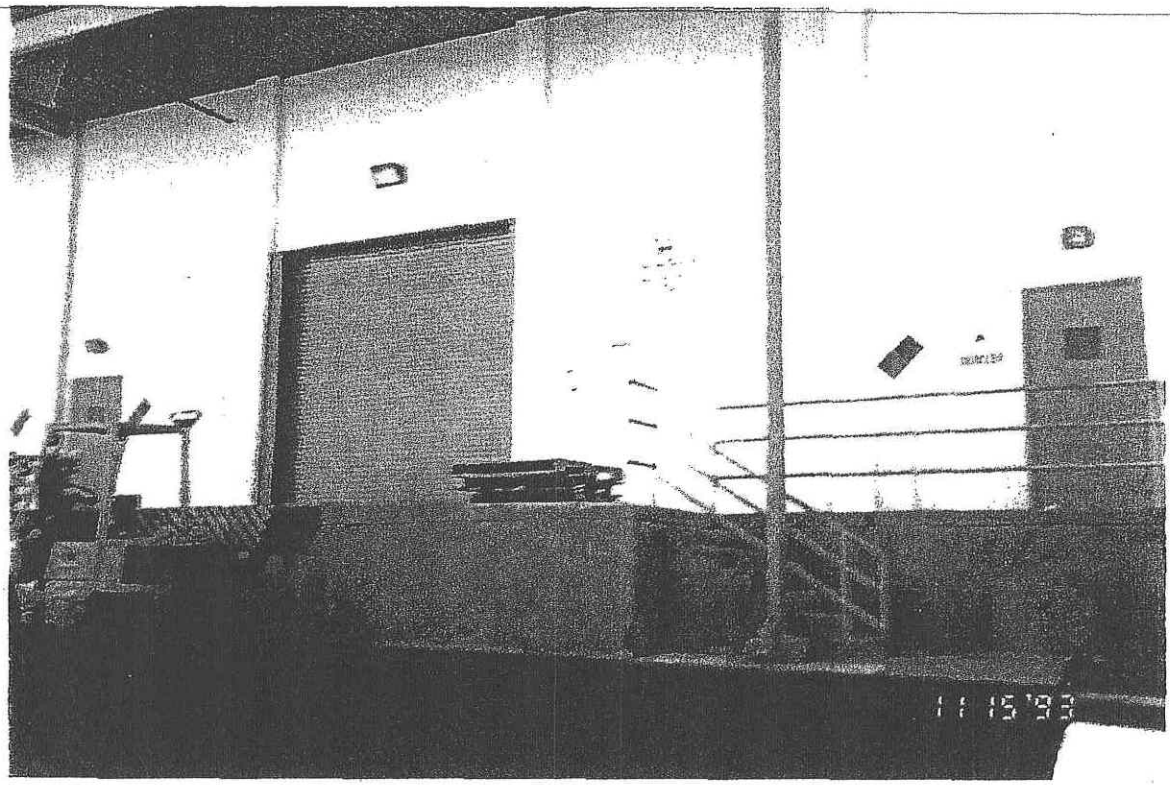
Headquarters & Headquarters Squadron 38 (H&HS 38), Storage Area 31
Aero Club, Storage Area 31
Marine Air Control Group 38 (MACG 38), Storage Area 32
Morale, Welfare & Recreation Department (MWR), Auto #1, Storage Area 32
Squadron Operations & Maint Squad (SOMS), HQ, Storage Area 33
Marine Fighter Attack Squadron 314 (VFMA 314), Storage Area 33
Marine Aviation Logistics Squadron 11 (MALS 11), Air Frames, Storage Area 34
Marine Aviation Logistics Squadron 11 (MALS 11), Ordinance, Storage Area 34
Marine Aviation Logistics Squadron 11 (MALS 11), Supply 35
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area 35
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area 36
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area 36
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area 37
Marine Aviation Logistics Squadron 11 (MALS 11), Storage Area 37
Compressed Gas Cylinder Storage Area 38
Flammable Material Storage Area 38
Chemical Storage Area 39
Chemical Storage Area 39
Flammable Storage Area 40
Hospital Compressed Gas Storage Area 40
Hospital Flammable Material Storage Area 41



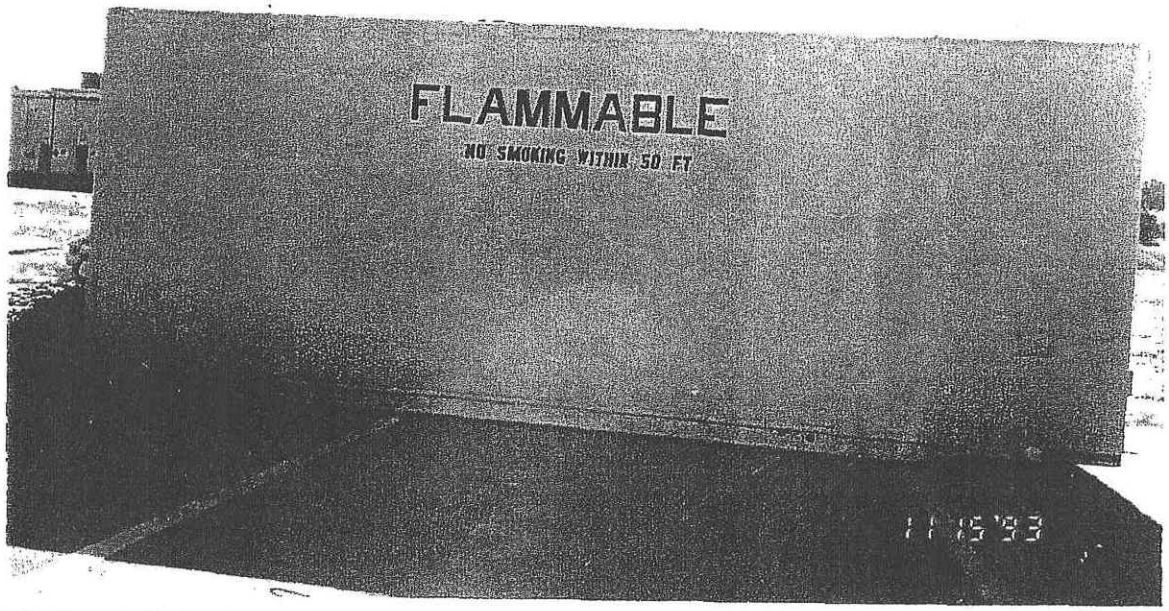
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics Bldg 636



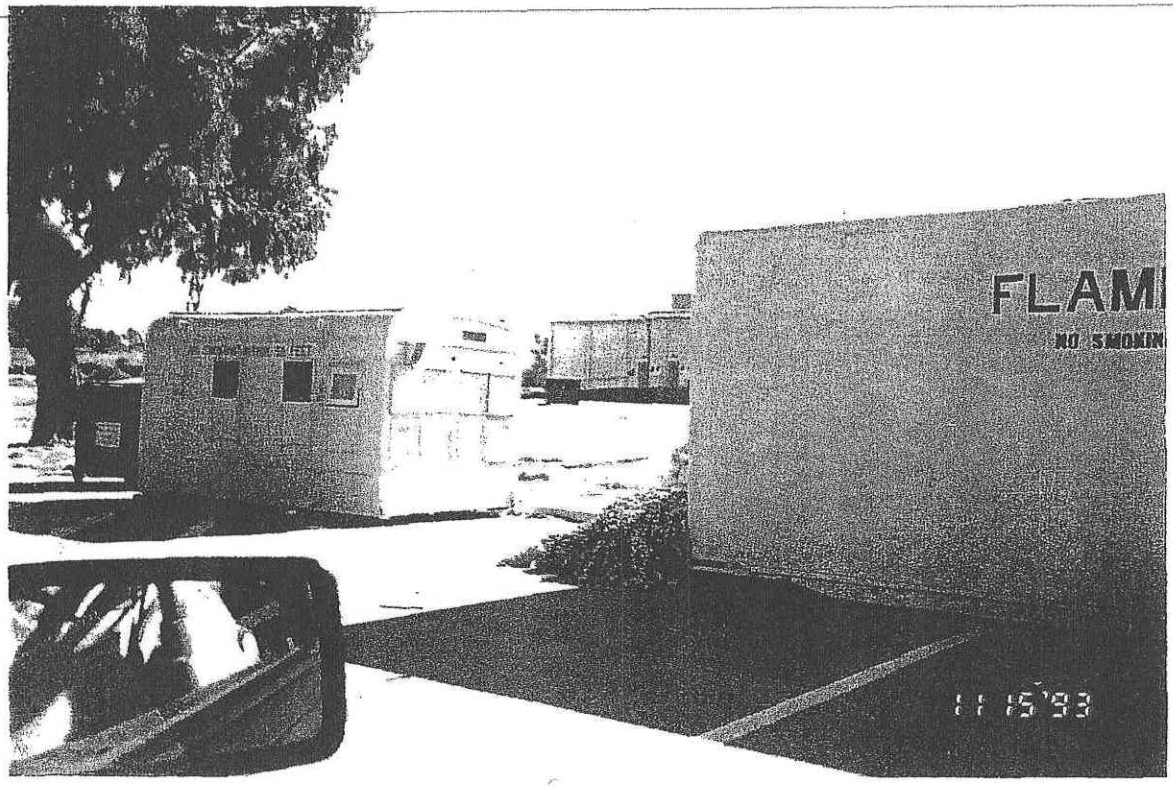
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics Bldg 636



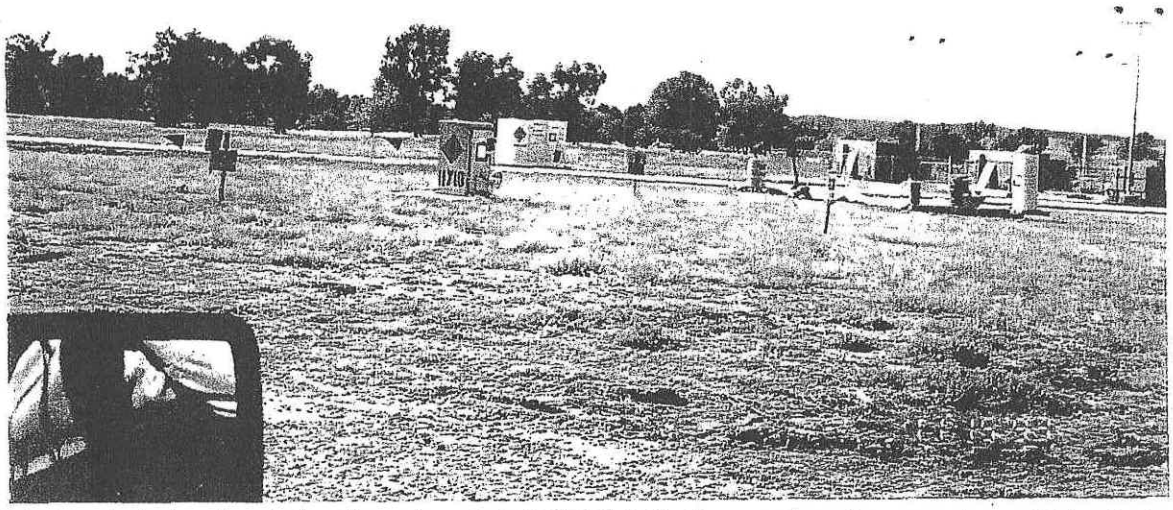
Mariine Aviation Logistics Squadron 11 (MALS 11), Supply



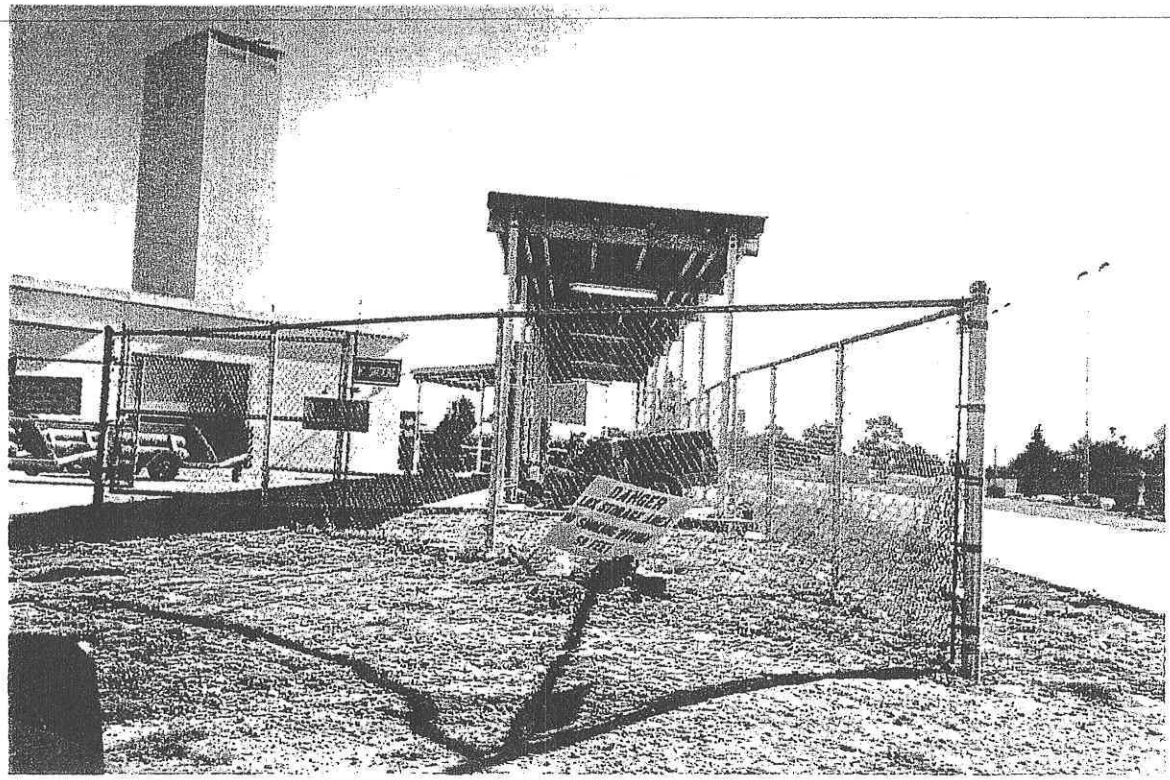
Mariine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area Bldg 636



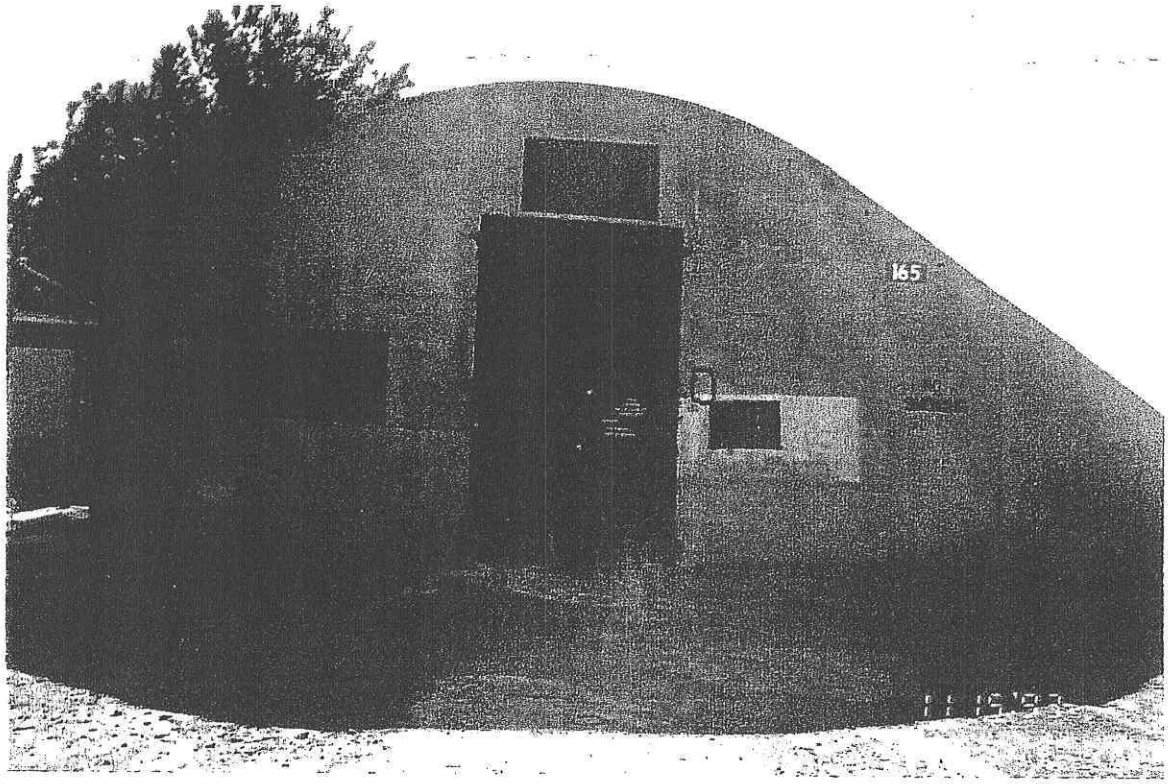
Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area Bldg 636



Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics, Storage Area Bldg 636



Marine Aviation Logistics Squadron 11 (MALS 11), Cryogenics Storage Area Bldg 636



Marine Aviation Logistics Squadron 11 (MALS 11), Storage Area Bldg 165

M60050.000776 (1.2)

4/17/89 TDP

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 1989 list does not identify Building 831 or Building 636.

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

EXTRACTS

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

FOR

MARINE CORPS AIR STATION EL TORO
EL TORO, CALIFORNIA

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

VOLUME 1

JULY, 1997

INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.

TABLE 5-39

MCAS EL TORO

SPILL HISTORY

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

TABLE 5-39
MCAS EL TORO
SPILL HISTORY

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

TABLE 5-39
MCAS EL TORO
SPILL HISTORY

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

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

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

BLDG CLASS 2 PROPERTY RECORD

TIME: 18:12:45 DATE: 93/08/29

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

(001) PR NO.....203069
(005) FACILITY NO..831
(106) SPEC AREA....

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

PR LAST UPDATED....13 AUG 1993

LOCATION

(101) COUNTRY..US UNITED STATES
(102) STATE....06 CALIFORNIA
(103) COUNTY...059 ORANGE
(104) CITY.....0000
(107) MAP GRID.R-12

GENERAL INFORMATION

(007) ACTION.....ACQUISITION
(008) FAM HOUSING....NO
(009) EE DATE.....
(011) PR REVIEW DATE.
(010) FACILITY NAME..
CRYOGENICS/VEHICLE SHOP

ACQUISITION

(201) ESTATE.....13 OTHER MIL FUND
(202) ACQ CONTRACT...N6247485C8417
(203) ACQ DATE.....16 AUG 1987
(204) GOVT COST..... $214,000
(205) APPR/EST.....
(206) APPR/EST DATE..
(207) LAND CCN.....91140
(014) NATO JFAI.....

INGRANTS

(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.

MEASUREMENTS

	ENGLISH	METRIC
+(301) LENGTH....	60 FT	+ 18 M
+(302) WIDTH.....	49 FT	+ 14 M
+(303) HEIGHT....	15 FT	+ 4 M
+(304)/(308) *AREA/UM...	2,260 SF	+ 209 m2
+(305) STORIES...	01	
+(307) IRREGULAR.	YES	

CONSTRUCTION

(401) YEAR BUILT.....1987
(402) CONSTRUCTION TYPE..PERMANENT
(403) YEAR IMPROVED.....
(404) ABMP CODE.....
(409) CURR PROJ ID...ET616R
(411) ORIG PROJ ID...
(410) HISTORIC IND...

MAINTENANCE

(701) MAINT UIC..M60050 (702) PRIME USE....14187 (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 831.

93AUG29 EFD.N68711 MC.M00027 *ACTIVITY.M60050 PR.2-03069 CONT

FM26P127MAR83

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

TIME: 18:12:45 DATE: 93/08/29

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

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

(001) PR NO.....203069
(005) FACILITY NO..831
(106) SPEC AREA....

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

PR LAST UPDATED....13 AUG 1993

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

(502) CATEGORY CODE...14187 (501) USE..LIQUID OXY/NIT FAC(NONIND)
(510) USER UIC.....M60050.....MCAS EL TORO SANTA ANA CA
(511) USE LAST UPDATED.

ENGLISH	AREA/SF*		OTHER/GA		ALT/		DEF CODES
ADEQ (515)	.....5,074.00	(516)	.....3,500.00	(517)		(524)	
SBST (518)		(519)		(520)		(525)	
INAD (521)		(522)		(523)		(526)	
TOTAL	5,074.00		3,500.00				

METRIC	AREA/m2*		OTHER/L		ALT/		
ADEQ (515)	.....471.39	(516)	....13,248.94	(517)		(524)	
SBST (518)		(519)		(520)		(525)	
INAD (521)		(522)		(523)		(526)	
TOTAL METRIC	471.39		13,248.94				

FM24P127MARB3

El Toro Building Guide

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

El Toro Building Guide

BLDG	GRI	DESCRIPTION	TENANT	CATCO	CAC	SIZE
606	N8	Maint Hangar OH Space	HMM-163	21105	EBVO	5350 SF
607	R13	Public Toilet/Golf Course	MWR/Rec	73075	EBLO	92 SF
610	M9	Water Distribution Bldg	Installation	84209	EHCO	1126 SF
611	O12	Missile Magazine	Sta Ordn	42172	EBQO	930 SF
614	L10	Aqua Chinon Playground	Housing	75020	ECNO	2 EA
615	M2	Handball Courts	MWR/Rec	74084	EBLO	1743 SF
616	U7	Admin Office	Sta/G-4	61010	EBFO	792 SF
619	T12	Standby Generator Bldg	Installation	81159	EAAO	1329 SF
624	O4	Air Terminal	SOMS	14111	EBNO	2077 SF
624	O4	SQ Headquarters	SOMS	61010	EBFO	9393 SF
625	M3	Hobby Shop, Automotive	MWR/Rec	74038	EBLO	6153 SF
626	M3	Hobby Shop, Automotive	MWR/Rec	74038	EBLO	480 SF
629	P4	Academic Instruction Bldg	FASOTRAG	17110	EBAO	4260 SF
631	U9	Applied Instruction Bldg	MALS-11	17120	EBAO	12870
633	U9	Loading/Unloading Ramp	DRMO	85115	EDAO	68 SY
634	M9	Avionics Shop	MALS-11	21154	EBVO	675 SF
634	M9	Maintenance Hangar 01 Space	MALS-11	21106	EBVO	2611 SF
634	M9	Engine Maintenance Shop	MALS-11	21121	EBVO	23365
634	M9	(Maint Hangar OH Space)	Vacant	21105	EBVO	13163
634	M9	(Maint Hangar O2 Space)	Vacant	21107	EBVO	5119 SF
634	M9	(Maint Hangar 01 Space)	Vacant	21106	EBVO	9958 SF
635	T9	Weighing Facility	Supply	89056	EAPO	1 EA
→ 636	R12	Cryogenics Office	MALS-11	14187	EBNO	500 SF
→ 636	R12	Parachute/Surv Equip Shop	MALS-11	21175	EBVO	8530 SF
637	M8	Exchange Gas Station	MWR/Ret	74031	EBLO	900 SF
638	Q10	Wind Direction Indicator	Sta/G-3	13462	ECXO	1 EA
639	N8	Electric Power Plant Bldg	Installation	81109	EAAO	144 SF
640	N8	Electric Power Plant Bldg	Installation	81109	EAAO	144 SF
641	N8	Electric Power Plant Bldg	Installation	81109	EAAO	144 SF
642	N9	Electric Power Plant Bldg	Installation	81109	ECEO	144 SF
643	N8	Fixed ACFT Start System	Installation	14915	ECEO	32 EA
644	N6	Arresting Gear	SOMS	14930	ECEO	1 EA
645	N6	Arresting Gear	SOMS	14930	ECEO	1 EA
646	P10	Arresting Gear	SOMS	14930	ECEO	1 EA
647	P10	Arresting Gear	SOMS	14930	ECEO	1 EA
649	O2	Cafeteria	MWR/Ret	74004	EBLO	6855 SF
649	O2	Exchange Retail Store	MWR/Ret	74001	EBLO	64191
649	O2	Exchange Warehouse	MWR/Ret	74085	EBLO	38318
650	P2	Exchange Retail Store Whse	MWR/Ret	74001	EBLO	3800 SF
651	O2	Exchange Auto Repair Sta	MWR/Ret	74030	EBLO	10495
651	O2	Exchange Supplmtl Gas Sta	MWR/Ret	74030	EBLO	3344 SF
655	U8	Field Maint Shop	CSSD-14	21453	EBBO	18600
656	P3	Child Development Center	Sta/G-1	74074	EBLO	12733
657	Q3	Visitor/Vehicle Registration	PMO	73025	EBLO	315 SF
658	N10	Engine Test Cell	MALS-11	21181	EBVO	2894 SF
659	N10	Storage Tank/Nonpotable	Installation	84440	EAQO	25000

1994 BUILDING GUIDE

MCAS EL TORO BUILDING GUIDE

FAC NO.	MAP GRID	DESCRIPTION	TENANT	CAT CODE NUMB	COST ACCT CODE	SIZE	
794	Q4	EOD Team Bldg	EOD	14320	EBPO	3600	SF
795	E14	EOD Range Bldg	EOD	14320	EBPO	340	SF
796	M10	Substation/Chiller Bldg	Installation	82610	EBPO	1518	SF
797	R5	AVGAS Fueling Station	Supply	12120	ECDO	800	GM
798	P12	Aircrft Decontamination Trng	Wing NBC	17950	EBAO	2	AC
799	P1	Package Store	MWR-Retail	74071	EBLO	10000	SF
800	U10	Vehicle Maint Facility	MWSS-373	21451	EBBO	30661	SF
801	U10	Dispatcher	MWSS-373	21451	EBBO	240	SF
802	U10	Washrack	MWSS-373	21455	EBBO	4000	SF
803	U10	Fuel Island (1)	MWSS-373	12310	ECBO	3	OL
804	U10	Fuel Island (2)	MWSS-373	12310	ECBO	3	OL
805	H15	Forklift Bldg	Sta Ordn	21860	EBBO	1922	SF
806	H15	Ammunition Assembly Shed	Sta Ordn	42510	EBQO	74888	SF
807	H15	Open Ammunition Storage	Sta Ordn	42510	EBQO	1800	SF
808	H15	Open Ammunition Storage	Sta Ordn	42510	EBQO	1800	SF
809	H15	Open Ammunition Storage	Sta Ordn	42510	EBQO	1800	
810	H15	Open Ammunition Storage	Sta Ordn	42510	EBQO	1800	
811	H15	Box Magazine	Sta Ordn	42172	EBQO	3630	SF
812	H15	Box Magazine	Sta Ordn	42172	EBQO	3630	SF
813	H15	ARCH Magazine	Sta Ordn	42122	EBQO	1250	SF
814	H15	ARCH Magazine	Sta Ordn	42122	EBQO	1250	SF
815	H15	ARCH Magazine	Sta Ordn	42122	EBQO	1250	SF
816	Q12	Computer Van Pad	MAG-11	11665	EDCO	174	SF
817	Q13	Vehicle Wash Bldg	MWR-Rec	21455	EBBO	288	SF
818	T-3	Sewage Lift Station	Installation	83230	EHFO	100	GM
819	K15	Small Arms Range Bldg	Sta Trng	17940	ECFO	1	EA
823	O3	Temporary Lodging Facility	MWR	74020	EBLO	23800	SF
824	S7	Crash Crew & Sta Recovery	SOMS	14120	EBNO	2112	SF
825	U10	Hazardous MH Locker	MWSS-373	44130	EBDO	250	SF
826	P12	Inert Weapon/Training Bldg	AWTU	17120	EBAO	4050	SF
827	U7	Supply Loading Ramp	Supply	85115	EDAO	1	EA
828	K7	Stables Equip Building	MWR-Rec	74079	EBLO	1800	SF
829	P4	Wing Headquarters	3d MAW	61070	EBFO	45287	SF
829	P4	Admin Office	NAESU	61010	EBFO	620	SF
830	L2	Playing Field	MWR-Rec	75020	ECNO	1	EA
831	R12	Cryrogenics	MALS-11	14187	EBNO	5074	SF
832	P12	NBC Gas Chamber	MWHS-3	17120	EBAO	2680	SF
833	N3	Chapel	Chaplain	73083	EBLO	7228	SF
834	L10	Fam Hsg Community Center	Installation	71432	EBBO	5000	SF
835	P14	Gate #3 Sentry House	PMO	73025	EBLO	96	SF
836	T3	Aircraft Display Gate #9	Installation	76020	ECNO	1	[illegible]
837	P2	Aircraft Display Gate #1	Installation	76020	ECNO	1	
838	M9	Aircraft Display Gate #2	Installation	76020	ECNO	1	
839	Q4	Combat Training Pool	Training	17120	EBAO	20820	SF
840	N14	Explosive Safety Office	MALS-11	61010	EBFO	928	SF
841	O13	Open Ammunition Storage Pad	Sta Ord	42510	75RO	210	SY
842	O2	Bachelor Enlisted Quarters	Station	72112	EBGO	180	PN
842	O2	Bachelor Enlisted Quarters	Station	72113	EBGO	110	PN

MCAS EL TORO BUILDING GUIDE

FAC NO.	MAP GRID	DESCRIPTION	TENANT	CAT CODE NUMB	COST ACCT CODE	SIZE
597	K14	Obstruction Light	Sta/G-3	13450	ECXO	1 EA
598	L15	Obstruction Light	Sta/G-3	13450	ECXO	1 EA
599	U9	Liquid Oxygen Facility	Supply	14187	EBNO	884 SF
600	P4	Storage out of Stores	MWCS-38	44112	EBDO	4108 SF
601	K1	Public Toilet/Picnic Area #1	MWR-Rec	73075	EBLO	92 SF
602	M9	Van Maint Shop	MALS-11	21145	EBVO	4800 SF
605	N7	Maint Hangar OH Space	VMFA-314	21105	EBVO	12900 SF
605	N7	Maint Hangar 01 Space	VMFA-314	21106	EBVO	5350 SF
605	N7	Maint Hangar 02 Space	VMFA-314	21107	EBVO	5348 SF
606	N8	Maint Hangar OH Space	VMFA-323	21105	EBVO	5350 SF
606	N8	Maint Hangar 01 Space	VMFA-323	21106	EBVO	12900 SF
606	N8	Maint Hangar 02 Space	VMFA-323	21107	EBVO	5348 SF
607	R13	Public Toilet/Golf Course	MWR-Rec	73075	EBLO	92 SF
610	M9	Water Distribution Bldg	Installation	84209	EHCO	1126 SF
611	O12	Missile Magazine	Sta Ordn	42172	EBQO	930 SF
614	L10	Aqua Chinon Playground	Housing	75020	ECNO	2 [illegible]
615	M2	Handball Courts	MWR-Rec	74084	EBLO	1743 S.
616	U7	Admin Office	Installation	61010	EBFO	792 SF
619	T12	Standby Generator Bldg	Installation	81159	EAAO	1329 SF
624	O4	Air Terminal	SOMS	14111	EBNO	2077 SF
624	O4	SQ Headquarters	SOMS	61010	EBFO	9393 SF
625	M3	Hobby Shop, Automotive	MWR-Rec	74038	EBLO	6153 SF
626	M3	Hobby Shop, Automotive	MWR-Rec	74038	EBLO	480 SF
629	P4	Academic Instruction Bldg	FASOTRAGRU	17110	EBAO	4260 SF
631	U9	Applied Instruction Bldg	NAMTRADET	17120	EBAO	12870 SF
633	U9	Loading/Unloading Ramp	DRMO	85115	EDAO	68 SY
634	M9	Maint Hangar OH Space	MALS-11	21105	EBVO	5119 SF
634	M9	Maint Hangar 01 Space	MALS-11	21106	EBVO	13163 SF
634	M9	Maint Hangar 02 Space	MALS-11	21121	EBVO	16629 SF
634	M9	Engine Maint Shop	MALS-11	21106	EBVO	12569 SF
634	M9	Avionics Shop	MALS-11	21145	EBVO	675 SF
635	T9	Weighting Facility	Supply	89056	EAFO	1 EA
→ 636	R12	Parachute/Surv Equip Shop	MALS-11	21175	EBVO	8530 SF
→ 636	R12	Cryogenics Office	MALS-11	14187	EBNO	500 SF
637	M8	Exchange Gas Station	MWR-Retail	74031	EBLO	900 SF
638	[illegible]	[illegible] cator	Sta/G-3	13462	ECXO	1 EA
[illegible]	[illegible]	[illegible] Bldg	Installation	81109	EAAO	144 SF
[illegible]	[illegible]	[illegible] Bldg	Installation	81109	EAAO	144 SF
[illegible]	[illegible]	[illegible] Bldg	Installation	81109	EAAO	144 SF
[illegible]	[illegible]	[illegible] Bldg	Installation	81109	ECEO	144 SF
[illegible]	[illegible]	[illegible] tem	Installation	14915	ECEO	32 F
[illegible]	[illegible]	[illegible]	SOMS	14930	ECEO	1 [illegible]
[illegible]	[illegible]	[illegible]	SOMS	14930	ECEO	1 EA
646	P10	Arresting Gear	SOMS	14930	ECEO	1 EA
647	P10	Arresting Gear	SOMS	14930	EBLO	1 EA
649	O2	Exchange Warehouse	MWR-Retail	74085	EBLO	38318 SF
649	O2	Exchange Retail Store	MWR-Retail	74001	EBLO	64191 SF
649	O2	Cafeteria	MWR	74004	EBLO	6855 SF

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

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Building 636 is located near Building 831.

	75057	RECREATION GRDS SITE 1	N6247483C2095	19861001		0	0	0	0	$7,140	$9,289	1986	
	75057	RECREATION GRDS SITE 1	N6247483C2095	19861001		0	0	0	0	$7,140	$9,289	1986	
	75057	REC GRDS (TOT LOTS) SITE 1	N6247483C2095	19861001		0	0	0	0	$6,746	$8,777	1986	
	75057	REC GRDS (TOT LOTS) SITE 1	N6247483C2095	19861001		0	0	0	0	$6,746	$8,777	1986	
	75057	REC GRDS (TOT LOTS) SITE 1	N6247483C2095	19861001		0	0	0	0	$6,746	$8,777	1986	
	75057	REC GRDS (TOT LOTS) SITE 1	N6247483C2095	19861001		0	0	0	0	$6,746	$8,777	1986	
	75057	REC GRDS (TOT LOTS) SITE 1	N6247483C2095	19861001		0	0	0	0	$6,746	$8,777	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$6,410	$8,339	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$6,410	$8,339	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$6,410	$8,339	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$6,410	$8,339	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$6,410	$8,339	1986	
	75010	OUTDOOR COURTS SITE 1	N6247483C2095	19861001		0	0	0	0	$2,606	$3,390	1986	
	85110	ROADS SITE 2	N6247483C2095	19861001	SY	9,831	0	0	0	$78,702	$102,391	1986	
	85210	SIDEWALKS SITE 2	N6247483C2095	19861001	SY	1,849	0	0	0	$51,103	$66,485	1986	
	87210	SOUND WALL SITE 2	N6247483C2095	19861001		0	0	0	0	$49,821	$64,817	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	75010	OUTDOOR COURTS SITE 2	N6247483C2095	19861001		0	0	0	0	$5,211	$6,780	1986	
	83210	SANITARY SEWER	N6247483C2095	19861001		0	0	0	0	$452,385	$588,553	1986	
	84210	WATER DISTRIBUTION	N6247483C2095	19861001		0	0	0	0	$420,799	$547,459	1986	
	82410	GAS DISTRIBUTION	N6247483C2095	19861001		0	0	0	0	$96,004	$124,901	1986	
	81230	ELECTRICAL DISTRIBUTION	N6247483C2095	19861001		0	0	0	0	$171,336	$222,908	1986	
	87110	STORM DRAIN	N6247483C2095	19861001		0	0	0	0	$398,149	$517,992	1986	
837	76020	AIRCRAFT DISPLAY GATE 1		19870605		0	0	0	0	$46,205	$57,033	1987	1990
838	76020	F4 AIRCRAFT DISPLAY GATE 2		19850723		0	0	0	0	$2,554	$3,374	1985	
827	85115	SUPPLY LOADING RAMP	N62474844104	19861020	SY	840	198	51	4	$298,525	$388,382	1986	
828	74079	STABLE EQUIPMENT BUILDING		19870901	SF	1,120	56	20	10	$10,000	$12,900	1987	
829	61070	MARINE AIR WING HEADQUARTERS	N6247486C0376	19880201	SF	45,907	221	181	27	$5,396,659	$6,563,266	1988	1990
830	75020	PLAYING FIELD	N6247482C0744	19860131		0	360	160	0	$197,129	$254,296	1987	
831	14187	CRYOGENICS/VEHICLE SHOP	N6247485C8417	19870816	SF	2,260	60	49	15	$214,000	$276,060	1987	
832	17120	GAS CHAMBER FACILITY	N6247485C8417	19870816	SF	2,862	80	49	14	$179,000	$230,910	1987	
833	73083	CHAPEL REPLACEMENT	N6247485C5499	19880725	SF	7,228	104	80	36	$1,047,739	$1,277,194	1988	
834	71432	FAMILY HSG COMMUNITY CENTER	N6247484C1797	19880311	SF	5,000	52	96	12	$666,410	$812,354	1988	
835	73025	GATE #3 GUARD SHACK		19870115	SF	216	18	12	10	$10,000	$12,900	1987	
6709	71170	15006 EHNIS WAY - 264 UNITS	N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
6710	71171	1814 BENNETT CIRCLE 264 UNIT	N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
6711	71171	1810 BENNETT CIRCLE 264 UNIT	N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
6712	71171	1806 BENNETT CIRCLE 264 UNIT	N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	4,908	56	49	27	$175,875	$222,079	1987	
			N6247484C4634	19871101	SF	6,877	73	54	25	$175,737	$228,688	1987	
			N6247484C4634	19871101	SF	6,877	73	54	25	$175,737	$228,688	1987	

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

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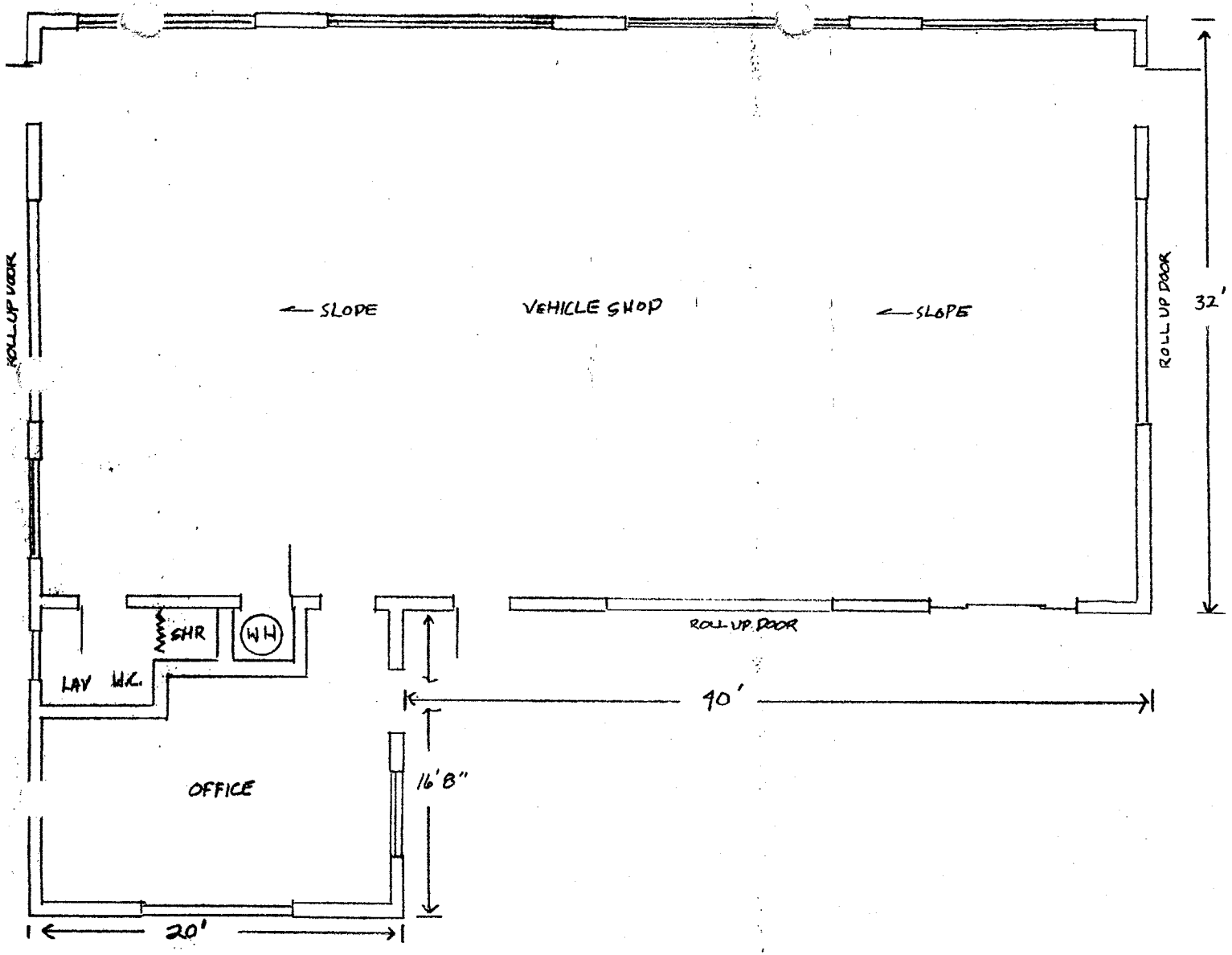
EXTRACTS FROM THE PLANT ACCOUNT IDENTIFY BUILDING 831 AND NEARBY BUILDINGS 636, 755, & 756.

	87210	CHAIN LINK FENCE (212 UNITS)	N6247481C8934	19831209		0	0	0	0	$29,000	$40,165	1983	
	85110	ROADS (212 UNITS)	N6247481C8934	19831209	SY	28,333	0	0	0	$275,000	$380,875	1983	
	85220	SIDEWALKS (212 UNITS)	N6247481C8934	19831209	SY	8,141	0	0	0	$91,000	$126,035	1983	
	81212	TRANSFORMERS (212 UNITS)	N6247481C8934	19831209		0	0	0	0	$22,800	$31,578	1983	
785	21106	PASCOE BUILDING		19840701	SF	5,600	140	40	20	$34,778	$45,951	1984	1985
755	14187	LOX/NOX BLDG	N6247481C7357	19830531	SF	150	15	10	10	$25,338	$35,321	1983	
756	14187	LOX/NOX SHED	N6247481C7357	19830531	SF	150	15	10	10	$25,337	$35,320	1983	
	85235	LOX SLAB		19840709	SY	69	25	25	0	$1,074	$1,449	1984	
	69010	FLAG POLE		19831101	SY	0	0	0	0	$469	$645	1983	1985
767	69010	BILLBOARD SIGN		19830101		0	0	0	0	$4,000	$5,540	1983	
787	17110	NBC DEFENSE TRAINING BLDG	N6247483C5722	19840906	SF	4,000	71	65	17	$185,039	$249,618	1984	
786	21154	AVIATION ARMAMENT BLDG	N6247483C5721	19841004	SF	3,000	75	40	22	$86,981	$117,337	1984	
792	74079	STABLES BARN		19840920	SF	2,880	120	24	15	$60,000	$80,700	1984	
	69010	ENERGY CONSERVATION B BOARD		19841109		0	0	0	0	$1,260	$1,695	1984	1984
746	17135	OPERATIONAL TRAINER FACILITY	N6247479C5140	19840817	SF	22,516	144	124	50	$3,288,901	$4,436,082	1984	1990
796	82610	SUBSTATION/CHILLER BLDG	N6247479C5140	19840817	SF	1,518	69	22	14	$224,816	$303,277	1984	
758	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19840830	SF	228	19	12	10	$31,000	$41,819	1984	
759	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19840830	SF	228	19	12	10	$31,000	$41,819	1984	
760	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19850830	SF	228	19	12	10	$31,000	$41,819	1984	
761	89009	A/C WASH EQUIPMENT BLDG	N6247480C9175	19840830	SF	684	36	19	12	$100,000	$134,900	1984	
762	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19850830	SF	228	19	12	10	$31,000	$41,819	1984	
763	89009	A/C WASH EQUIPMENT BLDG	N6247480C9175	19850830	SF	684	36	19	12	$100,000	$134,900	1984	
764	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19850830	SF	228	19	12	10	$54,554	$73,593	1984	
765	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19840830	SF	228	19	12	10	$54,554	$73,593	1984	
766	89009	VEH WASH EQUIPMENT BLDG	N6247480C9175	19840830	SF	228	19	12	10	$54,554	$73,593	1984	
	21455	VEHICLE WASHRACKS	N6247480C9175	19850830		10,091	0	0	0	$578,971	$781,032	1984	
674	87111	OIL WATER SEPARATOR	N6247471C4175	19720801		0	0	0	0	$74,000	$173,272	1972	1992
675	87111	OIL WATER SEPARATOR	N6247471C4178	19720801		0	0	0	0	$44,000	$138,952	1972	
797	12120	AVGAS FUELING STATION	N6247483C5771	19850321		0	40	40	30	$61,588	$81,358	1985	
789	83229	SEWAGE MONITORING STATION	N6247480C9175	19840830	SF	36	6	6	9	$114,364	$154,105	1984	1986
794	14320	EOD TEAM BLDG	N6247484C1747	19850514	SF	3,600	90	40	14	$194,494	$254,596	1985	1993
795	14320	EOD RANGE BLDG	N6247484C1747	19850514	SF	340	20	17	18	$44,529	$58,195	1985	1990
798	73070	AIRCRAFT DECONTAMINATION TRN	N6247483C1749	19850513	SF	944,460	945	987	10	$187,963	$246,607	1985	
817	21455	VEHICLE WASH BLDG	N6247483C5729	19850314	SF	288	24	12	12	$40,320	$52,436	1985	1986
816	11665	COMPUTER VAN PAD MAG-13	N6247484C1814	19850814	SY	174	98	16	0	$53,882	$71,569	1985	
780	42135	READY SERVICE MAGAZINE	N6247482C2812	19850325	SF	128	8	16	9	$32,017	$42,227	1985	1990
781	42135	READY SERVICE MAGAZINE	N6247482C2812	19850325	SF	512	16	32	9	$82,681	$109,222	1985	
818	83230	SEWAGE LIFT STATION	N6247483C5680	19850919		0	10	10	3	$37,600	$49,670	1985	
791	74060	COMMISSIONED OFFICERS' CLUB	N6247483C5680	19850916	SF	22,500	214	135	18	$2,410,479	$3,182,036	1985	1990
819	17940	SMALL ARMS RANGE OUTDOOR	N6247480C9567	19860205		0	42	38	10	$331,616	$423,315	1986	
790	74080	GOLF CART BLDG	N6247482C0749	19850123	SF	3,471	89	39	12	$154,831	$205,394	1985	1986
	83130	SEPTIC TANK (SM ARMS RANGE)	N6247480C9567	19860205		0	0	0	0	$12,003	$15,593	1986	
	85230	PEDESTRIAN BRIDGE (WHERRY)	N6247483C5757	19860311	SY	22	50	4	0	$30,132	$39,202	1986	
	85230	PEDESTRIAN BRIDGES (WHERRY)	N6247483C5757	19860311	SY	44	100	4	0	$46,131	$60,939	1985	
	11665	COMPUTER VAN PAD MAG-11	N6247484C1814	19851028	SY	278	100	25	0	$73,427	$96,606	1985	
805	21860	FORKLIFT BLDG	N6247483C2177	19860715	SF	1,922	62	31	14	$143,769	$187,043	1986	
811	42172	BOX MAGAZINE	N6247483C2177	19860715	SF	3,630	55	66	16	$494,059	$642,771	1986	
812	42172	BOX MAGAZINE	N6247483C2177	19860715	SF	1,250	50	25	12	$494,058	$642,769	1986	
813	42122	ARCH MAGAZINE	N6247483C2177	19860715	SF	1,250	50	25	12	$217,381	$282,665	1986	1990
814	42122	ARCH MAGAZINE	N6247483C2177	19860715	SF	1,250	50	25	12	$216,161	$281,225	1986	
815	42122	ARCH MAGAZINE	N6247483C2177	19860715	SF	1,250	50	25	12	$216,162	$281,227	1986	
800	21451	VEHICLE MAINTENANCE	N6247480C9828	19860321	SF	30,661	322	97	25	$2,710,241	$3,513,556	1986	1988
801	21451	DISPATCH OFFICE	N6247480C9828	19860321	SF	320	20	16	12	$63,250	$82,288	1986	

962	44130	HAZARDOUS MATERIAL		19940901	SF	180	9	20	0	$500	$500		
963	83141	HAZARDOUS WASTE		19940901	SF	272	16	17	15	$4,000	$4,000		
964	44130	HAZARDOUS MATERIAL		19940901	SF	140	14	10	9	$1,000	$1,000		
965	83141	HAZARDOUS WASTE		19940901	SF	272	16	17	15	$4,000	$4,000		
966	83141	HAZARDOUS WASTE		19940901	SF	130	10	13	7	$500	$500		
967	44130	HAZARDOUS MATERIAL		19940901	SF	432	18	24	6	$2,000	$2,000		
968	83142	HAZARDOUS WASTE		19940901	SY	21	0	0	0	$100	$100		
969	44130	HAZARDOUS MATERIAL		19940901	SF	140	10	14	5	$500	$500		
970	83141	HAZARDOUS WASTE		19940901	SF	200	10	20	10	$3,000	$3,000		
971	83142	HAZARDOUS WASTE		19940901	SY	31	14	20	0	$300	$300		
878	14930	E-28 ARRESTING GEAR R/W 7R	N6247480C4481	19810401		0	0	0	0	$28,938	$42,973	1981	
972	14187	LOX SHELTER	N6247490D5661	19941101		320	20	16	9	$9,240	$9,896	1994	
	45170	DISPOSAL YARD 2	INVENTORY	19950214		0	0	0	0	$0	$0		
627	13150	TRANSMITTER BLDG	REASSIGNED	19950609	SF	1,552	63	24	12	$50,000	$80,550	1980	
628	13165	ANTENNA TOWER	REASSIGNED	19950609		576	24	24	34	$15,000	$24,165	1980	
973	75058	RV CAMPGROUND	INVENTORY	19900615	SF	283,200	1180	240	0	$30,000	$35,340	1990	
974	75058	RV CAMPGROUND	INVENTORY	19900615	SF	78,750	450	350	0	$30,000	$35,340	1990	
975	75058	RV PARKING SITE	INVENTORY	19900615	SF	48,000	252	188	0	$10,000	$11,780	1990	
897	89009	AIRCRAFT WASHRACK BLDG	N6247490D5686	19920713	SF	704	32	22	13	$67,508	$77,229	1992	
977	44130	HAZ/MATERIAL STORAGE	INVENTORY	19941215		1,824	48	38	0	$5,000	$5,370	1994	
978	83141	HAZ/WASTE STORAGE	INVENTORY	19941215		1,824	48	38	0	$5,000	$5,370	1994	1996
979	73025	GATE HOUSE	N6871194D0682	19960615		50	13	4	8	$9,847	$10,192	1996	
	84215	WATER PUMP STATION	NBY57679	19651101		0	0	0	0	$4,698	$22,283	1965	
	85235	PARKING AREA BIT	NBY57679	19651101	SY	832	0	0	0	$6,222	$29,511	1965	
	89020	COMP AIR PLANT	NBY57679	19651101		0	0	0	0	$7,977	$37,835	1965	
611	42172	G-M MAGAZINE	NBY69864	19660601	SF	930	31	30	12	$34,863	$154,587	1966	1988
	82320	LIQ. PET. GAS TANK	67C0135	19670901	SY	0	0	0	0	$1,106	$4,896	1967	
624	14112	PASSENGER AIR TERMINAL	67C0135	19670901	SF	11,470	120	96	12	$274,869	$921,186	1967	1990
	82320	L P GAS TANK	67C0286	19680201	SY	0	0	0	0	$580	$2,458	1968	
629	17110	TRAINING BLDG /FASO/	67C0286	19680201	SF	4,260	71	60	17	$187,120	$471,427	1968	1985
	85230	PEDESTRIAN BRIDGE	67C3123	19680801	SY	21	38	5	0	$5,023	$21,232	1968	
636	21175	SURVIVAL EQUIPMENT SHOP	68C0010	19690301	SF	9,030	107	84	92	$312,194	$1,213,979	1969	1985
	12510	FUEL OIL LINE	68C0010	19690301	SY	0	0	0	0	$2,310	$9,148	1969	
631	17120	A/CFT SYST TRAIN BLDG	67C3034	19681001	SF	16,200	200	81	30	$367,002	$1,547,536	1968	1990
	82214		67C3034	19681001		0	0	0	0	$7,013	$29,721	1968	1988
643	14915	AIRCRAFT AIRSTART SYSTEM	69C0187	19690601	SY	0	0	0	0	$548,277	$2,162,822	1969	1985
639	81109	ELECTRIC POWER PLANT-BLDG	67C3184	19690601	SF	144	12	12	8	$14,850	$33,061	1969	1980
640	81109	ELECTRIC POWER PLANT-BLDG	67C3184	19690601	SF	144	12	12	8	$14,850	$33,061	1969	1980
641	81109	ELECTRIC POWER PLANT-BLDG	67C3184	19690601	SF	144	12	12	8	$15,413	$35,284	1969	1982
642	81109	ELECTRIC POWER PLANT-BLDG	67C3184	19690601	SF	144	12	12	8	$14,850	$33,061	1969	1980
	81320		67C3184	19690601		0	0	0	0	$9,625	$38,019	1969	
634	21121	IMA HANGAR	67C3155	19691101	SF	54,891	325	152	32	$3,408,871	$7,432,546	1969	1990
	11650	A/C TOW-WAY AREA	67C3155	19691101	SY	1,890	0	0	0	$10,886	$43,000	1969	
	81320		67C3155	19691101		0	0	0	0	$29,226	$115,443	1969	
	82320	LPG TANK/3425 GAL	67C3155	19691101	SY	0	25	5	0	$1,400	$5,544	1969	

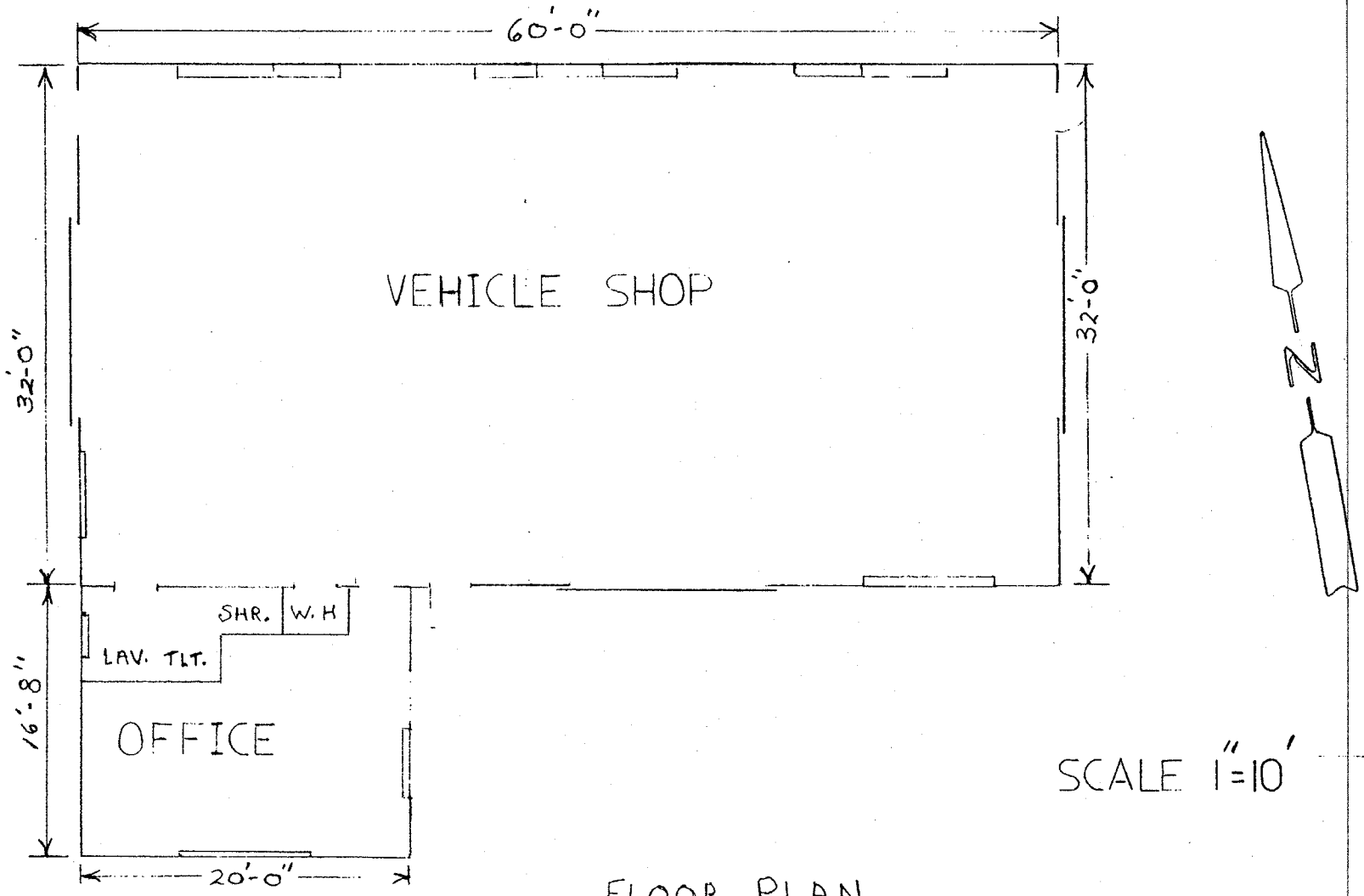


20×17 = 340
20×32 = 640
32×40 = 1280
2260

FLOOR PLAN
NOT TO SCALE

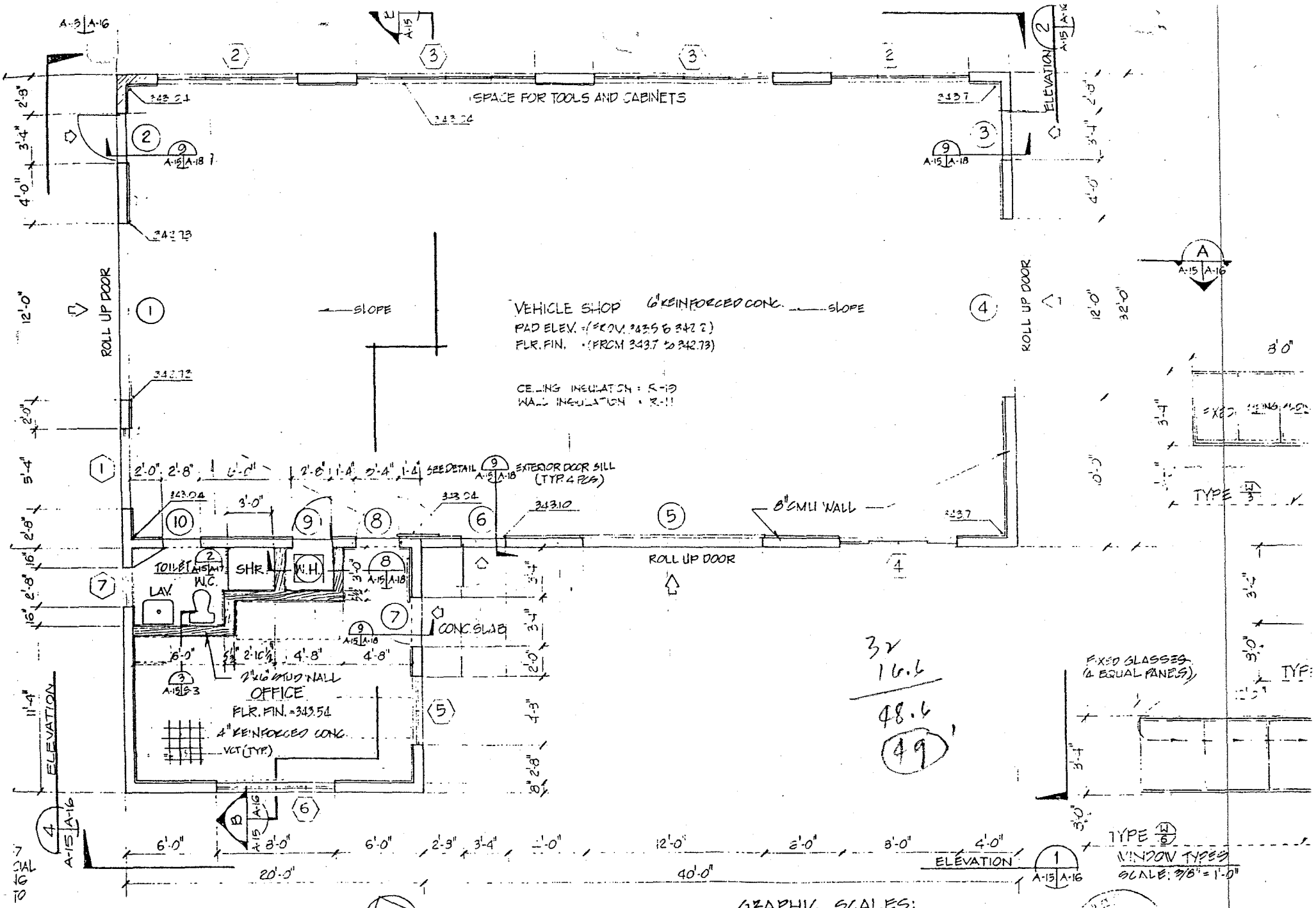
2260

BLDG	NO	AREA	BUILT	MAP GRID	TRACED BY	
CRYO VEH SHOP	831	2253 SQFT	1987	R 12	HOPEWELL	



FLOOR PLAN

BUILDING	N.O.	AREA SQ FT.	MAP GRID	DATE	DRAWN BY
CRYO.VEH.SP.	831	2260	R 12	5AUG87	PETER J FOX



FLOOR PLAN
SCALE: 1/4" = 1'-0"

32
16.6
48.6
49

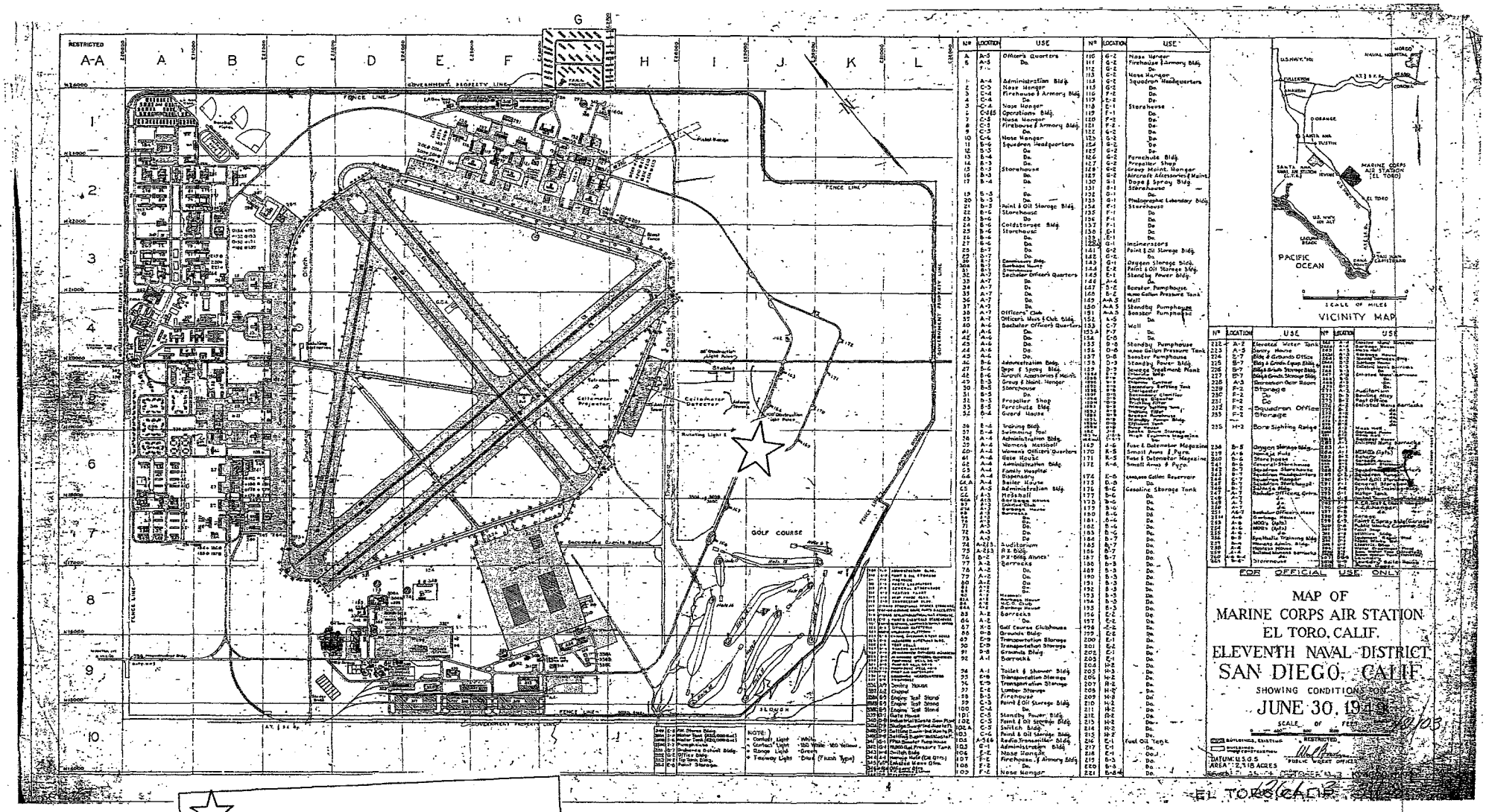
831

GRAPHIC SCALES:

3/8" = 1'-0"
1/4" = 1'-0"

CONSTRUCTION CONTRACT 85-B417

A-15



BUILDING 831 AND BUILDING 636 HAD NOT BEEN CONSTRUCTED AT THE TIME THIS MAP WAS PREPARED.

THE VICINITY OF BUILDING 831 IS IDENTIFIED WITH A STAR SYMBOL.

1949 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

	SF
	SF
	SF
	SF
	MN
	MN
	MN
	MN
	GA
	SF
	SF
	SF
.2	KG
.2	KG
	SF
	SF
	SF
	SF
	SF
	EA

NOTES: 1. BUILDING NOS. FOLLOWED BY AN ASTERISK - THUS* - ARE MULTIPLE CATEGORY USE BUILDINGS.

2. UNLESS OTHERWISE SHOWN THE ~~PLANNED~~ USE OF EXISTING BUILDINGS AND/OR STRUCTURES IS THE SAME AS THE CURRENT USE.

COMPILED BY
D.H. McALLISTER 31 JULY 1973

APPROVED BY
L.W. SELINDH

MCAS EL TORO
SANTA ANA, CALIFORNIA
GENERAL DEVELOPMENT MAP
INDEX OF STRUCTURES
EXISTING & PLANNED PRE-M DAY

P.W. DWG.
~~S-2010A~~
D-3064

EXTRACTS 1973

BUILDINGS

615	M-2	PLAYIN[illegible]	
616	U-7	ADMINISTRATIVE [illegible]	792
617	Q-10	AIRCRAFT SOUND-AB[illegible] FACILITY	1
618	Q-10	AIRCRAFT SOUND-ABATEMENT FACILITY	1
619	T-12	STANDBY GENERATOR PLANT	150
620	N-6	AIRCRAFT ARRESTING GEAR	1
621	M-6	AIRCRAFT ARRESTING GEAR	1
622	S-7	AIRCRAFT ARRESTING GEAR	1
623	R-6	AIRCRAFT ARRESTING GEAR	1
624	D-4	AIR PASSENGER TERMINAL	11,470
625	M-3	HOBBY SHOP, AUTOMOTIVE	6,153
626	M-3	HOBBY SHOP, AUTOMOTIVE	480
627	P-14	AIR SURVEILLANCE RADAR BLDG	1,520
628	P-14	AIR SURVEILLANCE RADAR TOWER	560
629	P-4	APPLIED INSTRUCTION BLDG	4,260
630	P-4	SWITCHING BLDG	48
631	U-9	APPLIED INSTRUCTION BLDG	16,200
632	Q-3	INCINERATOR, CLASSIFIED MATERIAL	1
633	U-9	LOADING/UNLOADING RAMP	1
634	N-9	MAINTENANCE HANGAR-OH SPACE(49012)	15,119
634*		MAINTENANCE HANGAR - 01 SPACE	14,182
634*		MAINTENANCE HANGAR - 02 SPACE	5,200
634*		ENGINE MAINTENANCE SHOP	7,533
634*		AIRFRAMES SHOP	2,478
634*		AVIONICS SHOP	4,500
635	T-9	WEIGHING FACILITY	1
636	R-12	PARACHUTE/SURVIVAL EQUIPMENT SHOP	9,238
637	M-8	EXCHANGE SUPPLEMENTAL GAS STATION	900
638	Q-10	WIND DIRECTION INDICATOR	1
639	N-8	FIXED AIRCRAFT START SYSTEM	1
640	N-8	FIXED AIRCRAFT START SYSTEM	1
641	N-9	FIXED AIRCRAFT START SYSTEM	1
642	N-9	FIXED AIRCRAFT START SYSTEM	1
643	N-8	COMPRESSED AIR PLANT	1
644	P-7	AIRCRAFT ARRESTING GEAR	1
645	P-7	AIRCRAFT ARRESTING GEAR	1
646	P-9	AIRCRAFT ARRESTING GEAR	1
647	P-9	AIRCRAFT ARRESTING GEAR	1
648	T-11	WHEEL-WATCH BOOTH	31
649	P-2	MARINE EXCHANGE RETAIL STORE	96,472
650	P-2	EXCHANGE SERVICE OUTLET GARDEN SHOP	4,428
651	P-2	EXCHANGE AUTO SERV. & REPAIR STA.	10,845
652	P-2	EXCHANGE INSTALLATION WAREHOUSE	1,100
653	S-11	GROUND CONTROL APPROACH SYSTEM	1
654	L-5	GROUND CONTROL APPROACH SYSTEM	1
655	U-8	AUTO VEHICLE MAINT. SHOP	18,600
656	M-3	CHILD CARE/NURSERY	12,733
657	Q-3	ADMINISTRATIVE OFFICE	315
658	N-10	ENGINE TEST CELL	9,592
659	N-10	STORAGE TANK, GND LEVEL, POTABLE	25,000
660	O-2	BEQ	490
661	O-2	BEQ	493
662	O-2	HEATING PLANT BLDG	552
663	O-2	LPG STORAGE	7,800
664	Q-11	SWITCHING/SUBSTATION BLDG	504
665	N-8	FIRE STATION/DRYING TOWER	169
666	M-2	ENLISTED BACHELOR QUARTERS	252
667	M-2	ENLISTED BACHELOR QUARTERS	252
668	M-2	ENLISTED BACHELOR QUARTERS	252
669	M-2	ENLISTED BACHELOR QUARTERS	252
670	M-1	LPG STORAGE	15,000
671	U-9	ADMINISTRATIVE OFFICE	833
672	U-10	REFUELING VEHICLE SHOP	1,667
673	P-12	A/C GROUND SUPPORT EQUIPMENT SHOP	12,225
674	U-5	INDUSTRIAL WASTE TREATMENT FACILITY	1

No Further Action Decision Documents for Nearby Locations of Concern

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

JACK MILLER, REHS
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

March 27, 1997

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 #636
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 November 18, 1996, 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

UNDERGROUND STORAGE TANK REMOVAL REPORT

EXTRACTS

Tank Number 636
Marine Corps Air Station (MCAS)
El Toro, California

Environmental Remedial Action Contract for Removal and Disposal of Underground Storage Tanks (USTs) at Various Locations in Southern California, Arizona, Nevada and New Mexico.

Contract No. N68711-92-R-4675
Delivery Order No. 0007

Prepared for:

Department of the Navy,
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, California 92132

Prepared by:

GEOFON, INC.
1081 Camino Del Rio South, Suite 202
San Diego, California 92108

GEOFON Project No. 95-333.70 January 30, 1997

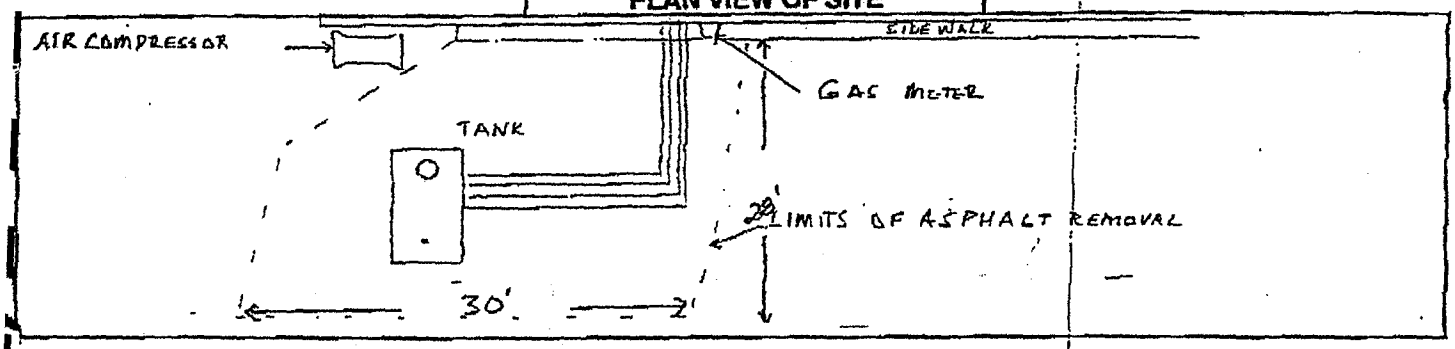
GEOFON INCORPORATED

UST REMOVAL SUMMARY

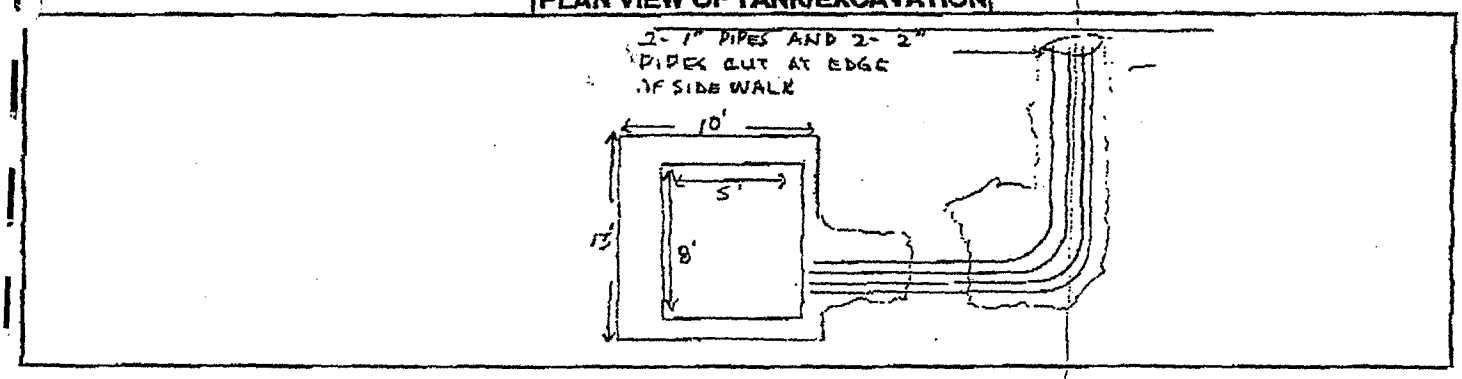
PROJECT LOCATION: 636 DELIVERY ORDER NO: _____ PROJECT NO: 95-333.70
TANK NO: 636

1) TANK CONTENT (gl): DIESEL 1 GAL. NO. OF TESTS (ea): N/A
2) EX. DIMENSISION (lf): 10'x13'x8' EX. VOLUME (cu yd): 43.33
3) UST DIMENSIONS (lf): 5'DIA. x 8' UST VOLUME (gl): 1175 UST VOLUME (cu yd): 5.8
4) VOLUME EX. SOIL (cu yd): _____ EX. SOIL UNDER UST (cu yd): _____ TOTAL EX. SOIL (cu yd): _____
6) TRENCH (lf): _____ NO. OF PIPE IN TRENCH (ea): _____ TOTAL PIPE REMOVED (lf): 180'
7) NO. OF TESTS STK PILE (ea): ___ NO. OF TESTS IN TRENCH(ea): ___
5) MISC WORK: _____

PLAN VIEW OF SITE



PLAN VIEW OF TANK/EXCAVATION



CROSS SECTION OF EXCAVATION

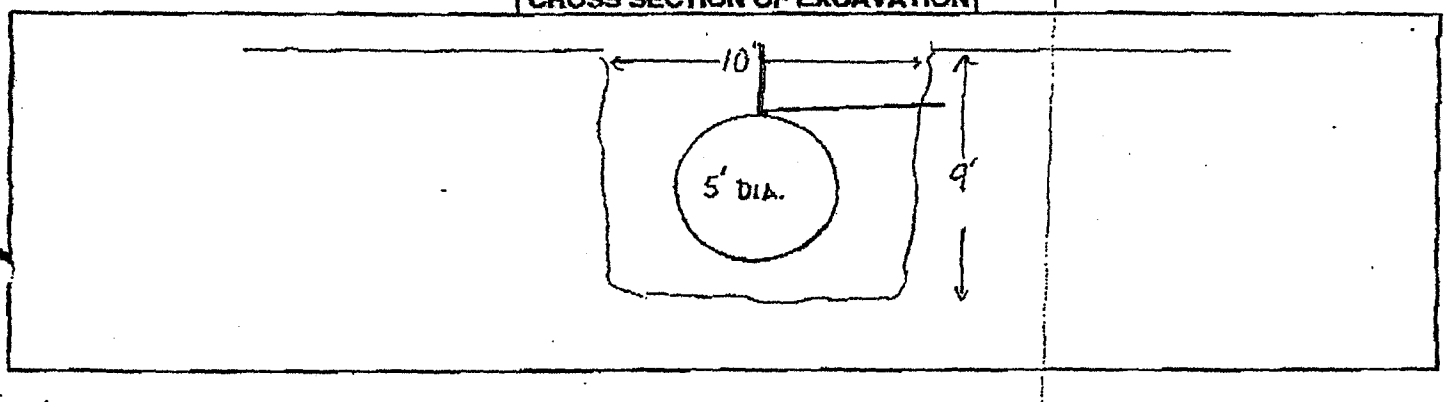


TABLE 1 -SUMMARY OF SOIL SAMPLE ANALYSES

Soil Sample I.D.	*Sample date	TPHg µg/kg	TPHd mg/kg	TRPH mg/kg	Benzene µg/kg	Toluene µg/kg	Ethyl-benzene µg/kg	Total Xylenes µg/kg	Comments
TANK EXCAVATION									
T636-1-10'	11/18/96	NA	ND	ND	ND	ND	ND	ND	
T636-2-10'	11/18/96	NA	ND	ND	ND	ND	ND	ND	
TRENCH									
PT-636-2.5'	11/18/96	NA	ND	ND	ND	ND	ND	ND	
STOCKPILE									
SP-636	11/18/96	NA	151	81	ND	ND	ND	ND	

* The locations of the tests are shown on the UST Removal Summary

Definitions:

TPHg = Total petroleum hydrocarbons as gasoline (DOHS Method)
TPHd = Total petroleum hydrocarbons as diesel (DOHS Method)
TRPH = Total recoverable petroleum hydrocarbons (Modified EPA Method 418.1)
BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes (EPA Method 8020)
NA = Not sampled/analyzed

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

JACK MILLER, REHS
DEPUTY DIRECTOR

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FAX: (714) 972-0749

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

September 5, 1997

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 #453
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 tank removal on May 21, 1997, 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 facility 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

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

JACK MILLER, REHS
DEPUTY DIRECTOR

MAILING ADDRESS
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

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COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

September 5, 1997

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 #454
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 tank removal on May 27, 1997, 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 facility 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
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