

## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4

245 West Broadway, Suite 350  
Fresno, CA 90802-4444M60050.001332  
MCAS EL TORO  
SSIC # 5090.3

Revised Version

May 17, 1994

Mr. Bret Raines  
BRAC Environmental Coordinator  
Southwest Division  
Naval Facilities Engineering Command  
Code 1831.ER  
1220 Pacific Highway  
San Diego, California 92132-5181

Dear Mr. Raines:

**APPROVAL WITH MODIFICATIONS OF MARINE CORPS AIR STATION EL TORO,  
EL TORO, CALIFORNIA, INSTALLATION RESTORATION PROGRAM, FINAL RCRA  
FACILITY ASSESSMENT [RFA] REPORT**

In a letter dated January 24, 1994, the California Department of Toxic Substances Control (DTSC) indicated that it had completed its review of the subject **Final RFA Report** (Volumes I through V) dated July 16, 1993. At the time, we did not approve the **Final RFA Report** because several Solid Waste Management Units/Areas of Concern (SWMUs/AOCs) that were recommended for further action had not been incorporated into the Remedial Investigation/Feasibility Study (RI/FS) program as Operable Unit (OU)-4 or another program for corrective and/or remedial action. Moreover, DTSC recommended additional SWMUs/AOCs for further action.

Enclosed with this letter are modifications that need to be made. These modifications may be made by attaching the enclosure to the **Final RFA Report**.

DTSC hereby approves the **Final RFA Report** with the specified modifications. If you have any questions concerning this matter, please contact me at (310) 590-4920.

Sincerely,

Albert A. Arellano, Jr., P.E.  
Region 4 Base Closure Unit  
Office of Military Facilities

Enclosure  
cc: See next page.



**Mr. Raines**  
**May 17, 1994**  
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cc: Mr. Andy Piszkin  
 Remedial Project Manager  
 Southwest Division  
 Naval Facilities Engineering Command  
 Code 1831.AP  
 1220 Pacific Highway  
 San Diego, California 92132-5181

Commanding General  
 Attn: Mr. Wayne Lee  
 Environmental Department, 1AU  
 Marine Corps Air Station  
 El Toro, California 92709-5010

Mr. John Hamill  
 U.S. Environmental Protection Agency  
 Region IX  
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 75 Hawthorne Street  
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Mr. John Broderick  
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Mr. James Hendron  
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DTSC MODIFICATIONS TO  
FINAL RFA REPORT

MCAS EL TORO

The following SWMUs/AOCs and underground storage tanks (USTs), that DTSC identified in the January 24, 1994 letter, have been incorporated into the **Base Realignment and Closure (BRAC) Cleanup Plan (BCP)** dated March 21, 1994 and recommended for further action. Please see the DTSC letter dated January 24, 1994 for additional information on these SWMUs/AOCs and USTs.

SWMUs/AOCs:

- 64 (oil/water separator [OWS] 298-C)
- 145 (UST 529 - Waste Oil)
- 151 (OWS 605-C)
- 173 (OWS 671)
- 175 (OWS 672-A)
- 176 (UST 672-B)
- 199 (OWS 759-A)
- 398 (UST 392 - Waste Oil)

USTs:

- at Tank Farms 2, 3, 5 and 6
- 240-A (removed); replaced by UST-797
- 398 (commonly known as Tank 398)

We require that the BCP be modified to address further action at the following SWMUs/AOCs (again, please see the DTSC letter dated January 24, 1994 for additional information):

- 7 (Transformer Storage Site)

The one sample location investigated during the RFA did not necessarily characterize this site.

- 9 (Fuel Bladder)

The RFA investigation provided no evidence that petroleum hydrocarbon contamination is limited to 5 feet below ground surface (bgs). Total fuel hydrocarbon (TFH)-diesel was detected at 5 feet bgs at a concentration of 414 parts per million (ppm); deeper samples were not collected. The potential for contamination at deeper depths should be investigated.

DTSC Modifications to *Final RFA Report*  
 May 17, 1994

- 244 (Polychlorinated Biphenyl [PCB] Spill Area)

The extent or absence of possible residual contamination should be confirmed.

- 267 (Drop Tank Fuel Storage Area)

This SWMU/AOC was recommended for a sampling visit in the *Draft Preliminary Review/Visual Site Inspection (PR/VSI) Report*, dated July 3, 1991, but was not sampled during the RFA investigation.

- Hazardous Waste Satellite Accumulation Areas

Decontamination and/or removal strategies (e.g., at concrete pad structures) should be evaluated.

We require that the *Tank Management Plan (TMP)*, being developed as part of base closure, address the following UST aboveground storage tank (AST) and OWS concerns:

- 20 (UST T-C [also known as UST 414-C] - Waste JP-5)

The RFA investigation provided no evidence that petroleum hydrocarbon contamination is limited to 5 feet bgs. TPH-diesel was detected at 5 feet bgs at a concentration of 463 ppm; deeper samples were not collected. The potential for contamination at deeper depths should be investigated.

- 48 (UST 178 - Waste Oil)

The 10 foot depth sample (top sample) of angle boring A1 with a total petroleum hydrocarbon (TPH) result of 822 ppm indicates possible surficial soil contamination. At a minimum, additional analyses should consist of semivolatile organic compounds, metals and petroleum hydrocarbons.

- 65 (UST 240-B)/66 (OWS 240-C), 205 (OWS 761-A)/206 (UST 761-B), and 211 (OWS 763-A)/212 (UST 763-B)

At these three OWS systems, the OWS and UST are separated by approximately 15 to 20 feet and only one 25 foot boring, situated between the two units, was used for the RFA evaluation.

DTSC Modifications to *Final RFA Report*  
 May 17, 1994

- 129 (UST or OWS 445-C - Waste Oil)  
 An observed stained area identified in the *Draft PR/VSI Report* should be investigated. The stained area is approximately 4 feet in diameter and about 25 feet west of the wall of Building 445 and 12 feet south of the concrete pad surrounding the pump units.
- 231 (UST 800-E - Waste Oil)  
 Even though RFA sample results did not indicate contamination, additional investigation and/or removal is recommended for this UST which failed a tank test conducted in 1990.
- 260 (AST - JP-5)  
 The *TMP* or *SCP* should include a proposal to evaluate the large stain observed on the pavement of this former storage tank. Since the pavement was cracked at the stain area, it is possible that soil may have been impacted by releases.

We require that the *TMP* evaluate strategies for the following OWSs that apparently were not investigated in the RFA but were identified in an OWS survey report (April, 1993) prepared by Law/Crandall:

- B-658
- B-744
- 280
- 324
- 371
- 802
- 845
- 850/851
- 892
- 896
- 897
- 1702

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4  
245 West Broadway, Suite 350  
Long Beach, CA 90802-4444



May 31, 1994

Mr. Bret Raines  
BRAC Environmental Coordinator  
Southwest Division  
Naval Facilities Engineering Command  
Code 1831.BR  
1220 Pacific Highway  
San Diego, California 92132-5161

Dear Mr. Raines:

**TRANSMITTAL LETTER, MARINE CORPS AIR STATION (MCAS) EL TORO**

In a letter dated May 17, 1994, the California Department of Toxic Substances Control (DTSC) approved, with modifications, the **Final RCRA Facility Assessment (RFA) Report** for MCAS El Toro. Enclosed, please find a revised version of the approval with modifications letter with the following correction.

On page 3, Solid Waste Management Unit/Area of Concern (SWMU/AOC) 231 is correctly identified as underground storage tank (UST) 800-E. In our original letter, SWMU/AOC 231 was incorrectly identified as UST 899-E.

In addition, please note that the revised version of our approval with modifications letter has been changed to indicate that SWMU/AOC 20 (UST T-C) is also known as UST 414-C (see page 2).

Please replace our original approval with modifications letter with the following revised version.

Sincerely,

Albert A. Arellano, Jr., P.E.  
Region 4 Base Closure Unit  
Office of Military Facilities

Enclosures  
cc: See next page.



Mr. Raines  
May 31, 19  
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cc: Mr. Andy Piszkin  
Remedial Project Manager  
Southwest Division  
Naval Facilities Engineering Command  
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1220 Pacific Highway  
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Commanding General  
Attn: Mr. Wayne Lee  
Environmental Department, 1AU  
Marine Corps Air Station  
El Toro, California 92709-5010

Mr. John Hamill  
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Mr. John Broderick  
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Mr. James Hendron  
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STATE OF CALIFORNIA - ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4  
245 West Broadway, Suite 350  
Long Beach, CA 90802-4444



January 24, 1994

Mr. Andy Piszkin  
BRAC Environmental Coordinator  
Southwest Division  
Naval Facilities Engineering Command  
Code 1831.AP  
1220 Pacific Highway  
San Diego, California 92132-5181

Col. J.P. Chessum  
USMC  
Assistant Chief of Staff  
Environment & Safety  
Environmental Department, 1AU  
Marine Corps Air Station  
El Toro, California 92709-5010

Dear Mr. Piszkin and Col. Chessum:

**MARINE CORPS AIR STATION (MCAS) EL TORO  
SUBJECTS:**

**MARINE CORPS AIR STATION EL TORO, EL TORO, CALIFORNIA,  
INSTALLATION RESTORATION PROGRAM, FINAL RCRA FACILITY ASSESSMENT  
[RFA] REPORT**

AND

**RECOMMENDATIONS FOR THE BRAC CLEANUP PLAN (BCP)**

The California Department of Toxic Substances Control (DTSC) has completed its review of the subject **Final RFA Report** (Volumes I through V) dated July 16, 1993. In the future, we recommend that all changes be fully integrated into the final document; the main objective of a "Response to Comments" should be to identify the nature and location of changes in the final document.

We do not approve the **Final RFA Report** at this time because several Solid Waste Management Units/Areas of Concern (SWMUs/AOCs) have been recommended for further action but have not yet been incorporated into the RI/FS program as Operable Unit (OU)-4 or another program for corrective and/or remedial action. Moreover, we are recommending additional SWMUs/AOCs for further action.



**Mr. Pizskin/Col. Chessum**

**January 24, 1994**

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The RFA results indicate that several underground storage tanks (USTs) and oil/water separators (OWSs) have had releases, including the following units which exhibited significant releases:

- SWMU/AOC 145 (Inactive UST 529 - Waste Oil)

The extent of petroleum hydrocarbon contamination (up to 27,526 ppm at 30 feet in angle boring A1) and BTEX contamination should be investigated.

- SWMU/AOC 173 (OWS 671)

The extent of petroleum hydrocarbon and BTEX contamination, which likely extends deeper than 25 feet below ground surface (bgs), should be investigated.

- SWMUs/AOCs 175 (Inactive OWS 672-A) and 176 (Inactive UST 672-B)

The extent of petroleum hydrocarbon and BTEX contamination, which likely extends deeper than 25 feet bgs, should be investigated.

- SWMU/AOC 280 (Removed UST 195 at Tank Farm 3)

The extent of petroleum hydrocarbon and BTEX contamination, which likely extends deeper than 50 feet bgs, should be investigated.

Based on the Phase I RI results, the following USTs have also exhibited significant releases:

- USTs at Tank Farms 5 and 6

Petroleum hydrocarbons, including listed hazardous substances, were detected in nearby groundwater monitoring wells. At downgradient cluster well 18\_BGMW01, TFH-gasoline and TFH-diesel were detected at concentrations up to 1,080 and 2,030 ppb, respectively, in the well screened at 205-245 feet bgs. In the same well, benzene was detected at concentrations up to 270 ppb (please note that the California Maximum Contaminant Level (MCL) for benzene is 1 ppb). In a well screened in a deeper zone (466-486 feet bgs) at this same cluster, TFH-diesel was detected at concentrations up to 4,500 ppb, however BTEX constituents were either not detected or present only at insignificant concentrations. At cross-gradient

Mr. Piszkin/Col. Chessum  
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well 04\_DBMW40, TFH-gasoline and TFH-diesel were detected at concentrations of 78 and 769 ppb, respectively; benzene was detected at concentrations up to 4 ppb.

• USTs at Tank Farm 2

Petroleum hydrocarbons, including listed hazardous substances, were detected in nearby groundwater monitoring wells. At cross- or downgradient well 13\_DGMW78, TFH-gasoline and TFH-diesel were detected at concentrations up to 445 and 436 ppb, respectively; benzene was detected at concentrations up to 110 ppb. At cross- or downgradient well 15\_DBMW51, TFH-gasoline and TFH-diesel were detected at concentrations up to 348 and 3,370 ppb, respectively; benzene was detected at concentrations up to 120 ppb.

• Abandoned or Removed UST 240-A and Possibly UST 797

Located near Tank Farm 2 at the Aero Club, UST 240-A apparently contained aviation gasoline and was abandoned or removed in 1985. Apparently, UST 797 was installed in 1985 to replace UST 240-A. Petroleum hydrocarbons, including listed hazardous substances, were detected in nearby groundwater monitoring wells. TFH-gasoline and benzene were detected in nearby well 13\_UGMW32 at concentrations up to 1,690 and 730 ppb, respectively.

The releases from these units are of particular importance since groundwater quality has been or may ultimately be impacted. We are hereby requesting that the USTs and OWSs identified above, as well as Tank 398, be given characterization/remediation priority in the BCP process. Please note that this should not preclude MCAS El Toro from complying with the applicable UST requirements of Chapter 16, Division 3, Title 23 of the California Code of Regulations. For USTs with releases, these requirements include: 1) submitting a written report with a description and schedule of the corrective and remedial actions to be conducted to determine the nature and extent of soil and groundwater contamination as well as the proposed methods of repair or replacement (Section 2652), 2) conducting initial abatement actions (Section 2653), 3) conducting initial site characterization (Section 2654), 4) removing free product, if applicable (Section 2655), and 5) corrective and remedial action, as necessary (Sections 2720 through 2728).

**Mr. Piszkin/Col. Chessum**  
**January 24, 1994**  
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The RFA results indicate that four other SWMUs/AOCs had moderate petroleum hydrocarbon contamination adjacent to the bottom of the unit. We recommend that these SWMUs/AOCs be evaluated in the BCP; the four units are:

- SWMU/AOC 84 (OWS 298-C)
- SWMU/AOC 151 (OWS 605-C)
- SWMU/AOC 199 (OWS 759-A)
- SWMU/AOC 298 (UST 392- Waste Oil)

We have included additional recommendations for the BCP in our attached comments. In addition, we have also included recommendations for the soil gas survey to be conducted as part of the RI/FS investigation.

We would like to take this opportunity to emphasize the following recommendations:

- 1) Until MCAS El Toro is closed, hazardous material storage and less than 90 day hazardous waste storage should be conducted in paved areas (preferably a relatively impervious surface such as concrete without gaps or cracks) and permanently bermed, if feasible, to preclude releases of hazardous constituents to soil.
- 2) In accordance with closure requirements for USTs containing hazardous substances, all residual liquid, solids, or sludges should be removed from inactive units. We are aware of at least two USTs that contained liquids at the time of the RFA sampling visit, namely, SWMUs/AOCs 91 (UST 314-A) and 92 (UST 314-B).

The following comments issued by DTSC on the *Draft RFA Report* were apparently not addressed in the *Final RFA Report*:

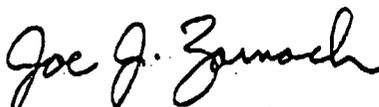
- 1) Compliance with sample holding times should be discussed; all samples with exceeded holding times should be identified.
- 2) Boring logs should bear the stamp or signature of a California registered geologist (RG) or certified engineering geologist (CEG).
- 3) Contrary to what is stated in the "Response to Comments", the location of the storm drain and general

**Mr. Piszkin/Col. Chessum**  
**January 24, 1994**  
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drainage path is not indicated in Figure 78 of Appendix B for SWMU/AOC 258 (Wash Water Runoff Site [Fuel Station 577]).

If you have any questions concerning this matter, please contact me at (310) 590-4878.

Sincerely,



Joe J. Zarnoch  
Base Closure Unit

**Enclosure**

cc: **Commanding General**  
**Attn: Mr. Vish Parpiani**  
**Environmental Department, 1AU**  
**Marine Corps Air Station**  
**El Toro, California 92709-5010**

**Mr. John Hamill**  
**U.S. Environmental Protection Agency**  
**Region IX**  
**Hazardous Waste Management Division, H-7-5**  
**75 Hawthorne Street**  
**San Francisco, California 94105-3901**

▼ **Mr. John Broderick**  
**Regional Water Quality Control Board**  
**Santa Ana Region**  
**2010 Iowa Avenue, Suite 100**  
**Riverside, California 92507-2409**

**Mr. Roy L. Herndon**  
**Orange County Water District**  
**P.O. Box 8300**  
**Fountain Valley, California 92728-8300**

**Mr. Sebastian Tindall**  
**Bechtel Corporation**  
**P.O. Box 193965**  
**San Francisco, California 94119-3965**

**Mr. Piszkin/Col. Chessum**  
**January 24, 1994**  
**Page 6**

**cc: Mr. James Hendron**  
**County of Orange**  
**Environmental Health Division**  
**2009 East Edinger Avenue**  
**Santa Ana, California 92705-4720**

**Mr. Piszkin/Col. Chessum**  
**January 24, 1994**  
**Page 7**

bcc: Al Arellano  
Unit Chief  
Base Closure Branch

**ATTACHMENT****DTSC COMMENTS  
ON****MARINE CORPS AIR STATION [MCAS] EL TORO  
EL TORO, CALIFORNIA  
INSTALLATION RESTORATION PROGRAM  
FINAL RCRA FACILITY ASSESSMENT [RFA] REPORT****BRAC CLEANUP PLAN (BCP)**

The BCP should address the following comments for SWMUs/AOCs identified in the RFA investigation. In addition to the following comments, the BCP should evaluate: 1) all SWMUs/AOCs recommended for further action in the Final RFA Report, 2) anomalies identified in Final Report, Aerial Photograph Assessment, MCAS El Toro prepared by SAIC, dated August 2, 1993, 3) suspected areas (e.g., the current burn pits) identified in our comments on the Phase II RI Work Plan but not included in the current RI/FS scope of work (see DTSC Comments dated December 17, 1993), 4) newly identified potentially contaminated areas (see DTSC letter dated August 27, 1993), and 5) Tiered Permitting Units identified as "M-439ET" (Med-Clinic Silver Recovery) and "P-312ET" (Photographic Lab).

**1. Oil/Water Separator (OWS) Systems**

The BCP should evaluate the twenty-four OWS and waste oil UST systems, as well as all other such systems not previously identified (see below). Please note that at the following three systems, the OWS and UST are separated by approximately 15 to 20 feet and only one 25 foot boring, situated between the two units, was used for the RFA evaluation:

- a) SWMUs/AOCs 65 (UST 240-B) and 66 (OWS 240-C),
- b) SWMUs/AOCs 205 (OWS 761-A) and 206 (UST 761-B), and
- c) SWMUs/AOCs 211 (OWS 763-A) and 212 (UST 763-B).

In addition, please note the following: 1) SWMU/AOC 231 (UST 899-E) failed an integrity test conducted in 1990, 2) OWSs with unit identifications "B-658" and "B-744" were reported by MCAS El Toro to DTSC's Tiered Permitting Program and were identified by an OWS survey report prepared by Law/Crandall

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in April 1993; it appears that these units were not investigated in the RFA, and 3) OWSS 280, 324, 371, 802, 845, 850/851, 892, 896, 897 and 1702 were also identified by the Law/Crandall survey and apparently were not investigated in the RFA (please note that apparently some of these units are not included in MCAS El Toro's inventory).

**2. Tanks**

The BCP should evaluate all USTs and aboveground storage tanks (ASTs) at the Station, including current, abandoned and removed USTs/ASTs.

The BCP should include a map displaying the following: 1) a map of MCAS El Toro and 2) the location of all USTs/ASTs (including tank farms), including current, abandoned and removed units. A similar figure should also indicate contours of groundwater plumes potentially associated with the USTs/ASTs, including plumes, e.g., of BTEX, TFH-gasoline and TFH-diesel constituents. Please include areas off-Station as well, e.g., TFH-gasoline and TFH-diesel were detected in off-Station well 18\_BGMP09.

For all tanks, the BCP should include a table indicating, at a minimum, the following : 1) UST/AST number, 2) location, including cross streets and building number, 3) year installed, 4) tank construction, 5) capacity, 6) types, quantities and concentrations of hazardous substances stored, 7) status (e.g., active, abandoned, removed, etc.), and 8) comments (including if the unit was integrity tested and if so, the year(s) and the results). Include SWMU/AOC 263.

For all USTs with releases, the BCP should include the following information: 1) the UST number, 2) location, including cross streets and building number, 3) year installed, 4) tank construction, 5) capacity, 6) types, quantities and concentrations of hazardous substances stored/released, 7) status (e.g., active, abandoned, removed, etc.), 8) source or cause of release, 9) the approximate date(s) the release occurred, 10) the approximate date the release was discovered, 11) how the release was discovered, 12) the date the release was stopped, including, if applicable, the date the unit was taken out of service, 13) impacted medium (e.g., soil and/or groundwater), 14) a description of the action(s) taken to control and/or stop the release or the proposed method(s) of

**DTSC Comments**  
**Final RFA Report**  
**January 24, 1994**

repair or replacement, 15) a description of any additional actions taken to prevent future releases, 16) a description of the corrective and remedial actions, including investigations which were undertaken and will be conducted to determine the nature and extent of soil, groundwater or surface water contamination due to the release, 17) the method(s) of cleanup implemented to date, proposed cleanup actions, and a time schedule for implementing the proposed actions, and 18) the method and location of disposal of the released hazardous substance and any contaminated soils or groundwater or surface water, including copies of any completed hazardous waste manifests for off-site transport of these media.

3. Less Than Ninety (90) Day Hazardous Waste Accumulation Areas

The BCP should evaluate all less than 90 day hazardous waste accumulation areas, as necessary, including decontamination.

4. SWMU/AOC 7 - Transformer Storage Site

We do not believe the one sample location investigated during the RFA adequately characterized this site.

5. SWMU/AOC 9 - Fuel Bladder

The RFA investigation provided no evidence that petroleum hydrocarbon contamination is limited to 5 feet below ground surface (bgs). Whether or not the concentration of 414 ppm for TFH-diesel falls below LUFT Manual criteria is inconsequential; a sample was not collected below a depth of 5 feet. Please note that the detection of 414 ppm TFH-diesel was within the former fuel bladder bermed area. The potential for contamination at deeper depths should be investigated.

6. SWMU/AOC 20 - UST T-C (Waste JP-5)

The RFA investigation provided no evidence that petroleum hydrocarbon contamination is limited to 5 feet bgs. TFH-diesel was detected at 5 feet bgs at a concentration of 463 ppm; deeper samples were not collected. The potential for contamination at deeper depths should be investigated.

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January 24, 1994**

7. **SWMU/AOC 39 - Hazardous Waste Storage Area (HWSA)**

This SWMU/AOC was added for further action in the *Final RFA Report*. The surficial soil extent of PCB contamination (52 ppb at a depth of 10 feet in an angle boring) and polycyclic aromatic hydrocarbon (PAH) contamination should be investigated.

8. **SWMU/AOC 48 - UST 178 (Waste Oil)**

The 10 foot depth sample (top sample) of angle boring A1 with a TPH result of 822 ppm indicates possible surficial soil contamination. At a minimum, additional analyses should consist of semivolatile organic compounds (SVOCs), metals and petroleum hydrocarbons.

9. **SWMU/AOC 88 - Drum Storage Area (DSA)**

This SWMU/AOC was added for further action in the *Final RFA Report*. The surficial soil extent of PCB contamination (11 ppb at a depth of 10 feet in an angle boring) should be investigated.

10. **SWMU/AOC 129 - UST 445-C (Waste Oil)**

An observed stained area identified in the *Draft PR/VSI Report*, dated July 3, 1991, should be investigated. The "Response to Comments" indicates that the stained area was not sampled during the RFA investigation because it is not believed to be a result of operations associated with SWMU/AOC 129 and it appears to be a one-time release which may have originated from a vehicle. The stained area is approximately 4 feet in diameter and about 25 feet west of the wall of Building 445 and 12 feet south of the concrete pad surrounding the pump units.

Please note that based on recent information, it appears that SWMU/AOC 129 is actually an OWS.

11. **SWMU/AOC 131 - Engine Test Cell**

The surficial soil extent of PAH contamination should be investigated.

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Final RFA Report  
January 26, 1994**

12. SWMU/AOC 151 - OWS 605-C

The BCP should include an evaluation of several pipes (vents) protruding from the asphalt surface of this location.

13. SWMU/AOC 171 - HWSA

The surficial soil extent of PAH contamination should be investigated.

14. SWMU/AOC 231 - UST 899-E (Waste Oil)

Even though RFA sample results did not indicate contamination, additional investigation and/or removal is recommended for this UST which failed a tank test conducted in 1990.

15. SWMU/AOC 244 - PCB Spill Area

Formal records providing a detailed account of the PCB spill and cleanup are not available. The extent or absence of possible residual contamination should be confirmed.

16. SWMU/AOC 260 - AST (JP-5)

The BCP should include a proposal to evaluate the large stain observed on the pavement of this former storage tank. Since the pavement was cracked at the stain area, it is possible that soil may have been impacted by releases.

17. SWMU/AOC 264 - DRMO Storage Yard #3 (Equipment Storage Yard)

Based on the recent discovery of what appears to be oil contaminated soil along the southwestern edge of the storage yard, additional sampling is required (if not conducted under another program such as a removal action). At a minimum, analyses should consist of SVOCs, PCBs, metals and petroleum hydrocarbons.

Based on the "Response to Comments", it is unclear if the significant stain area in the central portion of the yard near the jeep storage area was sampled (see the *Draft PR/VSI Report*). If not sampled during the RFA investigation, this area should be added to the strategy for additional sampling at this site.

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January 24, 1994**

**18. SWMU/AOC 267 - Drop Tank Fuel Storage Area**

We indicated in our comments on the *Draft RFA Report* that this SWMU/AOC was recommended for a sampling visit in the *Draft PR/VSI Report*, but was not sampled during the RFA investigation. The "Response to Comments" states that the Navy reconsidered the recommendation for sampling this SWMU/AOC because the tanks are stored on a tarmac and a release from this area would not be able to impact soil. However, further review of the *Draft PR/VSI Report* reveals that the aircraft fuel tanks at Building 605 are/were stored on metal racks located in an asphalt paved area adjacent to the northwest corner of Building 605. The storage area is/was not protected by a berm. There were several dark stains on the asphalt near and under the storage racks. Furthermore, there were several spots where the asphalt was in poor condition. We believe the BCP should evaluate this site and recommend sampling.

**SOIL GAS SURVEY**

For other recommendations on the soil gas survey, please also see General Comments #13 & 26 in DTSC comments, dated December 17, 1993, on the Phase II RI Work Plan.

**SWMUs/AOCs 100 (TCE Degreaser), 101 (OWS 359-B), 102 (UST 359-C [spent stoddard solvent]) and 303 (500 gallon TCE UST) at Building 359**

Records indicate that spent solvent at this location was discharged to the storm drain as recently as 1978 (*Draft PR/VSI Report*).

The soil gas survey work plan should include a strategy to investigate this area. Moreover, the work plan should include a map which indicates the locations of TCE units at or near Building 359 and storm drain systems for this area (possibly discharging to Bee Canyon and/or Agua Chino Washes).

## TELEFAX TRANSMITTAL FORM

### STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF TOXIC SUBSTANCES CONTROL

OFFICE OF MILITARY FACILITIES  
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Date: <i>7/13/94</i>	Nº of Pages (including cover): <i>6</i>
To: <i>Jacques Lord</i>	Contact Nº: (    )
From: <i>Joe Zarnoch</i>	Contact Nº: ( <i>310</i> ) <i>590-4878</i>

Subject: <i>MCAS EI Toro</i>
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Comments:
<i>Jacques -</i>
<i>Again, our RFA approval letter comment addressed the concrete/asphalt pad of the SAAs. However, if some SAAs (i.e., soil beneath SAAs) were not sampled in the RFA, then subsurface sampling in addition to a strategy for the pad may be warranted.</i>
<i>Joe Z</i>

<input type="checkbox"/> URGENT/HAND CARRY	<input type="checkbox"/> PER YOUR REQUEST
<input type="checkbox"/> CONFIDENTIAL	<input type="checkbox"/> PLEASE COMMENT
<input type="checkbox"/> INFORMATION	<input type="checkbox"/> ORIGINAL WILL/WILL NOT FOLLOW

Telefax Nº: (310) 590-4932 or CALNET 8-635-4932

Confirmation Nº: (310) 590-5575 or CALNET 8-635-5575

**Table 3-9**  
**Satellite Accumulation Area Inventory**  
**MCAS EI Toro BCP**

Database Tracking	Building Number	Parcel	SWMU/AOC	Satellite Accumulation Area Type	RFA Sampling	Comments	BCP AREA TYPE
SAA 240	240	1A	64	Hazardous Waste Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 242	242	1A	67	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 289	289	5A	70	Drum Storage Area	X	RFA recommended NFA	3
IRP 7	295	5A	71	Hazardous Waste Storage Area		R/FS Site 7 (1)	7
IRP 7	296	5A	72	Hazardous Waste Storage Area		R/FS Site 7 (1)	7
SAA 297	297	5A	73	Drum Storage Area	X	RFA recommended NFA	3
SAA 298	298	4A	83	Drum Storage Area	X	RFA recommended NFA	2
SAA 306	306	4A	88	Hazardous Waste Storage Area	X	Shallow Soil Borings	7
SAA 314	314	4A	269	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 317	317	4B	93	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
IRP 21	320	4B	94	Drum Storage Area		R/FS Site 21 (1)	7
SAA 357	357	4A	97	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	7
SAA 359A	359	4B	254	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 359B	359	4B	99	Hazardous Waste Storage Area	X	RFA recommended NFA	3
IRP 8	360	4B	104	Drum Storage Area		R/FS Site 8 (1)	7
IRP 8	360	4B	105	Drum Storage Area		R/FS Site 8 (1)	7
IRP 8	360	4B	106	Drum Storage Area		R/FS Site 8 (1)	7
SAA 370	370	4A		Hazardous Material Storage/ Hazardous Waste Storage Area		Identified in 1994 SPCC Plan	7
SAA 371A	371	5A	107	Hazardous Waste Storage Area	X	RFA recommended NFA	2

**Table 3-9**  
**Satellite Accumulation Area Inventory**  
**MCAS EI Toro BCP**

Database Tracking	Building Number	Parcel	SWMU/AOC	Satellite Accumulation Area Type	RFA Sampling	Comments	BCP AREA TYPE
SAA 371B	371	5A	242	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 386	386	4A	114	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 388A	388	4A	116	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 388B	388	4A	251	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 389A	389	3A	119	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	7
SAA 389B	389	3A	259	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 390A	390	3A	122	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 390B	390	3A	261	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 392A	392	2A	124	Drum Storage Area	X	RFA recommended NFA	3
SAA 392B	392	2A	271	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 398	398	5A	252	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 441	441	3A	256	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 442	442	3A	126	Hazardous Waste Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 445	445	4A	127	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 447	447	3A	130	Drum Storage Area	X	RFA recommended NFA	3
SAA 456	456	3A	135	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 461	461	5A	138	Hazardous Waste Storage Area	X	RFA recommended NFA (1)	2
SAA 462	462	5A	140	Hazardous Waste Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 529	529	4A	144	Hazardous Waste Storage Area	X	RFA recommended NFA	2

**Table 3-9  
Satellite Accumulation Area Inventory  
MCAS EI Toro BCP**

Database Tracking	Building Number	Parcel	SWMU/AOC	Satellite Accumulation Area Type	RFA Sampling	Comments	BCP AREA TYPE
SAA 534	534	4B	146	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 602	602	2A	147	Drum Storage Area	X	RFA recommended NFA	3
SAA 605	605	5A	149	Drum Storage Area	X	RFA recommended NFA	3
SAA 606	606	5A	255	Hazardous Waste Storage Area	X	RFA recommended NFA	2
SAA 626	626	1B	158	Drum Storage Area		R/FS Site 20 (1)	7
SAA 634	634	2A		Hazardous Material Storage/ Hazardous Waste Storage Area		Identified in 1994 SPCC Plan	7
SAA 636	636	3A	160	Hazardous Waste Storage Area	X	RFA recommended NFA	3
SAA 651	651	1G	165	Drum Storage Area	X	Located within SWMU/AOC 164	3
SAA 658	658	2A	171	Hazardous Waste Storage Area	X	Shallow Soil Borings	7
SAA 671	671	4A	172	Hazardous Waste Storage Area	X	RFA recommended NFA	2
SAA 672	672	4A	177	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 673	673	3A	186	Hazardous Waste Storage Area	X	RFA recommended NFA	2
SAA 698	698	5A		Hazardous Material Storage/ Hazardous Waste Storage Area		Identified in 1994 SPCC Plan	7
SAA 744	744	1G		Hazardous Material Storage/ Hazardous Waste Storage Area		Identified in 1994 SPCC Plan	7
SAA 765	765	3F	266	Drum Storage Area		Sampling Visit Not Recommended During PR/VI	2
SAA 769	769	4A	222	Hazardous Waste Storage Area	X	RFA recommended NFA	2
SAA 770	770	4A	223	Drum Storage Area	X	RFA recommended NFA	3
SAA 771	771	1D	224	Drum Storage Area	X	RFA recommended NFA	2

FROM: R4 BASE CLSR/FED FAC TO: JUL 13, 1994 8:35PM #283 P.05 619 687 8787

**Table 3-9**

**Satellite Accumulation Area Inventory  
MCAS EI Toro BCP**

Database Tracking	Building Number	Parcel	SWMU/AOC	Satellite Accumulation Area Type	RFA Sampling	Comments	BCP AREA TYPE
SAA 772	772	3F	225	Drum Storage Area	X	RFA recommended NFA	3
SAA 778	778	5A	226	Drum Storage Area	X	RFA recommended NFA	3
SAA 779	779	5A	227	Drum Storage Area	X	RFA recommended NFA	3
SAA 800	800	4B	229	Hazardous Waste Storage Area	X	RFA recommended NFA	2
SAA 856	856	3A	234	Hazardous Waste Storage Area	X	RFA recommended NFA	3

**NOTES:**

(1) - SWMUs/AOCs which were determined to be located within RI/FS site boundaries, were eliminated from RFA sampling visits. These SWMUs/AOCs will be investigated in the IRP.  
These SWMUs/AOCs will be investigated in the IRP.

\* - Indicates RFA recommendation of "no further action" is pending U.S. EPA approval.

PR/VS I - Preliminary Review/Visual Site Inspection performed as part of the RFA.

IRP - Installation Restoration Program

RFA - RCRA Facility Assessment

NFA - No Further Action

**Sources:**

JEG, 1993. MCAS EI Toro Final RCRA Facility Assessment Report.

SAIC, 1994. Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan (SPCC).

FROM: R4 BASE CLSR/FED FAC TO: 619 687 8787 JUL 13, 1994 8:36PM #283 P.06