

ADMIN RECORD
E.T.



January 17, 1997

M60050_004174
MCAS EL TORO
SSIC NO. 5090.3.A

Department of
Toxic Substances
Control

245 West Broadway,
Suite 425
Long Beach, CA
90802-4444

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
P. O. Box 95001
Santa Ana, California 92709-5001

Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

**COMMENTS ON DRAFT PHASE II REMEDIAL INVESTIGATION REPORT
FOR OPERABLE UNIT (OU)-3A, MARINE CORPS AIR STATION (MCAS)
EI TORO**

Dear Mr. Joyce:

The California Environmental Protection Agency (Cal/EPA) has completed the review of the above subject document dated November 20, 1996, prepared by Bechtel National, Inc. The report presents the results of Remedial Investigation (RI) conducted at OU-3A sites. OU-3A encompasses Sites 4, 6, 8 through 13, 15, 16, and 19 through 22.

This letter is to transmit the enclosed Department of Toxic Substances Control comments and the Regional Water Quality Control Board comments dated January 7, 1997 on the report. Overall, the report is excellent and well written. A few clarifications and modifications are needed as outlined in the enclosed comments. Please incorporate the comments, where appropriate, and send us a response to comments along with a revised document. Thank you for your cooperation. If you have any questions, please call me at (310) 590-4891.

Sincerely,

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

Enclosures

cc: See next page.



Mr. Joseph Joyce
January 17, 1997
Page 2

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

Mr. Lawrence Vitale
Remedial Project Manager
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Mr. Graig Carlisle
Bechtel National, Inc.
401 West A street, Suite 1000
San Diego, California 92101-7905

Mr. Andy Piszkin
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division
Code 1831.AP
1220 Pacific Highway
San Diego, California 92132-5187

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Comments On
Draft Phase II Remedial Investigation Report For OU-3A
Marine Corps Air Station-El Toro
Dated November 20, 1996

1. Executive Summary, Table ES-2, Human-Health Risk Assessment, Future Uses and Complete Pathways

In Table-ES-2 the risk management decisions seem to correspond in nearly every case to protection of the future industrial worker at an excess cancer risk $\leq 1E-04$ and a Hazard Index (HI) ≤ 1.0 . Some sites are likely to see future construction, in which case nonresidential receptors could be exposed to contaminants deeper than 2 ft below ground surface (bgs). Our concern arises from the differing suites of contaminants and exposure point concentrations used to calculate risk for the worker (0-2 ft bgs) and the resident (0-10 ft bgs). Although it is true that the estimates of risk and hazard for the future resident are higher than those for a typical construction worker scenario, we fear that a decision for no further action at a given site might not be protective of a future construction worker. The Navy should address this concern, either generically or on a site-by-site basis.

2. Section 1.1, Purpose of Report, Figure 1-2

The title of the figure should be changed to OU-3A Site Location Map.

3. Section 1.1, Purpose of Report, 2nd paragraph, page 1-1

Please verify the number of IRP sites at MCAS El Toro. OU-1 has one site; OU-2A has two sites; OU-2B has two sites; OU-2C has two sites; and OU-3 has seventeen sites. Thus, the total number of sites is 24.

4. Section 1.1, Purpose of Report, Table 1-1

The table lists Units 1 and 2 of Site 1, Explosive Ordinance Disposal Range, as being addressed in this report though this site belongs to OU-3B. Also, no units are listed for Site 4, Ferrocene Spill Area. Please correct the table or change the title to clarify that the table lists sites investigated during the Phase II RI.

5. **Scope of the OU-3A Investigation, Table 1-2**

Please delete OU-3B Site 14, Battery Acid Disposal Area, from the table.

6. **Attachment B, Site 6, Drop Tank Drainage Area No. 1**

Section 7.1.4, Human-Health Risk Assessment, page B7-2: The HI for an on-site industrial worker at Units 1, 2, and 3 listed as 1.1 is a typographical error. The correct value is 0.11.

Table 7-1, page B7-6: The risk assessment values entered this table does not agree with the calculated values in Section 6.

7. **Attachment C, Site 8, Defense Reutilization and Marketing Office Storage Area**

Figures depicting Site 8 should show the boundaries of the area (including depth) where the soil was inadvertently removed during the construction of the asphalt pad built in 1994. The construction of the asphalt pad occurred between the Phase I and Phase II remedial investigation. By showing the boundaries, the reviewer would be aware of soil boring data that may be invalid due to soil removal.

Table ES-2 and Table 6-5 indicate the residential scenario HI at Units 2 and 3 is higher than Units 1 and 4, yet the analytical data show higher contaminant concentrations at Units 1 and 4. If this is not an error please include, on appropriate figures and tables, evidence to support these conclusions. If this is an error, please cross-check the analytical data at each unit (for all sites) with the analytical data used in the risk assessment to ensure these data properly correspond.

Please provide any additional data showing that the remedial investigation identified the PCB "hot spot" at Unit 4. Soil sample location 08B404 indicates Oracular 1260 three times higher than the PRG, yet the surrounding soil was not further sampled.

8. **Attachment I, Site 15, Suspended Fuel Tank Area, Section 1.2.1, page I1-2**

The text states that Unit 1 was excluded from the IRP based on petroleum exclusion under CERCLA. Please attach a copy of the decision document to demonstrate that the BCT has agreed to the exclusion.

Section 7.1.1, Physical Characteristics, page 17-1: The statement that Site 15 is located in the northeast quadrant of MCAS El Toro is not accurate. The correct location is northwest.

9. **Attachment k, Site 19, Aircraft Expeditionary Refueling Site, Section 1.2.1, page K1-2**

The text states that Units 1 and 4 were excluded from the IRP based on petroleum exclusion under CERCLA. Please attach a copy of the decision document to demonstrate that the BCT has agreed to the exclusion. Also, please explain why Unit 4 is included in Table ES-2.

10. **Attachment L, Site 20, Hobby Shop, Section 1.2.1, page L1-4**

Please attach a copy of the decision document to demonstrate that the BCT has agreed to the exclusion of Units 2 and 3.

11. **Attachment L, Site 20, Hobby Shop, Section 6, Human-Health Risk Assessment**

We find a discrepancy in estimations of excess cancer risk for future residents at Unit 1. Table L6-5 estimates this risk at $1.5E-05$, driven by arsenic. However, Figure L4-3 shows that arsenic values for soils in Unit 1 fall within the range of ambient concentrations at all depths in both Phase I and Phase II investigations. Table K1-46 in Appendix K agrees with Figure L4-3 and shows that arsenic is not selected as a COPC for Unit 1. In addition, Table KVI-196 shows arsenic as a COPC for resident children for Unit 1. Please explain this discrepancy or correct any errors.

Cancer risk and non-cancer hazard for future industrial workers at Unit 1 are $<1E-07$ and <0.10 , respectively, while excess cancer risks for Unit 4 and the catch basin fall in the range of $2E-06$ to $6E-06$, driven by bis(2-ethylhexyl)phthalate (Tables L6-4, L6-5). Non-cancer hazard is not significant for either receptor group at Unit 4 or for industrial workers at Unit 4. The cumulative HI for future residents at the catch basin is 1.2, but all individual toxic endpoints show hazard indices <1.0 (Table L6-6).

12. **Attachment M, Site 21, Materials Management Group**

This section is missing Figures 1-1, 1-2, and 3-1.

13. Attachment N, Site 22, Tactical Air Fuel Dispensing System, Section 6, Human-Health Risk Assessment

Arsenic is selected as a COPC for Unit 1 and Unit 2 (Appendix K, Tables K153-55), although no detected values fell higher than the 95th percentile of ambient values (Table N4-5). This is apparently an error, leading to overestimation of excess cancer risk for both residential and industrial uses. Please explain or correct.

Even if arsenic were removed as a COPC, excess cancer risks for Unit 1 would still fall in the range of $1E-05$ to $2E-05$ for both the future resident and future industrial worker. If arsenic is not a COPC at Unit 2, then cancer risks are not significant. The cumulative HI is >1.0 only for the future resident at Unit 2, but no single toxic endpoint shows a HI >1.0 (Table N6-6). Therefore, no non-cancer hazards at Unit 2 are not significant. Cumulative HI via inhalation of dust at Unit 1 is six orders of magnitude greater for the future resident compared with the future worker (Table N6-5). This was due to barium being a COPC in soils in Unit 1 and manganese soils in Unit 2 for future residents (0-10 ft bgs) but not for workers (0-2 ft bgs), which accounts for 99+% of the difference (Tables KV-115, KV-117, KVI-233, KVI-244).

State of California

Memorandum

To: Mr. Tayseer Mahmoud
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, CA 90802-4444

Date: January 7, 1997

From: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SANTA ANA REGION
3737 MAIN STREET, SUITE 500, RIVERSIDE, CALIFORNIA 92501-3339
Telephone: CALNET 632-4130 Public (909) 782-4130

Subject: DRAFT PHASE II REMEDIAL INVESTIGATION REPORT OU-3A SITES
MARINE CORPS AIR STATION, EL TORO

We have reviewed the subject document dated November 12, 1996 and received by us on November 20, 1996. We find that the report meets with our requirements and we have no significant comments.

If you have any questions, please call me at 909-782-4998.


Lawrence Vitale
DoD Section