

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

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245 West Broadway, Suite 425
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June 23, 1995

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

Dear Mr. Joyce:

**REVIEW COMMENTS ON THE REVISED FIELD SAMPLING PLAN, PHASE II,
REMEDIAL INVESTIGATION/FEASIBILITY STUDY (FSP), MARINE CORPS AIR
STATION (MCAS) EL TORO**

The Department of Toxic Substances Control (DTSC) has completed its review of the above mentioned Work Plan. General and specific comments are enclosed. These are in addition to the comments previously submitted by the DTSC.

DTSC will be available for a comment resolution meeting(s) either in person or via a telephone conference as necessary.

We look forward to working with you on these and other issues. Feel free to contact me at (310) 590-4919.

Sincerely,

Juan M. Jimenez
Remedial Project Manager
Base Closure Unit
Office of Military Facilities

Enclosures

cc: See next page.



Mr. Joseph Joyce
June 23, 1995
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4
245 West Broadway, Suite 425
Beach, CA 90802-4444



MEMORANDUM

TO: Juan Jimenez
Office of Military Facilities
Base Closure Unit
245 West Broadway, Suite 425
Long Beach, California 90802

FROM: Geological Support Unit
245 West Broadway, Suite 425
Long Beach, California 90802

DATE: 19 June 1995

SUBJECT: *COMMENTS ON THE FIELD SAMPLING PLAN PHASE II REMEDIAL INVESTIGATION/FEASIBILITY STUDY, MARINE CORPS AIR STATION EL TORO, CALIFORNIA*

Introduction

As requested, the Geological Support Unit (GSU) of the Department of Toxic Substances Control (DTSC) has provided additional site-specific comments on the document entitled Draft Field Sampling Plan Phase II Remedial Investigation/Feasibility Study, MCAS El Toro, California (*FSP*). This document was prepared by Southwest Division, Naval Facilities Engineering Command (Navy), in conjunction with Bechtel National, Inc. (Bechtel).

General comments and some specific comments for the *FSP* were issued 24 May 1995. Below are a few additional general comments and some additional site-specific comments.

General Comments

1. When applicable, show abandoned wells on site-specific maps.
2. At a minimum, show the identifiers for all existing soil gas locations on all figures.
3. Five of the locations where soil gas samples were collected during the June 1994 soil gas survey should be resampled during the Phase II field activities. This will tie the two soil gas surveys together when comparing the results of both surveys.



Mr. Juan Jimenez
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4. Discuss the connection between the site-specific investigations and the VOC source area investigation.
5. If "no further investigation" is proposed for a site, unit, or SWMU/AOC, provide the reference such as a report, workplan, meeting notes, or the BCP stating the BCT decision for no further investigation designation. Simply stating that a "no further action or investigation" pathway is or was recommended is not sufficient.

Site-Specific Comments

Site 2

6. Figure B3-3 - Correct the "double location" of well 05_UGMW27 shown on the west side of the map.

Does the "Phase II monitoring well" symbol shown on the east portion of the map near well "D"2_DGMW25 belong on this figure?

Correct D2_DGMW25 to 02_DGWM25.

7. Show aerial photograph anomalies noted in previous reports (Comment 6a in the Response Summary). Consider collecting judgmental samples located within the identified anomalies.
8. Clarify in more detail surface geophysics strategy to determine landfill boundaries. Once the boundaries of the landfill are determined and the BCT agrees on the interpretation of the boundaries, an on-site meeting should take place to decide strategies for trenching.
9. Page B4-6 and Page B6-5 - Discuss groundwater sampling protocol in more detail.
10. Note: this comment refers to the Workplan. Add a discussion regarding Hydropunch activities in the Workplan DQOs.
11. Page B4-7, Section 4.3.2.3 - Include the letter designation for well 18_DGMW03 and the depth of the screened interval.
12. Page B4-7, Section 4.3.2.3 - If the BCT decides to install New8 monitoring well to serve the purpose of an upgradient well, then the location of the well should be farther upgradient than shown on Figure B3-2.

Site 3

13. A section of Agua Chion Wash that runs through Site 3 is unlined. There has been some discussion about lining this portion of the wash. Include a discussion regarding this issue.
14. Page C44-7, Section 4.2.4.2 - Please insure that a soil gas sample will be taken at the same location as the soil matrix sample was taken that showed elevated concentrations of VOC at SWMU/AOC 194.
15. Please indicate the location of all pits, trenches and anomalies identified in previous documents (refer to comment 1A of the DTSC Response Summary)
16. Will there be any attempt to determine the unknown thickness of the soil layer covering the landfill?
17. Dioxin analysis should be considered at SWMU 194 if results show elevated concentrations of PCBs.

Site 5

18. Show the proposed location of the downgradient well on Figure E-2.
19. It was discussed earlier that at least two feet of fill covers this site. If this is true it needs to be shown and the integrity needs to be documented, especially if a presumptive remedy is the remediation decision.

Site 7

20. Soil gas probe location 24_SG355 showed 2 ug/l of PCE, 531.2 ug/L of TCE and 383 ug/l of 1,1 DCE, totaling 916.2 ug/l VOCs at a 15 foot depth. It is difficult to determine if this area will be addressed under Site 24, if so please state it in the text.
21. Provide an expanded overview site map to include the location of well 07_DGMW91. It would be helpful if Site 8, Site 10, Building 296 and 297 were also shown on the map.

Site 8

22. There are existing soil gas locations showing VOC hits. How will this be addressed and to what extent will the elevated concentrations of VOCs be delineated? This is of particular concern because the removal action will be driven by constituents such as PCBs that are

generally found at much shallower depths than VOCs.

23. As stated at the 28 April 1994 technical exchange meeting, if it can be documented that the fill that underlies this parking lot was imported after the yard was no longer used, then no further investigation is acceptable. Otherwise, conduct field screening soil sampling of surface soil only.
24. On appropriate figures, indicate the locations of the trenches observed in the western portion of the site in the 1952 aerial photograph.

Site 12

25. Please add this site to the Site 24 soil gas investigation. Add two locations at Unit 1 and two locations at Unit 2. At each location collect samples at two depths.

Site 15

26. It is recommended to collect soil gas samples, then guide the location of the soil matrix samples from the soil gas results.

Site 17

27. Please note, it may be difficult to define groundwater gradient using the proposed well locations shown on Map Q3-2. As discussed previously, the location of NEW1 may not be possible due to the underlying geological unit. Please propose a new location.

Site 19

28. Please provide an explanation regarding the black hose that was observed extending from the side of Aqua Chinon Wash observed during the 02 May 1995 site visit.

Site 24

29. Check the locations of the soil gas probes. Do they coincide with VOC detects at the OU-3 sites?
30. Five of the locations where soil gas samples were collected during the June 1994 soil gas survey should be resampled during the Phase II field activities. This will tie the two surveys together, strengthening the interpretation of the results when comparing the data.

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31. Since it has been agreed by the BCT not to analyze for VOCs in surface water samples, delete all reference regarding this issue in the FSP.
32. Provide a detailed discussion regarding air sparging and soil vapor extraction. Will there be a formal presentation for the BCT before the design implementation of these systems?
33. Provide a more detailed discussion regarding aquifer pump tests.
34. Please show locations of CPT on Map W3-9.
35. Note: this comment refers to the Workplan. Building 655 is marked as Building 855 on all site-wide maps in Appendix W.
36. Note: this comment refers to the Workplan and the FSP. The locations of Buildings 333, 386, and 1589 located on Figure 1-3 of the Workplan are not consistent with the locations on the site-wide maps in Attachment W and Appendix W.
37. Building 312 is missing from site-wide maps in Attachment W and Appendix W.

Thank you for the opportunity to review and comment on this document. If you have any questions, please contact me at extension 5528.



Sherrill Beard, RG
Geologist
Geological Support Unit



Concur: Karen Thomas Baker, CEG
Unit Chief
Geological Support Unit

DRAFT FIELD SAMPLING PLAN FOR MCAS EL TORO PHASE II RI/FS
Comments by Greg Holmes
25 May 1995

GENERAL COMMENTS

1. Analysis of existing data from Phase I RI is not included in the El Toro Field Sampling Plan (FSP). A presentation of existing data is necessary for determining data gaps and evaluating sampling rationale, including proposed sample locations and numbers of samples. Such data are not included in the draft Phase II RI Workplan, nor in the draft QAPP.
2. Tier 1 sampling designs and the process by which Tier 2 sample locations will be selected are not included in the FSP; rather, they are located in the draft Phase II RI Workplan. The FSP should be a stand-alone document which can be used in the field without having to refer back to other documents.

SPECIFIC COMMENTS

1. *Page 1-1, Section 1.2, third sentence:* "This FSP presents the sampling procedure for collecting the necessary information..."

The introduction does not specifically state what the "necessary information" is .
2. *Page 2-4, first paragraph, line 7:* "The second site was."

The second site was what?
3. *Page 4-11, Section 4.2:* "...and objectives of the Phase II RI/FS (Tables 4-1 and 4-2)."

Tables 4-1 and 4-2 do not describe affected media or objectives; they only list COPCs.
4. *Page 5-3, Table 5-2*

Use of a scintillometer is proposed for field screening at four sites; however, radio nuclides are listed in Table 4-1 (page 4-7) as COPCs at seven sites. Please explain this discrepancy.
5. *Page 6-16, Section 6.4.1:* "Installation of Monitoring and Extension Wells".

Please change "extension" to "extraction".

6. ***Page 6-41, last paragraph***

Please describe the sampling device to be used for collecting soil gas samples after purging.

7. ***Page 6-49, first paragraph***

Describe how the Tedlar bags will be filled. Also, describe QC procedures for Tedlar bags.

8. ***Page 6-63, second paragraph from top***

When will real-time monitoring be required (as opposed to discrete)? Please explain in relation to COPCs and analysis to be used.

9. ***Page 6-63, Section 6.8.4, second paragraph***

Air Resources Board (ARB) ambient air sampling guidelines cited in this section are not listed in References (Section 8), but it is presumed that the document referred to is "Testing Guidelines for Active Solid Waste Disposal Sites" (December 1986). The ARB no longer uses or recommends use of this document. It has been replaced with "Landfill Gas Testing Program Data Analysis and Evaluation Guidelines" (September 1990), in which Appendix C-1 "Recommendations for Further Testing" would be applicable here. According to ARB, the main difference between the two guidance documents is that the latter requires significantly lower detection limits which were not achievable when the earlier guidance was published.

10. ***Page A1-1, Section 1.2***

Include use for surface elevation data which will be collected from all sampling points (Section 6.1).

11. ***Page A4-2, Section 4.2.2.1***

Grids are not shown on Map A3-2.

12. ***Page A4-3, last paragraph, second sentence***

This sentence does not make sense.

13. ***Page B-2, Section 1.2, second bullet, last sentence***

The presence of what?

14. *Page B2-2, Section 2.2, paragraph below bullets, third sentence*

Should be "...recorded as less than the detection limit...".

15. *Page B4-4, Section 4.2.1.4 Flux Chamber Monitoring*

The method for determining the number and location of flux chamber samples is not explained.

16. *Page B5-2, Section 5.2.4*

SVOCs cannot be analyzed by GC alone; method 8270 requires GC/MS. At present there are three state-certified mobile laboratories for GC/MS. Such instruments are mobile, not portable.

17. *Page C5-3, Section 5.2.7*

Please note that TO-14 requires use of Summa canisters, not Tedlar bags.

18. *Page C5-4, Section 5.3.6, second sentence*

Should be "Retardation factors are helpful in understanding the contaminants...".

19. *Page C6-2, Section 6.4, last sentence*

Should be "Soil gas sampling procedures are described in detail in FSP Section 6.6."

20. *Page C6-2, Section 6.5, second paragraph*

Explain rationale for using angle borings instead of vertical borings. Also, what would be criteria for reducing sample intervals?

21. *Page O3-5, Map O3-2*

Should be titled "Suspended Fuel Tanks", not "Crash Crew Pit No. 2".

22. *Page (Q)3-5, Map Q3-2*

It does not appear that there will be two down gradient monitoring wells for Site 17, according to the estimated groundwater flow direction. Well #17_DGMW82 appears to be cross-gradient, not down gradient.

23. *Page W4-5, Section 4.2.1*

The depth of three mud-rotary borings is not stated, nor is it stated whether they will be backfilled after core samples are collected; please clarify.

24. *Page W6-6, third paragraph*

There is no Section 6.6.1.2. It should probably be 6.7.1.2.