



Cal/EPA

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Mr. Joseph Joyce  
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**COMMENTS ON TECHNICAL MEMORANDUM REVISED RISK ASSESSMENT  
PROCEDURES, MARINE CORPS AIR STATION (MCAS) EL TORO**

Dear Mr. Joyce:

The Department of Toxic Substances Control (DTSC) has completed the review of the above subject document dated June 1996, prepared by Bechtel National, Inc. The technical memorandum presents the procedures that will be used in the human-health risk assessment for Remedial Investigation (RI) for Operable Unit 3 at MCAS El Toro. The information presented in the memorandum supplements or modifies the procedures outlined in the final Risk Assessment Work Plan for the Phase II RI which was issued in August 1995.

This letter is to transmit the enclosed DTSC's staff Toxicologist dated July 22, 1996. 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

Enclosure

cc: See next page

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MCAS EL TORO  
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Pete Wilson  
Governor

James M. Strock  
Secretary for  
Environmental  
Protection



*Mr. Joseph Joyce*

*July 24, 1996*

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cc: Ms. Bonnie Arthur  
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**MEMORANDUM**

**TO:** Tayseer Mahmoud  
Southern California Office of Military Facilities (OMF)  
Region 4, Long Beach

**FROM:** John P. Christopher, Ph.D., D.A.B.T.  
Staff Toxicologist  
Human and Ecological Risk Division (HERD) 

**DATE:** 22 July 1996

**SUBJECT:** MCAS El Toro: Revised Risk Assessment Procedures  
PCA: 14740 Site: 400055-45

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**Background**

Southern California Region 4 has asked OSA for continuing support on issues regarding risk assessment at Marine Corps Air Station (MCAS) El Toro, a closing base in Orange County which is also designated a Federal Superfund site. Remedial activities at this base are being directed by Naval Facilities Engineering Command, Southwest Division (SWDIV).

We previously reviewed and commented on draft and draft final work plans for assessing risk at this base. The current document is a listing of several changes the Navy desires to implement as part of the Phase II remedial investigation (RI).

**Document Reviewed**

We reviewed "Technical Memorandum, Revised Risk Assessment Procedures, Marine Corps Air Station El Toro, California, CTO 0079/0140". This document, dated June 1996, was prepared by Bechtel National, Inc., contractors to SWDIV. HERD received a request to review the document on 18 July 1996.

**Scope of Review**

The document was reviewed for scientific content. Minor grammatical or typographical errors that do not affect the interpretation have not been noted. However,

these should be corrected in any future version of the document. We assume that sampling of environmental media, analytical chemistry data, and quality assurance procedures have been examined by regional personnel. If inadequacies in this regard for the purposes of risk assessment were encountered, they are noted. Any future changes or additions to the document should be clearly identified.

### Comments

In general, the changes proposed by the Navy are minor and are acceptable to HERD. However, we noted one items which is not acceptable and one point which requires clarification.

On page 4 the Navy states that cancer risks less than 1E-05 will be deemed acceptable. This conflicts with the National Contingency Plan (NCP) under which this base is being regulated. The NCP clearly states that the "point of departure" or upper limit of insignificant risk of cancer is 1E-06. The NCP goes on to state that cancer risks estimated to fall between 1E-06 and 1E-04 should be dealt with case by case. This procedure should be followed at MCAS El Toro.

On page 7 the Navy correctly states the hierarchy for sources of toxicity criteria. Currently, USEPA's Integrated Risk Information System (IRIS) shows three criteria for assessing hazards due to exposure to manganese. For MCAS El Toro, we recommend using 5E-03 mg/kg-day for this purpose. If the Navy has any questions on how best to interpret information in IRIS, please contact Mr. Jeff Paull of USEPA Region IX in San Francisco at (415) 744-2308.

### Conclusions and Recommendations

We do not accept 1E-05 as the point of departure for cancer risk at MCAS El Toro or any other military base in California. Aside from this, the Navy's proposed changes to the risk assessment work plan are acceptable to HERD.

Reviewer: Deborah Oudiz, Ph.D.   
Senior Toxicologist, HERD

cc: Dr. M. Wade, HERD  
Mr. J. Paull, USEPA Region IX