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Southwest Division
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DATE: 8/13/96
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**RESPONSE TO COMMENTS
TECHNICAL MEMORANDUM
REVISED RISK ASSESSMENT PROCEDURES
MCAS EL TORO, CALIFORNIA**

<p>Originator: John P. Christopher, Ph.D., Staff Toxicologist DTSC</p> <p>To: Tayseer Mahmoud DTSC</p> <p>Date: 22 July 1996</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0079 File Code: 0306</p>
<p><u>SPECIFIC COMMENTS</u></p> <p>1. 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.</p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p> <p>RESPONSE 1: We concur that the NCP states that the “point of departure” of insignificant cancer risk is 10⁻⁶ and that the cancer risk estimates between 10⁻⁴ and 10⁻⁶ should be dealt with on a case by case basis. Risk management decisions will be made outside of the risk assessment presented in the RI report.</p>
<p>2. On Page 7 the Navy correctly states the hierarchy for sources of toxicity criteria. Currently, U.S. EPA’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 U.S. EPA Region IX in San Francisco at (415) 744-2308.</p>	<p>RESPONSE 2: We have contacted Mr. Jeff Paull to request the most current U.S. EPA reference dose (RfD) for manganese. The RfD provided by Mr. Paull, 4.6E-04 mg/kg-day, will be incorporated in the risk assessment for CTO-79.</p>

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<p>Originator: Jeffrey M. Paull, Regional Toxicologist U.S. EPA</p> <p>To: Bonnie Arthur, RPM U.S. EPA</p> <p>Date: 25 July 1996</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0079 File Code: 0306</p>
<p><u>SPECIFIC COMMENTS</u></p> <p>1. <u>Technical Memorandum, p. 1:</u> An additional explanation is needed concerning the process by which health risks at sites or units not included in the Phase II RI (e.g., Sites 1 and 23, and multiple units at Sites 4, 7, 13, 14, 15, 19, and 20) will be evaluated, and how these risks will be incorporated into the Basewide Risk Assessment.</p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p> <p>RESPONSE 1: It is our understanding that the health risk for sites not included in the Phase II RI will be evaluated in a future submittal under the same process used to assess the risk for sites currently included in the RI; the risk assessment will be conducted in accordance with the Risk Assessment Work Plan (BNI 1995) and the Revised Risk Assessment Procedures presented in the Technical Memorandum (BNI 1996). It is also our understanding that the data for all sites will be combined to perform a Basewide Risk Assessment.</p>
<p>2. <u>COPCs in Soil, p. 2:</u> A rationale or reference should be provided to support the selection of the depth criteria associated with shallow and surface soil data used in the selection of COPCs for the residential and industrial scenarios (e.g., 0 to 10 feet bgs, a 0 to 2 feet bgs, respectively).</p>	<p>RESPONSE 2: The Cal-EPA Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (1992) specifies depth intervals of soil samples. In addition, the 0 to 10 feet bgs was established as a standard soil depth interval for the residential scenario under the Clean II program (Jacobs 1993).</p>
<p>3. <u>COPCs in Groundwater, p. 3:</u> An explanation is required concerning the limited extent of groundwater sampling conducted in the Phase II RI (Site 16, Crash Crew Pit No. 2), and whether this limited data is representative of potential groundwater contamination for all sites within OU-3.</p>	<p>RESPONSE 3 The groundwater data for Site 16 will not be considered representative of potential groundwater contamination for other OU-3 sites. Those sites were investigated in accordance with the approved Work Plan which provided decision rules regarding the approach for assessing the potential for the releases to have impacted groundwater. The BCT agreed that the Phase II sampling was sufficient to conclude that the groundwater was not impacted by the releases.</p>
<p>4. <u>Receptor Analysis, p. 4:</u> An explanation is needed for why a cancer risk level in excess of 1×10^{-5} was selected as the limit of insignificant cancer risk. The National Contingency Plan (NCP) identifies 1×10^{-6} as the lower end of the acceptable risk range, which should serve as the point of departure for risk screening purposes.</p>	<p>RESPONSE 4: We concur that the NCP identifies 10^{-6} as the "point of departure. Risk management decisions will be made outside of the risk assessment presented in the RI report.</p>

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<p>Originator: Jeffrey M. Paull, Regional Toxicologist U.S. EPA</p> <p>To: Bonnie Arthur, RPM U.S. EPA</p> <p>Date: 25 July 1996</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0079 File Code: 0306</p>
<p>5. <u>Receptor Analysis, p. 4:</u> Has the utility worker been eliminated as a potential receptor at all Sites within OU-3? If so, can it be demonstrated that there are no buried cables or utility lines that will require repair at any of these sites?</p>	<p>RESPONSE 5 Buried cables and utility lines present at the sites may presumably need occasional repair or replacement. There is reasonable confidence that risks to a maintenance/utility worker will be much lower than risks to residential receptors. The worker will be exposed to soils at 0 to 10 feet bgs which is the same soil interval used for residential exposure, and exposure to the worker will be significantly less than to a resident because repair work would be infrequent and it can probably be completed within a few days. Therefore, assessment of risk to a person conducting repair of underground utilities will not be included in the RI as it may not provide risk managers with additional information for use in decision making.</p>
<p>6. <u>Quantification of Exposure, Table 1, p. 9:</u> A rationale or reference should be provided to support the selection of 100 days/year as the exposure frequency for the resident adult for dermal contact with soil. In addition, if the utility worker cannot be eliminated as a potential receptor, a value of 480 mg/day for the soil intake rate should be added to the table.</p>	<p>RESPONSE 6: Reference to the exposure frequency for dermal contact with soil by an adult is provided in The Preliminary Endangerment Assessment Guidance Manual (Cal EPA 1994).</p>