

**RESPONSE TO COMMENTS
DRAFT TECHNICAL MEMORANDUM
RISK EVALUATION FOR AN OFF-STATION AGRICULTURAL WORKER
MCAS EL TORO, CALIFORNIA**

M60050.002788
MCAS EL TORO
SSIC #5090.3

July 2002

<p>Originator: John P. Christopher, Ph.D., D.A.B.T. DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 20 June 2002</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0164 File Code: 0232</p>
<p><u>GENERAL COMMENTS</u></p> <p>Marine Corps Air Station (MCAS) El Toro is a closed military facility in Orange County. Remedial activities at this base are being directed by the Department of the Navy, Naval Facilities Engineering Command, Southwest Division. Based operations caused release of trichloroethylene (TCE) and other solvents to groundwater. The Navy presented estimates of risk and hazard for residential and industrial use of this groundwater in "Draft Final Operable Unit 1 Human Health Risk Assessment," dated 9 August 1996. We approved this assessment with our memorandum dated 5 September 1996. The current document presents estimates of risk and hazard for agricultural use of this groundwater.</p> <p>We reviewed "Draft Technical Memorandum, Risk Evaluation for an Off-Station Agricultural Worker." This document, dated June 2002, was prepared by Bechtel National, Inc., contractors to the Navy.</p>	<p><u>RESPONSES TO GENERAL COMMENTS</u></p> <p><u>RESPONSE:</u> Please see the response to specific comments below.</p>
<p><u>SPECIFIC COMMENTS</u></p> <p>1. The risk assessment is acceptable for the agricultural workers under two sets of conditions. Estimated cancer risks are 3 E-8 and 5 E-8 for two different agricultural exposure settings, while non-cancer hazard indices are less than 1% of the benchmark of 1.0. These risk and hazards are less than the points of departure for health concerns.</p> <p>We note that the Navy has not attempted to estimate carcinogenic risks or non-cancer hazards in food crops irrigated with TCE-contaminated groundwater. However, by using the most contaminated well for the exposure point concentrations, the Navy has made its risk estimates quite conservative.</p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p> <p><u>RESPONSE 1:</u> The risk assessment that is the subject of these comments evaluated the risk to an agricultural worker that could be exposed to contaminated groundwater used to irrigate crops while working in the fields. The Navy does not feel that it is necessary to evaluate the carcinogenic risks or non-cancer hazards in food crops because of the low propensity of VOCs to bioaccumulate and the conservative nature of the risk estimate already performed. DTSC has indicated that they concur that this evaluation is not required.</p>

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2. We suggest just one change for the final draft. In Table 5, the Navy should ascribe Cal/EPA cancer slope factors not to DTSC but to the Office of Environmental Health Hazard (OEHHA).	RESPONSE 2: Table 5 has been revised as suggested.



BECHTEL NATIONAL INC.

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Southwest Division
Ms. Karen Rooney, Code 02R1.KR
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: July 30, 2002
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FROM: Thurman L. Heironimus, Project Manager

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