



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

August 14, 2001

BRAC Environmental Coordinator  
Base Realignment and Closure, Environmental Division  
Attn: Mr. Dean Gould  
P.O. Box 51718  
Irvine, CA 92619-1718

RE: Draft Technical Memorandum Phase II Evaluation of Radionuclides in Groundwater at the Former Landfill Sites and EOD Range, Marine Corps Air Station, El Toro, dated July, 2001

Dear Mr. Gould:

EPA has reviewed the above-referenced document and provides the following comments from Steve Dean, EPA's technical expert in radiological issues:

**Table 3-2: Groundwater Analytical Results on Page 3-5:**

**Uranium 238 : Uranium 235 ratios Columns:** The table needs to include the actual concentrations of U238 and U235 for each sample as well as the ratios of each radionuclide in each sample. Documenting the range of naturally occurring uranium concentrations in MCAS-ET groundwater is important reference data for future groundwater investigations.

**Tritium Results Column:** Both state and federal environmental regulations express the Maximum Contaminant Level (MCL) for tritium concentrations in water in picoCuries per liter (pCi/l) not tritium units (TUs). Since the purpose of this document is to report the information necessary for the reader to clearly understand whether or not groundwater in the study areas are impacted by radioactive contaminants, I recommend that the tritium data be reported in pCi/l. The tritium data in Table 3-2 should be reported in units that are consistent with regulatory MCLs for the sake of clarity and consistency.

**Data Evaluation, Page 4-1**

**Item 8:** The Navy has determined and then reported on the age of the water using tritium based on TU data, but should also include that the groundwater tritium levels are orders of magnitude below the drinking water MCL of 20,000 pCi/l.

received  
8/21/01

If you have any questions, please call me at (415) 744-2366.

Sincerely,

A handwritten signature in black ink that reads "Nicole G. Moutoux". The signature is written in a cursive style with a large, sweeping "N" and "M".

Nicole G. Moutoux  
Project Manager  
Federal Facilities Cleanup Branch

cc: Lynn Hornecker, SWDIV  
Triss Chesney, DTSC  
Patricia Hannon, RWQCB  
Greg Hurley, RAB Community Co-Chair