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Ser 1843.1/L7074  
20 Dec 1996

Mr. Erick Ortega, Environmental Engineer  
Raytheon  
750 MSS/CEV  
Onizuka Air Station  
1080 Lockheed Way, Box 16  
Sunnyvale, CA 94089-1231

Dear Mr. Ortega,

As a part of the United States Department of the Navy (Navy)'s Installation Restoration Program, the Navy is remediating contaminated groundwater at various sites at Moffett Federal Airfield. The purpose of this letter is to formally request a response to the Air Force's commitment to reusing Navy treated groundwater for irrigation of the Moffett Golf Course.

Typically, groundwater is pumped above ground, and treated to a very high degree using advanced treatment processes such as activated carbon, air stripping, and ultra violet radiation. The effluent water is then sampled to ensure that it meets applicable federal and state regulations, and standard practices. The treated and sampled water may then be transferred to the golf course for reuse pending your concurrence. Two sites slated for groundwater cleanup are the proposed West-side Aquifers Treatment System (WATS) and the Operable Unit (OU) 5 treatment system.

The California Regional Water Quality Control Board, Region 2 (RWQCB) is the lead governmental agency in permitting and enforcing discharge type and requirements for groundwater discharges in the San Francisco Bay region. According to RWQCB Resolution 88-160, "Regional Board Position on the Disposal of Extracted Groundwater from Groundwater Cleanup Projects," a hierarchy is established for the reuse of treated groundwater. The most preferable use of treated groundwater is reuse for irrigation, process water, or reinjection to groundwater. These forms of reuse are deemed the most beneficial to the people of the State of California and the environment.

The Navy wishes to solicit a response from the Moffett Golf Course operator (United States Air Force) regarding the potential use of Navy treated groundwater for golf course irrigation. After investigating various potential reuse, the Navy feels that the most beneficial groundwater reuse option at Moffett is for golf course irrigation. The suitability of Navy treated groundwater for golf course irrigation was discussed at the July 15, 1996, meeting at Onizuka Air Station and a May 13, 1996, letter to Ms. Gay Howard, both of which should be in your files. In addition, the October 28, 1996, "West-side Aquifers Treatment System Discharge Alternatives" technical memorandum (sent to you December 11, 1996) gives a more complete and current description of Navy activities for the WATS. These documents contain ancillary information that may be needed by the Air Force to indicate interest in using the Navy's treated groundwater.

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In summary, these documents identify no significant risks to human or turf grass health associated with long-term use of Navy treated groundwater under one main condition. This condition is the mixing of treated groundwater with conventional potable supplies to bring the level of total dissolved solids (TDS) in the irrigation water to a level sustainable for long-term irrigation. In addition, the documents identify the need to segregate the water system at the golf course into a potable system and a nonpotable system per California Title 22 regulations. Please also note that the production rates (maximum at approximately 120 gallons per minute or 16 acre-feet per month) and availability of Navy treated groundwater cannot be guaranteed and are only projections currently.

The Navy requests a written response to this letter describing the Air Force's commitment to reusing Navy treated groundwater for irrigation of the Moffett Golf Course by January 15, 1997. Should you have any questions, please feel free to contact me at (415) 244-2563 or Mr. Don Chuck of my staff at (415) 603-9834. Your cooperation is appreciated.

Sincerely,

**Original signed by:**

STEPHEN G. CHAO  
BRAC Environmental Coordinator  
for Moffett Field  
By direction of  
the Commanding Officer

Copies to:

National Aeronautics and Space Administration (Attn: Ms. Sandy Olliges)  
California Regional Water Quality Control Board, Region 2 (Attn: Mr. Michael Rochette)  
U.S. Environmental Protection Agency (Attn: Mr. Michael Gill)  
California Department of Toxics Substance Control (Attn: Mr. Joseph Chou)  
PRC Environmental Management, Inc. (Attn: Mr. Tim Mower)  
PRC Environmental Management, Inc. (Attn: Mr. Steve Fisher)

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