



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# California Regional Water Quality Control Board

## Los Angeles Region

Over 50 Years Serving Coastal Los Angeles and Ventura Counties  
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.swrcb.ca.gov/rwqcb4>



Gray Davis  
Governor

N60258.000223  
NSY LONG BEACH  
SSIC NO. 5090.3

October 31, 2002

Mr. Thomas Macchiarella  
Southwest Division, Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101-8517

### DRAFT WORK PLAN FOR GROUNDWATER MONITORING AT INSTALLATION RESTORATION SITES 8, 9, 10, 11, 12 AND 13, FORMER LONG BEACH NAVAL COMPLEX, LONG BEACH, CALIFORNIA (File No. 90-75)

Dear Mr. Macchiarella:

We have received the Navy's *Draft Work Plan Groundwater Monitoring at Installation Restoration Program Sites 8, 9, 10, 11, 12 and 13, Former Long Beach Naval Complex, Long Beach California*, dated September 16, 2002. The work plan describes the rationale, scope of work, procedures, and methodologies to be employed for installation of new monitoring wells and performance of quarterly groundwater monitoring at the above referenced Installation Restoration (IR) sites. We have reviewed the report and have the following comments:

1. On page 1-1, the work plan indicates that groundwater monitoring will occur for one year at the six IR sites. Groundwater monitoring wells must be sampled quarterly at a minimum for a two-year period. Upon completion and review of the groundwater monitoring results of the quarterly sampling activities, a determination will be made regarding the need to continue monitoring on a quarterly basis or the need to reduce the sampling frequency to a semi-annual and/or annual basis. Please revise the work to address the above accordingly.
2. The workplan indicates that groundwater monitoring will be conducted from Summer 2002 through Spring 2003. Please update the workplan to reflect a more accurate monitoring period with a two-year period as indicated above.
3. Please update the workplan, including the text and tables, to reflect the values in the most current California Ocean Plan criteria (State Water Resources Control Board, 2001) as the appropriate screening criteria for the subject sites.
4. The workplan proposed to re-install one well within IR Site 8. One well is not sufficient to monitor contaminant degradation, natural attenuation and plume migration patterns within IR Site 8. At a minimum, two groundwater monitoring wells must be re-installed within this site. Please revise the workplan accordingly.

### California Environmental Protection Agency

\*\*\*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption\*\*\*  
\*\*\*For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>\*\*\*



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

5. Regarding IR Site 9 groundwater monitoring wells: additional groundwater monitoring wells must be re-installed up-gradient, south of NW-09-06 and NW-09-07, and down-gradient, north of NW-09-03, of the volatile organic compounds (VOC) plumes. These wells are needed in order to delineate the extent of the groundwater contamination and monitor the contaminant degradation, natural attenuation and plume migration patterns within IR Site 9. Please revise the workplan accordingly.
6. Regarding IR Site 12 groundwater monitoring wells: additional groundwater monitoring wells must be re-installed up-gradient, south of NW-12-06, and down-gradient, north of NW-12-01, of the arsenic plume. These wells are needed in order to delineate the extent of the groundwater contamination and monitor the contaminant degradation, natural attenuation and plume migration patterns within IR Site 12. A determination will be made regarding the need to install additional groundwater monitoring wells east and west of the arsenic plume upon reviewing the quarterly groundwater sampling data. Please revise the workplan to reflect the above accordingly.

If you have any questions regarding the above, please call me at (213) 576-6738.

Sincerely,



Ana M. Townsend  
Sanitary Engineer Associate  
Site Cleanup I Unit

cc: Martin Hausladen, US Environmental Protection Agency  
Sue Hakim, Department of Toxic Substances Control  
Jennifer Valenzia, Southwest Division, Naval Facilities Engineering Command  
Christine Houston, Port of Long Beach