



Department of Toxic Substances Control



Edwin F. Lowry, Director
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N00236.002981
ALAMEDA POINT
SSIC NO. 5090.3

July 31, 2003

Mr. Richard Weissenborn
Department of Navy
Southwest Division
Naval Facilities Engineering Command
1230 Columbia Street, Suite 1100
San Diego, CA 92101

DRAFT FINAL WORKPLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM, ALAMEDA POINT, ALAMEDA, CALIFORNIA

Dear Mr. Weissenborn:

The Department of Toxic Substances Control (DTSC) has reviewed the above referenced document dated June 30, 2003. Our comments are enclosed. If you have any questions, please contact me at 510-540-3767.

Sincerely,

Marcia Liao, Ph.D., CHMM
Hazardous Substances Engineer
Office of Military Facilities

enclosure

Mr. Richard Weissenborn
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cc: Michael McClelland, SWDiv
Andrew Dick, SWDiv
Steve Edde, Alameda Point
Mark Ripperda, EPA
Judy Huang, RWQCB
Elizabeth Johnson, City of Alameda
Peter Russel, Northgate Environmental
Randolph Brandt, LHF
Bert Morgan, RAB Co-Chair
Lea Loizos, Arc Ecology



Department of Toxic Substances Control



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MEMORANDUM

TO: Marcia Liao, Ph.D. CHMM
Hazardous Substances Engineer
Office of Military Facilities

FROM: Michael Kenning, RG
Engineering Geologist
Geologic Services Unit

REVIEWED BY: Michael O. Finch, RG
Senior Engineering Geologist
Geologic Services Unit

DATE: July 30, 2003

SUBJECT: REVIEW OF THE DRAFT FINAL WORK PLAN FOR
BASEWIDE GROUNDWATER MONITORING PROGRAM
FOR ALAMEDA POINT, ALAMEDA, CALIFORNIA.

Activity Requested

At your request GSU (Geologic Services Unit) has reviewed sections of the above document to determine if earlier comments to the previously released draft document have been adequately addressed. The June 30, 2003 document was prepared by Shaw Environmental, Inc. for the U.S. Department of the Navy, Southwest Division, Naval Facilities Engineering Command.

General Comments

The work plan includes a table for each site that provides data on screen depth below ground surface of the monitoring wells, the hydrogeologic unit of the screen interval, a list the COCs (Contaminants of Concern) for that well and rationale for each monitoring well. These tables are acceptable, but more specific information should be provided for each well, either on paper or on a data base or spreadsheet. The additional specific information for each well should include northing and easting coordinates, ground

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

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surface and top of casing elevations with respect to mean sea level, well and casing diameter, casing type (PVC, stainless steel, etc.), screen slot size and intervals, and filter pack interval and filter pack size.

Specific Comments

DTSC comment 2. It is acknowledged that analysis of some COCs such as metals will seldom result in non-detects. The Navy proposes, on a site specific basis, to eliminate from the monitoring program wells that have four consecutive sampling events of non-detects or concentrations below the MCL. For some sites this proposal may be acceptable, particularly if there are other nearby wells that can be monitored. But for other sites where there is a definite boundary between plumes in adjacent sites or near the shoreline, point of compliance well(s) (a clean well) to demonstrate plume stability will be needed. Also, where Natural Attenuation is proposed, it will be necessary to track the movement of the plume and the associated degradation products over time, and the sampling program will need to include wells that may be currently non-contaminated. In addition, for some monitoring wells, it may be important to track some contaminants even if concentrations are below the MCL for reasons relating to ecological or human health risk determinations.

DTSC Comment 6, Section 11.0, Quarterly Groundwater Monitoring Reports. Time/concentration graphs should be provided for the COCs, as stated in DTSC's previous comments. The graphs may be submitted annually. The graphs show trends that can be readily discerned and are invaluable in reviewing monitoring reports. The graphs are particularly useful in demonstrating natural attenuation of COCs.

Each groundwater monitoring report should contain supporting documentation related to the sampling event including but not limited to: copies of field logs and activity sheets; field parameter results; immiscible layer data if present; purge volume data; chain-of-custody forms; and laboratory data sheets.

Comment 9. Bentonite is not recommended as an additive to cement grout because it tends to absorb water that would otherwise hydrate the cement, lowering the integrity of the grout. (See "Super Jet Grouting" by Burke, Caccolso, and Chadwick in Transportation Research Record No. 1721, Geomaterials 2000, pp45-53.)

Comment 12. GSU believes that outstanding issues and follow-up work should be reported in the groundwater monitoring reports because these issues (repair and replacement of wells, non-sampled wells, elevated detection limits) will impact the quality of data generated by the sampling program.

If you have any questions, contact me by telephone at (916) 255-3625 or by e-mail at mkenning@dtsc.ca.gov.