



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maureen F. Gorsen, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

N00236.002497
ALAMEDA POINT
SSIC NO. 5090.3



Arnold Schwarzenegger
Governor

August 9, 2006

Mr. Thomas L. Macchiarella, Code BPMOW.TLM
Department of the Navy
Base Realignment and Closure Program
Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

REVIEW OF PROPOSED PLAN FOR IR SITE 1, 1943-1956 DISPOSAL AREA,
FORMER NAVAL AIR STATION ALAMEDA, ALAMEDA COUNTY

Dear Mr. Macchiarella:

The Department of Toxic Substances Control (DTSC) has reviewed the draft Proposed Plan for Installation Restoration (IR) Site 1, 1943-1956 Disposal Area at the former Naval Air Station-Alameda, now known as Alameda Point (Proposed Plan). DTSC previously provided the Navy with a letter dated July 18, 2006 that specified our overarching concerns regarding the landfill at Site 1. Subsequently, a meeting was held on August 1, 2006 at the Region 1 DTSC office to discuss our primary concern, which is that in the draft Proposed Plan, the Navy selected remedy S1-4a rather than remedy S1-3. Remedy S1-4a involves placing a four-foot soil cover on the former waste disposal area at Site 1 and remedy S1-3 involves placing an engineered cap on the former waste disposal area at Site 1. Persons that were present at the meeting include Andrew Baughman of the U.S. Navy, Mark Ripperda and John Chesnutt of the U.S. Environmental Protection Agency (USEPA), Judy Huang and John Kaiser of the San Francisco Regional Water Quality Control Board (participating by telephone), and Tony Landis, Dan Ward and myself of DTSC. As a result of this meeting and internal discussion, DTSC recommends that the Navy select one of the three options described below. Each option would be an acceptable remedy for the Site 1 landfill.

Option 1: Place a four-foot thick soil cover over Area 1a following additional site characterization.

Rationale: The primary argument provided by the Navy to support a four-foot soil cover rather than an engineered cap is that the waste has been sitting in groundwater for the past 50 years and is unlikely to negatively impact human health or the environment. However, this argument is based on professional judgment rather than site characterization. Before DTSC will concur with placing a four-foot soil cover on the Site 1 landfill, a site characterization should be completed, which would include trenching and additional soil and groundwater sample analysis to determine chemical constituents in soil and groundwater as well as waste characterization. If results of the site characterization indicate that the Navy's assumption is valid and that the contents of the landfill are unlikely to negatively impact the environment, then DTSC will concur with the placement of a four-foot soil cover on the former waste disposal area as part of the remedy for Site 1.

Option 2: The Navy should design a cover that is less permeable than the four-foot soil cover but more permeable than an engineered cap.

Rationale: In the Final Feasibility Study Report, IR Site 1, 1943-1956 Disposal Area (Bechtel 2006), the Navy provided the regulatory agencies and community with two alternatives for consideration. One alternative included the placement of a four-foot soil cover that would prevent exposure to soil and debris and shield receptors from underlying radiological anomalies, but would not provide a low-permeability cap. The second alternative involved the placement of an engineered alternative cap to provide a low-permeability layer to prevent surface-water infiltration. DTSC recommends that the Navy should design a third alternative, which would be a non-prescriptive cap that would retard but not necessarily prevent the downward movement of surface water. An advantage of this option is that the cover can be designed so that the wetlands would receive an appropriate amount of drainage to ensure they remain viable while reducing the amount of liquid that comes in contact with the waste left in place.

Option 3: Placement of an engineered cap over the former waste disposal area.

Rationale: For this option, the Navy should select Remedial Alternative S1-3 (Engineered Alternative Cap) rather than S1-4a (Soil Cover for Area 1a) in the Proposed Plan. Alternative S1-3 is the most protective of the two alternatives described in the Proposed Plan and would ensure that surface water does not infiltrate down into the waste left in place. This option also satisfies appropriate and relevant regulations found at title 22 California Code of Regulations, section

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66264.310, which requires that a final landfill cover should prevent the downward entry of water into a closed landfill for a period of at least 100 years.

All three of the options described above would require implementation of a strengthened groundwater monitoring program that would include installation of additional groundwater monitoring wells. Preservation of existing wetlands would also need to be included as part of the design for all three options presented above.

DTSC looks forward to working with the Navy in selecting a remedial option for Site 1 that is protective, reasonable, and consistent with other military facilities in Northern California. If you have any questions, please contact me at (916) 255-6449 or by e-mail at dlofstro@dtsc.ca.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dot Lofstrom", with a long horizontal flourish extending to the right.

Dot Lofstrom, P.G.
Project Manager
Northern California Operations
Office of Military Facilities

cc: See next page.

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cc: Dr. Peter Russell
Russell Resources, Inc.
440 Nova Albion Way, Suite 1
San Rafael, California 94903-3634

Ms. Elizabeth Johnson
950 W. Mall Square, Building 1
Alameda Point
Alameda, California 94501

Mr. Andrew Baughman
Code BPMOW.AB
Department of the Navy
Base Realignment and Closure Program
Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

Mr. Mark Ripperda
Region IX
75 Hawthorne Street
San Francisco, California 94105

Ms. Judy Huang
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612