



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street  
San Francisco, CA 94105**

1996 JAN 29 AM 11:29

January 18, 1996

Via Facsimile and U.S. Mail

Ms. Content Garriga  
Department of the Navy  
Southwest Division  
1220 Pacific Highway  
San Diego, CA 92132

RE: Review and Comment on Draft Extended Site Inspection, Inactive Landfill, Naval Training Center, San Diego

Dear Ms. Garriga:

EPA has completed its review of the Navy's Responses to EPA Comments on the Draft Extended Site Inspection (ESI), Inactive Landfill, at Naval Training Center, San Diego (NTC). EPA has questions or comments on a few of the responses. These additional questions and comments are summarized below.

**EPA Comments and Questions on the Navy's Responses to EPA Comments on the Draft ESI, Inactive Landfill, NTC**

**GENERAL COMMENTS**

Comment 1: The response states that seasonal variations in groundwater flow patterns will be partially evaluated as additional groundwater sampling takes place. In order for the future sampling to achieve this goal, groundwater levels must be recorded over a short period of time. The long-term groundwater monitoring plan should state how this will be done. The Navy should also evaluate the flow regime during different tidal stages during a single sampling event since tidal fluctuations may mask seasonal fluctuations.

**Section 3 - Specific Comments**

Comment 1: Please add the additional topographic information presented in your response to the text of the revised ESI.

**Section 6 - General Comments**

Response 2: The source(s) and origin of elevated TDS concentrations in groundwater beneath the landfill should be discussed in detail in the text of the ESI. What hydrogeological data indicates the ES-10S is not in good hydraulic communication with other parts of the aquifer? Clarify in the text how "stagnation" of the water results in higher TDS. Additional groundwater sampling and analysis, per

specific suggestions provided in EPA comments on the Draft ESI are still recommended to clarify whether landfill leachate is the source of elevated TDS. Clarifying this issue will assist the Navy in developing an appropriate long-term groundwater monitoring program to ensure containment of groundwater contaminants beneath the landfill.

Comment 12: Chemical ratios are one of the tools which could be used to determine whether leachate is present beneath the landfill. EPA continues to recommend that Ca/Mg and Na/K ratios be evaluated to better understand the properties of the leachate plume to support the ongoing groundwater monitoring and containment of the leachate.

Comment 13: The EPA strongly believes that indicating ND locations on a posting map is necessary. By posting ND locations the reader can easily evaluate the extent of contamination and determine whether apparent spatial trends are real or an artifact because analyses were not performed. NDs for every analyte do not have to be listed; it would be sufficient to list classes of contaminants (i.e., VOCs - ND).

Response 17: The basis for disregarding the well boring log for DMW-8 should be clearly stated in the text. It is not sufficient to dismiss the published well log (or to change it) based on "belief" that DMW-8 is a deep well and is constructed like other deep wells. If the top of the filter pack is actually 5 feet below ground surface (bgs), the filter pack serves as a potential conduct for contaminant migration. Analytical data should be examined as a potential evidence of transport between aquifers. Because there is doubt about the construction of this well, it should be considered for abandonment/replacement if the actual construction cannot be determined definitively (for example, borehole geophysical methods can often be used to verify the presence of grout). Further, if the true construction of this well is not known data from this well should not be used in contour maps. If possible, the Navy should obtain copies of Jacobs' original field notes in order to resolve the uncertainties associated with construction of this well.

#### **SPECIFIC COMMENTS - ECOLOGICAL RISK ASSESSMENT**

Response 1: The additional explanation should also explain whether a more comprehensive ecological risk assessment is needed. The text should also include the conclusions of the screening assessment and discuss, per our original comment, whether further investigation is needed.

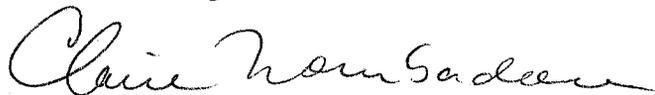
Response 2: Evidence of other animals that "occasionally" use the landfill as foraging and nesting habitat need to be documented as stated in EPA comments. Also, contamination of surface and subsurface soil may occur if gases are escaping through the cap of the landfill. Surface soil in the least tern area is known to be contaminated. This should provide justification for including the

soil exposure ingestion pathway in the evaluation of receptors.

Response 3: Soil ingestion by the least tern should be addressed if soil is being considered as a potential source of contamination for other receptors at the landfill.

EPA would like to suggest that after the Navy has had an opportunity to review this letter, we set up a telephone conference call with the State to discuss these comments and any other outstanding issues, such as the recalculation of background and air modeling. However, since DTSC is the lead regulatory agency for this site, EPA intends to differ to their needs and requirements with respect to the outstanding landfill issues regarding the recalculation of background and need for air modeling of the landfill. Should you have any questions about EPA's comments on the Draft ESI, please contact me at (415) 744-2409. I look forward to hearing from you.

Sincerely,



Claire Trombadore  
Remedial Project Manager

cc: Alice Gimeno, DTSC  
Phill Dyck, Navy  
Corey Walsh, RWQCB