



California Regional Water Quality Control Board

Santa Ana Region



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Agency Secretary

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Arnold Schwarzenegger
Governor

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MCAS EL TORO
SSIC NO. 5090.3.A

May 11, 2005

Base Realignment and Closure
Attn: Mr. F. Andrew Piszkin, P.E.
BRAC Environmental Coordinator
7040 Trabuco Road
Irvine, CA 92618

COMMENTS ON DRAFT FEASIBILITY STUDY ADDENDUM, OPERABLE UNIT 2C (OU 2C), IRP LANDFILL SITES 3 AND 5, FORMER MARINE CORPS AIR STATION, EL TORO

Dear Mr. Piszkin:

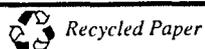
We have reviewed the above referenced document, dated March 2005, which we received on March 9, 2005. We have the following comments:

- **2.4.1 Groundwater Uses**, Page 2-10: The section begins with identification of the groundwater subbasin per the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). Note, however, that the Basin Plan was amended by Regional Board Resolution No R8-2004-0001 to incorporate an updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region. The amended Basin Plan includes revisions to the groundwater subbasin boundaries, the TDS and nitrate-nitrogen water quality objectives, and the TDS and nitrogen wasteload allocations. The amended Basin Plan also contains revisions to the reach designations and the TDS and nitrogen objectives, and specifies the beneficial uses for specific surface waters in the Santa Ana Region.

The former Irvine Forebay Groundwater Subbasin is now the Irvine Management Zone. Please update the Feasibility Study for OU 2C, IRP Landfill Sites 3 and 5, to incorporate the updated groundwater management zone designations, and the appropriate water quality objectives and designated beneficial uses.

- **TABLE 4-1: Advantages and Disadvantages of Barrier Covers, Flexible Membrane Layer**, Page 4-5: Landfill covers that include a flexible membrane layer are vulnerable to punctures and tiny pinholes, created by certain insects and burrowing animals. This common problem may result in increased maintenance and repair costs for the Navy, and should be identified as a disadvantage.
- **Summary of ARARS Evaluation – IRP Sites 3 and 5**, Page 8-2, 8-3: The California Water Code (Porter-Cologne Water Quality Control Act), the Water Quality Control Plan, Santa Ana River (Basin Plan), and the California Code of Regulations

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(CCR) are the fundamental regulatory documents through which the Board determines specific cleanup goals for sites within the Santa Ana Region. The Basin Plan designates beneficial uses and water quality objectives for all surface waters and groundwater management zones within our Region, in accordance with the Water Code. Groundwater and soil cleanup goals are determined based on protection of the designated beneficial uses and water quality objectives. Therefore, the Water Code and Basin Plan are appropriate, relevant and applicable requirements (ARARs) for sites that have impacted or threaten to impact groundwater or surface water. For the protection of water quality at landfill sites, such as IRP Sites 3 and 5, the requirements of CCR Title 27 are ARARs as well.

- **8.2.3 Action Specific ARARs, Page 8-4: CCR Title 27 - Action Specific ARARs:**

| | |
|--|----------------------------------|
| Monitoring Requirements | 27 CCR §20385 |
| General Closure and Post-Closure Maintenance | 27 CCR §20950(a), (e) |
| General Post-Closure Maintenance | 27 CCR §21090(b)(1), (c), (e)(2) |
| Gas Monitoring and Control During Closure and Post-Closure | 27 CCR §20921 |
| Gas Monitoring | 27 CCR §20923 |
| Perimeter Monitoring Network | 27 CCR §20925 |
| Structure Monitoring | 27 CCR §20931 |
| Monitored Parameters | 27 CCR §20932 |
| Monitoring Frequency | 27 CCR §20933 |
| Reporting | 27 CCR §20934 |
| Control | 27 CCR §20937 |
| Post-Closure Maintenance | 27 CCR §21180 |
| Post-Closure Land Use | 27 CCR §21190 |

- **9. DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES – FS ADDENDUM:**

Many of the alternatives that you have evaluated rely on the consolidation of the redefined “discontinuous areas of waste” at Site 3 into a single area over an existing waste footprint. The cost for each of these alternatives may vary significantly, depending on the area of the footprint selected for waste consolidation.

During our review of the Feasibility Study, we assumed that a consistent square footage was used in your cost calculations, both with and without the proposed waste consolidation. Even so, by varying the height of waste placed on the landfill footprint, the result will be either a reduction or an increase in the total area of the cover. Reducing or increasing the area of the cover affects the cost to construct it. Please provide a more thorough analysis of the actual cost comparison for the different cover alternatives, and indicate the appropriate variations in square footage for each proposed alternative.

Mr. F. Andrew Piszkin, P.E.

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May 4, 2005

For any questions, please call me at (951) 782-4494, or send email to jbroderick@waterboards.ca.gov.

Sincerely,


John Broderick
SLIC/DoD Section

cc via email: Mr. Richard Muza, US EPA, Region 9
Mr. Frank Cheng, DTSC, Office of Military Facilities
Mr. Karnig Ohannessian, NAVFACENGCOM, Southwest Division

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