



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 1, 1998

Mr. Joseph Joyce
BRAC Environmental Coordinator
AC/S Environment (1AU)
MCAS El Toro
P.O. Box 95001
Santa Ana, CA 92709-5001

Re: EPA Concerns and Recommendation on Proposed Remedy for Sites 3 & 5 Landfills, MCAS El Toro

Dear Mr. Joyce:

This letter is to express EPA's concerns on the Navy's proposed soil caps for Sites 3 and 5 landfills and to suggest a mechanism that could alleviate both EPA's concerns and the concerns of the State regulatory agencies.

As you are aware, the California Integrated Waste Management Board (IWMB) has expressed both written and verbal concerns that irrigation of the landfills with the type of cover proposed by the Navy, could cause generation of methane gas and ultimately lead to threats to public health and safety. In response to regulatory agency concerns, the Navy submitted two modeling reports: a Draft Technical Memorandum on Landfill Gas Emissions for Inactive Landfills; and, a Draft Technical Memorandum on UNSAT-H Infiltration Modeling for Landfill Covers.

After reviewing the Technical Memorandums, the IWMB concluded that the methane gas model did not demonstrate that there would be minimal methane gas generation under an irrigated reuse scenario. They reiterated the need for a comprehensive landfill gas survey and/or long-term gas monitoring before any conclusions could be made on a gas collection system. The IWMB further stated that without a liner, they could not support irrigation under the Navy's proposal unless it was demonstrated by either long-term monitoring or a landfill waste characterization study that increased moisture would have minimal impact on landfill gas generation and waste settlement.

Furthermore, representatives of the IWMB have stated that they are unaware of any sites in California where without prior waste characterization, there is irrigation of a monolithic soil cover to support a golf course. This would make it even more difficult for the regulatory agencies to support irrigation under the Navy's proposal.

Based on the above, EPA believes that a waste characterization study of the Sites 3 and 5 landfills has merit and recommends that such a study be carried out.

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Although the Navy has elected to follow EPA's Presumptive Remedy guidance for landfills (which does not require waste characterization studies), it is not unusual to deviate from guidance if it makes sense under the site circumstances. As much as EPA would like to have "one size fits all" guidance, there may be situations where it makes sense to conduct additional field work, especially if there are data gaps that could readily be addressed. In the case of the Sites 3 and 5 landfills, there is some anecdotal evidence (based on interviews of former Marine/Navy employees) that there was little organic material left in the landfills and therefore less likelihood of significant methane gas generation, however, there is still a lack of field data to support these assumptions.

Although conducting a waste characterization study would undoubtedly cost more money and add more time to the FFA schedule, we think it would be both money and time well spent. As examples, the landfill remedies for the NTC landfill in San Diego and the three landfills at Moffett Naval Air Station near San Francisco, were modified to cheaper remedies after waste characterization studies were performed and found that the landfills were significantly smaller than originally believed. The resulting savings for the NTC landfill are estimated to be approximately one million dollars.

For El Toro, visual confirmation through a waste characterization study that the landfill wastes do indeed contain little organic matter would address regulatory agency concerns, allow irrigation of the monolithic soil cover for any anticipated future land use and avoid a likely formal dispute resolution process. Such a study could also eliminate the need for a liner and a gas collection system. Other potential benefits would include less stringent land use restrictions (institutional controls) and less monitoring.

EPA encourages the Navy to give serious consideration to conducting a waste characterization study at the Sites 3 and 5 landfills, both for the potential cost savings and as an alternative to dispute. EPA would also be willing to grant the Navy any reasonable FFA extension request to allow a waste characterization study to proceed.

As a next step, I suggest a meeting between the Navy, EPA, the IWMB and other interested agencies (the Local Reuse agency) to discuss the specific requirements such a study would include.

Please contact me at your earliest convenience to let me know your thoughts on this proposal.

Sincerely,



Glenn R. Kistner
Remedial Project Manager
Federal Facilities Cleanup Branch

cc: Patricia Hannon, RWQCB
Gregory Hurley, RAB Co-Chair
Peter Janicki, IWMB
Tayseer Mahmoud, DTSC
Polin Modanlou, MCAS El Toro LRA