



California Regional Water Quality Control Board

San Diego Region



Peter M. Rooney
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/~rvqcb9>
9771 Clairemont Mesa Boulevard, Suite A, San Diego, California 92124-1324
Phone (619) 467-2952 FAX (619) 571-6972

Pete Wilson
Governor

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NTC SAN DIEGO
SSIC NO. 5090.3.A

October 26, 1998

Mr. Keith Forman
BRAC Environmental Coordinator
BRAC Program Office, Code 05BS.KF
1420 Kettner Boulevard, Suite 501
San Diego, CA 92101-2404

Dear Mr. Forman:

NTC INACTIVE LANDFILL PRE-CONSTRUCTION STUDY, NAVAL TRAINING CENTER, SAN DIEGO

Regional Water Quality Control Board (RWQCB) staff has completed our review of the subject document, dated June 9, 1998 and received by this office on October 1, 1998. The report was prepared by Ninyo & Moore on behalf of the San Diego Unified Port District (SDUPD) to evaluate the Naval Training Center (NTC) inactive landfill for potential expansion of the adjacent San Diego International Airport facility. The document was submitted by the US Navy to the RWQCB for review pursuant to the Defense State Memorandum of Agreement (DSMOA) as a foundation document to the development of the Engineering Evaluation/Cost Analysis (EE/CA). Our comments were discussed in a meeting on October 15, 1998, between representatives of the Navy, SDUPD, City of San Diego, California Integrated Waste Management Board (IWMB), and representatives of the consulting firms Bechtel National and Ninyo & Moore. Based on our review of the Pre-Construction Study and discussions with the Navy and SDUPD we have the following comments.

Revision of Landfill Boundary and Reclassification of Waste

This study includes sampling results from numerous trenches, soil borings, cone penetrometer tests, and groundwater monitoring wells surrounding the NTC inactive landfill. The data presented identified three relatively distinct waste management units (WMUs): (1) a northern unit consisting of burned refuse, characterized by black ash material and glass fragments; (2) a central unit consisting of municipal solid refuse, characterized by decomposable waste; and (3) a southern unit consisting primarily of construction debris and lesser amounts of landscaping material, characterized as being less soluble and decomposable than the northern and central units.

Based on limited sample data the study recommends the waste in the southern unit be classified as inert waste. The study further proposes, that based upon the inert classification, to redefine the boundaries of the landfill by excluding this unit from regulation by the Regional Board.

Section 20230(a) of Title 27 defines inert waste as a subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives and does not contain significant quantities of decomposable waste. Section 20230(c) of Title 27 allow the Regional Board to prescribe individual or general Waste Discharge Requirements (WDRs) for discharges of inert wastes. While it appears the southern unit poses a lower threat to water quality than the other units, the data suggests the buried decomposable landscape waste and construction debris may contain soluble pollutants that are leachable to groundwater. However, the characteristics of the waste in this unit do suggest it has a lower need for long-term maintenance and water quality monitoring. At this time, we do not concur that there is sufficient data to classify the southern unit as inert. Therefore, we recommend the southern unit continue to be considered as part of the landfill.

*method to monitor health
What type of monitoring
is it worth doing
leachability tests*

Evaluation of Proposed Remedial Alternatives

The pre-construction study was completed to guide development of a master plan and design effort for redevelopment of the site. Subsequently, the SDUPD was to identify anticipated future land use in order for the Navy to adopt an appropriate remedial action to be implemented at the site. The SDUPD has identified an immediate need for automobile parking in the southern half of the site and has tentatively identified wildlife habitat, open space, automobile parking and/or construction of structures that could encompass the northern and central units of the landfill.

The pre-construction study also considered three alternatives for development of the NTC landfill. Our comments on each alternative are provided below:

Alternative 1: Construction of Asphalt Concrete Cap Over the Entire Landfill

An asphalt concrete pavement cap is proposed to overlie the entire landfill and be used to expand automobile parking for the facility. Based on our experience with the use of asphalt concrete pavement and other structural improvements overlying other landfills throughout the San Diego Region, the cost for maintaining the landfill cover can be greatly underestimated. Significant disruptions to site development can also occur from differential settlement of site improvements and subsequent required maintenance. In recent years, we have observed subsidence and significant ponding of rain water, primarily in the central and northern units of the NTC inactive landfill. This settlement, and subsequent ponding in both developed (paved) and undeveloped areas has been historically noted as violations of the existing waste discharge requirements (WDRs). If the central unit of highly compressible waste were to be covered with an asphalt concrete cap the anticipated cracking and settlement would likely aggravate drainage and consolidation problems at the site. A pavement cap would require annual inspections and repairs as necessary and could possibly require demolition and reconstructed. Another area of concern is the installation of subsurface utilities (i.e. sewer, water, and electrical services) that maybe proposed for installation into or across areas containing waste. This remedial alternative does

flexible lines are acceptable

(monofilled @ landfill (arena) mbr)

not address the possible need for landfill gas control and monitoring. We do not recommend this alternative for final cover of the landfill.

Alternative 2: Construction of Asphalt Concrete Cap on the Southern Unit of the Landfill with Remaining Northern Units Remaining as Undeveloped Open Space

This alternative proposes paving the southern unit and continue to maintain the central and northern units as undeveloped open space and wildlife habitat. The final soil cap design for the central and northern units would need to be designed to promote positive drainage and to reduce infiltration. Annual maintenance of the cap would continue to be required to eliminate ponding of surface waters. A groundwater monitoring program would also continue to be required. This alternative would be acceptable to the RWQCB staff, and would require less costly maintenance than Alternative 1.

Alternative: 3 - Clean Closure of Central Unit

This alternative proposes excavation of all decomposable waste in the central unit. The study indicates this would be the most expensive alternative in the short term and thus the SDUPD has not identified this as the preferred alternative. During the October 15, 1998 meeting, Glenn Young, of the IWMB indicated the estimates for excavation and tipping fees in the pre-construction study may be higher than actual costs. In addition, the actual cost of long-term maintenance and the potential for corrective action using Alternatives 1 or 2 may be higher than those estimated in this study. Considering all of these factors together, clean closure may represent a more cost effective long-term alternative, particularly when anticipated future land use of the central and northern portion of the landfill include construction of parking and other structural improvements. We also believe this alternative removes potential impacts of buried waste on groundwater and provides a higher level of environmental protection.

RWQCB Staff Recommendations

The RWQCB staff does not believe it is appropriate to construct pavement or other structures on landfills, such as the central unit, which is underlain by refuse and is susceptible to differential settlement. Alternative 1 does not appear to be reasonable based on identified future land uses. However, if the SDUPD is unable to define the final land use for the northern and central units, we believe that Alternative 2 could be implemented. Lastly, if the final land use of the northern and central units will include any type of structural improvement, then the RWQCB staff would recommend Alternative 3 be implemented to eliminate the potential for differential settlement and any potential adverse environmental impacts.

What level of effort is required for soil cap

Transfer And Site Development That Require Regulatory Action

NTC landfill is currently regulated under Regional Board Order No. 97-11, General Waste Discharge Requirements for Inactive Landfills. Under Order No. 97-11 site maintenance and water quality monitoring is required. The transfer of the site from the US Navy to the San Diego Unified Port District could be accomplished under Order 97-11 by a notification to this office with information specified in 27 CCR Section 21710 (c) (1), which states:

"Change of Ownership: The discharger shall notify the RWQCB in writing of any proposed change of ownership or responsibility for construction, operation, closure, or post-closure maintenance of a unit. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revision thereof. The RWQCB shall amend the existing waste discharge requirements to name the new discharger."

With regard to any of the proposed modifications to land, each of the proposed Alternatives 1, 2, and 3, will result in a change in land use of the inactive landfill. These proposed modifications require amending WDRs. Based on proposed modifications in land use, identification of three distinct WMUs and modification to the final cover of the inactive landfill, we anticipate drafting individual WDRs for this facility.

In order for the Regional Board to modify the WDRs, information must be submitted in the form of a Report of Waste Discharge (ROWD), that provides sufficient information on waste characteristics, closure, post-closure maintenance, financial assurance, and written notification of proposed change of ownership of the NTC inactive landfill property from the Navy to the San Diego Unified Port District. We anticipate information contained in the subject study, the revised EE/CA, the EROS, and other technical information, (expected to be completed in November 1998 and February 1999, respectively) will contain sufficient detail to serve as the ROWD. Once the ROWD is determined complete, RWQCB staff can begin preparation of tentative revised WDR within 120 days. WDRs will specify proper closure, post-closure maintenance, financial assurance, and will add the San Diego Unified Port District as a responsible party for compliance with WDRs.

California Environmental Quality Act (CEQA)

Issuance of new or amended WDR is a discretionary act that requires the Regional Board to comply with CEQA. Furthermore, we expect that CEQA would also be necessary for a either alternative proposed in the pre-construction study. At this time, we believe the San Diego Unified Port District, in their capacity as primary agency overseeing the closure of the inactive landfill, is the appropriate choice as lead agency to complete CEQA for this project. CEQA may be a completed by an exemption, Negative Declaration, mitigated Negative Declaration,

Mr. Keith Forman
Pre-Construction Study

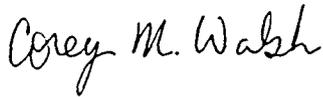
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Environmental Impact Report (EIR), or perhaps as a supplemental to the existing EIR for the transfer of the NTC base. We believe the San Diego Unified Port District has the expertise and resources to complete CEQA in a timely manner. The preparation of CEQA can be concurrent with other investigations ongoing at the site. The CEQA process may be time consuming, we therefore suggest that the lead agency be identified and work begin as soon as possible.

Please contact Corey Walsh at (619) 467-2980 or Carol Tamaki (619) 467-2982 if you have any questions regarding this letter.

Sincerely,



COREY M. WALSH, Associate Engineering Geologist
Site Mitigation and Cleanup Unit
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cc:

Ms. Content Arnold, Remedial Project Manager, BRAC Operations Office, Code 05BS.CA,
1420 Kettner Blvd. Suite 501, San Diego, CA 92101-2404

Mr. Martin Hausladen, U.S. EPA, Region IX, (H-9-2), Hazardous Waste Management Division,
75 Hawthorne Street, San Francisco, CA 94105-3901

Mr. Glenn Young, Remediation, Closure and Technical Services, California Integrated Waste
Management Board, 8800 Cal Center Drive, Sacramento, CA 95826-3268

Mr. Martin Kenney, U.S. Fish and Wildlife Service, 2730 Loken Ave. West, Carlsbad, CA
92008

Ms. Betsy Weisman, NTC Reuse Project Director, City of San Diego, 202 C Street MS5A, San
Diego, CA 92101