



California Regional Water Quality Control Board

Santa Ana Region



Terry Tamminen
Secretary for
Environmental
Protection

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M60050.003128
MCAS EL TORO
SSIC NO. 5090.3

January 26, 2004

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

COMMENTS ON DRAFT EXPANDED SITE INSPECTION REPORT, ANOMALY AREA 3, FORMER MARINE CORPS AIR STATION, EL TORO

Dear Mr. Piszkin:

We have reviewed the above referenced document, dated November 2003, which we received on November 10, 2003. We have the following comments:

- **Section 2.2: LAND USE**, Page 2-5: This section identifies borrow pits and trenches that were used as disposal sites for construction debris from 1972 to 1988. The disposal areas are now covered with a soil layer that is up to five feet thick. The California Code of Regulations, Title 27, Section 20164 (27 CCR 20164) defines construction and demolition wastes as "the waste building materials, packaging and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures." In addition, as described in detail below, the results of your investigation demonstrate that the demolition waste that was placed in Anomaly Area 3 does not meet the criteria for the 27 CCR definition as inert material. The disposal pits and trenches are, therefore, a non-hazardous solid waste landfill site.
- **Table 3-1: Summary of Detected Analytes Exceeding MCLs – Groundwater Sampling – Previous**, Page 3-2: There is sufficient sampling to document a release from one or more of the landfill units that comprise Anomaly Area 3. We do not believe that those releases have been fully characterized. The scope of this investigation is not compatible with the methodology required under 27 CCR 20425 for determining contaminant releases to groundwater from a non-hazardous solid waste landfill. While we recognize that the Navy may not consider these releases to be significant under CERCLA definitions, the degradation of water quality is a violation of the Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the Santa Ana Region, and must be dealt with in accordance with procedures set forth in 27 CCR for contaminant releases from landfills.

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- **Section: 3.4 GEOPHYSICAL INVESTIGATION**, Page 3-5: This section describes the results of geophysical characterization of the waste, which indicates the presence of varying amounts of both buried debris and metal debris. Unless further testing reveals the presence of hazardous wastes, this material is likely non-hazardous solid waste per 27 CCR 20220.
- **Table 3-3: Details of Subsurface Soil Sampling from Trenches – Previous Investigation**, Page 3-7: Under the *Material Found* heading, all of the identified debris appears to be non-hazardous solid waste per 27 CCR 20220.
- **Section 6.1: PHYSICAL EXTENT OF DEBRIS PLACEMENT AREA**, Page 6-2: The third paragraph states that domestic refuse is not present, and that the refuse encountered would be classified as inert waste per State law definition. Contrary to this statement, Table 3.3 for Trench Number H4 identifies domestic refuse as “found.” Shallow and deep soil gas sampling has been conducted at perimeter and interior locations at this landfill site. Methane and other volatile organic compounds have been detected in soil gas samples and in air samples that were collected above the landfill surface. Groundwater monitoring results indicate that a contaminant release has occurred at this landfill site.

Please note that, by definition, inert waste is material that will not decompose. The presence of landfill gas and groundwater contamination demonstrates that the material placed in the landfill is not inert waste, and has adversely impacted water quality.

- **Section 6.5.5: Summary of Groundwater Sampling Results**, Page 6-72: The statistical data that you presented are based on analytical results for four groundwater samples that were collected over four years, at various times of the year. The use of these results for standard statistical analyses of water quality data is not appropriate. Acceptable data collection criteria and statistical analytical methods for water quality evaluation are described in 27CCR 20415(e)(6) et seq. Specific programs for these analyses are available from various technical sources. If you are unable to locate the necessary information for appropriate statistical analysis, our staff would be happy to assist you by providing the names of several acceptable statistical methods for analysis of groundwater quality data. Please be aware that additional data will be required for any such method, as four individual data points from four separate years will not enable you to run a meaningful statistical analysis of groundwater quality.
- **Section 6.5.5: Summary of Groundwater Sampling Results**, Page 6-72: This groundwater investigation focused on CERCLA-listed contaminants. Low detections of volatile organic compounds, semi-volatile organic compounds, petroleum hydrocarbons, and metals were identified in groundwater at this landfill site, indicating that a release to groundwater has occurred. Pursuant to 27 CCR 20425, the landfill must enter into an evaluation monitoring program to provide full characterization of the nature and extent of this release.
- **Section 6.5.5: Summary of Groundwater Sampling Results**, Page 6-72 and **Section 9.6: Evaluation of Groundwater Quality**, Page 9-2: Based on the data you provided, it is evident that the landfill waste at this site is situated within, or in close proximity to, the

groundwater. According to 27 CCR 20240(c), "Existing landfills shall be operated to ensure that wastes will be a minimum of five feet (5 ft.) above the highest anticipated elevation of underlying ground water."

- **Section 6.5.5: Summary of Groundwater Sampling Results**, Page 6-72 and **Section 9.6: Evaluation of Groundwater Quality**, Page 9-2: As indicated in our comments above, we believe that your investigations have documented the occurrence of contaminant releases from this landfill site; therefore, we cannot concur with your assertion that the groundwater has not been impacted. This release will need further assessment consistent with the procedures outlined in 27 CCR.
- **Section 9.8: Evaluation of Surface Water Quality**, Page 9-3: Water quality impacts resulting from the release of contaminants at concentrations above their respective regulatory thresholds are identified in your report. Evaluation and corrective action to address the identified contaminant release is appropriate.

Prior to this report submittal, the proposal for this site called for consolidation of the waste at Installation Restoration Program Site 3. This document recommends no further action at this landfill; however, based on the concerns listed above, we believe Anomaly Area 3 is not an inert solid waste landfill site. Further, this landfill apparently has released contaminants to both groundwater and surface waters. These releases will require assessment and corrective action in accordance with the procedures set for non-hazardous solid waste landfills, pursuant to 27 CCR. Therefore, we cannot concur with a no further action determination for this site.

Please submit a proposed evaluation monitoring plan for this landfill site by February 24, 2004 for our review and approval.

For any questions, contact me at (909) 782-4494, or you may call Ann Sturdivant, Chief of our SLIC/DoD Section, at (909) 782-4904, or Dixie Lass, Chief of our Land Disposal Section, at (909) 782-3295.

Sincerely,



John Broderick
SLIC/DOD Section

cc: Mr. Jorge Leon, OCC, SWRCB
Ms. Nicole Moutoux, US EPA, Region 9
Mr. Manny Alonzo, DTSC, Office of Military Facilities
Mr. Karnig Ohannessian, NAVFACENGCOM, Southwest Division

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