

EXECUTIVE OFFICER SUMMARY REPORT  
May 12, 2010

ITEM: 14

SUBJECT: Waste Discharge Requirements: United States Marine Corps, Las Pulgas Landfill, Marine Corps Base Camp Pendleton (Update of current waste discharge requirements in response to the design report for the Phase II lateral expansion of the landfill and in response to evidence of a release from the unlined portion of the landfill) (tentative Order No. R9-2010-0004) (*Amy Grove*)

PURPOSE: To adopt updated waste discharge requirements for the Las Pulgas Landfill, which if adopted, would supersede Order No. 2000-54.

PUBLIC NOTICE: A Public Notice of this agenda item was published in the North County Times on February 25, 2010, and was posted on the San Diego Water Board and the Marine Corps websites on March 1, 2010. These actions satisfy the requirements of California Code of Regulations (CCR) Title 27, section 21730(b) "Notice Requirements."

DISCUSSION: The Las Pulgas Landfill (Landfill) is a 39.4 acre class III (non-hazardous) municipal solid waste landfill that has operated since 1971. The Landfill is owned and operated by the U.S. Marine Corps (USMC) and is located at the Marine Corps Base Camp Pendleton (Supporting Document No.1). Camp Pendleton is a groundwater dependent facility/community. The nearest water supply wells are located about 5 miles from the landfill.

Tentative Order No. R9-2010-0004 updates the waste discharge requirements (WDRs) for the Las Pulgas Landfill as follows:

1. New requirements mandated by changes to State regulations (i.e., California Code of Regulations, Title 27) are included;
2. Slope stability and landfill gas monitoring requirements are included;

3. A more conservative design for the remaining expansion areas of the landfill is required; and
4. A formal corrective action monitoring program is required to monitor the natural attenuation of waste constituents released into groundwater from the unlined portion of the landfill.

These modifications bring the facility into compliance with all applicable State and federal requirements.

The waste constituents released into groundwater in the late 1980s from the unlined portion of the landfill appear to be breaking down naturally. The corrective action monitoring program will require the USMC to continue monitoring the natural attenuation of these waste constituents in groundwater to ensure that water quality is restored.

The USMC plans to expand the landfill by 49.3 acres in a six-phase expansion, with the Phase I expansion already completed. In 2003 the slope and liner of the Phase I expansion area failed. No waste constituents, however, were released from the landfill to the environment. Because of this failure, the Tentative Order requires more conservative design criteria for future phases of expansion compared to those for the Phase I expansion. Slope stability monitoring is also required for future phases of expansion.

In response to the Public Notice for this item, only the United States Marine Corps (USMC) submitted comments on the tentative Order and monitoring and reporting program (M&RP). The letter, dated March 26, 2010 is attached as Supporting Document No. 6. An Errata Sheet showing revisions, which were made to the tentative Order and M&RP in response to most of the comments in the letter, is attached as Supporting Document No. 7. By letter dated April 7, 2010, staff notified the USMC of the revisions made to the Order and M&RP, and provided responses that addressed the remaining comments.

**KEY ISSUES:**

These WDRs incorporate a more conservative liner design and slope stability monitoring to prevent another slope or liner failure in future phases of expansion.

**LEGAL CONCERNS:**

None.

**SUPPORTING DOCUMENTS:**

1. Location Map

2. Landfill Expansion Map
3. Tentative Waste Discharge Requirements (WDR) Order No. R9-2010-0004 with attachment
4. Tentative Monitoring and Reporting Program No. R9-2010-0004 with attachments
5. Draft Information Sheet with attachment
6. Comment Letter from the USMC dated March 26, 2010
7. Errata Sheet
8. San Diego Water Board Response to Comment letter dated April 7, 2010

**SIGNIFICANT CHANGES:**

1. Modification of the acceptable liner design to require a prescriptive liner instead of an engineered alternative;
2. The installation of permanent monuments or inclinometers for the purposes of monitoring slope stability;
3. Installation of a landfill gas monitoring system; and
4. The development of a Corrective Action Monitoring Program to evaluate the effectiveness of corrective action measures implemented at the Landfill.

**COMPLIANCE RECORD:**

Following the failure of the slope and liner system, the San Diego Water Board issued Cleanup and Abatement Order (CAO) No. R9-2006-0016 requiring the USMC to develop and implement a Corrective Action Plan for the Phase I expansion area of the Las Pulgas Landfill. The USMC ceased operation of the Phase I area, and in December 2007 submitted a Corrective Action Plan that fulfilled the requirements of the CAO.

Proposed corrective actions for Phase I include the removal of approximately 250,000 cubic yards of waste, to be relocated in Phase II, removal of the side slope liner system, and an analysis of whether the base liner system can be salvaged or if it also needs to be replaced. Implementation of corrective actions in Phase I will commence upon completion of construction activities in Phase II.

**RECOMMENDATION:**

Adoption of tentative Order No. R9-2010-0004 with errata is recommended.