

EXECUTIVE OFFICER SUMMARY REPORT
May 11, 2011

- ITEM: 5
- SUBJECT: Waste Discharge Requirements Revision: United States Marine Corps, Las Pulgas Landfill, amendments to Order No. R9-2010-0004 for design plan modifications to the Phase II expansion area. (Tentative Order No. R9-2011-0039) (*Amy Grove*)
- PURPOSE: To amend Order No. R9-2010-0004 to revise geotechnical design criteria by incorporating performance standards for the Phase II expansion area of the Las Pulgas Landfill at U.S. Marine Corps Base Camp Pendleton.
- PUBLIC NOTICE: A Public Notice of this agenda item was published in the North County Times on March 24, 2011, and was posted on the San Diego Water Board website on March 28, 2011. These actions satisfy the requirements of California Code of Regulations (CCR) Title 27, section 21730(b) "Notice Requirements."
- DISCUSSION: Tentative Order No. R9-2011-0039 (Tentative Order) (Supporting Document No. 1), if adopted, would amend waste discharge requirements Order No. R9-2010-0004 for the U.S. Marine Corps (USMC) Las Pulgas Landfill. The Las Pulgas Landfill (Landfill) is a 39.4 acre class III (non-hazardous) municipal solid waste landfill located on Marine Corps Base Camp Pendleton (Supporting Document No. 2) that has been owned and operated by the USMC since 1971. Camp Pendleton is a groundwater dependent community, and the nearest supply well is located approximately 5 miles from the Landfill.
- On January 28, 2011, the USMC submitted to the San Diego Water Board proposed modifications to the Landfill liner design for the Phase II expansion area. A map of the expansion area is shown in Supporting Document No. 3. The following modifications have been incorporated into the Tentative Order as requested:
1. Allow for the use of either a non-woven geotextile or a plastic cover on areas of the side slopes that are too high on the slope to be covered by the initial placement of the protective soil cover.
 2. Modify the specifications for the geotextile from a specific fabric density to "filter fabric" for use within the subdrain system. This change allows the USMC to use whichever density fabric is most appropriate for the expansion area.

The geosynthetic fabric acts as both a cushion and a drainage layer beneath the subdrain, and will prevent clogging of the subdrain system and be more protective of the pipes comprising the subdrain system.

3. Modify the maximum diameter of stones that would be left in place on the prepared subgrade from 0.5-inch diameter to 3 inches. The proposed combination of prepared subgrade and low-permeability layers will continue to function as intended, even with the larger diameter stones left in place.

Revisions were also made to the design specifications for the protective cover soil (PCS) and leachate collection and removal system (LCRS). Directive Nos. 2, 4, 5, and 12 retain the original approved design specifications for the PCS and LCRS, adds additional approved design specifications, and provides a third alternative based on performance standards for the design and functions of this part of the liner system. The revisions do not fully incorporate the USMC's requested modifications to the Order. The revisions, however, do provide the USMC with the needed flexibility to design and construct a liner system that is cost efficient and compliant with State and federal regulations.

An additional revision was made by the San Diego Water Board to Finding No. 24, Annual Fees. This change is necessary to bring the Order into compliance with current fee regulations established in CCR Title 23, section 2200. This revision also allows for future modifications to the Threat to Water Quality and Complexity rankings without the need to modify the Order. The Tentative Order also corrects a typographical error in Finding No.10 and a citation to the regulations in Finding No. 18. All of the above proposed modifications are minor.

Comments on the Tentative Order were received from the USMC by letter on April 21 and by email on April 26, 2011 (Supporting Document No. 4). To address the USMC's concern regarding acceptable materials for use as the PCS, Directive Nos. 2, 4, 6, 10 and 12 were revised and Directive No. 3 was added to the Tentative Order. These Directives incorporate performance standards which allow for flexibility in both the design and materials that are permitted for use in the PCS.

Changes made to the Tentative Order as a result of the comments are shown as underline/strikeout formatted text. A Response to Comments Document has been prepared and is included as Supporting Document No. 5. For reference, a complete copy of Order No. R9-2010-0004 as amended by Tentative Order No. R9-2011-0039 showing all proposed

changes in underline/strikeout is included as Supporting Document No. 6.

KEY ISSUES:

Additional language has been added to the Tentative Order to describe the function and purpose of the PCS and to allow some flexibility in the design and materials used for the PCS in the Landfill liner system, while maintaining compliance with State and federal regulations.

LEGAL CONCERNS:

None

SUPPORTING DOCUMENTS:

1. Tentative Order No. R9-2011-0039 [original modifications are shown in red underline/strikeout text. Modifications resulting from comments received are shown in blue underline/strikeout].
2. Location Map
3. Map of the Expansion Area
4. Comments from the USMC
5. Responses to Comments
6. Order No. R9-2010-0004 as amended by Tentative Order No. R9-2011-0039 showing all proposed amendments in underline/strikeout text.

COMPLIANCE RECORD:

Following the failure of the slope and liner system in the Phase I expansion Unit, and in response to a subsequent Cleanup and Abatement Order, the USMC developed and is implementing a Corrective Action Plan to repair or replace the Phase I expansion area. The USMC ceased operation in Phase I in December 2007.

The corrective actions for Phase I include removal of approximately 250,000 cubic yards of waste, to be relocated into the Phase II Unit, 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 for the Phase II Unit.

RECOMMENDATION:

Adoption of tentative Order No. R9-2011-0039 is recommended.