UNITED STATES MARINE CORPS
MARINE CORPS BASE
BOX 555008
CAMP PENDLETON CALIFORNIA 92055-5008

IN REPLY REFER TO:
5090.11
ENVSEC/41
April 21, 2011

Executive Officer
Attention: Ms. Amy Grove
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123

SUBJECT: COMMENTS ON TENTATIVE ORDER R9-2011-0039 FOR THE LAS PULGAS LANDFILL

Dear Ms. Grove:

Enclosed, please find our comments on the Tentative Order R9-2011-0039, which modifies Order R9-2010-0004. Please note that the USMC requests to rescind the request to amend the Phase II design by letter dated January 28, 2011 which proposed to substitute the 16 oz/sy non-woven geotextile on the sideslope with a geocomposite drainage layer. We appreciate the opportunity to comment on this tentative order and work together on revising the Waste Discharge Requirement for Las Pulgas Landfill.

If you have any questions or concerns, please contact Mr. Brian Shin at 760-763-7747.

Sincerely,

T. L. Sahagun

T. L. SAHAGUN
Head, RCRA Management Division
Assistant Chief of Staff,
Environmental Security
By direction of
the Commanding Officer

Enclosure: (1) Comments

Comments on Tentative
WDR Order No. R9-2011-0039
Las Pulgas Landfill

The following comments on the Tentative WDR Order No. R9-2011-0039 and to provide clarification that our submission of BAS's memorandum dated June 29, 2010, sent to you by Mr. Brian Shin by email on July 16, 2010, has demonstrated that the protective cover soil can be 1.5-inch minus without risk to the liner system. These comments are supported by the JTD Addendum for the Phase II Design Report (January 28, 2011) and the Supplement to the JTD Addendum for the Phase II Design Report (March 7, 2011). The purpose of the addendum is to allow the geocomposite drainage layer to be the LCRS component on the sideslopes of Phase II rather than the protective cover soil layer which would allow a less stringent permeability (instead of the minimum 2×10^{-3} cm/sec), while still allowing leachate to percolate down to the LCRS components. The LCRS calculations included HELP analyses to demonstrate that minimal head (less than 30 cm) would build up on the Phase II sideslope liner.

1. Tentative Order R9-2011-0039, Page 3, Finding 11.c: LEACHATE COLLECTION AND REMOVAL SYSTEM - SIDESLOPES. Please modify as follows:

   The LCRS on the sideside slopes will be comprised of either one of the following: 1) a geotextile and the 24-inch protective cover soil layer having a permeability of no less than or equal to 1×10^{-5} cm/sec; 2) a drainage geocomposite material and the 24-inch protective cover soil layer having a permeability of no less than of 1×10^{-6} cm/sec; or 3) an engineered alternative protective cover soil layer that demonstrates it is designed and operated to meet the regulatory requirements of Title 27 CCR Section 20340 and approved by the San Diego RWQCB, to allow the LCRS to function without clogging. The protective cover soil shall be initially placed approximately 8 to 10 feet vertically up the lined sideslopes and placed incrementally 8 to 10 feet up the entire lined sideslopes thereafter. This layer may be constructed of ~~The~~ on-site material graded to 1.5-inch minus having an average permeability as previously specified for the options previously described.~~of at least 21×10^{-34} cm/sec or greater~~.

2. Request that the Tentative Order R9-2011-0039 modifies Order R9-2010-0004 Page 4, Finding 12: PROTECTIVE SOIL COVER LAYER
   Please modify as follows:

   The protective soil cover layer is the uppermost layer of the liner system. On the basal and sideslope liner system, this layer will be 24-inches thick, and will serve to protect the underlying liner components from punctures or tears during waste disposal activities and designed and operated to meet the regulatory requirements of Title 27 CCR Section 20340 and approved by the San Diego RWQCB, to allow the LCRS to function without clogging. On the sideslopes, this layer ~~serves as the drainage layer of the sideslope LCRS system and~~ will be placed 8 to 10 feet

vertically up the sideslopes initially, incrementally 8 to 10 feet up the entire lined sideslopes thereafter. The protective soil cover ~~is~~ may be composed of on-site materials having a permeability of either one of the following: 1) a 24-inch protective cover soil layer having a permeability of no less than or equal to 1 x 10^{-5} cm/sec if placed over a geotextile; 2) a 24-inch protective cover soil layer having a permeability of no less than of 1 x 10^{-6} cm/sec if placed over a drainage geocomposite material; or 3) an approved permeability prescribed by an engineered alternative that demonstrates it is designed and operated to meet the regulatory requirements of Title 27 CCR Section 20340 and approved by the San Diego RWQCB, to allow the LCRS to function without clogging.

3. Request that the Tentative Order R9-2011-0039 modifies R9-2010-0004, Page 21, Order E.9.ii.: Request to change the requirement "Be comprised of soil materials composed of having a permeability of either one of the following: 1) a 24-inch protective cover soil layer having a permeability of no less than or equal to1 x 10^{-5} cm/sec if placed over a geotextile; 2) a 24-inch protective cover soil layer having a permeability of no less than 1 x 10^{-6} cm/sec if placed over a drainage geocomposite material; or 3) an approved permeability prescribed by an engineered alternative that demonstrates and is designed and operated to meet the regulatory requirements of Title 27 CCR Section 20340 and approved by the San Diego RWQCB, to allow the LCRS to function without clogging. ~~having a minimum laboratory permeability of 2 x 10-3 cm/sec~~".