

Regional Water Quality Control Board  
Central Valley Region

Response to Written Comments for  
Tentative Waste Discharge Requirements  
for  
County of Madera  
Fairmead Municipal Solid Waste Landfill, Madera County

This document contains the responses to written comments received from interested parties regarding the proposed tentative Waste Discharge Requirements (WDRs) for the County of Madera (County), Fairmead Municipal Solid Waste Landfill, Madera County for construction, operation, and corrective action. The Tentative WDRs, R5-201X-XXXX, were prepared to incorporate construction and operation requirements and the approved corrective action program. Currently, WDRs Order R5-2004-0161 currently regulates the facility.

The Tentative WDRs were circulated on 22 January 2015 for public comment, ending on 23 February 2015. A total of one letter/email was received and these comments are addressed below.

Comments submitted during the comment period were received from the following:

- A. Christine Arbogast, Tetra Tech BAS (on behalf of the County), 23 February 2015

## **RESPONSE TO COMMENTS**

### **Comment A.1:**

FINDING 5: Finding No. 5 indicates that WMU 1 is inactive. However, waste is currently being placed on top of existing waste in WMU 1 and it is active. Also, in accordance with the latest JTD, the acreage for WMU 1 is 45.4 acres and the future total acreage in WMU 3 will be 27.1 acres. Cell 3A should be renamed 2C and is a future cell. Cells 3B and 3C should be renamed cells 3A and 3B. The limits of all future cells will be subject to the required projected airspace for the landfill and may result in adjustment of future cell limits within the approved WMU limits. It is recommended that this finding be revised to reflect this latest information from the JTD.

### **Response A.1:**

The requested revision has been made to Finding 5 and Attachment B.

### **Comment A.2:**

FINDING 22 WASTE CLASSIFICATION AND UNIT CLASSIFICATION: Condensate is currently used as dust control on lined areas so we recommend this finding add *"or is used for dust control in lined areas."*

### **Response A.2:**

The following revisions have been made to Finding 22:

Landfill gas (LFG) condensate is generated within the LFG collection system and flows through lateral and header pipes to LFG condensate sumps. Each sump is equipped with a submersible pump which discharges to an above ground storage tank. Once condensate is removed from the tank, it is either transported to the City of Madera wastewater treatment plant or injected into the LFG flare for destructive

*combustion or is used for dust control over the composite-lined landfill unit from which it came.*

In order to incorporate the use of gas condensate as dust control, the following finding will also be added directly before Finding 22:

*The Discharger proposes to return leachate and landfill gas condensate to the composite-lined landfill units from which they came. Title 27, section 20340(g) requires that leachate be returned to the unit from which it came or be discharged in a manner approved by the regional board. This section of Title 27 also references State Water Board Resolution 93-62 regarding liquids restrictions in 40 C.F.R. section 258.28 for MSW landfills. 40 C.F.R. section 258.28 states that liquid waste may not be placed in MSW landfill units unless the waste is leachate or gas condensate derived from the landfill unit and it is designed with a composite liner and an LCRS. Therefore, leachate and landfill gas condensate from composite lined units with an LCRS may be returned to the unit from which they came. This Order includes requirements for returning leachate and landfill gas condensate back to composite-lined units such that the liquid waste is not exposed to surface water runoff, will not cause instability of the landfill, and will not seep from the edges of the units.*

Additionally, the following Discharge Specification will be added:

*Leachate and/or landfill gas condensate may be returned only to WMU 2 – Cells 3 and 4, all cells of WMU 3, and future composite lined modules listed in Finding 6 of this Order in accordance with Standard Discharge Specifications D.2 through D.4 of the SPRRs.*

**Comment A.3:**

FINDING 65 CONSTRUCTION AND ENGINEERED ALTERNATIVE LINER SYSTEM: We request that for the LCRS system, it prescribe that it be placed above the upper HDPE liner layer and that it allow for an engineered alternative.

**Response A.3:**

Construction Specification D.3 of the Tentative WDRs already allows for use of an engineered alternative. Therefore, no additional engineered alternative language will be added to Finding 65. However, Finding 65 (now Finding 66) will be revised as follows:

A leachate collection and removal system (LCRS) will be installed in each new waste cell consisting of a geocomposite drainage layer installed directly above the *primary HDPE geomembrane* in the base liner system.

**Comment A.4:**

FINDING 69 LANDFILL CLOSURE: The Discharger submitted a 2004-2010 *Preliminary Closure and Postclosure Maintenance Plan* for closure and post-closure maintenance of the unlined and lined WMUs at the Facility.

**Response A.4:**

The requested revisions have been made.

**Comment A.5:**

FINDING 70 LANDFILL POST-CLOSURE MAINTENANCE: The Discharger submitted a 2004 2010 *Preliminary Closure and Postclosure Maintenance Plan* for closure and post-closure maintenance of the unlined unit. The plan includes inspection, maintenance, and monitoring of the landfill during the post-closure maintenance period, and includes a post-closure maintenance cost estimate for the entire Facility.

**Response A.5:**

The requested revisions have been made.

**Comment A.6:**

B. DISCHARGE SPECIFICATIONS 7: The Discharger may dispose of other non-hazardous, non-designated waste as described in the *Waste Acceptance Plan*, including inert waste and construction debris; dead animals; treated biosolids; treated auto shredder waste; ash and cement kiln dust; and contaminated soils after approval of the *Waste Acceptance Plan* by CalRecycle.

It is suggested that the following sentence be added to the specification:

*“The Discharger may propose modifications to the Waste Acceptance Plan in the event regulations are revised, site conditions change, other waste types potentially applicable for disposal are identified, or other changes that may affect waste disposal are identified. Changes to the Waste Acceptance Plan will require Central Valley Board staff and CalRecycle approval.”*

**Response A.6:**

The requested revisions have been made.

**Comment A.7:**

D. CONSTRUCTION SPECIFICATIONS: For Section 1(b)(1), we propose to fix the reference to “Construction Specification D.4” for the subgrade. The previous Construction Specification D.4 [WDRs Order R5-2004-0161] called out a reference to the following text that describes the prescribed subgrade.

*“The subgrade for the side slopes of each cell of expansion Unit 3 shall be prepared in an appropriate manner using accepted engineering and construction methods so as to provide a smooth surface that is free from rocks, sticks, or other debris that could damage or otherwise limit the performance of the of the 40-mil thick HDPE geomembrane.”*

We would suggest adding this previous specification text back to the end of Section 1(b)(1) and removing the carry over reference to “Construction Specification D.4” which no longer discusses subgrade preparation.

**Response A.7:**

The requested revisions have been made and the carryover reference from the previous WDRs has been deleted.

**Comment A.8:**

D. CONSTRUCTION SPECIFICATIONS: For Section 1(a)(1), we propose adding “*or an approved engineered alternative:*” at the end of ... that meets the following criteria. This is a narrow specification that could be revised and still meet groundwater protection standards set forth in Title 27.

Construction specification 1(a)(2), 1(a)(3), 1(b)(2), and 1(b)(3) lock the facility into using a Gundseal material. Although Gundseal has been the most cost-effective liner material in the past, there is no guarantee that it will remain so in the future. We suggest that the specifications include an additional finding that will allow flexibility. For example:

*“In lieu of Specifications 2) and 3), the Discharger’s engineered alternative bottom liner system may include, in ascending order:*

- a. A 40-mil thick HDPE geomembrane;*
- b. A GCL that exhibits appropriate strength characteristics (hydrated) to accommodate stresses associated with specific landfill design parameters, with particular attention to interface, long-term creep shear, and bearing capacity; and*
- c. A 60-mil thick HDPE geomembrane.”*

**Response A.8:**

Construction Specification D.3 already allows for the use of an engineered alternative. However, the requested revisions have been made.

**Comment A.9:**

M&RP GROUNDWATER MONITORING NO. 1: The M&RP identifies residential wells R-1, R-2, R-3, and R-4 as being part of the monitoring network. These wells are being monitored by the County as a courtesy to the property owners and they have not been identified as part of the monitoring network in the past. We recommend that they not be included as monitoring points in the new WDRs.

**Response A.9:**

The four residential wells (R-1, R-2, R-3, and R-4) will be removed from the monitoring network list. The following sentence will be added directly below the list:

*The Discharger periodically monitors four residential wells (R-1, R-2, R-3, and R-4) for volatile organic compounds (see Table IV, USEPA Method 8260B, short list). Based on future sampling results and if determined necessary, these wells may be required to be incorporated into the monitoring network as part of the Corrective Action Program.*