



# SOLID WASTE DEPARTMENT

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**BRYCE HOWARD, DIRECTOR**

January 7, 2013

Mr. Dan Carlson, Senior Engineering Geologist  
California Regional Water Quality Control Board  
Central Valley Region  
1685 E Street  
Fresno, CA 93706

**RE: COMMENTS ON TENTATIVE WASTE DISCHARGE REQUIREMENTS,  
TEAPOT DOME LANDFILL, TULARE COUNTY**

Dear Mr. Carlson,

This letter is in response to the Tentative Waste Discharge Requirements (WDRs) for the Teapot Dome Landfill received by this office dated 11 December 2013. In the accompanying Notice of Public Hearing, it is stated that any comments or recommendations concerning the Tentative WDRs should be submitted to your office in writing by noon on 10 January 2014. Staff from the Tulare County Solid Waste Department have reviewed the Tentative WDRs and have the following comments:

**Waste Discharge Requirements:**

**Finding No. 17** states in pertinent part, *"The uppermost zone is unconfined, and extends from the water table to about 120 feet below the ground surface (bgs). The upper semi-confined groundwater zone is located from approximately 140 feet to 310 feet bgs."*

**Comment:** Review of the January 2005 Malcom Pirnie Final EMP Report for the site states on page ES-2 in pertinent part, *"The unconfined aquifer extends vertically from the water table to approximately 110 feet below ground surface (bgs)...A contact between young alluvial deposits and older alluvial deposits occurs at approximately 110 feet. The upper 40 feet of older alluvium is defined as a leaky confining zone, which separates the unconfined aquifer from the semi-confined aquifer.*

*The semi-confined aquifers include an upper semi-confined aquifer and a lower semi-confined aquifer. The upper semi-confined aquifer extends below the confining layer to depths of approximately 310 feet bgs.*

*Below 300 feet, sand channels are less common, soil density is greater, and soil weathering is more extensive. This zone, herein termed the lower semi-confined aquifer, extends to depths greater than 400 feet."*

For clarity, it is suggested that the Finding read as follows, starting at the third sentence, *“Three groundwater zones have been identified beneath the facility. The uppermost zone is unconfined and extends vertically from the water table to approximately 110 below ground surface (bgs). This unconfined aquifer is underlain by a 40-foot thick leaky confining layer. Below the confining layer are upper and lower semi-confined aquifers. The upper semi-confined aquifer extends below the confining layer to approximately 310 feet bgs. The lower semi-confined aquifer is directly below the upper semi-confined aquifer and extends to over 400 feet bgs.”*

**Finding No. 27** states in pertinent part, *“...background groundwater quality for first encountered groundwater has electrical conductivity (EC) ranging between 680 and 1300  $\mu$ mohs/cm, with total dissolved solids (TDS) ranging between 440 and 790 mg/l.”*

**Comment:** County review of the 1<sup>st</sup> Semi-Annual 2013 Self Monitoring Report shows that the EC ranges between 260 (M-1S) and 1,300 (M-13A)  $\mu$ mohs/cm and the TDS ranges between 200 (M-1S) and 790 (M-13A) mg/l. Please change the finding accordingly.

**Finding no. 38** states in pertinent part, *“The VOCs detected in groundwater at the Point of Compliance include:...1-fluoro-1,1-dichloro-ethane...”*.

**Comment:** 1-fluoro-1,1-dichloro-ethane was determined in a 2008 sample to be a Tentatively Identified Compound (TIC) and that detection was the only time this VOC has been detected at the Point of Compliance. If the intention of the Finding is not to include TICs, please remove 1-fluoro-1,1-dichloro-ethane from the finding.

**Finding No. 40** lists the results of detection and evaluation monitoring to adequately delineate the extent and character of the release and lists the following predominate chlorinated volatile organic compounds (CVOCs): PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1,2-DCE [sic], 1,1-DCA, 1,2-DCA, chloroethane, vinyl chloride, CFC-11, CFC-12, CFC-22, 1,4-DCB, 1,2-dichloropropane, chlorobenzene, and iodomethane.

**Comment:** In the Final EMP report for the Teapot Dome landfill dated January 2005, the first paragraph on page ES-3 lists the following CVOCs of landfill origin detected in groundwater: PCE, TCE, cis-1,2-DCE, 1,1-DCE, 1,1-DCA, chloroethane, vinyl chloride, CFC-11, CFC-12, and CFC-22. Please change the finding accordingly.

**Finding No. 46** states in pertinent part, *“...Water from the new supply well is treated prior to use.”*

**Comment:** In a 6 September 2006 letter from your office regarding a proposed revision to the approved corrective action program at the site, the installation of a new landfill water supply well to reduce VOC concentrations was determined to be acceptable.

The letter also stated that if water from the well was only to be used for dust control over the existing footprint of the landfill, treatment of the water would not be necessary. It is suggested that the last sentence of the finding be changed to read, *"Water from the new supply well is not treated for use as dust control over the existing waste footprint because the CVOC concentrations are low (less than 10 micrograms/liter), however any other use of the water would require treatment."*

**Finding No. 51** states in pertinent part, *"The Discharger submitted a 22 August 2013 cost estimate of \$0.69 million for corrective action of all known or reasonably foreseeable releases....As of 2013, the balance of the corrective action fund was \$0.69 million."*

**Comment:** The original cost estimate for water corrective action at the site was submitted in 1994 and was estimated to be \$0.48 million. Since that time, adjustments for inflation have been made to bring the fund balance to the current amount of \$0.69 million. It is suggested that the finding be changed to read in pertinent part, *"The Discharger submitted a 1994 cost estimate of \$0.48 million for corrective action of all known or reasonably foreseeable releases....As of 2013, the balance of the corrective action fund was \$0.69 million."*

### **Financial Assurance Specifications**

**Specifications F.1. & F.2.** – Both of these specifications require that reports regarding financial assurances for closure and postclosure (F.1.) and corrective action (F.2.) be submitted to the Central Valley Water Board by **1 June** of each year. To be consistent with all other WDRs for Tulare County landfills, the County requests that the dates in these two specifications be changed to **1 October** as well as the date of Reporting Specification B.6 on page 6 and the date for the Financial Assurances Report in the last paragraph at the bottom of page 10 in the associated Monitoring and Reporting Program.

### **Monitoring and Reporting Program**

**Groundwater Monitoring A.1.** – In the table on page 2, the Status of monitoring well M-3A is listed as Detection. M-3A is also a Corrective Action monitoring well. Please change the well status of M-3A to reflect its dual purpose.

**Facility Monitoring Specification 3.c.** – This specification requires that Standard Observations be conducted on a Weekly and Monthly frequency during the Wet and Dry seasons respectively. To be consistent with the MRP adopted previously for the Visalia landfill (MRP R5-2013-0059), the County requests that the frequencies be changed to Monthly and Quarterly for the Wet and Dry seasons respectively.

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**Reporting Specification B.1** – This specification requires that Semiannual Monitoring Reports be submitted by **1 August** and **1 February**. To be consistent with MRPs adopted recently for Tulare County landfills and previous requests from the County, please change these dates to **31 August** and **28 February** in this specification as well as the dates listed for the Semiannual Monitoring Report listed at the top of page 8 of the MRP.

**Reporting Specification B.2** - This specification requires that the Annual Monitoring Report be submitted by **1 February**. To be consistent with MRPs adopted recently for Tulare County landfills and previous requests from the County, please change this date to **28 February** in this specification as well as the date listed for the Annual Monitoring Report listed for the Annual Monitoring Report on page 9 of the MRP.

**TABLE IV** – USEPA methods listed on Table IV appear to be from an older list of methods that is outdated. Please revise the methods listed to be consistent with MRPs adopted recently for the Visalia landfill (i.e. – most methods are now USEPA 200.8 with Mercury 254.1 and Cyanide and Sulfide SM-4500-CN or –SF (Standard Methods)).

### Information Sheet

Please change the Information Sheet accordingly to reflect changes made to the WDR and MRP as indicated above.

The County appreciates the opportunity to comment on the Tentative Waste Discharge Requirements for the Teapot Dome Landfill. If you have any questions or need clarification on any of our comments, please feel free to contact me at (559)624-7190.

Sincerely,



Bryce Howard, Director

cc: Joy Isaacson, CalRecycle  
Ken Bowers, Tulare County HHSA – Environmental Health Division.