

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 30/31 May 2013**

**Response to Written Comments for County of Tulare
Visalia Municipal Solid Waste Landfill
Tulare County
Tentative Waste Discharge Requirements**

At a public hearing scheduled for 30 and 31 May 2013, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) will consider adopting waste discharge requirements that revise the existing waste discharge requirements to provide for construction, operation, closure, postclosure maintenance, and the implementation of a corrective action program. This document contains responses to substantive comments received from interested parties regarding the proposed Order circulated on 27 March 2013. Written comments from interested parties were required by public notice to be submitted to the Central Valley Water Board by noon on 26 April 2013 to receive full consideration. Comments were received by the due date from:

1. County of Tulare

The comments are summarized below, followed by Central Valley Water Board staff responses.

COUNTY OF TULARE

COMMENT: Finding No. 21 lists the alternative daily cover (ADC) materials used at the Visalia landfill as Airspace Saver geosynthetic blankets and shredded green waste. The County also uses a thin film degradable plastic film as ADC. Please add the thin film ADC material use to this Finding accordingly.

RESPONSE: Finding No. 21 was revised to include thin film degradable plastic as an ADC material.

COMMENT: Finding No. 27 states in pertinent part: *"Monitoring data indicate that background water quality for first encountered groundwater has an EC ranging between 640 and 940 micromhos/cm with TDS ranging between 410 and 640 mg/l."*

Staff review of the historical background water quality at the Visalia landfill found that the EC ranges between 170 and 1300 micromhos/cm and TDS ranges between 220 and 810 mg/l.

Please change the Finding accordingly.

RESPONSE: The EC and TDS data in the tentative WDRs was acquired from current Waste Discharge Requirements Order No. R5-2003-0146. Based on the latest available Self-Monitoring Report (SMR) for the Visalia landfill, the 1st semiannual period of 2012, the background upper alluvial ground water EC ranges between 330 and 630 micromhos/cm and that TDS ranges between 310 and 710 mg/l. Finding No. 27 in the Tentative WDRs was revised to read: *"Background groundwater quality for the first encountered groundwater during the 1st semiannual period 2012 has an*

electrical conductivity (EC) ranging between 330 and 630 micromhos/cm, with total dissolved solids (TDS) ranging between 310 and 710 milligrams per liter (mg/L)."

COMMENT: Finding No. 28 states in pertinent part, *"The direction of groundwater flow...with an average groundwater gradient ranging between 0.003 and 0.005 feet per foot... The estimated groundwater flow velocity for the upper alluvial...zone is approximately 2.0 feet per day. Groundwater flow in the lower alluvial groundwater zone ranges between...with an average groundwater gradient ranging between 0.005 and 0.006 feet per foot."*

Staff review of data contained in the latest Self-Monitoring Report (SMR) for the Visalia landfill for the 2nd semiannual period of 2012 shows that the direction of groundwater flow in the upper alluvial groundwater zone is toward the southwest with a gradient ranging between 0.001 and 0.002 feet per foot. Also, the SMR shows that the estimated groundwater flow velocity in the upper alluvial groundwater zone is approximately 1.1 feet per day. In addition, groundwater flow in the lower alluvial groundwater zone ranges between 0.004 and 0.008 feet per foot.

RESPONSE: The gradient ranges for the upper alluvial groundwater zone in Finding No. 28 are from the 1st semiannual 2012 SMR. The 2nd semiannual 2012 SMR and the 2012 Annual Monitoring Summary Report have not yet been received, so groundwater gradient and estimated velocity data from those reports were not available to Staff. The estimated groundwater flow velocity for the upper alluvial groundwater zone of approximately 2.0 feet per day was incorrect. Based on the 1st semiannual 2012 SMR, the estimated groundwater flow velocity for the upper alluvial groundwater zone is 1.07 feet per day. Staff revised Finding No. 28 to use the groundwater gradient and estimated velocity data for the upper alluvial groundwater zone from the 1st semiannual 2012 SMR.

The gradient ranges for the lower alluvial groundwater zone in Finding No. 28 are from the 1st semiannual 2012 SMR, the latest available to Staff. Staff will use the groundwater gradient data for lower alluvial groundwater zone from the 1st semiannual 2012 SMR in Finding No. 28. Therefore, no additional changes will be made.

COMMENT: Finding No. 39 states in pertinent part, *"Additionally, the First Semiannual Monitoring Report, 2012, stated that 4-methyl-2-pentanone,...vinyl acetate,...were detected in off-site lower alluvial groundwater monitoring wells."*

A review of the monitoring data and Table 3-4 of the said monitoring report shows that 4-methyl-2-pentanone and vinyl acetate were not detected in the off-site lower alluvial groundwater zone monitoring wells at the Visalia landfill.

Please remove methyl-2-pentanone and vinyl acetate from the finding.

RESPONSE: Further review of the 1st semiannual 2012 SMR, determined that 4-methyl-2-pentanone and vinyl acetate were not detected in off-site lower alluvial groundwater monitoring wells. Finding No. 39 was revised to remove methyl-2-pentanone and vinyl acetate from the finding.

COMMENT: Finding No. 79 states in pertinent part, *“The Discharge, on 10 September 2010, submitted an amended report of waste discharge that estimated the completion of the closure of Unit 1 between January and March 2014.”*

The County anticipates that construction of the final cover of Unit 1 will begin in March/April 2014 and anticipates the construction duration to last approximately 18 months. This schedule is dependent on approval of final construction plans, specifications and the construction quality assurance manual.

The County requests that the following sentence be added at the end of the finding, *“The County anticipates that construction of the final cover of Unit 1 will begin in March/April 2014 and that construction of the final cover will last for a duration of approximately 18 months.”*

RESPONSE: The proposed estimated completion date for Unit I (between January and March 2014) in Finding No. 79 is based on the Discharger’s statement in its 20 September 2010 amended report of waste discharge. Currently, the Discharger estimates that the completion of closure will be 18 months following the implementation of closure activities in March/April 2014. Landfill Closure and Postclosure Maintenance Specification E.1 of the Tentative WDRs requires the Discharger to submit a time schedule for Executive Officer approval that specifies the dates for final closure implementation and completion of final closure activities of Unit I. The Discharger will need to specify in the time schedule a date for completion of final closure of Unit I and include a rationale and justification to support the revised final closure date for Executive Officer consideration. Finding No. 79 of the Tentative WDRs was not revised.

COMMENT: Construction Specification D.1. states in pertinent part: *“The Discharger shall submit...a design report for each expansion cell of Unit II that includes detailed plans, specifications, and descriptions for the ...system components.”*

Future phases of expansion in Unit II at the Visalia landfill may include construction of one or more cells in each phase.

The County requests the Specification be changed to read in pertinent part, *“The Discharger shall submit...a design report for each expansion ~~cell~~ Phase of Unit II that includes detailed plans, specifications, and descriptions for the ...system components.”*

RESPONSE: Previously it was assumed that each phase of construction represented one cell. However, the Discharger pointed out that each phase of construction may contain two or more cells. Staff spoke with the Discharger on 25 April 2013 and an agreement was reached to revise Construction Specification D.1 of the Tentative WDRs to read: *“The Discharger shall submit for Executive Officer review and approval either prior to, or concurrent with, submission of the construction quality assurance plan as per Construction Specification D.2.a., below, a design report for each expansion of Unit II that includes detailed plans, specifications, and descriptions for the liner components and leachate collection and removal system components”*.

COMMENT: Landfill Closure and Postclosure Maintenance Specification E.4. states: *“Closure activities shall be completed within **180 days** of the beginning of closure activities unless an extension is granted by the Executive Officer.”*

As stated previously, closure activities for Unit 1 are expected to last a duration of 18 months.

The County requests that the Specification be changed to read, *“Closure activities shall be completed within ~~180 days~~ 18 months of the beginning of closure activities unless an extension is granted by the Executive Officer.”*

RESPONSE: Completing closure activities within 180 days of the implementation of closure activities is required under section 21110(d), California Code of Regulations, Title 27, section 20005 et seq. However, Landfill Closure and Postclosure Maintenance Specification E.1 of the Tentative WDRs requires the Discharger to submit a time schedule that specifies the dates for final closure implementation and completion of closure activities for Executive Officer approval. Therefore, following review of the time schedule submittal, which will include a rationale and justification to support the revised final closure completion date, the Executive Officer can extend the completion date of closure activities beyond 180 days of the implementation of closure activities if such an extension is justified by the Discharger. Landfill Closure and Postclosure Specification E.4 of the Tentative WDRs was not revised.

COMMENT: The Site Map shown as Attachment B is missing a label for groundwater monitoring well M-7C. Also, the arrow pointing to the entrance on Avenue 328 should point to a location approximately half way between landfill gas monitoring wells G-12 and G-13. Additionally, the Unit II cells should be labeled as follows:

Phase 1, Cell 1	Phase 2, Cell 6
Phase 2, Cell 2	Phase 2, Cell 7
Future Cell 3	Future Cell 8
Future Cell 4	Future Cell 9
Future Cell 5	Future Cell 10

RESPONSE: Labeling of items on Attachment B of the Tentative WDRs was included or revised as requested.

COMMENT: Groundwater Monitoring A.1.: Domestic and Agricultural Groundwater Supply Wells AG-10 and AG-13R at the bottom of page 2 are not sampled on a routine basis as they have never had a detection or trace detection.

Please remove them from the list of Domestic and Agricultural Groundwater Supply wells at the bottom of page 2 of the MRP.

RESPONSE: Staff reviewed the existing MRP and determined that wells AG-10 and AG-13R are not sampled on a regular basis. Groundwater Monitoring A.1 of the Tentative MRPs was revised to remove agricultural wells AG-10 and AG-13R from the Domestic and Agricultural Groundwater Supply monitoring well network.

COMMENT: Unsaturated Zone Monitoring A.2.: The first sentence in the second paragraph states in pertinent part: *"Unit II, Cell 1 was constructed with a pan lysimeter..."*

There are four cells that have been constructed in Unit II to date. Please change the sentence to read in pertinent part: *"Unit II, Cells 1, 2, 6 & 7 were each was constructed with a pan lysimeters..."*

RESPONSE: Staff reviewed the specifications for the subject cells and confirmed each was constructed with a pan lysimeter. The first sentence in the second paragraph of Unsaturated Zone Monitoring A.2 of the Tentative MRPs was revised to read: *"Unit II, Cells 1, 2, 6 & 7 were each constructed with a pan lysimeter..."*

COMMENT: The second column with the headings, *"Unit Where Sump is Located"* at the top of page 5 in Leachate Monitoring A.3 only describes where the sump is for Cell 1. Please add Cell 2 where the sump is also located at the West-Central Margin as well as Cells 6 & 7 where the sumps are located at the East-Central Margins of each cell. This would apply for both the primary and secondary sumps for each cell.

RESPONSE: The column for current leachate system sump monitoring points under Leachate Monitoring, Seep Monitoring, and Annual Primary and Secondary LCRS Testing A.3 of the Tentative MRPs, was revised to include the primary and secondary leachate sump locations for Cells 2, 6, and 7 of Unit II.

COMMENT: Table V – The USEPA method specified for Sulfide is shown as *"SM 4500-CN"*. Please change to the appropriate SM 4500 method specific to Sulfide.

RESPONSE: The current method used for sulfide is USEPA method SM 4500-SF. Table V of the Tentative MRPs was revised to replace USEPA method SM 4500-CN for sulfide with USEPA method SM 4500-SF.

COMMENT: Two non-substantive comments were submitted regarding editorial changes to the Tentative WDRs.

RESPONSE: The requested editorial changes in Finding No. 38 and Provision I.E.6 of the Tentative WDRs were made as requested.