

Central Valley Regional Water Quality Control Board
31 January/1 February 2013 Board Meeting

Response to Comments
for the
County of Sacramento Department of Waste Management and Recycling
Kiefer Landfill Groundwater Extraction and Treatment Plant
Tentative Waste Discharge Requirements

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (NPDES Permit No. CA0083681) renewal for the County of Sacramento Department of Waste Management and Recycling (Discharger) Kiefer Landfill Groundwater Extraction and Treatment Plant (Facility).

The tentative NPDES Permit was issued for a 30-day public comment period on 11 May 2012 with comments due by 15 June 2012. The Central Valley Water Board received public comments regarding the tentative Permit by the due date from the Discharger and the United States Environmental Protection Agency (USEPA), Region IX. Some changes were made to the tentative Permit based on public comments received.

The submitted comments were accepted into the record, and are summarized below, followed by Central Valley Water Board staff responses.

DISCHARGER COMMENTS

Discharger Comment No. 1. Sampling Frequency of Total Residual Chlorine

The Discharger requests a change in the minimum sampling frequency for Total Residual Chlorine from 1/Week or Continuous to 1/Month or Continuous. Chlorine is only used for occasional well maintenance, not in the treatment system. Additionally, chlorine has not been detected in the past 5 years of weekly monitoring.

RESPONSE: Central Valley Water Board staff concurs. Section IV.A.1, Table E.2., of the Monitoring and Reporting Program has been updated to require the minimum sampling frequency for Total Residual Chlorine in the permit be 1/Month or Continuous. Footnote 6 of the table was also clarified to specify continuous chlorine residual monitoring is required for a minimum of 24-hours after the discharge to Deer Creek resumes following well and groundwater treatment system maintenance events in which chlorine is used.

**Discharger Comment No. 2. Required Analytical Test Method Addition
(Hand-Held Field Meter)**

The Discharger requests a footnote be added to Tables E-4 and E-5 in the Monitoring and Reporting Program (MRP), which allows a hand-held field meter to be used as an

acceptable test method for pH, chlorine (total residual), dissolved oxygen, electrical conductivity and turbidity. The Discharger contends that this addition would be consistent with Table E-2 of the MRP, which allows the use of a hand-held meter for pH, chlorine (total residual), and dissolved oxygen. Additionally, the Discharger prefers to measure electrical conductivity in the field as it is a simple and reliable measurement, which uses equipment that rarely requires calibration.

RESPONSE: Central Valley Water Board staff concurs. Section IV.A.1, Table E.4 and Table E.5 of the Monitoring and Reporting Program has been updated to include footnote 3. Footnote 3 states the following: *“A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer’s instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.”*

Discharger Comment No. 3. Other minor clarifying changes

The Discharger requested several other minor clarifying changes to the proposed Order.

RESPONSE: Central Valley Water Board staff concurs and modified the proposed Order accordingly.

USEPA, REGION IX COMMENTS

USEPA, REGION IX Comment 1. WATER QUALITY-BASED EFFLUENT LIMITS (WQBELs) FOR SELENIUM

USEPA contends that the permit should impose WQBELs for selenium based on one sample exceeding the water quality criteria.

RESPONSE: The California Toxics Rule (CTR) contains a chronic (4-day average) criterion for selenium of 5 µg/L and an acute (1-hour average) criterion of 20 µg/L. The Discharger collected three samples for selenium in April, May, and June 2011. The April sample was measured at 9.6 µg/L, which exceeds the CTR chronic criterion. The subsequent two samples were non-detect with a method detection level of 0.5 µg/L. Due to the limited data set and inconsistent results, the tentative NPDES permit proposes additional monitoring, rather than establishment of WQBELs at this time. Section 1.3 of the State Implementation Plan allows the regional boards to require additional monitoring for a pollutant in place of an effluent limitation if data are unavailable or insufficient.

Selenium has not been identified as a constituent of concern for the groundwater cleanup and is not routinely monitored. Once every 5 years selenium is monitored in an upgradient groundwater monitoring well, with the last result showing non-detect

at a detection level of 5 µg/L. At the time of effluent sampling in 2011 the Discharger had recently implemented new maintenance procedures to control the discharge of manganese. In this case, additional monitoring is warranted, because until the Discharger fully implements its maintenance procedures, and sufficient data is collected to clearly represent the discharge, it remains uncertain if the one elevated sample result is representative of the discharge and if there is reasonable potential for the discharge to cause or contribute to an exceedance of the CTR criteria for selenium.

USEPA comments that all available, valid, relevant, representative data and information should be used to conduct the reasonable potential analysis. Central Valley Water Board staff concurs. In the tentative NPDES permit, the data has not been excluded, and as explained in the Fact Sheet of the permit, the fact that selenium has not been of concern for this ground water body, and two of the three sampling events were non-detect at very low concentrations is information that puts into question the one elevated sample result. The Central Valley Water Board has the discretion, as allowed by the State Implementation Plan, to require additional monitoring in lieu of effluent limitations, to acquire the representative data and information necessary to conduct the reasonable potential analysis. All relevant data and information regarding the Facility's current maintenance system, was used to make this determination.

USEPA comments that unless the Central Valley Water Board can provide justification for excluding the elevated data point in a future reasonable potential analysis, this result will need to be used and must result in a finding of reasonable potential and subsequent effluent limitations. Central Valley Water Board staff concurs. This is the reason for the additional monitoring. If additional monitoring demonstrates that the discharge has elevated selenium that results in a finding of reasonable potential, the permit can be reopened to add an effluent limitation. In addition, the proposed permit has been modified to require the Discharger to immediately develop a work plan and treatment feasibility study to control selenium in the event that reasonable potential exists. However, if the additional data continues to be non-detect or below the water quality criteria, as were the last two sample results, this would confirm that the elevated sample in April 2011 was not representative of the effluent and should be excluded from the reasonable potential analysis. The data set is currently insufficient to conduct the reasonable potential analysis.

USEPA comments that the additional monitoring for selenium should be conducted prior to reissuance of the NPDES permit, rather than as a condition of a reissued permit. Central Valley Water Board does not concur. This would delay the renewal of the permit by at least a year from the date the Board originally considered the tentative permit, which is contrary to USEPA's and the Central Valley Water Board's goal to renew permits in a timely manner.

Finally, USEPA comments that other Regional Boards and until recently, the Central Valley Water Board, have established reasonable potential and imposed effluent limitations based on only one data point, so the tentative NPDES permit is inconsistent. Central Valley Water Board staff does not concur. The Central Valley Water Board must use its discretion on permit-specific and receiving water-specific conditions of each facility must be considered in this decision. In some situations it may be warranted to establish effluent limits based on only one data point. However, as discussed above, in this case there is justification to require monitoring due to the uncertainty in the data results. As allowed by the State Implementation Plan, for this specific discharge, the permit proposes additional monitoring in lieu of imposing effluent limits due to limited and questionable data.

The tentative permit has been modified to provide additional clarification regarding the justification for additional selenium monitoring in place of a final effluent limitation at this time.