

Regional Water Quality Control Board
Central Valley Region

Response to Written Comments for
Tentative Waste Discharge Requirements
for
Kings Waste and Recycling Authority
Hanford Municipal Solid Waste Landfill, Kings County

This document contains the responses to written comments received from interested parties regarding the proposed tentative Waste Discharge Requirements (WDRs) for the Kings Waste and Recycling Authority (KWRA), Hanford Municipal Solid Waste Landfill, Kings County for postclosure maintenance and corrective action. The Tentative WDRs, R5-2014-XXXX, were prepared to incorporate postclosure maintenance requirements and the approved corrective action program. Currently, WDRs Order R5-2007-0154 currently regulates the facility.

The Tentative WDRs were circulated on 19 March 2013 for public comment, ending on 18 April 2014. 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. Jeff Monaco, Kings Waste and Recycling Authority, 14 April 2014

RESPONSE TO COMMENTS

Comment A.1:

Finding No. 43 (WDRs page 8) states in pertinent part, *“Proposed is that groundwater would be extracted from extraction wells EX-1 through EX-5 and pumped into four 10,000-gallon above ground tanks for aeration. The aeration system would consist of a float-based aerator, and possibly more, placed inside each of the above-ground tanks to volatilize VOCs to nondetect. Initiation of groundwater extraction was proposed for extraction well EX-2 where the most significant concentrations of total VOCs in groundwater have been detected.”*

It is suggested that the finding be changed to read in pertinent part, *“Proposed is that groundwater would be extracted from extraction well EX-2 only and pumped into four 10,000-gallon above ground tanks for aeration.”*

Response A.1:

Based on the previously approved Corrective Action Program (CAP), the following revisions have been made in pertinent part to Finding No. 43.

“Proposed is that groundwater would initially be extracted from extraction well EX-2, where the most significant concentrations of total VOCs in groundwater have been detected, and pumped into four 10,000-gallon above ground tanks for aeration. The aeration system would consist of a float-based aerator, and possibly more, placed inside each of the above-ground tanks to volatilize VOCs to non-detectable concentrations. Once it is determined that the extraction/aeration system is removing VOCs from the extracted groundwater, the Discharger shall evaluate whether additional site groundwater extraction wells should be added to the CAP.”

Comment A.2:

Finding No. 57 (**WDRs page 11**) states in pertinent part, *“Based on the threat and complexity of the discharge, the facility is determined to be classified 1A as defined below:*

- a. *Category 1 threat to water quality, defined as, “Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.”*
- b. *Category A complexity, defined as, “Any discharge or toxic wastes; any small volume discharge containing toxic waste; any facility having numerous discharge points and groundwater monitoring; or any Class 1 waste management unit.”*

Based on the March 13, 2014 example *Models of Hydrogeologic Units* contained in the State Water Resource document titled *“Hydrogeologic Modeling”* it is our contention that the Hanford Landfill falls into the Hydrogeologic Simple Model and that based on the proposed CAP to be implemented at the site, the designation of the Hanford Landfill should be 1B rather than 1A. KWRA would appreciate consideration of this change particularly since the 1B designation would not only more accurately describe the site conditions, but would provide much needed fiscal relief for our operating budget.

Response A.2:

Central Valley Water Board staff evaluated data in the case file and the complexity category definitions in Section 2200, Title 23, California Code of Regulations. A Category B complexity rating is approved and will be addressed in specific correspondence to KWRA. The following revisions have been made to Finding No. 57:

Based on the threat and complexity of the discharge, the facility is determined to be classified 1B as defined below:

- a. *Category 1 threat to water quality, defined as, “Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.”*
- b. *Category B complexity, defined as, “Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units.”*

Comment A.3:

Under the Corrective Action Specifications, Item 1 (WDRs page 14) states: *“By 31 October 2014, the Discharger shall submit an amended report of waste discharge and a time schedule to establish a corrective action program.”*

KWRA respectfully requests an additional six months be added to the timeline and thereby suggests that this item read: *“By 31 March 2015, the Discharger shall submit an amended report of waste discharge and a time schedule to establish a corrective action program.”*

Response A.3:

As referenced in Finding No. 3 of the WDRs, the revised CAP has been accepted as the amended ROWD. Therefore, Corrective Action Specification G.1 and Provision H.7.C.1 have been removed from the tentative WDRs.

Comment A.4:

Under the Corrective Action Specifications, Item 2 (WDRs page 14) states: *“The Discharger shall initiate groundwater extraction from extraction well EX-2 adjacent to the northwestern area of the Unit where the highest concentration of total VOCs have been detected to verify that the extraction/aeration system is removing VOCs from the extracted groundwater. Once it is determined that the extraction/aeration system is removing VOCs from the extracted groundwater, the Discharger shall expand groundwater extraction to extraction wells EX-1, EX-3, EX-4, and EX-5.”*

Previous estimates indicated that due to the considerably lower concentrations of VOCs in the other site extraction wells (EX-1, EX-3, EX-4, and EX-5), continuous pumping of millions of gallons of groundwater would result in the removal of less than 0.5-pounds of VOCs.

Rather than automatically adding the additional extraction wells, it is requested that this item read: *“The Discharger shall initiate groundwater extraction from extraction well EX-2 adjacent to the northwestern area of the Unit where the highest concentrations of VOCs have been detected to verify that the extraction/aeration system is removing VOCs from the extracted groundwater. Once it is determined that the extraction/aeration system is removing VOCs from the extracted groundwater, the Discharger shall evaluate whether additional site groundwater extraction wells should be added to the extraction CAP.”*

Response A.4:

The requested revisions have been made to Corrective Action Specification G.2 (now Corrective Action Specification G.1).

Comment A.5:

Under the Corrective Action Specifications, Item 6 (WDRs page 15) states in pertinent part: *“By 31 October 2014, the Discharger shall submit a plan for sampling water...”*

KWRA respectfully requests an additional six months be added to the timeline and thereby suggests that this item read: *“By 31 March 2015, the Discharger shall submit a plan for sampling water...”*

Response A.5:

Corrective Action Specification G.6 (now Corrective Action Specification G.5) has been revised to incorporate the requested submittal due date of 31 March 2015.

Comment A.6:

Under the Corrective Action Specifications, Item 8 (WDRs page 15) states in pertinent part: *“By 31 October 2014, the Discharger shall submit a plan for modifying the LFG extraction system...”*

KWRA respectfully requests an additional six months be added to the timeline and thereby suggests that this item read: *“By 31 March 2015, the Discharger shall submit a plan for modifying the LFG extraction system...”*

Response A.6:

Comment partially approved. The current deadline for a plan submittal is over seven months from the date of issuance of the tentative WDRs, which is sufficient time to prepare a plan for modifying the LFG extraction system. However, Corrective Action Specification G.8 (now Corrective Action Specification G.7) has been revised to incorporate a submittal due date of 30 November 2014, an additional month to submit the plan.

Comment A.7:

Under the Corrective Action Specifications, Item 10 (WDRs page 16) states in pertinent part: *“By 30 November 2014, the Discharger shall implement a CAP pursuant to Section 20430 of Title 27...”*

KWRA respectfully requests an additional six months be added to the timeline and thereby suggests that this item read: *“By 30 April 2015, the Discharger shall implement a CAP pursuant to Section 20430 of Title 27 ...”*

Response A.7:

Corrective Action Specification G.10 (now Corrective Action Specification G.9) has been revised to incorporate a six month extension and as follows:

“By 30 April 2015, the groundwater aeration and extraction system shall be operating and fully functional as described in the approved CAP and pursuant to Section 20430 of Title 27...”

Provision H.7.C.5 (now Provision H.7.C.4) has been revised to read:

“The groundwater aeration and extraction system shall be operating and fully functional as described in the approved CAP”

Comment A.8:

Under the Corrective Action Specifications, Item 13 (WDRs page 16) states in pertinent part: *“...the Discharger shall submit an amended RWD...”*

KWRA suggests the language be revised in pertinent part to say *“...the Discharger shall submit an Amended Report of Waste Discharge (ROWD)...”* (This correction needs to be made globally throughout all portions of the draft WDRs including the STANDARD PROVISIONS AND REPORTING REQUIREMENTS.)

Response A.8:

In Finding No. 3 of the WDRs and in B.3 of the Standard Provisions and Reporting Requirements (SPRRs), a Report of Waste Discharge is already referred to as “ROWD”. As such, the recommended changes were not made to the SPRRs. However, all references of RWD (Corrective Action Specifications G.13 through G.15 [now Corrective

Action Specifications G.12 through G.14] and in Provision H.7 of the tentative WDRs has been changed to ROWD.

Comment A.9:

Per the previous comments, KWRA respectfully requests the following changes be made to the compliance dates listed in Item 7 of the Provisions (WDRs page 18):

Task C1, C2, and C3 from 31 October 2014 to 31 March 2015.

Task C5 from 30 November 2014 to 30 April 2015.

Response A.9:

Revisions have been made, in accordance with the previous responses, to incorporate the following submittal due dates:

Task C1 has been deleted.

Task C2 [now Task C1] from 31 October 2014 to 31 March 2015.

Task C3 [now Task C2] from 31 October 2014 to 30 November 2014

Task C5 [now Task C4] from 30 November 2014 to 30 April 2015.

Comment A.10:

Paragraph 1 (MRP [Monitoring and Reporting Program] page 6) reads: *“The Discharger shall submit monthly status reports on the effectiveness of the proposed extraction/aeration system in remediating ground water for the first 90 days from start-up and thereafter on a quarterly basis (see Corrective Action Specification G.7. of the WDRs). Monthly status reports shall be submitted for the first three months after start-up and the quarterly status reports shall be submitted in the semiannual monitoring reports.”*

KWRA requests that this item be revised in pertinent part to say *“The Discharger shall submit monthly status reports on the effectiveness of the proposed extraction/aeration system in remediating ground water for the first 90 days from start-up and thereafter on a quarterly basis.”*

Response A.10:

Groundwater extraction rates and other details are important in evaluating the treatment system and overall CAP and need to be addressed in the status reports. The requested revision was not made.

Comment A.11:

Paragraph 2 (MRP page 6) in pertinent part reads: *“The annual corrective action program status report needs to contain tables showing the concentrations of detected VOCs at groundwater monitoring wells MW-1, HL-13, HL-14, and the Keverline and Mendoza domestic wells for each monitoring event beginning with the VOC concentrations at the implementation of the groundwater extraction/aeration system, and time/plot graphs showing stability, decreases, or increases in VOC concentrations at groundwater monitoring wells MW-1, HL-13, HL-14, and the Keverline and Mendoza domestic wells.”*

Mendoza should read Martinez. (This correction needs to be made globally throughout all portions of the draft WDRs including Attachment B).

Response A.11:

The revisions have been made.

Comment A.12:

Item f [B.2.f] (MRP page 10) reads: “*A map showing the area and elevations in which filling has been completed during the previous calendar year and a comparison to final closure design contours, and include a projection of the year in which each discrete landfill module will be filled.*”

This item should be removed entirely since the site is a closed landfill which no longer takes waste and consequently does not require filling.

Response A.12:

Item B.2.f has been deleted.

Comment A.13:

Item h [B.2.h] (MRP page 10) reads: “*The results of the annual testing of leachate collection and removal systems required under Standard Facility Specification E. 14 of the SPRRs.*”

This item should be removed entirely since the site does not have a leachate collection system.

Response A.13:

Item B.2.h has been deleted. In addition, Item B.1.g has been modified to remove reporting requirements regarding leachate monitoring and control facilities.

Comment A.14:

Page 1 [Information Sheet], last paragraph reads in pertinent part reads: “*The latest self-monitoring report (Second Semiannual Monitoring Report, 2012) detected: CFC-12; 1,1-DCA; 1,1-DCE; fcis-1,2-DCE; TCE; PCE; CFC-11; and vinyl chloride in point of compliance and corrective action groundwater monitoring wells.*”

The paragraph should read in pertinent part: “*The latest self-monitoring report (Second Semiannual Monitoring Report, 2012) detected: CFC-12; 1,1-DCA; 1,1-DCE; CIS-1,2-DCE; TCE; PCE; CFC-11; and vinyl chloride in point of compliance and corrective action groundwater monitoring wells*”

Response A.14:

The correction has been made.

Comment A.15:

Page 2, paragraph 3 [Information Sheet]: “*Proposed is that groundwater would be extracted from extraction wells EX-1 through EX-5 along the western point of compliance and pumped into four 10,000-gallon above-ground tanks for aeration.*”

A revised CAP titled ‘Groundwater Remediation Plan Utilizing Aeration Revision 1-5 September 2012’ was submitted on 28 September 2012. The Discharger’s revised CAP proposes a five-year pilot test utilizing a groundwater extraction/aeration system to remediate VOCs in groundwater and control the hydraulically down-gradient migration of VOCs in groundwater. This paragraph should read in pertinent part:

“*Proposed is that groundwater would be extracted only from extraction well EX-2, which is located along the north-western point of compliance and pumped into four 10,000-*

gallon above-ground tanks for aeration. The aeration system would consist of a float-based aerator, and possibly more, placed inside each of the above-ground tanks to volatilize VOCs to non-detectable concentrations. Initiation of groundwater extraction was proposed for extraction well EX-2 where the most significant concentrations of total VOCs in groundwater have been detected. Following aeration, the treated groundwater would be discharged to one or more on-site evaporation/percolation basins. Additionally, the Discharger proposes increasing LFG extraction in the northwestern portion of the Unit where VOC concentrations in groundwater and LFG are the highest to control VOC migration to groundwater.”

Response A.15:

The following revision has been made:

Proposed is that groundwater would initially be extracted only from extraction well EX-2, which is located along the north-western point of compliance and pumped into four 10,000-gallon above-ground tanks for aeration. However, the number of extraction wells is subject to change. Once it is determined that the extraction/aeration system is removing VOCs from the extracted groundwater, the Discharger will evaluate whether additional site groundwater extraction wells should be added to the CAP. The aeration system would consist of a float-based aerator, and possibly more, placed inside each of the above-ground tanks to volatilize VOCs to non-detectable concentrations. Initiation of groundwater extraction was proposed for extraction well EX-2 where the most significant concentrations of total VOCs in groundwater have been detected. Following aeration, the treated groundwater would be discharged to one or more on-site evaporation/percolation basins. Additionally, the Discharger proposes increasing LFG extraction in the northwestern portion of the Unit where VOC concentrations in groundwater and LFG are the highest to control VOC migration to groundwater.