

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
[TENTATIVE] WASTE DISCHARGE REQUIREMENTS ORDER R5-2020-XXXX
FOR
STANISLAUS COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES
FINK ROAD LANDFILL
STANISLAUS COUNTY

**RESPONSES TO DISCHARGER'S COMMENTS ON
TENTATIVE WASTE DISCHARGE REQUIREMENTS ORDER
AND MONITORING AND REPORTING PROGRAM**

In accordance with the Water Code and Title 27, Central Valley Regional Water Quality Control Board (Central Valley Water Board) provided Stanislaus County Department of Environmental Resources (Discharger) with a copy of the Tentative Waste Discharge Requirements (WDRs) and Tentative Monitoring and Reporting Program (MRP) for the Fink Road Landfill (collectively, Facility). The tentative orders are scheduled for adoption at the Central Valley Water Board's public meeting on 14-15 October 2021.

The Discharger provided its comments via email on 6 July 2021. Responses of Central Valley Water Board staff and counsel to those comments are set forth below.

After receiving the Discharger's comments, Central Valley Water Board staff revised the Tentative WDRs Order. As a result, the finding numbers referenced in the Discharger's comments may not match the numbers in the final version that is to be considered for adoption.

Additionally, unless otherwise specified, finding and section references are to the contents of the Tentative WDRs Order.

ITEM 1

Comment

WDR Finding 14 - Post Subtitle D Cells should be updated to Cells 2-7, not 1-7.

The finding implies that Subtitle D prohibits vertically expanding over LF-2, Cell 1 due to its liner that does not comply with Subtitle D. Vertical expansions are explicitly allowed under Subtitle D. EPA Technical Manual for Solid Waste Facility Criteria (November 1993, EPA530-R-93-017) states in Section 1.6.3, page 13 "The portion of a facility that is considered to be an existing unit will include the waste management area that has received waste prior to the effective date of Part 258. Existing units may expand vertically." However, we recognize that separation liners have often been required by the RWQCB prior to vertical expansion to protect water quality.

Response

Finding 14 has been changed to indicate that post Subtitle D cells are Cells 2-7.

ITEM 2

Comment

WDR Finding 47

- a. The requirement for a well downgradient of LF-1 between LF-1 and LF-2 Cell 5, may be difficult to implement due to access issues and spacing between Units. The proposed plan to relocate the access road in order to utilize airspace between LF-1 and LF-2 would make installing a well in this location infeasible.
- b. The addition of a well upgradient of future LF-2, Cell 7 would be another background well specific for one cell of LF-2. This additional well seems unnecessary given that there are four relatively new background wells, at least three of which are upgradient of LF-2. Since future Cell 7, as part of LF-2, and will not be monitored as a stand-alone unit, it does not need a stand-alone background well.
- c. There is a drainage basin between SI-1 and SI-2 and would make installing a new well in this location infeasible due to accessibility and safety.
- d. Existing monitoring well MW-18 fits this location description.

Response

- a. The Discharger is required to monitor LF-1 and LF-2 separately especially since LF-1 is an unlined unit. One cannot determine the effectiveness of the final closure cover installed over LF-1 if LF-1 is not monitored separately. Also please see response to Item 11. The WDRs require the Discharger to demonstrate in a written report if it finds installation of a well is infeasible (Please see WDRs Finding 45).
- b. Proposed future Cell-7 will be constructed between BG-2 and BG-3 along the northern edge of the Waste-To-Energy (WTE) facility. There is significant distance between BG-2 and BG-3 and the Discharger has shown that upgradient groundwater quality varies at different locations. The Discharger must install a background monitoring well upgradient of the proposed Cell-7 prior to disposal of waste in Cell-7 to in order to determine if background water quality upgradient of Cell-7 is significantly different than background

water quality previously established.

- c. If the Discharger indicates that construction of a monitoring well between SI-1 and SI-2 is infeasible the Discharger must submit a technical report certifying the infeasibility of installing such well. Furthermore, the Discharger must consider the possibility of modifying/temporarily modifying the lateral extent of the drainage basin in order to make room for equipment to safely access and install a monitoring well between SI-1 and SI-2.
- d. The WDRs in Finding 47.d require installation of a groundwater monitoring well “Upgradient of SI-2 between LF-2 and SI-2”. MW-18 is located east of SI-2 and therefore is not upgradient of SI-2 and not between LF-2 and SI-2. The Discharger is required to install a groundwater monitoring well upgradient (west) of SI-2 in order to establish background water quality upgradient of SI-2. This is needed to provide earliest detection of a release originating from SI-2. Currently no upgradient background well exists for SI-2.

ITEM 3

Comment

WDR Page 31 – Discharge Prohibitions, Item 5

“The discharge of MSW to LF-2, Cell 1, including MSW leachate drainage from adjacent fill areas, is prohibited.” Please clarify that if an appropriate separation liner is installed over the existing LF-2, Cell 1 waste fill (i.e., similar to that installed over LF-1), that waste placed in the infill area could be placed vertically over LF-2, Cell 1.

Response

If an appropriate separation liner is installed above LF-2 Cell 1, the overlying cell would be designated a new cell; therefore any additional discharge above LF-2 Cell 1 would be to a different cell, not LF-2 Cell 1. Any vertical expansion over existing cells would be considered new waste management units (WMUs) and receive different designations. These new WMUs would have their own containment system and LCRS. Therefore, no change to Discharge Prohibition A.5 is warranted.

ITEM 4

Comment

Table 4 – Compliance Schedule

Since this revision of the WDRs took a year longer than anticipated, the County requests a 9-month extension on the compliance due dates included on Table 4, except for those items requiring annual submittals, in order to provide the County adequate time to procure and contract firms to prepare the requested deliverables

Response

An additional 11 months have been added to the initially proposed due dates.

ITEM 5

Comment

WDR – Financial Assurances, Item 4 (pg. 37)

Since this revision of the WDRs took a year longer than anticipated, the County requests a 9-month extension on the compliance due date included in item 4 to have adequate time to procure and contract firms to prepare the requested deliverables

Response

An additional 11 months have been added to the initially proposed due date.

ITEM 6

Comment

WDR – Monitoring Specifications, Items 6, 7, 8, and 9

Since this revision of the WDRs took a year longer than anticipated, the County requests a 9-month extension on all compliance due dates included in the monitoring specifications to have adequate time to procure and contract firms to prepare the requested deliverables.

Response

An additional 11 months have been added to the initially proposed due date.

ITEM 7

Comment

WDR – Monitoring Specifications, Section G, 12

The due date for the additional stormwater sampling locations proposal was not updated from the September 2020 date. Since this revision of the WDRs took a year longer than anticipated, the County requests a 9-month extension on the compliance due date included in item 12 in order to provide the County adequate time to procure and contract firms to prepare the requested deliverable.

Response

An additional 11 months have been added to the initially proposed due date.

ITEM 8

Comment

Closure and Post Closure Maintenance Specifications 8. c.

Specification 8.c. lists a LHC layer with a hydraulic conductivity of 1×10^{-7} or less for the repair of the LHC layer. Based on the requirements listed in Attachment H, closure of the units will be constructed with soil components having a minimum hydraulic conductivity of 1×10^{-6} cm/sec or less. Repairs should be completed with material equal or less than those required in the construction specifications (i.e., $K < 1 \times 10^{-6}$ cm/sec).

Response

Maintenance Specification 8.c has been clarified as follows:

- c. → Have a hydraulic conductivity of no greater than 1×10^{-6} cm/sec and for MSW Units have no greater through-flow rate than the bottom liner system throughout the post-closure maintenance period in accordance with Title 27 section 21090(a)(1).¶

ITEM 9

Comment

Attachment G – Authorized Waste Discharges

LF-2: Treated Wood Waste is shown as not accepted for LF-2 in Attachment G. The site has received a variance from DTSC for accepting wood waste in LF-2. Requirement B.3. states that treated wood waste shall only be discharged to LF-2 consistent with Discharge Specification B.1 and Finding 17.

LF-3: Special Wastes accepted. Waste discharges to LF-2 have been historically limited to boiler ash generated by an offsite waste-to-energy Plant immediately southwest of the Facility. The hazardous boiler ash is discharged to LF-3 under an exemption that was approved by DTSC in 1990 that allows the waste to be managed and discharged to a landfill as a Title 22 “nonhazardous” waste if authorized under WDRs issued by the Water Board. The Discharger proposes to continue discharging boiler ash from the WTE to LF-3.

Response

Attachment G has been changed to allow Treated Wood Waste to be accepted in LF-2 WMU so long as DTSC and CalRecycle permit such waste to be discharged in a non-hazardous landfill unit. Regarding boiler ash disposal the Attachment G notes in the last paragraph describe how the boiler ash is classified by DTSC as a non-hazardous designated waste that can only be disposed of in LF-3. Attachment G continues to allow boiler ash from WTE to be disposed of in LF-3.

ITEM 10

Comment

MRP – Table 1

LF-1: MW-12 is no longer used as a background monitoring point. This should be changed to BG-2 which is upgradient of LF-1.

LF-2: Background for LF-2 should be listed as BG-1 and BG-2. Another background well west of LF-2 Cell 7 should not be required as it is not a separate unit to be monitored independently. See comment b. for Finding 47 above.

LF-3: Monitoring wells MW-24, MW-31, and MW-32 are not downgradient of LF-3 and, therefore, cannot be detection monitoring wells (at downgradient perimeter of Unit).

Requirement for new well east of LF-3 would be the detection monitoring point. If not, why would this new well be required?

Response

Regarding LF-1 in Table 1 of the Discharger's Updated Water Quality Protection Standards Report (Updated WQPS Report) dated 31 December 2018 MW-12 was identified as a background monitoring well. However, based on Regional Water Board staff approval of the Updated WQPS Report on 19 April 2019 MW-12 was replaced by other background monitoring wells. Therefore, Table 1 has been changed to indicate that MW-12 is an upgradient detection monitoring well. Please see response to comments on Item 2 regarding need for installation of additional background monitoring well upgradient of proposed Cell-7.

Regarding LF-2, BG-1 and BG-2 are identified as background monitoring wells.

Regarding LF-3, the location of MW-24, MW-31, and MW-32 has been changed to side gradient and still can be used for detection monitoring of landfill gas migration impacting groundwater along the perimeter. The Updated WQPS Report Table 4 indicates that MW-32 is impacted by VOCs as well as having several monitoring parameters exceeding proposed concentration limits. An additional detection monitoring well is necessary between MW-19 and MW-16 since groundwater flow and direction shown in Attachment E of the WDRS indicate that there is no point of compliance well between MW-16 and MW-19 that meets the definition of a point of compliance well as required in Title 27 regulations.

ITEM 11

Comment

MRP – Table 5

LF-1: BG-2 is listed as a background point, but this table is for corrective action monitoring points. As long as this is intended to show the background point for LF-1, and not that BG-2 is a corrective action monitoring point, that is OK.

Note that this states BG-2 is the background monitoring point for LF-1, but MRP Table 1 states it is MW-12. See comment for MRP – Table 1, above.

LF-1 & LF-2 (contiguous): The wells listed as corrective action wells are given as detection monitoring wells for LF-2 in Table 1. If these are corrective action wells for LF-1, then the requirement for a new monitoring well between LF-1 and LF-2 Cell 5 is unnecessary.

Response

BG-2 has been deleted as a groundwater monitoring well that is in corrective action. MW-12 is no longer listed as a background monitoring well in Table 1. A monitoring well can be in several monitoring programs simultaneously. It can be used as a detection monitoring well for new releases or a corrective action monitoring well used to determine the effectiveness of the corrective action program. Regarding LF-1 & LF-2 (contiguous) Finding 45 and 47 of the WDRs require the Discharger to monitor LF-1 and LF-2 separately especially since LF-1 is an unlined unit. Even though there are monitoring wells along the eastern edge of LF-2 that may serve as detection monitoring wells for LF-1 and LF-2 which can detect a release solely from LF-1 without ambiguity.

ITEM 12

Comment

MRP Section D Water Quality Protection Standard, Section 4

MRP Page 28 - Point of Compliance (POC): "The following are monitoring locations at the point of compliance:" None are listed.

Response

The sentence "The following are monitoring locations at the point of compliance:" was inadvertently repeated twice and is in error. The first instance has been deleted. The next sentence identifies the current landfill and surface impoundment points of compliance.

- 4. Point of Compliance (POC)**—For purposes of the WQPS, the POC of each WMU shall be the vertical surface located at the hydraulically down-gradient limit of the Unit that extends through the uppermost aquifer underlying the unit. Title 27 alternatively also allows for the Discharger to demonstrate that the Point of Compliance be located along the downgradient perimeter of contiguous units (or contiguous portions thereof) provided the requisite demonstration is made. It is anticipated that such demonstration will be made after expansion of LF-2 renders monitoring along the downgradient perimeter of LF-1 infeasible. ~~The following are monitoring locations at the point of compliance:~~

The following are the current landfill and surface impoundment points of compliance:

LF-1: MWs-9, -10, and -11.

- LF-2, Cell 1: DL-20A, -21A, and -22A; MWs-18, and -19.
- LF-2, Cell 2: DL-26, and -27; MW-14, and -18.
- LF-2, Cell 3: Pan lysimeter beneath Cell 3; MWs-14, and -18.
- LF-2, Cell 4: Pan lysimeter beneath Cell 4; MWs-14, and -18
- LF-2, Cell 5: Pan lysimeter beneath Cell 5; MWs-13, and -25
- LF-2, Cell 6: Pan lysimeter beneath Cell 6; MWs-26, 27S & 29
- LF-3, Cell 1: DL-1 through DL-13 inclusive, and MW-16.
- LF-3, Cell 2: DL-28, -29, and -30; MW-16.
- LF-3, Cell 3: Pan lysimeter beneath Cell 3; MWs-16, and -19.
- LF-3, Cell 4: Pan lysimeter beneath Cell 4; MWs-16, and -19.
- SI-1: Subdrain system beneath SI-1; and MW-19.
- SI-2: DL-23, -24, and -25; and MW-18.

The points of compliance for future LF-2, Cell 7 and LF-3, Cell 5 will be the cell pan lysimeter and their closest downgradient monitor wells. See WDR Attachments E and F.

ITEM 13

Comment

MRP Section D Water Quality Protection Standard, Section 5, a.

MRP Page 29 - Should Table 5 also be referenced for groundwater monitoring points?

Response

Monitoring Points for groundwater monitoring associated with landfill units and surface impoundments are listed in Tables 1 and 2. Monitoring points can be associated with different monitoring programs such as detection monitoring, evaluation monitoring, and corrective action programs. Table 5 identifies the monitoring points associated with the corrective action monitoring program. A monitoring point can be associated with several monitoring programs. A groundwater monitoring point can be simultaneously in detection monitoring for new releases and corrective action monitoring for an existing release. Therefore Table 5 does not need to be added to Section 5.a.

ITEM 14

Comment

MRP Section D Water Quality Protection Standard, Section 5, a.

MRP Page 28 – The due date for an updated WQPS report is currently set for 1 February 2022. Since this revision of the MRP took a year longer than anticipated, the County requests a 9-month extension on the report due date included in Section 2.c. to have adequate time to prepare the requested deliverables.

Response

The delivery date of the updated WQPS Report has been changed to 1 January 2023.