
Central Valley Regional Water Quality Control Board

26 September 2012

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REQUEST FOR AMENDED REPORT OF WASTE DISCHARGE (ROWD); FEATHER RIVER ORGANICS COMPOST FACILITY; WASTE DISCHARGE REQUIREMENTS ORDER R5-2003-0093 (WDR ORDER); RECOLOGY YUBA-SUTTER DISPOSAL, INC. (DISCHARGER); YUBA-SUTTER DISPOSAL, INC. LANDFILL (YSDI LANDFILL); YUBA COUNTY (COUNTY)

The Feather River Organics Compost Facility (FRO) is an unpermitted composting facility that is operating at the Yuba-Sutter Disposal Inc. (YSDI) landfill. The composting facility is currently unregulated with respect to Porter Cologne Water Quality Act (Ca Water Code §13260 et seq.). Previously the facility operated under Central Valley Water Board WDR Waiver Order #96-031, which expired on 1 January 2003 and has not been renewed.

In a 17 May 2012 letter the Discharger was requested to submit an updated Report of Waste Discharge (ROWD) that adequately describes *"specific detailed information on the composting facility and its impacts to surface and groundwater."*

The Discharger submitted an Engineering Feasibility Study (EFS Report) dated 29 June 2012. In the EFS Report §5.0 the Discharger provided the updated ROWD information. The EFS Report §5.4 referenced an 18 May 2001 Golder Associates Report (2001 Golder Report) addressing our concerns. However, the outdated 2001 Golder Report does not reflect current conditions at the site. Since the 2001 Golder Report the site has been cited with Notice of Violations (NOVs) for precipitation ponding on the landfill unit attributed to landfill settling. Therefore, the ROWD information submitted is inadequate in addressing our present concerns at the site.

For example, the EFS Report §1.7 stated that *"Overall, the changes in groundwater chemistry in the corrective action wells appear to be from two potential sources: leachate and/or landfill gas."* It concluded that *"Therefore, corrective actions should be directed toward reducing the potential of water entering the landfill."* The corrective action implies that the integrity of the closure cover over LF-1 WMU has been compromised. This conclusion includes evaluation of the closure

cover below the current composting operation. Yet, the EFS Report in §3.0 Recommended Corrective Actions does not discuss any corrective actions related to the composting operations. Therefore, the submitted ROWD information is inadequate in addressing groundwater quality impacts related to composting operations above LF-1 WMU.

The Discharger stated in a California Environmental Quality Act (CEQA) document (State Clearinghouse SCH# 2012042038) for Operational Modifications at the FRO that the composting facility would operate under a tentative statewide General Waste Discharge Requirements (WDR) Order NO. DWQ-2012-XXXX for the Discharge of Wastes at Compost Management Units that has been slated for future adoption. However, the tentative Statewide General WDR Order classifies the YSDI composting facility as a new Composting Management Unit (CMU). The tentative Statewide General WDR Order states in Finding 10.b.ii that a composting facility is considered a new CMU if it:

"began operating a CMU on or before the initial effective date of this Order, and for which the discharge of waste to land is not currently regulated by an order (i.e. a conditional waiver, individual or general WDRs that remain in effect), adopted by either the State Water Board or Regional Water Boards (collectively referred to as the Water Boards). This absence of an effective order includes, but is not limited to, those CMUs that were previously regulated pursuant to the requirements of a Conditional Waiver of Waste Discharge Requirements for Composting Operations (Green Waste Composting Waiver) adopted by a Regional Water Board prior to 1999 and that have continued to operate in accordance with that waiver, after it was rescinded, but for which the Regional Water Board has not adopted individual WDRs."

As a new CMU the Regional Board will not likely allow the Discharger to seek coverage under the tentative Statewide General WDR Order due to site specific water quality issues at YSDI. The LF-1 WMU is currently experiencing groundwater exceedences of its Water Quality Protection Standards (WQPS) for volatile organic compounds (VOCs), chloride and total dissolved solids (TDS). Furthermore, this General Order does not apply to the FRO since it does not address CMUs that are located directly above closed landfill WMUs.

Furthermore, Title 27 §20950(a)(2)(A)1 states that for closure of a WMU the following performance standard shall be used:

"for landfills and for waste piles and surface impoundments closed as landfills, the goal of closure, including but not limited to the installation of a final cover, is to minimize the infiltration of water into the waste, thereby minimizing the production of leachate and gas. For such Units, after closure, the final cover constitutes the Unit's principal waste containment feature."

Although LF-1 was closed prior to the revision of Ca Code Title 23, Chapter 3, Subchapter 15 Regulations on 27 November 1984, and one might argue that LF-1 is therefore not subject to current regulations, Title 27 §20950(a)1 states among other things that *"If a portion of a Unit was completely closed in accordance with an approved closure plan by November 27, 1984, the cover over the closed portion does not need to be modified to conform to the SWRCB's*

additional closure requirements in these regulations, unless monitoring data indicate impairment of beneficial uses of ground water." Currently, monitoring data around LF-1 indicates that ground water is being impacted by LF-1 as evidenced by corrective action that is currently underway to rectify those exceedences as documented in the EFS Report.

Therefore, our concern is that composting operations amongst other activities currently ongoing above the cover at LF-1 are not consistent with Best Practicable Treatment or Control (BPTC) measures typically used to maintain the integrity of the closure covers over the post-closure maintenance period. Regional Board staff considers the requirements specified in §Title 27 §21090(a)4 as minimum BPTC measures required to maintain the integrity of the closure cover over the post-closure maintenance period. Specifically, it is not clear how the Discharger will be able to effectively perform periodic leak searches as well as identifying and repairing breaches in the closure cover at LF-1 with composting operations, vehicle traffic and maintenance, and recycling operations occurring directly upon the closure cover.

Also composting operations amongst other activities currently ongoing above the cover at LF-1 are not consistent with BPTC measures used to control the discharge of liquids on a final cover. Regional Board staff considers the requirements specified in Title 27 §21090(a)5 as minimum BPTC measures. The BPTC for discharges of leachate to a cover in §21090(a)5(A) references BPTC measures in §20200(d)(3) which states that "*such discharge will not exceed the moisture holding capacity of the landfill, either initially or as a result of waste management operations, compaction, or settlement.*" The BPTC measure for closed unlined landfills is to prevent liquid from entering the WMU such that the moisture holding capacity of the waste is not exceeded otherwise resulting in leachate generation and flow through to underlying groundwater. It is unclear how the Discharger will satisfy BPTC measures when its composting operations add liquid to the composting piles which generates leachate above the closure cover. Also, during precipitation events the composting piles increase mean resident time of liquid above the closure cover which increases the amount of leachate that can infiltrate into the landfill. The EFS Report concludes that infiltration has exceeded the moisture holding capacity of the landfill causing leachate generation and groundwater contamination. The addition of liquid to the composting process violates the BPTC measure to minimize moisture content within a closed unlined WMU.

The Ca Water Code §13263 (b) states that "*a regional board, in prescribing requirements, need not authorize the utilization of the full waste assimilation capacities of the receiving waters.*" In order for the Regional Water Board to authorize degradation of receiving waters e.g. utilization of part/all of the assimilative capacity of the receiving water the Regional Board must comply with State Water Resources Control Board (State Water Board) Resolution No. 68-16 which is a statement of policy with respect to maintaining high quality of waters in California. The resolution states that:

"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to

assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained."

In complying with State Water Board Resolution No. 68-16 the Regional Board will apply BPTC measures to the permitting of the FRO composting facility. Furthermore, those BTPC measures are described in Title 27, the California Water Code, and the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins. The Discharger will have to show that it is implementing BPTC measures to maintain the highest quality waters at the site.

Finally, Regional Board staff is concerned that underlying groundwater at certain times of the year is encroaching upon minimum separation between landfill waste and underlying groundwater as specified in California Code of Regulations (CCR) siting requirements. There is concern that at times of high groundwater elevation, groundwater may be contacting the bottommost waste placed in YSDI's WMUs. This concern is greatest at LF-1 where it is an unlined WMU. WDR Order 89-091 Finding No. 9 for YSDI adopted 26 May 1989 allowed for an engineered alternative to the CCR Title 23 §2530 requirement of five (5) foot separation between waste and groundwater. The Discharger provided an addendum to the ROWD dated 3 April 1989 requesting that three feet of separation be allowed as the engineered alternative. Our current concern is that the addendum did not consider that leachate by definition is considered waste. Therefore only one foot of separation was designed between the highest anticipated groundwater elevation and waste placement. Depending on how the highest anticipated groundwater elevation was calculated, and the historical data available at the time, new information obtained through recent groundwater and surface water elevation monitoring may determine that further restriction to the amount of infiltration allowed through the closure cover may be required other than the BPTC measures found in regulations.

In summary, please provide the following information in report form under separate cover as an amendment to the June 2012 ROWD that was submitted to this office:

1. Detailed responses that we requested in our 17 May 2012 letter as it applies to current conditions at the YSDI site. The 2001 Golder Report is outdated and does not reflect current conditions at the site and is not accepted as addressing our concerns. The Discharger will have to perform a new survey of the site, its closure cover's current condition, current operations above the closure cover and their impacts to water quality (both surface and groundwater). The survey should include past site inspection results performed by CalRecycle/LEA summarizing the findings/violations to accurately depict the condition, operation, and maintenance of the closure cover;
2. Address the YSDI composting facility as a new Composting Management Unit (CMU) and how this new CMU as well as other activities occurring above LF-1 will be managed and operated to meet the BPTC measures found in Title 27 §20950(a)(2)(A)1, §21090(a)4, §21090(a)5, and State Water Board Resolution No. 68-16; and
3. Information that was used to determine the highest anticipated groundwater level below LF-1, LF-2, and LF-3 WMUs and how the highest anticipated groundwater level was calculated. Furthermore, a graphical map depicting the separation distance between the highest anticipated groundwater level relative to the bottommost location of the waste in each WMU using the definition of leachate as waste in the WMU. The analysis should

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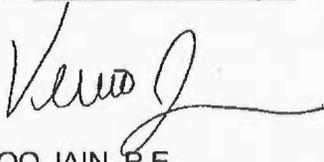
- 5 -

26 September 2012

consider groundwater elevation below the WMUs as if it was unconfined e.g. allowed to rise to its highest elevation due to permeability of underlying materials, gravel, sands, silts, and desiccated clay. The analysis should include influences from nearby surface waters e.g. rivers, streams, ponds, surface impoundments, and their seasonal elevation fluctuations.

Please submit an amendment to the June 2012 ROWD by **30 November 2012**. If more time is needed to provide the information requested by this letter please notify our office in writing no later than 21 October 2012.

If you have any questions, please call me at (916) 464-4815 or contact me via email at vkjain@waterboards.ca.gov.



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