



# California Regional Water Quality Control Board Central Valley Region

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12 May 2008

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### ***RESPONSE TO COMMENTS ON TENTATIVE WASTE DISCHARGE REQUIREMENTS, FINK ROAD LANDFILL, STANISLAUS COUNTY***

We have reviewed the 2 May 2008 letter from the Stanislaus County Department of Environmental Resources (County) with comments and recommendations on the tentative Waste Discharge Requirements (WDRs) for the Fink Road Landfill. Below, we have addressed each of the County's eleven recommendations. Most of the County's comments address requirements written by our compliance and enforcement staff who has also provided the corresponding responses.

Comment #1 on WDRs, Findings, No. 7: "Recommendation: If the Order will contain additional requirements for studies and reports not included in the current WDRs, then that intent should be stated in this paragraph."

Response: Staff agrees with the recommendation for Finding No. 7. Staff has revised the Finding as follows:

The County submitted a 17 October 2007 request, and a subsequent 21 February 2008 Report of Waste Discharge, for an amendment of the WDRs to discharge treated wood waste in LF-2. This is currently allowed in lined Class III landfills, as described in Section 25150.8 of the Health and Safety Code and Section 67386.11 of Title 22, CCR. This Order revises the WDRs to allow the disposal of treated wood waste in composite-lined Cell 4 of LF-2, and future Cells 5, 6, and 7 of LF-2. In addition, this Order requires that the County perform a Site Investigation into the cause of elevated concentrations of inorganic and organic constituents of concern in groundwater, as described further in later Findings of this Order. Based on the results of the Site Investigation, the County is required to submit a revised Water Quality Protection Standards report, Feasibility Study, and Corrective Action Plan.

Comment #2 on WDRs, Findings, No. 4: "Recommendation: Remove all references to Ogden Martin Systems of Stanislaus (OMSS) and Covanta Energy and replace with "Covanta Stanislaus, Inc."

Response: Staff has removed all references to Ogden Martin Systems of Stanislaus (OMSS) and Covanta Energy; and replaced those references with "Covanta Stanislaus, Inc." or "Covanta plant."

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*California Environmental Protection Agency*

Comment #3 on WDRs, Findings, No. 39, Groundwater Monitoring: "Recommendation: The facts stated in paragraph 39 are correct and should remain. However, it is recommended that the language stating that the RWQCB has rejected the intrawell approach justification and a new Water Quality Protection Standard Report is required, should be removed. Instead, it is recommended that this paragraph state that intrawell concentration limits have been proposed and the Discharger and RWQCB will work together to resolve outstanding questions on this approach."

Response: Finding No. 39 has been revised as follows:

The Discharger submitted a 15 March 2007 *Water Quality Protection Standard Report*. As required, the report proposed concentration limits for constituents of concern in groundwater. The report proposed intrawell concentration limits where each detection monitoring well serves as its own background well. Regional Water Board staff issued a 6 December 2007 letter commenting on the report. The letter stated that staff does not concur with the proposed concentration limits due to several wells with upward trending, impacted, or erratic data. On 29 February 2008, the Discharger submitted additional information to justify the proposed concentration limits. Review of the report by our compliance and enforcement staff indicates that the proposed concentration limits are still based on upward trending, impacted, or erratic data. The proposed Order therefore requires additional technical data and the inclusion of groundwater data from the Site Investigation. It also includes a time schedule to submit a revised/updated Water Quality Protection Standard Report with proposed Concentration Limits that are based on background data from a data set or data sets that are representative of unimpacted groundwater conditions following the Site Investigation for LF-3.

Comment #4 on WDRs, Findings, No. 42, Groundwater Monitoring: "This paragraph states that ""the Discharger did not install a pan lysimeter or other unsaturated zone monitoring system at LF-3 Cell 3."" This statement is incorrect. Lysimeter LF3C3P (primary) and LF3C3S (secondary) were installed and are shown on Attachment B to the Tentative Order. Recommendation: Delete this paragraph or amend to a general statement of the requirement."

Response: Historically, the County has reported that liquids are pumped from LF3C3P and LF3C3S. For example, 107,468 gallons has been pumped from LF3C3P through April 2007. If LF3C3P and LF3C3S are lysimeters, then the presence of liquids is evidence of a release, and the County must follow the reporting and corrective action requirements for evidence of a release.

However, staff does not agree that sample points LF3C3P and/or LF3C3S represent the lysimeters in a vadose zone monitoring system. Sample point LF3C3P is installed into the primary leachate collection and recovery system (LCRS), and sample point LF3C3S is installed into the secondary LCRS. These sample points are not associated with a pan lysimeter. Instead, both sample points are associated with the double composite liner system, as described in WDRs R5-2004-0158 Section F.2.a as follows:

The liner of LF-3, Cell 3 and all new LF-3 cells shall be constructed as an engineered alternative with the following composite liner design: An engineered alternative

composite base liner system that is comprised of two composite liners separated by an LCRS. This double composite liner system shall also be overlain by a second LCRS and a 15-inch operations layer.

Moreover, the double composite liner system is not a replacement for a vadose zone monitoring system. Therefore, the two samples points associated with the double composite liner do not satisfy the requirements for vadose zone monitoring system as required by WDRs Findings No. 29 and Title 27 Section 20415.(d)(2)(B) for a vadose zone monitoring system.

Comment #5 on WDRs, Findings, No. 45 and 46, Groundwater Monitoring:

"Recommendation: Paragraph 45 should acknowledge that while there were two detections of MTBE in 2006, it has not been detected since. Paragraph 46 should be revised to remove the reference to MTBE and the requirement that either the source be identified, or the lateral and vertical extent be defined, for MTBE. It is not possible to identify the source of MTBE if it is not present nor is it possible to define the lateral and vertical extent of something that does not currently exist."

Response: Staff's research of electronic analytical data and the First Quarter 2007 Monitoring Report reveals that MTBE has been historically detected at the facility from 1995 to 2006. The County's 2006-2008 electronic data was not available for review. Based on the available data, the following sampling locations have shown concentrations of MTBE in landfill gas, leachate, and/or groundwater:

1. In 1995, the sump at Surface Impoundment 2 (sample location SI-2SUMP) had an MTBE concentration of 35 ug/L.
2. In 2003, a gas sample location at Landfill 1 (GP-2D) had an MTBE concentration of 3.8 ppbv.
3. In 2005, landfill gas monitoring locations GP-2D and GP-3D (detected in January, May, and July) had MTBE concentrations of 1.1, 5.8, 1.3, and 5.1 ppbv, respectively.
4. In 2005, the lysimeter BL-04 (at Landfill 1) had an MTBE concentration of 0.43 ug/L.
5. In 2005, a sump at Landfill 2, location LF-2CSDIS, had an MTBE concentration of 110 ug/L.
6. In 2006, landfill gas well GP-3D had a concentration of 3.3 ppbv.
7. In 2006, a sump at Landfill 2 (location LF-2C3SUMP) had a concentration of 180 ug/L.
8. In 2006, MW-17 (south of Landfill 3 Cell 3) had confirmed trace concentrations ranging from 0.19 to 0.55 ug/L.
9. In the first quarter of 2007, MTBE was detected at an estimated concentration of 0.17 ug/L at MW-17. A trace concentration (0.14J) was also detected at MW-21, but was not confirmed. MTBE was detected at LF2-C3 at a concentration of 5.2 ug/L and at LF2-C4 at a concentration of 190 ug/L.

Based on the historical concentrations of MTBE throughout the facility (i.e., Landfill 1, Landfill 2, and Landfill 3), the tentative Order requires that the Site Investigation include the sampling and analysis for MTBE. Therefore, Findings 45 and 46 will remain unchanged.

Comment #6 on WDRs, Provisions, Section H.14: "Recommendation: It is recommended that any reference to MTBE and determination of the source of MTBE removed. It is not possible to determine the source of something that is no longer present. It is also recommended that the specific references to new monitoring wells and locations be removed as these may not be

the best locations to determine the cause of inorganic increases. It is recommended that reference to Evaluation Monitoring Report, Engineering Feasibility Study and Corrective Action Plan be removed as these will not be required if it is demonstrated that natural groundwater variability, not a release from the landfill, is the cause of the increases."

Response: Due to the historic, current, and persistent detections of MTBE throughout the facility, the Site Investigation must include sampling and analysis for MTBE. In their Site Investigation Work Plan, the County may propose locations for new groundwater monitoring wells. Moreover, these new groundwater monitoring wells must be located to determine if off-site facilities, such as the livestock watering area, are a source of MTBE. Thus, sampling these new wells for MTBE will be used to evaluate if MTBE is coming from an off-site source, such as the livestock watering area.

Upon review of the Site Investigation Report, staff may then reevaluate the requirements for submittal of an Evaluation Monitoring Report, Engineering Feasibility Study, and Corrective Action Plan.

Comment #7 on WDRS, Provisions, Section H.15.A: "Recommendation: Remove requirements related to MTBE and remove specific well location requirements."

Response: Due to the persistent detections of MTBE throughout the facility, the Site Investigation must include sampling and analysis for MTBE. In addition, the County may propose locations for new groundwater monitoring wells in their Site Investigation Work Plan.

Comment #8 on WDRs, Provisions, Section H.15.B: "Recommendation: It is recommended that the deadline be removed and that the Discharger provide quarterly updates to RWQCB, to be included in the quarterly and annual monitoring reports, until such time that the cause can be documented. At that time, all data will be reported in the Site Assessment Report. For reasons already discussed, reference to determining the source of MTBE should also be removed."

Response: Staff encourages the County to propose a date and schedule for submittal of the Site Investigation report. However, staff does not concur with piecemeal submittals of Site Investigation data via the quarterly/annual reports. In addition, staff does not concur with the possible submittal of a Site Assessment report at an undetermined date if the County establishes a cause for a release. Therefore, the Site Investigation data must be submitted to staff in whole, for evaluation and review as a complete document and with a comprehensive set of data, results, and recommendations.

Comment #9 on WDRs, Provisions, Section H.15.C: "Recommendation: Remove this requirement or state that the Discharger will submit these reports within 60 days of completion of the Site Assessment Report, if it is determined that the cause of the inorganic increases is a release from the landfill."

Response: Staff encourages the County to propose a date and schedule for submittal of the Feasibility Study and Corrective Action Plan. However, Regional Water Board staff does not concur with the County's recommendations that the Discharger would solely determine the need for a Site Assessment Report, Feasibility Study, and Corrective Action Plan. In this

regard, Title 27 gives the Regional Water Board the authority to make an independent decision what further work is necessary; this would include requiring the submittal of plans, reports, and corrective action.

Comment #10 on WDRs, Section H, Provisions, Paragraph 16: "Recommendation: Remove this requirement. If necessary, state that the County and RWQCB will continue discussions to determine the best statistical approach for this facility and modify, as appropriate, the existing WQPS Report already submitted."

Response: Staff agrees that the existing WQPS Report could be modified and resubmitted after the results of the Site Investigation have been submitted. In addition, staff encourages the County to propose a date for submittal of the revised WQPS Report.

Comment #11 on MRP, Section D.4, Surface Water Monitoring: "Recommendations: remove references to S-3 as a surface water monitoring location."

Response: Staff agrees with the County's recommendation and has removed S-3 from the MRP. The County stated that they reconfigured the surface water drainage system, and the location of SW-3 is now part of the drainage to a surface impoundment.

Thank you for your review and comments on the tentative WDRs. A revised version of the tentative WDRs will be placed on the Board agenda for the 12/13 June 2008 Board meeting on 19 May 2008. Should the County want to have additional input, such as changes to the dates in the compliance schedule in the WDRs, this should be proposed as soon as possible. Should you have questions, please contact Mary Boyd at (916) 464-4676 for questions related to groundwater investigation and corrective action, or me at (916) 464-4622 for general permitting questions.

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