

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2011-0065

SPECIAL ORDER
FOR
CHEMICAL WASTE MANAGEMENT, INC.
KETTLEMAN HILLS FACILITY, KINGS COUNTY
MODIFYING WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2006-0122

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board or Board) finds that:

1. Chemical Waste Management, Inc. (CWMI) owns and operates the Kettleman Hills waste disposal facility in Kings County. The presently authorized waste management area includes 499 acres of a 1,600 acre parcel extending across Section 34, T22S, R18E, and across Section 3, T23S, R18E, MDB&M. Land in the vicinity of the property is used for oil and gas production and a limited amount of cattle grazing.
2. Wastes are discharged into hazardous Class I waste management units (WMUs), and non-hazardous solid waste Class II/III WMUs. Non-hazardous Class II/III WMUs B-17 and B-19 are regulated by Waste Discharge Requirements (WDRs) Order No. R5-2006-0122.
3. Landfill WMU B-19 was constructed with approved liner and leachate collection systems that exceed Title 27 prescriptive standards for Class II and III containment, in accordance with State and Federal regulations. The bioreactor portion of WMU B-19 was subsequently filled with solid waste and prepared for the introduction of supplemental liquids and monitoring.
4. In 2004, the United States Environmental Protection Agency added section 258.4 to the federal municipal solid waste regulation requirements, for the purpose of developing and demonstrating advanced landfill operation methods, such as bioreactors, as long as specific conditions are met. The section allows an approved state to issue research, development and demonstration (RD&D) permits allowing the addition of supplemental liquids into municipal solid waste landfills. Permits cannot exceed three years unless renewed, and each renewal may not exceed three years for a total project term of twelve years.
5. State Water Resources Control Board Resolution 93-62, *Policy for Regulation of Discharges of Municipal Solid Waste* describes the regulation of discharges of municipal solid waste to landfills in California. Resolution 93-62 was modified in 2005 to allow the State to permit RD&D project (bioreactors) landfills in accordance with 40 CFR 258.4, within appropriately constructed municipal solid waste landfills through the issuance of waste discharge requirements.
6. On 19 October 2007, the United States Environmental Protection Agency Region IX (USEPA) issued the final determination, *Adequacy of California Municipal Solid Waste Landfill Permit Program*. The ruling authorizes the State of California to issue time-limited

permits of RD&D projects that includes the introduction of supplemental non-hazardous liquids into a landfill to promote the biodegradation of municipal solid waste.

7. In part, WDRs Order No. R5-2006-0122 regulates the operation and monitoring of an 18.23-acre portion of Class II/III WMU B-19 as an anaerobic bioreactor research development and demonstration (RD&D) project. Operation as a bioreactor includes the introduction of non-hazardous liquids to the municipal solid waste landfill to accelerate the process of waste decomposition, resulting in more rapid waste settlement, thereby increasing the disposal capacity of the landfill and ultimately resulting in the need for fewer landfills. More rapid decomposition causes more rapid gas generation, where the gas can be collected and used beneficially as an energy source. Environmental risks and potential impacts are reduced at closure since the waste mass is stabilized and gas emissions are greatly reduced. Leachate is collected and reintroduced into the unit or removed to the Class I surface impoundments, as needed.
8. CWMI notified the Central Valley Regional Water Quality Control Board staff on 15 September 2008 of the first addition of liquids into the WMU to initiate the bioreactor process. The bioreactor portion of WMU-B-19 continues to be operated and monitored as a RD&D bioreactor project, regulated by Order No. R5-2006-0122.
9. Prohibition A.6 in the WDRs specifies that the bioreactor project can only be operated in three-year periods from the date of first addition of supplemental liquids, and not to exceed a total of 12 years. The first three-year period ends 15 September 2011. Revision of the Order by the Board, can allow for the continued addition of liquids to the bioreactor project for an additional three year period.

PROCEDURAL REQUIREMENTS

10. The Central Valley Water Board notified CWMI and interested agencies and persons of its intent to modify the WDRs, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the modification of WDRs Order No. R5-2006-0122.
12. The action is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), in accordance with Title 14, California Code of Regulations, Section 15301.
13. Any person aggrieved by this action of the Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, Sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state

holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that the requirements of Order No. R5-2006-0122 are modified as follows:

Prohibition A.6 shall be modified to read as follows:

The operation of and the addition of non-hazardous liquids into the RD&D bioreactor portion of landfill WMU B-19 after 15 September 2014, without the Regional Water Board revising this Order following a request from CWMI to continue with operation and liquid addition for another three year period.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the Central Valley Regional Water Quality Control Board, on 13 September 2011.

Original signed by Ken Landau for

PAMELA C. CREEDON, Executive Officer