



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by JMM Date 6/12/09
General Manager

DATE: June 11, 2009
TO: General Manager
FROM: Senior Engineer
SUBJECT: LEA Approval Letter for Landfill Gas Monitoring Probe Installation

FOR INFORMATION ONLY

STATE LANDFILL GAS MONITORING REGULATIONS

The California Code of Regulations, Title 27 (27 CCR) Section 20919.5 requires owners or operators of all municipal solid waste landfill units to implement routine landfill gas (LFG) migration monitoring programs to ensure that concentrations of methane do not exceed (at any depth) 25% of the lower explosive limit (LEL), or 1.25% by volume, in facility structures, or 100% of the LEL, or 5% by volume, at the facility property boundary.

In September of 2007, the California Integrated Waste Management Board (CIWMB) promulgated a revised set of LFG regulations for gas monitoring and control at active and closed disposal sites. These new regulations created more stringent requirements for LFG monitoring at active landfills. All California active landfills were required to comply with a full set of new LFG monitoring regulations by September 20, 2008. These requirements include elements for probe spacing, depths, construction details, location, monitoring, and criteria for alternatives and exemptions.

LEA APPROVAL OF DISTRICT'S LFG MONITORING SYSTEM

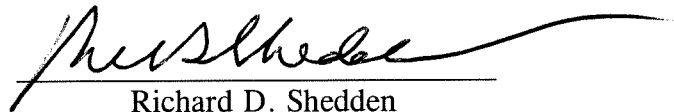
In order to comply fully with the original 27 CCR Article 6 compliance date of September 20, 2008, the District proceeded to construct the new LFG monitoring system, including 13 new LFG monitoring wells, between July 30th and August 22, 2008. The cost to install the new LFG monitoring system was approximately \$100,000. The District subsequently submitted a report (dated April 3, 2009) entitled "Revised Landfill Gas Monitoring Program Plan" to the Monterey County Environmental Health Department, the local enforcement agency (LEA) for the State, and CIWMB for parallel review and approval.

The LEA has approved the LFG Migration Monitoring Program Plan and existing monitoring probe network (see attached letter dated June 4, 2009). The LEA accepted the following alternatives to the prescriptive standards of 27 CCR, to accommodate site-specific characteristics:

- Approval of an alternative LFG monitoring compliance boundary to avoid encircling a large area of future module development (exclusion of the southwest area of the future landfill, where composting operations are currently being conducted).
- Approval of the four inter-well spacings that exceed 1,000 feet.
- Approval of the seven wells that do not reach the base of waste elevation.
- Approval of an alternative probe construction for Well GP-11, eliminating the intermediate probe depth.

The only issue remaining is to provide conclusive evidence that the Salinas River provides a continuous and permanent hydraulic barrier to LFG migration along the northern facility boundary. Staff believes that the existing data will easily provide this conclusive evidence, and we are preparing a report for submittal to the regulators. Of course, CIWMB staff has to concur with the LEA's conclusions before final approval will be granted.

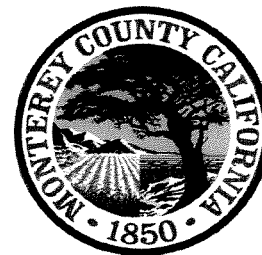
Staff believes that the installed LFG monitoring well network at the Monterey Peninsula Landfill, with the site-specific alternatives (alternative LFG monitoring well spacings, depths, probe levels and compliance boundaries), is in compliance with the intent of the revised 27 CCR Article 6 requirements as applied to active landfills; will detect the presence of LFG migrating beyond the facility boundary or into on-site structures; and will protect public health and safety and the environment.



Richard D. Shedden

Attachment

MONTEREY COUNTY



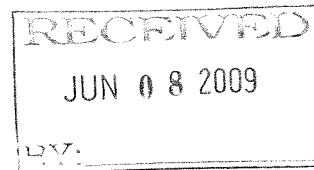
DEPARTMENT OF HEALTH LEN FOSTER, Director

ADMINISTRATION
ANIMAL SERVICES
BEHAVIORAL HEALTH

CLINIC SERVICES
COMMUNITY HEALTH
EMERGENCY MEDICAL SERVICES

ENVIRONMENTAL HEALTH
OFFICE OF THE HEALTH OFFICER
PUBLIC ADMINISTRATOR/PUBLIC GUARDIAN

June 4, 2009



William Merry
Monterey Regional Waste Management District
P.O. Box 1670
Marina, CA 93933-1670

**RE: Proposed Landfill Gas Monitoring System,
Monterey Regional Waste Management District, SWIS 27-AA-0010**

Dear Mr. Merry:

The County of Monterey, Solid Waste Local Enforcement Agency (LEA) has reviewed the proposed landfill gas monitoring system plans received on April 6, 2009 for the Monterey Regional Waste Management District (MRWMD) at 14201 Del Monte Boulevard in Marina, CA. The plans included a Landfill Gas Monitoring Probe Installation Report (September 2008, Vector Engineering) and a LFG Monitoring Program Plan document (April 2009, Golder Associates, Inc.). In response to this submittal, the LEA has the following comments:

1. As discussed during the on-site meeting between the LEA, CIWMB, and MRWMD on May 15, 2009, additional information must be provided in order to demonstrate that a continuous hydrogeologic barrier exists along the northern facility boundary. Wells GP-1 and GP-13 through GP-16 may only be considered supplemental if it can be conclusively proven that a permanent barrier to landfill gas migration exists in this area. This would include but is not limited to historical information demonstrating that groundwater does not drop below the level of the river bottom, preventing any gaps where landfill gas could migrate. In addition, this information should demonstrate a permanent barrier along the entire 5,900 foot span of the northern border, as both the level of the river bottom and/or groundwater may fluctuate.
2. Based on data in the provided plans, the LEA accepts the following variations to 27 CCR for the compliance probes at this site:
 - a. The interim LFG well location (GP-6), which excludes the southwestern area until site operations expand.
 - b. The four inter well spacings that exceed 1000 feet.
 - c. The seven existing wells that do not reach the base of waste elevation.
 - d. Well GP-11, which does not contain an intermediate probe depth.

Please note that these variations will not be considered final until they have been concurred with by the CIWMB.

Letter to Mr. Merry

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In addition, as per 27 CCR 20921 (b)(3)(A)(ii), all approved gas monitoring and control programs must be fully implemented by October 18, 2009. Due to this requirement, please respond to comments made on this proposal by the LEA and CIWMB as soon as possible.

If you have any questions, please contact me at (831) 755-8977, or TerrasasTJ@co.monterey.ca.us.

Sincerely,



Ted J. Terrasas, REHS
Senior Environmental Health Specialist

C: Nevin Yeates, CIWMB
Jacques Graber, CIWMB
Rick Shedden, MRWMD