

**RESPONSE TO COMMENTS**  
**File No. PDC08-042**  
**Letter From California Integrated Waste**  
**Management Board**

**Comment A-1: Risk of Upset Conditions**

The project proposes some grading of cover soils during landfill closure activities and for the development of the resource recovery area and building structures (relocated and new) at the ZRRROL facility. The proposed project's location on top of the ZRLF's 'footprint' has the potential to create a pathway for landfill gas (LFG) to migrate and collect in low-lying pockets of the excavation area and within project site enclosures (e.g., buildings, truck cabs, open-ended pipes, etc.). Methane in LFG has the potential to concentrate within pockets and enclosures within the explosive range of 5-15% methane in air. The presence of methane gas at this low concentration may not be detectable by smell because methane alone has no odor. This statement is not to be misconstrued as a confirmation that LFG has been, or will be detected at the ZRLF to date, however, the landfill does contain some organic materials (e.g. wood waste) that can decompose and generate LFG, especially the organic wastes that are saturated with water due to the landfill's proximity to the groundwater. Board staff highly recommend that the contractor for the proposed project take precautionary measures and have a contingency plan, and appropriate equipment, and trained personnel for monitoring methane gas, as well as measures to contain methane gas migration if detected.

**Response A-1:** As documented in the *Zanker Road Resource Recovery Operation and Landfill PD Rezoning Initial Study*, the landfill does not accept putrescible materials, such as food waste.

Because of the unusual setting of the landfill and nature of its waste stream and operations, the ZRRROL site was granted a variance from routine perimeter landfill gas migration monitoring provided that "occasional" barhole monitoring is conducted around the landfill perimeter to ensure that the site is not creating a hazard or nuisance due to landfill gas. Results of this occasional monitoring are provided to the LEA, the CIWMB, and the BAAQMD.

As documented in the *Zanker Road Resource Management, Inc, Preliminary Closure and Postclosure Maintenance Plan, Zanker Road Class III Landfill*, Zanker Road Resource Management (ZRRM) has installed gas detection alarms in each of the three enclosed structures on the site: the scalehouse, the office trailer, and the employee trailer. These gas detection alarms will remain as long as these structures are in place at the landfill.

The occasional monitoring at the ZRRROL will continue through closure and postclosure periods. Monitoring will occur at least every three years during the postclosure period, and will be discontinued only after a minimum of 30 years and documentation that the landfill no longer poses a threat to public health and safety nor the environment. It should be noted that high groundwater levels and the nature of surrounding land uses

might interfere with barhole monitoring procedures. If difficulties are experienced in the implementation of the monitoring, ZRRM will bring it to the attention of the LEA and CIWMB and work with these agencies to establish alternative monitoring procedures to ensure that the landfill is not posing a hazard.

A condition of approval will be added requiring that contractors working at the site be notified of possible hazards. Contractors will be required to provide monitoring equipment, proper employee training, and preparation of contingency plans, as appropriate.

**Comment A-2:** The local enforcement agency (LEA) for the City of San José should be notified if grading activities expose disposed refuse. In the event that methane gas is detected in the project area, or grading activities expose disposed refuse, the local enforcement agency (LEA) for the City of San José should be notified immediately.

**Response A-2:** A condition of approval will be added requiring notification of the LEA if grading activities expose refuse that could be a source of odor and landfill gas, or if methane gas is detected in the area during monitoring or other activities.

### **Comment A-3: ZRRROL Operations, Location, Construction and Monitoring**

Please be aware of the following regulations which apply to the postclosure land use on top of the ZRLF 'footprint':

#### Title 27, California Code of Regulations, Section 21190 - **Postclosure Land Use**

(a) Proposed postclosure land uses shall be designed and maintained to:

(3) prevent landfill gas explosions.

(g) All on site construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed in accordance with the following, or in accordance with an equivalent design which will prevent gas migration into the building, unless an exemption has been issued:

(1) a geomembrance or equivalent system with low permeability to landfill gas shall be installed between the concrete floor slab of the building and subgrade;

(2) a permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches shall be installed between the geomembrance and the subgrade or slab;

(3) a geotextile filter shall be utilized to prevent the introduction of fines into the permeable layer;

(4) perforated venting pipes shall be installed within the permeable layer, and shall be designed to operate without clogging;

(5) the venting pipe shall be constructed with the ability to be connected to an induced draft exhaust system;

(6) automatic methane gas sensors shall be installed within the permeable gas layer, and inside the building to trigger an audible alarm when methane gas concentrations are detected; and

(7) periodic methane gas monitoring shall be conducted inside all buildings and underground utilities in accordance with Article 6, of Subchapter 4 of this chapter (section 20920 et seq.).

Please contact Scott Walker of the cleanup Branch, within the Board's Waste Compliance and Mitigation Program, at (916) 341-6319, or e-mail Mr. Walker at [swalker@ciwmb.ca.gov](mailto:swalker@ciwmb.ca.gov) for technical assistance.

**Response A-3:** The project is subject to the requirements of Title 27 of the California Code of Regulations, including requirements for postclosure land uses and landfill maintenance. The applicant is aware of and familiar with these regulations. Operations at the site will be periodically reviewed by the LEA to assure compliance with Title 27 requirements.