

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION PERMIT APPLICATION EVALUATION AND CALCULATIONS	PAGES 3	PAGE 1
	APPL. NO 492334, 509109	DATE 11/15/2012
	PROCESSED BY GCR	CHECKED BY AD

PERMIT TO CONSTRUCT

(Alteration/Modification to LFG Collection, F15049/A/N 339266)

APPLICANT'S NAME: ORANGE CO., WASTE & RECYCLING, FRB

MAILING ADDRESS: 300 NORTH FLOWER STREET, SUITE 400
SANTA ANA, CA 92703-5000

EQUIPMENT ADDRESS: 11002 Bee Canyon Access Road
(Frank R. Bowerman Landfill)
Irvine, CA 92602

FACILITY ID.: 69646

EQUIPMENT DESCRIPTION: See Sample Permit

CONDITIONS: See Sample Permit

BACKGROUND:

On November 11, 2008, OC Waste & Recycling-FRB (previously Orange County IWMD, FRB) submitted this A/N 492334 for a modification to an existing landfill gas (LFG) collection system permitted under PO F15049/A/N 339266. Facility proposes to install new horizontal and vertical wells for future expansion of the landfill operations and to achieve compliance with Rule 1150.1/WWW/AAAA.

This is a Title V facility. Initial Title V Facility Permit was issued on April 26, 2004. Title V revision (No. 1) was issued on April 23, 2008.

A/N 491773 was filed for Title V Renewal (TV permit expiration date- 4/27/2009) to include this proposed modification to the LFG collection system. On 3/19/10, A/N 509109 was filed for this revision. The TV Permit was renewed on October 6, 2011.

PROCESS DESCRIPTION:

Frank R. Bowerman landfill is an active landfill site. The facility has proposed for modification to the existing LFG collection system (F15049) for future expansion of the LFG system to install new vertical and horizontal LFG collectors (wells), in various parts of the landfill. The proposed wells will be installed on a as needed basis. Collected LFG will be directed to the combustion or processing facility/equipment, which is in full use and can adequately process the volume of LFG, and has been issued a valid permit from the SCAQMD. Based on current information, the landfill will close in 2053.

For this modification application, based on communications with and E-mail correspondences with OC Waste and Recycling staff, the equipment description is revised as necessary to reflect current and future wells configurations. Please note that wells installed in past that have been abandoned, damaged, non repairable and non productive have been removed from the equipment description.

Emissions:

Construction/installation of proposed new wells and horizontal gas collectors is a construction activity with associated dust emissions as well as exposure of trash to the atmosphere with trash-decomposition associated gases. Once construction/installation of wells or groups of wells are completed they are either capped or connected to conveyance piping

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and landfill gases are directed to the combustion or processing facility/equipment, which is permitted and in full use and can adequately process the volume of LFG.

For AEIS and NSR purposes, R1 = R2 = 0.

RULES EVALUATION

CEQA: The proposed project is categorically exempt (Class 1, Section 15301) from provisions of CEQA. See copy of Notice of Exemption in folder (Filed on October 23, 2008).

Rule 401: With proper operation, monitoring and maintenance of equipment, compliance is expected.

Rule 402: With proper operation, monitoring and maintenance of equipment, compliance is expected.

Rule 1150: Excavation associated with the construction/installation of the collection system is exempt per (c)(2). Conditions relating to minimizing releases are included in the permit.

Rule 1150.1: (d) (1) - Applicant has submitted a design plan prepared by a professional engineer.

(d) (1) A – Applicant has used US EPA Landfill Gas Emissions model for estimation of existing and potential landfill gas generation rate in lieu of IPCC model as required. Since LandGEM gas generation is more conservative than IPCC (higher gas generation rate) and is required under 40 CFR Part 60 subpart WWW, it can be accepted as a substitute to IPCC.

(d) (1) A – Based on landfill gas generation rate (13,748 scfm - estimated gas generation in –Year 2028) and permitted combustion capacity (19,630 scfm), this facility can provide adequate gas collection and control of landfill gas.

(d) (2) – d (20) – Compliance is expected.

A review of the third and fourth quarter 2011 reports and the first and second quarter 2012 reports indicate that the owner/operator is performing all required monitoring and that Rule 1150.1 requirements were met.

Regulation 13: No increase in emission from permitted equipment is expected from the proposed modifications.

Regulation 14: No increase in emission from permitted equipment is expected from the proposed modifications.

NSPS: 40 CFR 60 subpart WWW. The site is subject to this regulation and compliance is expected with all requirements including the following:

- A gas collection and control system (GCCS) design plan prepared by a professional engineer has been submitted and meets the design requirements of paragraph §60.752 (b)(2)(ii) and the specifications for active collection systems in §60.759.
- The collection system is designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended useful period of the gas control or treatment system equipment.
- The collection system collects gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed.
- The collection system is operated with negative pressure at each wellhead except under the certain conditions.

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- Each interior wellhead in the collection system operate with a landfill gas temperature less than 55 degrees C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent.
- The control or treatment system will be operated at all times when the collected gas is routed to the system.

NESHAP: 40 CFR 60 subpart AAAA – The site is subject to this regulation and compliance is expected with all requirements including the following:

- § 63.1955, Compliance with the requirements of 40 CFR part 60, subpart WWW.
- § 63.1960, Testing and Monitoring per WWW will be performed, and a written SSM plan was developed according to the provisions in 40 CFR 63.6(e)(3).
- § 63.1980, Records and reports as specified in 40 CFR part 60, subpart WWW will be kept.

Reg. XXX: Application 509109 was submitted for Title V permit revision (No. 3) on 03/19/2010 to incorporate modifications to an existing LFG collection system permitted under PO F15049/A/N 339266.

This revision is considered a “de minimus revision”, as construction/installation of proposed new wells and horizontal gas collectors is a construction activity with associated dust emissions as well as exposure of trash to the atmosphere with trash-decomposition associated gases. Once construction/installation of wells or groups of wells are completed they are either capped or connected to conveyance piping and landfill gases are directed to the combustion or processing facility/equipment, which is permitted and in full use and can adequately process the volume of LFG.

The facility has had no Notices to Comply or Notices of Violation in the past two years.

Public notice is not required for this minor permit revision; however, it is subject to EPA 45-day review and comment period.

RECOMMENDATIONS:

Permit to Construct is recommended as shown above. Issue the revised Title V permit (Revision 03) upon completion of 45-day EPA review and commenting period.