

ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

**RULE 1150.1 -- CONTROL OF GASEOUS EMISSIONS
FROM ACTIVE LANDFILLS**

(Adopted: 04/05/85)

(a) Summary

The purpose of this rule is to reduce gaseous emissions from active landfills to prevent public nuisance and possible detriment to public health caused by exposure to such emissions. The rule requires in an active landfill, a landfill gas control system approved by the Executive Officer.

The rule requires installation of the landfill gas control system sufficient to draw landfill gas toward the gas collection devices without overdraw that would adversely affect the system. Sample probes shall be installed at the perimeter of the landfill to monitor off-site migration. Sufficient landfill gas shall be collected to prevent the average concentration of total organic compounds over a certain area on the surface of the landfill from exceeding 50 ppm. The concentration of organic compounds and any toxic air contaminants shall be determined when the landfill gas control system commences operation and periodically thereafter. Air samples at the perimeter of the landfill shall be analyzed to determine off-site migration. Results of such determination shall be reported to the Executive Officer on a quarterly basis. The maximum concentration of organic compounds as methane, measured at any point on the surface of the landfill, shall not exceed 500 ppm.

The rule requires determination of efficiencies of the disposal system of the collected landfill gas. Such efficiencies shall be measured when the landfill gas control system commences operation and periodically thereafter. Mitigation measures shall be implemented as necessary during installation of the system to ensure no public nuisance. Mitigation measures and all methods of measurements and evaluations are to be approved by the Executive Officer.

A compliance schedule is provided as a guide to achieve compliance by January 1, 1989. The owner/operator shall apply for a permit to construct and a permit to operate any expansion or modification to the landfill gas control system not covered by the approved plan, prior to beginning the expansion or modification.

All active landfills, except those described in paragraph (g) of this rule, require a gas control system. Any exemption from the requirement shall be reviewed periodically.

(b) Definitions

For purposes of this rule, the following definitions shall apply:

- (1) Landfill is a site used for the final land disposal of waste in accordance with applicable waste management plans and policies, in which refuse is spread, compacted, and covered with earth, and where the organic portion of such waste is subject to natural processes of aerobic and anaerobic decomposition.
- (2) An Active Landfill is a landfill that is currently receiving or has been receiving waste on or after January 1, 1982. This includes all portions of the landfill where waste is being deposited or has been deposited.
- (3) Landfill Gas is any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a landfill or from the evolution of volatile species in the waste.
- (4) Toxic Air Contaminant is an air contaminant which has been identified as a hazardous air pollutant pursuant to Section 7412 of Title 42 of the United States Code; or has been identified as a toxic air contaminant by the Air Resources Board pursuant to Health and Safety Code Section 39655 through 39662, or which may cause or contribute to an increase in mortality or an increase in serious illness, or potential hazard to human health.
- (5) Perimeter is the outer boundary of the entire waste disposal property.

(c) Requirements

The owner/operator of an active landfill shall:

- (1) Install and maintain in good operating condition a landfill gas control system approved by the Executive Officer, which is designed to be of sufficient capacity to draw landfill gas toward the gas collection devices without overdraw that could cause excessive aerobic decomposition, or fires, or damaging effect on landfill gas disposal systems.
- (2) Install the landfill gas control system according to a design and in a manner approved by the Executive Officer. Such system shall be extended as necessary to prevent off-site migration. The landfill gas control system shall provide for gas recovery accordingly as the landfill is expanded in order to maintain compliance with this rule.
- (3) Install sampling probes at the perimeter of the landfill to determine whether off-site migration exists. A plan for such installation shall be submitted for approval together with the compliance plan.

- (4) Analyze the following samples to determine the concentrations of total organic compounds and any toxic air contaminants, following installation of the landfill gas control system and each month or greater interval thereafter, as specified by the Executive Officer, to assure continued compliance. The sampling plan and methods of analysis shall be approved by the Executive Officer prior to sampling and modified thereafter as necessary. The results of the analyses shall be reported to the Executive Officer on a quarterly basis in the form and manner prescribed by him. Such report shall be due within 45 days of the last day of the reporting period,
 - (A) Integrated air sample on the surface of the landfill, over an area determined to be representative by the Executive Officer on a site-by-site basis.
 - (B) Landfill gas collected by the gas control system.
 - (C) Landfill gas from the sampling probes specified in subparagraph (c)(3).
 - (D) Air at the perimeter of the landfill.
- (5) Collect sufficient landfill gas with the landfill gas control system to prevent the concentration of total organic compounds in the sample specified in subparagraph (c)(4)(A) from exceeding 50 ppm.
- (6) Not allow the maximum concentration of organic compounds from exceeding 500 ppm measured as methane at any point on the surface of the landfill.
- (7) Dispose all landfill gas collected by any of the following methods which have been demonstrated to the satisfaction of the Executive Officer to achieve the maximum possible efficiency:
 - (A) Combustion.
 - (B) Gas treatment and subsequent sale.
 - (C) Sale and processing off-site.
 - (D) Other equivalent methods.
- (8) Evaluate the efficiency of the combustion equipment or the gas treating facility as the system commences operation and annually thereafter. Such evaluation shall be made in a manner approved by the Executive Officer, recorded and maintained for at least two (2) years, and available to the District for inspection.
- (9) Take approved mitigation measures during installation of the landfill gas control system to prevent public nuisance.

- (10) Not recommence operations of a previously closed landfill, or commence operations of a newly established landfill, without an approved plan to comply with the requirements of this rule.
- (11) Submit to the Executive Officer a plan to comply with the requirements of this rule. Such plan shall include but not be limited to:
 - (A) The means to meet the compliance schedule.
 - (B) The installation procedures and location of sampling probes.
 - (C) Sampling and test methods.
 - (D) Mitigation measures to be taken during installation of landfill gas control system.
 - (E) Mitigation measures to be taken when excessive concentrations are determined.
 - (F) Determination of efficiency specified in subsection (c)(8).

If after the installation of the landfill gas control system in accordance with the approved plan and the provisions of the permit to construct, the Executive Officer determines that in spite of all reasonable efforts by the owner/operator, the limits cannot be attained, he may specify other attainable limits.

(d) **Compliance Schedule**

- (1) The owner/operator of an active landfill shall meet the following compliance schedule.
 - (A) On or before October 1, 1985.
 - (i) Comply with the requirements in subsection (c)(6).
 - (ii) Submit a compliance plan specified in subsection (c)(11).
 - (B) Increments of progress:
 - (i) On or before April 1, 1986.
File an application with the District for a permit to construct and permit to operate a landfill gas control system.
 - (ii) Within 6 months of the permit approval, award contract(s) for installation of the landfill gas control system.
 - (iii) Within 12 months of the permit approval, begin installation.
 - (iv) Within 24 months of the permit approval, complete installation.
 - (v) January 1, 1989. Attain final compliance with this rule

(2) The owner/operator of an active landfill shall apply for a permit to construct and permit to operate any expansion or modification to the landfill gas control system prior to the installation of such expansion or modification, unless said expansion or modifications is covered by the plan previously submitted and approved by the Executive Officer.

(e) Fees

The owner/operator of an active landfill shall be assessed applicable filing and evaluation fees pursuant to Rules 301, 301.1, 304, and 306.

(f) Applicability of Other Rules

Compliance with the provisions of this rule does not exempt a person from complying with the requirements of Section 41700 of the California Health and Safety Code, Rules 401 (Visible Emissions), 402 (Nuisance), 403 (Fugitive Dust), 1150 (Excavation of Landfill Sites) of the District's Rules and Regulations, or any other applicable law, statute, code, ordinance, rule, or regulation.

(g) Exemptions

A landfill may be exempt from all or any portion of the requirements of this rule if the owner/operator can demonstrate to the satisfaction of the Executive Officer that due to the size, nature and age of the refuse, projected gas generation, or remoteness of the facility, there will be no adverse impact on air quality.

Such exemption shall be reviewed periodically by the District, to consider the development of the operations and gaseous emissions, and the impact of such development on the public. Depending upon the results of the review, the Executive Officer may extend or terminate the exemption.

(h) Severability of Portions of the Rule

If any portion of this rule is found to be invalid or unenforceable, such finding shall have no effect on the validity and enforceability of the remaining portions of the rule, which are severable and shall continue to be in full force and effect.

(i) Summary Paragraph Intended Only as a Guide

Paragraph (a) of this rule is intended only to summarize and give guidance in the interpretation. The provisions of paragraph (a) are not separate or distinct requirements, and if found to conflict with a provision of any other paragraph of this rule, shall yield to the provision in the other paragraph.

[SIP: Limited Approval/Disapproval 5/6/97, 62 FR 24574, 40 CFR 52.220(c)(164)(i)(E)(1)]