

**AIR POLLUTION CONTROL DISTRICT
SAN DIEGO COUNTY**

NEW RULE 59.1 - MUNICIPAL SOLID WASTE LANDFILLS

WORKSHOP REPORT

A workshop notice was mailed to all companies and government agencies in San Diego County that may be subject to the proposed new Rule 59.1 - Municipal Solid Waste Landfills. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on September 11, 1997, and was attended by eight people. The comments and District responses are provided below. In addition, the EPA will be amending federal Subpart Cc and Subpart WWW in the near future. Accordingly, proposed new Rule 59.1 has been amended to reflect the expected future changes.

1. WORKSHOP COMMENT

Subsection (h)(2) states that "every owner or operator of an existing MSW landfill not subject to the requirements of Section (d) of this rule shall, upon becoming subject to Section (d), meet the following increments of progress:..." At what point in the modification or permitting process will the existing landfill become subject to Section (d) and thus subject to Subsection (h)(2) requirements?

DISTRICT RESPONSE

Subsection (h)(2) becomes effective when the Authority to Construct is issued for a modification of an existing landfill and it is demonstrated through emission calculations that, because of the modification, the uncontrolled non-methane organic compound emissions will increase to 55 tons per year or more. Subsection (h)(2) may also become effective when an existing landfill, exempt under Section (b) shows, through the submittal of the annual non-methane organic compound emission rate report, an increase in the non-methane organic compound emissions to 55 tons per year or more.

2. WORKSHOP COMMENT

EPA is developing a modeling program to estimate the landfill gas emissions. What is the status of that program and will it be available on the EPA web site?

DISTRICT RESPONSE

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The latest version (October 1997) of the modeling program for landfills is currently available on the EPA TTN Bulletin Board. The manual that accompanies the program is still in the review phase and is not available yet. The modeling program has a Read Me file that will assist users. The modeling program and the Read Me file dated October 30, 1997, can be found at the following Website address: <http://www.epa.gov/ttnchie1/software.html>.

3. WORKSHOP COMMENT

Once the District revises the workshop draft of this rule, will it be made available to all interested parties?

DISTRICT RESPONSE

Yes. The District responds in the workshop report to all issues raised during the workshop and all comments received. A copy of the workshop report will be mailed to all workshop attendees and other interested persons together with a revised draft of Rule 59.1. All changes to the present draft rule will be underlined.

4. WORKSHOP COMMENT

Existing landfills are presently subject to District Rule 59. Some of the existing landfills will also be subject to the proposed Rule 59.1. Is it possible to exempt landfills subject to proposed Rule 59.1 from either all or a portion of Rule 59?

DISTRICT RESPONSE

The District agrees and has added language to the proposed rule exempting landfills subject to Rule 59.1 from the requirements of Rule 59. The District has also revised proposed Rule 59.1 to include several requirements from Rule 59 that will make these two rules equivalent in stringency. Specifically, Rule 59.1 now prohibits gas leaks along the landfill gas transfer path, requires flares to be equipped with automatic shutoff mechanisms and does not allow leachate or condensate to reach any surface where it could be a source of non-methane organic compound emissions. In addition, some provisions of Subpart Cc that would allow use of a passive collection system and open flares are less stringent than Rule 59 requirements and therefore were excluded from the proposed rule.

5. WORKSHOP COMMENT

When will proposed Rule 59.1 be adopted?

DISTRICT RESPONSE

The District is planning to submit Rule 59.1 for public hearing in June 1998.

6. WORKSHOP COMMENT

Will Rule 59 be revised and if so, what is the time table for the revision?

DISTRICT RESPONSE

At this time, the District does not intend to revise Rule 59. As stated in the District response to Comment #4, some provisions of Rule 59 have been incorporated into proposed Rule 59.1. This will make proposed Rule 59.1 and Rule 59 essentially equivalent.

7. WORKSHOP COMMENT

For landfills subject to proposed Rule 59.1, will there be separate permitting fees or will the cost of permitting be incorporated in the federal Title V operating permit for the landfill gas collection system?

DISTRICT RESPONSE

The District will incorporate the permitting fees related to Rule 59.1 requirements into any existing and future new landfill permits. If an application is required to modify a landfill to comply with Rule 59.1, a separate fee will be required. If there is a separate operating permit for the landfill gas collection system, the fees will be apportioned between the landfill and the gas collection system. Any additional costs associated with Rule 59.1 and/or Title V requirements will be added to the annual District permit renewal fees.

8. WORKSHOP COMMENT

Is proposed Rule 59.1 applicable only to landfills with a design capacity above 2.75 million tons?

DISTRICT RESPONSE

No. All existing landfills are subject to proposed Rule 59.1. Some of them must comply only with reporting and recordkeeping requirements, while others must comply also with emission standards. The proposed rule requires all existing landfills to submit an initial design capacity report and amendments (if any) in accordance with 40 CFR 60.752(a). Generally, this is all that is required from small active and inactive landfills with a design capacity of less than 2.75 million tons and 3.27 million cubic yards. Existing landfills with a larger design capacity must also submit a non-methane organic compound emission rate report. Existing landfills with both a design capacity of 2.75 million tons and 3.27 million cubic yards or more and non-methane organic emission rate of 55 tons per year or more must install an emissions collection and control system which would comply with all applicable requirements of proposed Rule 59.1.

9. WRITTEN COMMENT

Under proposed Rule 59.1, which refers to a corresponding provision of the federal regulation (Subpart WWW), in the event of a surface emission standard exceedance, an owner or operator must take certain corrective actions specified in 40 CFR 60.755(c)(4). Therefore, according to the federal regulation, this exceedance does not constitute a rule violation. District Rule 59, presently applicable to landfills that are also subject to the proposed new rule, does not have similar provisions. In fact, as currently enforced, if a District inspector finds an exceedance of the emission standard of Rule 59, he or she will consider this exceedance a rule violation. As the corrective action is the beneficial result, Rule 59.1 should include language specifying that corrective actions will be the first means of enforcement.

DISTRICT RESPONSE

The District agrees. Language has been added to proposed Rule 59.1 to specify that if an exceedance of an emission standard was found during a District inspection with the sample probe located at 1.3 cm (0.5 in) from the ground (the distance presently used by the District), this exceedance is subject to the "fix-it" provisions of Subpart WWW (40 CFR 60.755(c)(4)). However, if an unrecorded surface emission exceedance was found during a District inspection with the sample probe located at 5-10 cm (2-4 in.) from the ground, it will be considered a rule violation.

10. WRITTEN COMMENT

The City of San Diego believes that the Miramar site consists of three separate landfills, i.e. these landfills represent three separate stationary sources. Has EPA provided the District with some input on this issue?

DISTRICT RESPONSE

The District consulted with EPA staff and reviewed EPA guidance documents on this issue. The EPA guidance document states that a landfill is considered a single stationary source if the landfill cells are contiguous and under common ownership or control, even if a road separates the landfill cells. Based on this guidance, the District's and EPA agree that the City of San Diego landfills at Miramar site constitute a single stationary source. For rule clarification, a definition of stationary source will be added to Section (c).

11. ARB COMMENT

Section (c)(1), definition of "Administrator," should be changed to be consistent with the definition that was developed by the Statewide Landfill Workgroup with concurrence from EPA Region IX.

DISTRICT RESPONSE

The District has made the necessary changes to the rule to comply with the intent of the definition of "Administrator" (see Section (h) and Subsection (f)(2)).

12. ARB COMMENT

Section (d) should include requirements for the submission of the design plan with proposed alternatives, if any.

DISTRICT RESPONSE

The District agrees. These requirements are specified in new Section (h).

13. ARB COMMENT

Subsection (h)(1)(ii), allows an additional three months for the owner or operator to demonstrate compliance with Section (d) of Rule 59.1. The District should change this subsection to allow only 30 months (instead of 33 months) after rule adoption for the installation of the emission collection and control system, as required by Subpart Cc (Emission Guidelines).

DISTRICT RESPONSE

The District agrees. The increment of progress in Section (h) for the installation of the emission collection and control system has been changed to 30 months .

14. ARB COMMENT

Subsection (a)(2) is an exemption and should be moved to Section (b).

DISTRICT RESPONSE

The District disagrees. For clarity and consistency with other District rules, the exemption will remain in Subsection (a)(2).

15. ARB COMMENT

Section (c) does not have a definition for the "emission collection and control system design plan," which is used throughout Rule 59.1. For clarity, it is recommended that the District add the definition.

DISTRICT RESPONSE

The District agrees. A definition for "emission collection and control system design plan" has been added to Section (c).

16. ARB COMMENT

Subsections (e)(1) and (e)(2) provide the reporting requirements for the initial design capacity and non-methane organic compound emission rate reports. For clarity and consistency, these requirements should be moved to Section (h).

DISTRICT RESPONSE

The District disagrees. For clarity and consistency with other District rules, Subsections (e)(1) and (2) will remain under Section (e).

17. ARB COMMENT

The landfill gas collection well placement and design compliance provisions of 40 CFR 60.755(b) were omitted from Section (g). To satisfy the requirements of Subpart Cc, these provisions should be included in Section (g).

DISTRICT RESPONSE

The District agrees and has made the appropriate changes to Section (g).

**AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO**

PROPOSED AMENDMENTS TO NEW RULE 59.1

Proposed amendments to new Rule 59.1 are to read as follows:

RULE 59.1 MUNICIPAL SOLID WASTE LANDFILLS

(a) APPLICABILITY

(1) Except as provided in Section (b) below, this rule is applicable to each existing municipal solid waste (MSW) landfill.

(2) This rule does not apply to any new MSW landfill subject to the requirements of New Source Performance Standards Subpart WWW - Standards for Municipal Solid Waste Landfills (40 CFR 60.750).

(3) Except as provided in Subsection (i)(3), Any any MSW landfill subject to the requirements of Section (d) of this rule shall not may also be subject to Rule 59.

(b) EXEMPTIONS

The provisions of Section (d) shall not apply to MSW landfills with a design capacity less than 2.8 million tons (2.5 million Megagrams) in mass units or less than 3.27 million cubic yards (2.5 million cubic meters) in volume units, or with uncontrolled non-methane organic compound emissions less than 55 tons per year (50 Megagrams per year).

(c) DEFINITIONS

Except as noted below, all terms in this rule shall be defined as in 40 CFR 60.751 (Definitions).

(1) **"Administrator"** (as referred to in 40 CFR 60.750) means the Air Pollution Control Officer of the San Diego County Air Pollution Control District or his designee, ~~except that the Air Pollution Control Officer shall not have the authority to approve alternate test methods.~~

(2) **"Construction"** means fabrication, erection, or installation of a municipal solid waste landfill.

(3) **"Design Capacity"** means the maximum amount of solid waste a landfill can accept, as indicated in terms of volume or mass in the most recent ~~specified in the construction or operating permit issued by the state, local, or tribal agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass units or from mass to volume units, the calculations must include a site specific density, which must be recalculated annually.~~

(4) **"Emission Collection and Control System Design Plan (Design Plan)"** means the site-specific plan for the gas collection and control system proposed by the owner or operator of an MSW landfill.

~~(4)~~(5) **"Existing Municipal Solid Waste Landfill"** means a landfill:

(i) for which construction or modification was commenced before May 30, 1991; and

(ii) which has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

~~(6)~~ **"Landfill Gas Transfer Path"** means any connection or fitting in the gas collection and control system including, but not limited to, gas wells, piping, flanges, valves, blowers, flame arresters, pipe fittings, and sampling ports.

~~(5)~~(7) **"Modification"** means any increase in the permitted volume or mass design capacity of the landfill by either a horizontal or vertical expansion.

~~(6)~~(8) **"Municipal Solid Waste (MSW) Landfill"** means an entire disposal facility in a contiguous geographical space, publicly or privately owned, where household waste is placed in or on land. Portions of an MSW landfill may be separated by access roads. An MSW landfill may also receive other types of Resource Conservation and Recovery Act (RCRA) Subtitle D (40 CFR 257 and 258) wastes such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste.

~~(7)~~(9) **"New Municipal Solid Waste Landfill"** means a landfill that commenced construction or modification or began accepting waste on or after May 30, 1991.

~~(8)~~(10) **"Professional Engineer"** means a person who is legally licensed to engage in engineering practice in the State of California.

(11) **"Stationary Source"** means the same as defined in Rule 2.

(d) **STANDARDS**

(1) Every owner or operator of an existing MSW landfill with a design capacity of 2.8 million tons (2.5 million Megagrams) and 3.27 million cubic yards (2.5 million cubic meters) or more and with uncontrolled emissions of 55 tons per year (50 Megagrams per year) or more of non-methane organic compounds shall:

~~(1)~~(i) install an emissions collection system meeting the requirements of 40 CFR 60.752(b)(2)(ii)(A). The provisions of 40 CFR 60.752(b)(2)(ii)(B) concerning passive collection systems shall not apply to MSW landfills subject to this rule; and

~~(2)~~(ii) install an emissions control system meeting the requirements of 40 CFR 60.752(b)(2)(iii)(B) or (C), and. The provisions of 40 CFR 60.752(b)(2)(iii)(A) concerning the use of open flares shall not apply to MSW landfills subject to this rule.

(2) Every owner or operator of an existing MSW landfill subject to the requirements of Subsection (d)(1) of this rule shall:

(i) operate the collection system as specified in 40 CFR 60.753(d), so that the methane concentration is less than 500 parts per million by volume (ppmv) above background at the surface of landfill as measured pursuant to Subsection (g)(1), and

(ii) not allow any gas leaks along the landfill gas transfer path, which result in a concentration of 1375 ppmv or more, measured as methane, at a distance of 1.3 centimeters (0.5 inches) from the transfer path, other than non-repeatable momentary readings, and

(iii) not allow leachate and/or condensate from the landfill to reach any surface where non-methane organic compounds can be evaporated into the atmosphere, and

~~(3)~~ (iv) comply with the all other operational standards and monitoring requirements specified in 40 CFR 60.753 and 60.756, respectively, and

(3) Flares used to control the emissions of landfill gases shall be equipped with automatic shutoff mechanisms designed to immediately stop the flow of landfill gases when a flame-out occurs. During restart or startup, there shall be sufficient flow of propane or commercial natural gas to the burners to ensure that unburned landfill gases are not emitted to the atmosphere, and

(4) Whenever landfill material is to be brought to the surface during the installation or preparation of wells, piping, or other equipment, or when landfill waste is to be excavated and moved, the owner/operator shall first obtain and then follow mitigation measures approved in writing by the Air Pollution Control Officer to prevent public nuisance and to minimize the release of non-methane organic compounds.

(e) **RECORDKEEPING AND REPORTING**

(1) Every owner or operator of an existing MSW landfill subject to this rule shall submit to the Air Pollution Control Officer an initial design capacity report and amendments (if any) in accordance with 40 CFR 60.752(a) by (three months after rule adoption), and

(2) Every owner or operator of an existing MSW landfill with a design capacity of 2.8 million tons (2.5 million Megagrams) and 3.27 million cubic yards (2.5 million cubic meters) or more, shall comply with the non-methane organic compound emission rate reporting requirements of 40 CFR 60.752(b) by *(three months after rule adoption)* and at least once every 12 months, unless otherwise approved in writing by the Air Pollution Control Officer.

~~(3) In addition, every~~ Every owner or operator of an existing MSW landfill subject to the requirements of Section (d) of this rule shall:

(i) comply with the reporting and recordkeeping requirements specified in 40 CFR 60.757 and 60.758, respectively, and

(ii) comply with the recording requirements, associated with surface emission monitoring, specified in 40 CFR 60.755(c)(4).

(f) **TEST METHODS AND EMISSION CALCULATION PROCEDURES**

(1) Compliance with and applicability of this rule shall be determined using the test methods, calculation procedures and measurement procedures specified in 40 CFR 60.754 and 40 CFR 60.755.

(2) An alternative test method may be used provided such method has been approved, in advance, by the Air Pollution Control Officer and U.S. Environmental Protection Agency.

(g) **COMPLIANCE TEST REQUIREMENTS**

Every owner or operator of an existing MSW landfill subject to the requirements of Section (d) of this rule shall comply with the compliance test requirements and the instrument specifications and monitoring procedures specified in 40 CFR 60.755(a) and 60.755(e), (d) and (e), respectively, except as provided below:

(1) surface emission monitoring, as required by 40 CFR 60.755(c)(3), shall be conducted with the probe inlet placed within 1.3 centimeters (0.5 inches) of the ground, and

(2) any surface emission concentration of 500 ppmv or more, measured as methane, with the probe inlet placed within 5 to 10 centimeters (2 to 4 inches) of the ground, not recorded as specified in Subsection (e)(3)(ii) and identified at the time of the District compliance inspection, shall be considered a violation of this rule.

(h) **EMISSION COLLECTION AND CONTROL SYSTEM DESIGN PLAN**

(1) The owner or operator of any MSW landfill subject to the requirements of Subsection (d)(1) of this rule shall submit to the Air Pollution Control Officer for approval a site-specific emission collection and control system design plan prepared by a professional engineer as provided in 40 CFR 60.752(b)(2)(i).

(2) The design plan shall either meet the specifications for active collection system outlined in 40 CFR 60.759 or demonstrate to the satisfaction of the Air Pollution Control Officer that the alternative collection system is sufficient to comply with the requirements of 40 CFR 60.759.

(3) The design plan shall also include alternatives, if any, to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting requirements of 40 CFR 60.753 through 40 CFR 60.758.

~~(h)~~(i) **COMPLIANCE SCHEDULE**

(1) Every owner or operator of an existing MSW landfill subject to the requirements of Section (d) of this rule shall meet the following increments of progress:

(i) By ~~(15~~ 12 months after rule adoption), submit to the Air Pollution Control Officer, a proposed emission collection and control system design plan as specified in Section (h) prepared by a professional engineer as provided in 40 CFR 60.752(b)(2)(i), and an application for Authority to Construct and Permit to Operate the emission collection and control system.

(ii) By ~~(33~~ 30 months after rule adoption), install the emission collection and control system as ~~provided in 40 CFR 60.752(b)(2)(ii)~~ specified in Subsection (d)(1).

(iii) By ~~(39~~ 36 months after rule adoption), demonstrate compliance with all applicable provisions ~~Section (d)~~ of this rule.

(2) Every owner or operator of an existing MSW landfill not subject to the requirements of Section (d) of this rule on *(date of adoption)* shall, upon becoming subject to such requirements ~~Section (d)~~, meet the following increments of progress:

(i) By twelve months after first becoming subject to the requirements of Section (d), submit to the Air Pollution Control Officer a proposed emission collection and control system design plan as specified in Section (h) ~~prepared by a professional engineer as provided in 40 CFR 60.752(b)(2)(i)~~, and an application for Authority to Construct and Permit to Operate the emission collection and control system.

(ii) By 30 months after first becoming subject to the requirements of Section (d), install the emission collection and control system as ~~provided in 40 CFR 60.752(b)(2)(ii)~~ specified in Subsection (d)(1).

(iii) By 36 months after first becoming subject to the requirements of Section (d), demonstrate compliance with all applicable provisions ~~Section (d)~~ of this rule.

(3) Every owner or operator of an existing MSW landfill subject to the requirements of Section (d) of this rule shall also comply with the Compliance Provisions of 40 CFR 60.755(b) Rule 59 until compliance with all applicable provisions of Rule 59.1 has been achieved.