

CHAPTER 17: 111(D) REQUIREMENTS FOR LANDFILLS

Rule 19.1701 Purpose

This Chapter establishes standards of performance, monitoring, recordkeeping, and reporting requirements for the control of designated pollutants from municipal solid waste landfills pursuant to 40 C.F.R. Part 60 Subpart Cf. Requirements under this Chapter shall not affect an owner's or operator's requirements under Rule 22.

Rule 19.1702 Definitions

For the purposes of this Chapter, the definitions in 40 C.F.R. § 60.41f are incorporated by reference except the definition of NMOC. NMOC means nonmethane organic compounds, as measured according to the provisions of 40 C.F.R § 60.35f.

Rule 19.1703 Applicability

This Chapter applies to each municipal solid waste landfill that:

- (A) Accepted waste after November 8, 1987, or has capacity for future waste deposition; and
- (B) Commenced construction, reconstruction, or modification on or before July 17, 2014.

Rule 19.1704 Requirement to Obtain a Permit

- (A) The owner or operator of a municipal solid waste landfill subject to this Chapter with a design capacity greater than or equal to two and one-half million (2,500,000) megagrams or two and one-half million (2,500,000) million cubic meters and that is not otherwise subject to Part 70 shall obtain a Part 70 permit in accordance with the procedures of Rule 26 by no later than ninety (90) days after the effective date of EPA approval of this Chapter.
- (B) The owner or operator of a municipal solid waste landfill subject to this Chapter with a design capacity less than two and one-half million (2,500,000) megagrams or two and one-half million (2,500,000) cubic meters is not subject to the requirement to obtain a Part 70 permit under this Chapter and may instead obtain a permit in accordance with Rule 19 if the municipal solid waste landfill is not otherwise subject to Part 70.
- (C) If a municipal solid waste landfill subject to this Chapter becomes a closed landfill and is not otherwise subject to Part 70, the owner or operator is no longer subject to the requirement to maintain a Part 70 permit if the following conditions are met:

- (1) The landfill was never subject to the requirement to install, maintain, and operate a gas collection and control system under 40 C.F.R. § 60.33f; or
 - (2) The landfill meets the conditions for control system removal or decommissioning specified in 40 C.F.R. § 60.33f(f).
- (D) Physical or operational changes made to a municipal solid waste landfill subject to this Chapter are not considered a modification or reconstruction under this Chapter if the changes are made solely to comply with this Chapter.
- (E) The permit of each municipal solid waste landfill subject to this Chapter shall be subject to re-opening to incorporate the applicable requirements of this Chapter in accordance with the procedures of Rule 19 for municipal solid waste landfills not subject to the requirement to obtain a Part 70 permit, or in accordance with the procedures of Rule 26 for municipal solid waste landfills required to obtain a Part 70 permit.

Rule 19.1705 Exemption from Reporting Requirements for Closed Landfills

The owner or operator of a closed landfill subject to this Chapter is not subject to the requirement to submit the following reports if the owner or operator submitted the reports to the Division or EPA under the provisions of 40 C.F.R. § 60 Subpart WWW or 40 C.F.R. § 62 Subpart GGG on or before July 17, 2014:

- (A) Initial design capacity report required under Rule 19.1706(A);
- (B) Initial or subsequent NMOC emission rate report required under Rule 19.1707, if the most recent NMOC emission rate report indicated the NMOC emissions were below fifty (50) megagrams per year;
- (C) Collection and control system design plan required under Rule 19.1710;
- (D) Closure report required under Rule 19.1713;
- (E) Equipment removal report required under Rule 19.1713;
- (F) Initial annual report required under Rule 19.1712, and
- (G) Initial performance test report required under Rule 19.1712.

Rule 19.1706 Design Capacity Reports

For each municipal solid waste landfill subject to this Chapter having a design capacity less than two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume, the owner or operator shall:

- (A) Submit to the Division an initial design capacity report that meets the requirements of 40 C.F.R. § 60.38f(a).
 - (1) The owner or operator may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values.
 - (2) The owner or operator shall document and submit any density conversions with the design capacity report.
- (B) If the maximum design capacity of a landfill increases such that the maximum design capacity is equal to or exceeding two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume,
 - (1) The owner or operator shall submit to the Division an amended design capacity report within ninety (90) days of the increase in maximum design capacity; and
 - (2) The owner or operator shall obtain a Part 70 permit in accordance with the procedures of Rule 26 and comply with Rule 19.1707 and Rule 19.1708.

Rule 19.1707 NMOC Emission Rate Reports

- (A) For each municipal solid waste landfill subject to this Chapter having a design capacity equal to or exceeding two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume, the owner or operator shall:
 - (1) Prepare an initial NMOC emission rate report using the emission rate calculation procedures specified in 40 C.F.R. § 60.35f(a);
 - (2) Recalculate the NMOC emission rate annually in accordance with the procedures specified in 40 C.F.R. § 60.35f(a), except as provided in 40 C.F.R. § 60.38f(c)(3); and
 - (3) Follow the procedures specified in 40 C.F.R. § 60.33f(e)(1) through (3).
- (B) For demonstrations using the Tier 4 provisions of 40 C.F.R. § 60.35f(a)(6), the owner or operator shall notify the Division of the date(s) upon which the owner or operator intends to demonstrate that site-specific surface methane emissions are below five hundred (500) parts per million methane.
 - (1) The notification shall include a description of the wind barrier to be used during the surface emission monitoring described in the notification.

- (2) The notification must be postmarked, or delivered to the Division, not less than thirty (30) days prior to the date(s) on which surface emissions monitoring is scheduled to occur.

Rule 19.1708 Standards of Performance

(A) Requirement to install, maintain, and operate a gas collection and control system

The owner or operator of a municipal solid waste landfill subject to this Chapter shall install, maintain, and operate a collection and control system meeting the requirements specified in 40 C.F.R. § 60.33f(b)(1) through (3) and 40 C.F.R. § 60.33f(c)(1) through (4), except as provided in 40 C.F.R. § 60.24, within thirty (30) months after:

- (1) The first NMOC emission rate report for a landfill in which the NMOC emission rate equals or exceeds thirty-four (34) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than thirty-four (34) megagrams per year;
- (2) The first NMOC emission rate report in the closed landfill subcategory in which the NMOC emission rate equals or exceeds fifty (50) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than fifty (50) megagrams per year; or
- (3) The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds thirty-four megagrams per year based on Tier 2, if the Tier 4 surface emission monitoring shows a surface methane emission concentration of five hundred (500) parts per million methane or greater.

(B) Collection system standards

The owner or operator shall ensure that each collection system installed to comply with this Chapter shall meet the requirements specified in:

- (1) 40 C.F.R. § 60.33f(b)(2) and 40 C.F.R. § 60.40f(a) through (c) for active collection systems; or
- (2) 40 C.F.R. § 60.33f(b)(3) for passive collection systems.

(C) Control system standards

The owner or operator shall ensure that each control system installed to comply with this Chapter shall meet the requirements specified in 40 C.F.R. § 60.33f(c)(1) through (4) except as provided in 40 C.F.R. § 60.24.

(D) Collection and control system removal requirements

A collection and control system required under this Chapter may be capped, removed, or decommissioned if the criteria specified in 40 C.F.R. § 60.33f(f)(1) through (4) are met.

Rule 19.1709 Compliance Schedule and Increments of Progress for Gas Collection and Control Systems

(A) The owner or operator of each municipal solid waste landfill subject to the requirement to install and operate a gas emission collection and control system pursuant to this Chapter shall complete planning, awarding, of contracts, installing, and starting up municipal solid waste landfill gas emission collection and control equipment within thirty (30) months after the date an NMOC emission rate report shows:

- (1) NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills;
- (2) NMOC emissions equal to or exceeding fifty (50) megagrams per year for closed landfills; or
- (3) A methane surface emission concentration equal to or exceeding five hundred (500) parts per million based on Tier 4 surface emissions monitoring.

(B) The owner or operator of each municipal solid waste landfill subject to this Chapter shall comply with the increments of progress listed in Table 19.17.1.

Table 19.17.1 Increments of Progress		
Increment	Date if Using Tiers 1, 2, or 3	Date if Using Tier 4
Increment 1: Submit final collection and control system design plan to the Division in accordance with Rule 19.1710	Twelve (12) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Twelve (12) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill

Increment 2: Submit notice to the Division that on-site construction of collection and control system has begun	Twenty-four (24) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Twenty-four (24) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 3: Submit notice to the Division that on-site construction of collection and control system is complete	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 4: Final compliance with Rule 19.1708	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill

Rule 19.1710 Collection and Control System Design Plan

- (A) The owner or operator shall submit to the Division a site-specific design plan for each gas collection and control system required under this Chapter. The collection and control system design plan shall be prepared and approved by a professional engineer and shall comply with the requirements specified in 40 C.F.R. § 60.38f(d)(1) – (7).
- (B) The owner or operator of a municipal solid waste landfill who has already been required to submit a design plan under this Chapter, under 40 C.F.R. Part 60 Subpart WWW, or under 40 C.F.R. Part 62 Subpart GGG; must submit a revised design plan to the Division as specified in 40 C.F.R. § 60.38f(e)(1) and (2).

- (C) Upon receipt of an initial or revised design plan, the Division shall review the information submitted and either approve it, disapprove it, or request that additional information be submitted. If the Division does not approve or disapprove the design plan, or does not request that additional information be submitted, within ninety (90) days of receipt, then the owner or operator may continue with implementation of the design plan at their own risk.
- (D) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this Chapter using a treatment system as defined in 40 C.F.R. § 60.41f, then the owner or operator shall prepare a site-specific treatment system monitoring plan that meets the requirements specified in 40 C.F.R. § 60.39f(b)(5).

Rule 19.1711 Operating, Compliance, and Monitoring Requirements for Gas Collection and Control Systems

- (A) The owner or operator of a municipal solid waste landfill with a gas collection and control system used to comply with this Chapter shall meet the operating, compliance, and monitoring requirements of this Chapter by:
 - (1) Compliance with the requirements of 40 C.F.R. § 60.34f(a) through (g), 40 C.F.R. § 60.36f(a) through (e), and 40 C.F.R. § 60.37f(a) through (h); or
 - (2) Compliance with the requirements of 40 C.F.R. § 63.1958, 40 C.F.R. § 63.1960, and 40 C.F.R. § 63.1961.
- (B) If the owner or operator chooses to demonstrate compliance with the requirements of this Chapter as provided under Rule 19.1711(A)(2), the owner or operator:
 - (1) Shall submit to the Division the twenty-four-hour high temperature report required under 40 C.F.R. § 63.1981(k); and
 - (2) May no longer use the provisions referenced in Rule 19.1711(A)(1) to comply with operating, compliance, and monitoring requirements of this Chapter.

Rule 19.1712 Performance Testing Reports

The initial and annual performance test report provisions specified in 40 C.F.R. § 60.38f(h) and (i) are incorporated by reference.

Rule 19.1713 Closure and Equipment Removal Reports

The closure report and equipment removal report provisions specified in 40 C.F.R. § 60.38f(f) and (g) are incorporated by reference.

Rule 19.1714 Liquids Addition Reports

The liquids addition reporting requirements specified in 40 C.F.R. § 60.38f(l) are incorporated by reference.

Rule 19.1715 Recordkeeping Requirements

The recordkeeping provisions specified in 40 C.F.R. § 60.39f(a) through (j) are incorporated by reference.

Rule 19.1716 Electronic Reporting of Certain Reports

The owner or operator of a municipal solid waste landfill subject to this Chapter shall submit, as applicable, the following reports electronically in accordance with the procedures specified in 40 C.F.R. § 60.38f(j):

- (A) NMOC emission rate reports required under Rule 19.1707;
- (B) Performance testing reports required under Rule 19.1712; and
- (C) Liquids addition reports required under Rule 19.1714.

Rule 19.1717 Test Methods and Procedures

The test methods and procedures provisions specified in 40 C.F.R. § 60.35f(a) through (e) are incorporated by reference.

Rule 19.1718 Corrective Actions

The corrective action and the corresponding timeline requirements specified in 40 C.F.R. § 60.38f(k) are incorporated by reference.