

40 C.F.R. § 62.16720

Compliance provisions.

Follow the compliance provisions in this section (as well as the provisions in §§ 62.16716 and 62.16722), or the compliance provisions in § 63.1960 of this chapter (as well as the provisions in §§ 63.1958 and 63.1961 of this chapter), or both as alternative means of compliance, for an MSW landfill with a gas collection and control system used to comply with the provisions of § 62.16714(b) and (c). Once the owner or operator begins to comply with the provisions of § 63.1960 of this chapter, the owner or operator must continue to operate the collection and control device according to those provisions and cannot return to the provisions of this section.

- (a) Except as provided in § 62.16724(d)(2), the specified methods in paragraphs (a)(1) through (6) of this section must be used to determine whether the gas collection system is in compliance with § 62.16714(b) (2).
- (1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with \S 62.16714(b)(2)(i), either Equation 5 or Equation 6 must be used. The methane generation rate constant (k) and methane generation potential (Lo) kinetic factors should be those published in the most recent AP-42 or other site-specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in \S 62.16718(a)(4), the value of k determined from the test must be used. A value of no more than 15 years must be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.
- (i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$
 (Eq. 5)

Where: Q_m = Maximum expected gas generation flow rate, cubic meters per year. L_0 = Methane generation potential, cubic meters per megagram solid waste. R = Average annual acceptance rate, megagrams per year. k = Methane generation rate constant, year-1. t = Age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years. t = Time since closure, years (for an active landfill t = 0 and t = 1).

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_{M} = \sum_{i=1}^{n} 2kL_{o}M_{i}(e^{-kt_{i}})$$
 (Eq. 6)

Where: Q_M = Maximum expected gas generation flow rate, cubic meters per year. k = Methane generation rate constant, year-1. L_0 = Methane generation potential, cubic meters per megagram solid waste. M_i = Mass of solid waste in the ith section, megagrams. t_i = Age of the ith section, years.

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, Equation 5 or Equation 6 in paragraphs (a) (1)(i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using Equation 5 or Equation 6 in paragraphs (a)(1) (i) or (ii) of this section or other methods must be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

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