

Operational standards for collection and control systems.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the last paragraph of rule 3745-76-01 of the Administrative Code titled "Incorporation by reference."]

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of paragraph (B)(2)(b) of rule 3745-76-07 of the Administrative Code shall:

- (A) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for :
 - (1) Five years or more if active; or
 - (2) Two years or more if closed or at final grade.
- (B) Operate the collection system with negative pressure at each wellhead except under the following conditions:
 - (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in paragraph (F)(1) of rule 3745-76-12 of the Administrative Code;
 - (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
 - (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the director;
- (C) Operate each interior wellhead in the collection system with a landfill gas temperature less than fifty five degrees Celsius and with either a nitrogen level less than twenty percent or an oxygen level less than five per cent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
 - (1) The nitrogen level shall be determined using Method 3C of Appendix A of 40 CFR Part 60, unless an alternative test method is established as allowed by paragraph (B)(2)(a) of rule 3745-76-07 of the Administrative Code.

- (2) Unless an alternative test method is established as allowed by paragraph (B)(2)(a) of rule 3745-76-07 of the Administrative Code, the oxygen shall be determined by an oxygen meter using Method 3A of Appendix A of 40 CFR Part 60 except that:
- (a) The span shall be set so that the regulatory limit is between twenty and fifty per cent of the span;
 - (b) A data recorder is not required;
 - (c) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - (d) A calibration error check is not required;
 - (e) The allowable sample bias, zero drift, and calibration drift are plus or minus ten per cent.
- (D) Operate the collection system so that the methane concentration is less than five hundred parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at thirty meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the thirty meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- (E) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with paragraph (B)(2)(c) of rule 3745-76-07 of the Administrative Code. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour; and
- (F) Operate the control or treatment system at all times when the collected gas is routed to the system.
- (G) If monitoring demonstrates that the operational requirements in paragraph (B), (C), or (D) of this rule are not met, corrective action shall be taken as specified in paragraphs (A)(3) to (A)(5) of rule 3745-76-10 of the Administrative Code or paragraph (C) of rule 3745-76-10 of the Administrative Code. If corrective actions are taken as specified in rule 3745-76-10 of the Administrative Code, the monitored exceedance is not a violation of the operational requirements in this rule.

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Certification

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Date

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