

567—101.109(455B) Environmental monitoring and corrective action requirements for air quality and landfill gas. MSWLFs shall comply with the following environmental monitoring and corrective action requirements for air quality and landfill gas.

101.109(1) Air criteria. Owners or operators of MSWLFs must ensure that the units do not violate any applicable requirements developed under a state implementation plan (SIP) approved or promulgated by the department pursuant to Section 110 of the Clean Air Act.

101.109(2) Landfill gas. MSWLFs shall comply with the following requirements for landfill gas. For purposes of this subrule, “lower explosive limit” means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.

a. Owners or operators of MSWLF units must ensure that:

(1) The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures (excluding gas pipeline, control or recovery system components), and

(2) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.

b. Owners or operators of MSWLF units must implement a routine methane-monitoring program to ensure that the standards of 101.109(2)“*a*” are met. Such a program shall include routine subsurface methane monitoring (e.g., at select groundwater wells, at gas monitoring wells).

(1) The type and frequency of monitoring must be determined based on the following factors:

1. Soil conditions;

2. The hydrogeologic conditions surrounding the facility;

3. The hydraulic conditions surrounding the facility;

4. The location of facility structures (including potential subsurface preferential pathways such as but not limited to pipes, utility conduits, drain tiles, and sewers) and property boundaries; and

5. The locations of structures near the outside of the facility to which or along which subsurface migration of methane gas may occur. Examples of such structures include but are not limited to houses, buildings, basements, crawl spaces, pipes, utility conduits, drain tiles, and sewers.

(2) The minimum frequency of monitoring shall be quarterly.

c. If methane gas levels exceeding the limits specified in 101.109(2)“*a*” are detected, the owner or operator must:

(1) Immediately take all necessary steps to ensure protection of human health and notify the department and department field office with jurisdiction over the MSWLF;

(2) Within seven days of detection, place in the operating record and notify the department and department field office with jurisdiction over the MSWLF of the methane gas levels detected and a description of the steps taken to protect human health; and

(3) Within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the department and department field office with jurisdiction over the MSWLF that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.

d. The owner or operator shall submit an annual report to the department detailing the gas monitoring sampling locations and results, any action taken, and the results of steps taken to address gas levels exceeding the limits of 101.109(2)“*a*” during the previous year. This report shall include a site map that delineates all structures, perimeter boundary locations, and other monitoring points where gas readings were taken. The site map shall also delineate areas of landfill gas migration outside the MSWLF units, if any. The report shall contain a narrative explaining and interpreting all of the data collected during the previous year. The report shall be due each year at a date specified by the department in the facility’s permit.

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