



Ohio Revised Code

Section 3734.041 Explosive gas monitoring plan for landfill.

Effective: May 31, 1988

Legislation: House Bill 65 - 117th General Assembly

(A) The owner or operator holding a license issued under division (A) of section 3734.05 of the Revised Code for a sanitary landfill that is so situated that a residence or other occupied structure off the premises of the landfill is located within one thousand feet horizontal distance from the exterior boundary of the landfill, and the owner or operator of any closed landfill that is so situated and for which a license was issued under division (A) of section 3734.05 of the Revised Code, or the subsequent owner, lessee, or other person who has control of the land on which the closed landfill is located, shall, within sixty days after the effective date of the rules adopted under division (F) of this section, submit an explosive gas monitoring plan for the landfill or closed landfill to the director of environmental protection for approval for compliance with those rules. After approval of the plan, the owner or operator of the landfill, or, in the instance of a closed landfill, the owner or operator of the closed landfill, or the subsequent owner, lessee, or other person who has control of the land on which the closed landfill is located shall conduct monitoring of explosive gas levels at the landfill or closed landfill, and submit written reports of the results of the monitoring to the director and the board of health of the health district in which the landfill is located in accordance with the approved plan and the schedule for implementation contained in the approved plan.

No person shall violate or fail to perform a duty imposed by a plan approved under this section.

(B) Division (A) of this section does not apply to a sanitary landfill or closed sanitary landfill that exclusively disposes, or disposed, of solid wastes generated on the premises where the landfill or closed landfill is located; to a sanitary landfill or closed sanitary landfill that exclusively disposes, or disposed, of solid wastes generated on one or more premises owned by the person who owns the landfill or closed landfill; or to a sanitary landfill or closed sanitary landfill owned or operated by a person other than the generator of the wastes that exclusively disposes, or disposed, of nonputrescible solid wastes or nonputrescible wastes generated by a single generator at one or more premises owned by the generator.

(C) When the director determines that, due to the types of wastes disposed of, the engineering



design, the hydrogeological setting, the period of time since the commencement of operation, and the proximity of residential or other occupied structures located off the premises of the landfill to the exterior boundaries, of a sanitary landfill licensed under division (A) of section 3734.05 of the Revised Code or closed sanitary landfill for which a license was issued under that division, the potential exists for the formation and subsurface migration of explosive gases in such quantities and under such conditions as to endanger human health or safety or the environment, the director shall issue to the owner or operator of the sanitary landfill, or, in the instance of a closed sanitary landfill, the owner or operator of the sanitary landfill, or the subsequent owner, lessee, or other person who has control of the property on which the closed landfill is located, an order directing such owner to prepare, obtain approval of, and implement an explosive gas monitoring and reporting plan, in accordance with division (A) of this section. For the purposes of this division and division (D) of this section, explosive gases shall be considered to endanger human health or safety or the environment if concentrations of methane generated by the landfill in landfill structures, excluding gas control or recovery system components, exceed twenty-five per cent of the lower explosive limit or if concentrations of methane generated by the landfill at the landfill boundary exceed the lower explosive limit. As used in this division, "lower explosive limit" means the lowest per cent by volume of methane that will produce a flame in air at twenty-five degrees centigrade and atmospheric pressure.

(D) If a report submitted pursuant to a plan approved under division (A) of this section indicates that the formation of explosive gases at, and migration of explosive gases from, a sanitary landfill or closed sanitary landfill threatens human health or safety or the environment, the director or his authorized representative shall promptly conduct an evaluation of the levels of explosive gases on the premises of the landfill and in structures located in proximity to the boundaries of the landfill to determine whether the formation of explosive gases at, and migration of those gases from, the landfill or closed landfill constitutes such a threat. Based upon the findings of the evaluation, or of an evaluation conducted by the director, or his authorized representative, on his own initiative, the director shall issue an order under division (A) or (B) of section 3734.13 of the Revised Code, as the director considers necessary or appropriate, directing the owner or operator of the landfill, or, in the instance of a closed landfill, the owner or operator of the landfill, or the subsequent owner, lessee, or other person who has control of the land on which the closed landfill is located, to perform such measures as the director considers necessary or appropriate, to abate or minimize the formation of explosive gases or their migration off the premises of the landfill, to abate or remedy any conditions



caused by the formation and migration of such gases that endanger human health or safety or the environment and to take such actions as the director finds necessary or appropriate to prevent recurrence of the migration of explosive gases or decrease their concentration to levels set forth in division (C) of this section.

After the issuance of an order under this division, the director shall inspect the landfill at least once each week, or at such other intervals as the director or his authorized representative considers necessary or appropriate, to ascertain compliance with the order until such time as the director determines that full compliance with those terms and conditions has been achieved.

If a report submitted pursuant to a plan approved under division (A) of this section indicates that the formation of explosive gases at, and migration of explosive gases from, a landfill that is subject to an order issued under division (D) of this section has recurred in such quantities or under such conditions as threaten human health or safety or the environment, or if the director determines from an inspection of any such landfill that the owner or operator of the landfill, or, in the instance of a closed landfill, the owner or operator of the landfill, or the subsequent owner, lessee, or other person who has control of the land on which the closed landfill is located, has violated or is violating a term or condition of the order or that measures in addition to those prescribed by the order are necessary or appropriate under the circumstances, the director shall take such actions under division (A), (B), or (C) of section 3734.13 of the Revised Code as he considers necessary or appropriate to protect human health or safety or the environment.

(E) The director shall conduct random inspections of licensed and closed sanitary landfills for explosive gas levels and to monitor the accuracy of the reports submitted pursuant to plans approved under division (A) of this section.

(F) The director shall adopt rules under Chapter 119. of the Revised Code prescribing standards for conducting the explosive gas monitoring required by division (A) of this section including, without limitation, standards governing the numbers, locations, and design and construction of monitoring wells; quality control procedures to be followed by persons conducting those evaluations to ensure the accuracy of the monitoring; the frequency for sampling the monitoring wells, which shall be at least quarterly, except as otherwise provided in this division; and the frequency of reporting monitoring results to the director and board of health. The rules shall require that, in the instance of



closed sanitary landfills, explosive gas monitoring be conducted for the period of twenty years after closure or for such other period as the director considers necessary or appropriate. Such explosive gas monitoring shall be conducted quarterly during each of the five years immediately following closure of the landfills and semiannually thereafter. If such semiannual sampling shows that the methane limits set in division (C) of this section are exceeded, sampling may be resumed at a frequency determined by the director.

(G) The remedy provided by division (D) of this section is cumulative and concurrent with any other remedy provided in this chapter or Chapter 3704. of the Revised Code, and the existence or exercise of one remedy does not prevent the exercise of any other.