



Ohio Administrative Code

Rule 3745-54-90 Applicability - ground water protection.

Effective: December 7, 2004

(1) Except as provided in paragraph (B) of this rule, rules 3745-54-90 to 3745-54-101 of the Administrative Code apply to owners or operators of facilities that treat, store, or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in paragraph (A)(2) of this rule for all wastes (or constituents thereof) contained in waste management units at the facility, regardless of the time at which waste was placed in such units.

(2) All waste management units must comply with the requirements in rule 3745-54-101 of the Administrative Code. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of rules 3745-54-91 to 3745-54-100 of the Administrative Code in lieu of rule 3745-54-101 of the Administrative Code for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The financial responsibility requirements of rule 3745-54-101 of the Administrative Code apply to regulated units.

(B) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under rules 3745-54-90 to 3745-54-101 of the Administrative Code if:

(1) The owner or operator is exempted under rule 3745-54-01 of the Administrative Code; or

(2) He operates a unit which the director finds:

(a) Is an engineered structure,

(b) Does not receive or contain liquid waste or waste containing free liquids,

(c) Is designed and operated to exclude liquid, precipitation, and other run-on and run-off,

(d) Has both inner and outer layers of containment enclosing the waste,



(e) Has a leak detection system built into each containment layer,

(f) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods, and

(g) To a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(3) The director finds, pursuant to paragraph (D) of rule 3745-56-80 of the Administrative Code, that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of rule 3745-56-78 of the Administrative Code has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under paragraphs (B) to (B)(5) of this rule can only relieve an owner or operator of responsibility to meet the requirements of rules 3745-54-90 to 3745-54-101 of the Administrative Code during the post-closure care period; or

(4) The director finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under rule 3745-55-17 of the Administrative Code. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under paragraphs (B) to (B)(5) of this rule on assumptions that maximize the rate of liquid migration.

(5) He designs and operates a pile in compliance with paragraph (C) of rule 3745-56-50 of the Administrative Code.

(C) Rules 3745-54-90 to 3745-54-101 of the Administrative Code apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, rules 3745-54-90 to 3745-54-101 of the Administrative Code:



(1) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

(2) Apply during the post-closure care period under rule 3745-55-17 of the Administrative Code if the owner or operator is conducting a detection monitoring program under rule 3745-54-98 of the Administrative Code; or

(3) Apply during the compliance period under rule 3745-54-96 of the Administrative Code if the owner or operator is conducting a compliance monitoring program under rule 3745-54-99 of the Administrative Code or a corrective action program under rule 3745-54-100 of the Administrative Code.

(D) Rules 3745-54-90 to 3745-54-101 of the Administrative Code may apply to miscellaneous units when necessary to comply with rules 3745-57-91 to 3745-57-93 of the Administrative Code.

(E) Rules 3745-54-90 to 3745-54-101 of the Administrative Code apply to all owners and operators subject to the requirements of paragraph (G) of rule 3745-50-45 of the Administrative Code, when Ohio EPA issues either a post-closure permit or an enforceable document [as defined in paragraph (G) of rule 3745-50-45 of the Administrative Code] at the facility. When Ohio EPA issues an enforceable document, references to "in the permit" mean "in the enforceable document" in rules 3745-54-90 to 3745-54-101 of the Administrative Code.

(F) The director may replace all or part of the requirements of rules 3745-54-91 to 3745-54-100 of the Administrative Code that apply to a regulated unit with alternative requirements for ground water monitoring and corrective action for releases to ground water set out in the permit [or in an enforceable document, as defined in paragraph (G) of rule 3745-50-45 of the Administrative Code] where the director determines that:

(1) The regulated unit is situated among waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more waste management unit(s) (or areas of concern) are likely to have contributed to the release; and



(2) It is not necessary to apply the ground water monitoring and corrective action requirements of rules 3745-54-91 to 3745-54-100 of the Administrative Code because alternative requirements will protect human health and the environment.