

ENVIRONMENTAL QUALITY

CHAPTER 50

SOLID WASTE MANAGEMENT

Subchapter 10

Landfill Location

Rule	17.50.1001	General Provisions
	17.50.1002	Definitions
	17.50.1003	Airport Safety
	17.50.1004	Floodplains
	17.50.1005	Wetlands
	17.50.1006	Fault Areas
	17.50.1007	Seismic Areas
	17.50.1008	Unstable Areas
	17.50.1009	Location Restrictions

Subchapter 10

Landfill Location

17.50.1001 GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1002 DEFINITIONS In this subchapter, the following definitions apply:

(1) "100-year flood" means a flood that has a one percent or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(2) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(3) "Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with ARM 17.50.1403.

(4) "Aquifer" means any geologic formation, group of formations, or part of a formation capable of yielding significant quantities of ground water to wells or springs.

(5) "Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the Class II or lined Class IV landfill unit, because of natural or artificially-caused events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

- (6) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.
- (7) "Class II landfill facility" has the meaning given in ARM 17.50.504.
- (8) "Class III landfill facility" has the meaning given in ARM 17.50.504.
- (9) "Closure" has the meaning given in ARM 17.50.502.
- (10) "Department" has the meaning given in ARM 17.50.502.
- (11) "Destruction or adverse modification" means a direct or indirect alteration of critical habitat that appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.
- (12) "Displacement" means the relative movement of any two sides of a fault measured in any direction.
- (13) "Disposal" has the meaning given in 75-10-203, MCA.
- (14) "Endangered or threatened species" means any species listed as such pursuant to section 4 of the federal Endangered Species Act of 1973.
- (15) "Existing," when used in conjunction with "unit" or a type of unit, has the meaning given in ARM 17.50.502.
- (16) "Facility" has the meaning given in ARM 17.50.502.
- (17) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.
- (18) "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood prone areas of offshore islands, that are inundated by the 100-year flood.
- (19) "Ground water" has the meaning given in ARM 17.50.502.
- (20) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.
- (21) "Karst terranes" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.
- (22) "Landfill" has the meaning given in ARM 17.50.502.
- (23) "Lateral expansion" has the meaning given in ARM 17.50.502.
- (24) "Leachate" has the meaning given in ARM 17.50.502.
- (25) "Licensee" has the meaning given in ARM 17.50.502.
- (26) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This definition does not include artificial materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.
- (27) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.
- (28) "New," when used in conjunction with "unit" or a type of unit, has the meaning given in ARM 17.50.502.

- (29) "Operator" has the meaning given in ARM 17.50.502.
- (30) "Owner" has the meaning given in ARM 17.50.502.
- (31) "Poor foundation conditions" means those areas where features exist that indicate that a natural or artificially-caused event may result in inadequate foundation support for the structural components of a Class II or lined Class IV landfill unit.
- (32) "Post-closure care" has the meaning given in ARM 17.50.502.
- (33) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.
- (34) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- (35) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.
- (36) "Solid waste management system" has the meaning given in 75-10-203, MCA.
- (37) "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of a Class II or lined Class IV landfill unit that is necessary for protection of human health and the environment.
- (38) "Taking" means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting or attempting to engage in such conduct.
- (39) "Unit" has the meaning given in ARM 17.50.502.
- (40) "Unstable area" means a location that is susceptible to natural or artificially-caused events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and Karst terranes.
- (41) "Washout" means the carrying away of solid waste by waters of the base flood.
- (42) "Wetlands" has the meaning given in 40 CFR 232.2. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1003 AIRPORT SAFETY (1) The owner or operator of a new or existing Class II landfill unit, or a lateral expansion of an existing Class II landfill unit, that is located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft shall submit for department approval a demonstration that the unit is designed and operated so that the landfill unit does not pose a bird hazard to aircraft. For a new Class II landfill unit, or a lateral expansion of an existing Class II landfill unit, the demonstration must be submitted with the application for license. For an existing Class II landfill unit for which the demonstration has not been submitted and approved, the owner or operator shall submit the demonstration to the department for approval within 60 days after being requested to do so by the department.

(2) The owner or operator shall place the demonstration required in (1) in the operating record and notify the department that it has been placed in the operating record.

(3) An owner or operator proposing to site a new Class II landfill unit, or lateral expansion of an existing Class II landfill unit, within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the manager of the affected airport and the Federal Aviation Administration (FAA) of the proposal. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1004 FLOODPLAINS (1) The owner or operator of a new or existing Class II or Class IV landfill unit, or a lateral expansion of an existing Class II or Class IV landfill unit, located in a 100-year floodplain shall submit for department approval a demonstration that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator shall place the approved demonstration in the operating record and notify the department that it has been placed in the operating record.

(2) For a new Class II or Class IV landfill unit, or a lateral expansion of an existing Class II or Class IV landfill unit, the demonstration in (1) must be submitted with the application for a license. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1005 WETLANDS (1) A new Class II or Class IV landfill unit, or a lateral expansion of an existing Class II or Class IV landfill unit, may not be located in wetlands, unless the owner or operator submits to the department for approval the following demonstrations:

(a) when applicable under 33 USC 1344 (Section 404 of the Federal Clean Water Act, as amended) or applicable Montana wetlands laws, clear rebuttal of the presumption that a practicable alternative to the proposed landfill is available that does not involve wetlands;

(b) the construction and operation of a Class II or Class IV landfill unit will not:

(i) cause or contribute to violations of any applicable Montana water quality standard;

(ii) violate any applicable toxic effluent standard or prohibition under 33 USC 1317 (Section 307 of the Federal Clean Water Act, as amended);

(iii) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under 16 USC 1531 through 1544 (the Endangered Species Act of 1973, as amended); or

(iv) violate any requirement under 33 USC 1401 through 1447(f) (the Marine Protection, Research, and Sanctuaries Act of 1972, as amended) for the protection of a marine sanctuary;

(c) the Class II or Class IV landfill unit will not cause or contribute to significant degradation of wetlands. The owner or operator shall demonstrate the integrity of the Class II or Class IV landfill unit and its ability to protect ecological resources, by addressing the following factors:

(i) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the Class II or Class IV landfill unit;

(ii) erosion, stability, and migration potential of dredged and fill materials used to support the Class II or Class IV landfill unit;

(iii) the volume and chemical nature of the waste managed in the Class II or Class IV landfill unit;

(iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(v) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

(d) to the extent required under 33 USC 1344 (Section 404 of the Federal Clean Water Act, as amended) or applicable Montana wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable as required by (1)(a), then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions, e.g., restoration of existing degraded wetlands or creation of artificial wetlands; and

(e) sufficient information is available to make a reasonable determination with respect to these demonstrations. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1006 FAULT AREAS (1) A new Class II landfill unit, or a lateral expansion of an existing Class II landfill unit, may not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator submits to the department for approval a demonstration that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the Class II landfill unit and will be protective of human health and the environment. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1007 SEISMIC AREAS (1) A new Class II landfill unit, or a lateral expansion of an existing Class II landfill unit, may not be located in a seismic impact zone, unless the owner or operator submits to the department for approval a report prepared by a Montana licensed professional engineer demonstrating that all landfill containment structures including, but not limited to, the landfill liner, leachate collection and removal system, and surface water control system are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator shall place the approved report in the operating record and notify the department that it has been placed in the operating record. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1008 UNSTABLE AREAS (1) An applicant for a license for a new Class II landfill unit, or a lateral expansion of an existing Class II landfill unit, located in an unstable area shall submit to the department for approval, with the application, a report prepared by a Montana licensed professional engineer demonstrating that the unit is designed to ensure that the integrity of the structural components of the unit will not be disrupted. The owner or operator shall place the approved report in the operating record and notify the department that it has been placed in the operating record. When determining whether an area is unstable, the owner or operator shall consider the following factors, and any other factor determined by the department to be necessary to protect human health or the environment:

(a) on-site or local soil conditions that may result in significant differential settling;

(b) on-site or local geologic or geomorphologic features; and

(c) on-site or local artificial features or events, both surface and subsurface.

(History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

17.50.1009 LOCATION RESTRICTIONS (1) The owner or operator of a landfill facility shall comply with the following general locational requirements:

(a) a sufficient amount of land must be available to satisfy the approved design, operation, and capacity of any solid waste management system, including adequate separation of wastes from underlying ground water or adjacent surface water;

(b) local roads must be capable of providing access in all weather conditions and local bridges must be capable of supporting vehicles with maximum rated loads;

(c) the facility must be located in a manner that does not allow the discharge of pollutants in excess of state standards for the protection of state waters, public water supply systems, or private water supply systems. The department may, if necessary to protect human health or the environment, impose additional conditions on a facility in or near sensitive hydrogeological environments including, but not limited to, sole-source aquifers, wellhead protection areas, or gravel pits;

(d) drainage structures must be installed to control surface water run-off from waste management areas and prevent surface water run-on into waste management areas;

(e) the facility must be located to allow for closure, post-closure care, and planned uses of the land after the post-closure period;

(f) the facility must manage solid waste, gas, and leachate pursuant to subchapters 4 and 5 and subchapters 10 through 14;

(g) the facility or practices may not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife;

(h) a Class III landfill may not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health, wildlife, or land or water resources; and

(i) the facility or solid waste management activity may not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, as identified in 50 CFR Part 17. (History: 75-10-204, MCA; IMP, 75-10-204, MCA; NEW, 2010 MAR p. 317, Eff. 2/12/10.)

