

ADOPTED BY THE BOARD OF ENVIRONMENTAL REVIEW  
OF THE STATE OF MONTANA

**In the matter of the adoption of 17.36.911 through 17.36.924  
and the repeal of ARM 17.36.901 through 17.36.903 and  
17.36.907 through 17.36.910 pertaining to Subsurface  
Wastewater Treatment Systems**

17.36.911 SCOPE (1) These rules are intended to protect the public health, safety, and welfare by setting forth minimum standards for the construction, alteration, repair, extension, and use of wastewater treatment systems within the state.

(2) Under 50-2-116, MCA, local boards of health must adopt regulations no less stringent than this subchapter 9 for wastewater treatment systems for private and public buildings installed after October 1, 1991.

AUTH: 75-5-201, MCA

IMP: 75-5-305, MCA

17.36.912 DEFINITIONS (1) "Absorption bed" means an absorption system that consists of excavations greater than three feet in width where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground.

(2) "Absorption trench" means an absorption system that consists of excavations less than or equal to three feet in width where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground.

(3) "Bedrock" means material that cannot be readily excavated by hand tools, or material that does not allow water to pass through or that has insufficient quantities of fines to provide for the adequate treatment and disposal of wastewater.

(4) "Cesspool" means a seepage pit without a septic tank to pretreat the wastewater.

(5) "Department" means the Montana department of environmental quality.

(6) "Drainage way" means a course or channel along which stormwater moves in draining an area.

(7) "Dwelling" or "residence" means any structure, building or portion thereof, which is intended or designed for human occupancy and supplied with water by a piped water system.

(8) "Experimental system" means a wastewater treatment system for which specific design standards are not provided in department Circular DEQ-4, 2002 edition, DEQ-2, 1999 edition, or this subchapter.

(9) "Failed system" means a wastewater treatment and/or disposal system that no longer provides the treatment and/or

disposal for which it was intended, or violates any of the requirements of 17.36.913.

(10) "Floodplain" means the area adjoining the watercourse or drainway that would be covered by the floodwater of a flood of 100-year frequency except for sheet flood areas that receive less than one foot of water per occurrence and are considered zone b areas by the federal emergency management agency. The floodplain consists of the floodway and the flood fringe, as defined in ARM Title 36, chapter 15.

(11) "Gray water" means wastewater other than toilet wastes or industrial chemicals including, but not limited to, shower and bath wastewater, kitchen wastewater, and laundry wastewater.

(12) "Ground water observation well" means a well installed for the purpose of measuring the depth from the natural ground surface to the seasonally high groundwater.

(13) "Holding tank" means a watertight receptacle that receives wastewater for retention and does not, as part of its normal operation, dispose or treat the wastewater.

(14) "Impervious layer" means any layer of material in the soil profile that has a percolation rate slower than 120 minutes per inch.

(15) "Individual wastewater system" means a wastewater system that serves one living unit or commercial structure. The total number of people served may not exceed 24.

(16) "Limiting layer" means bedrock, an impervious layer, or seasonally high groundwater.

(17) "Living unit" means the area under one roof occupied by a family. For example, a duplex is considered two living units.

(18) "Multiple user wastewater system" means a non-public wastewater system that serves or is intended to serve three through 14 living units or three through 14 commercial structures. The total number of people served may not exceed 24. In estimating the population served, the reviewing authority shall multiply the number of living units times the county average of persons per living unit based on the most recent census data.

(19) "Municipal" means pertaining to an incorporated city or town.

(20) "Package plants" means wastewater treatment systems that are sealed within a watertight container and contain components for the secondary and tertiary treatment of wastewater.

(21) "Percolation test" means a standardized test used to assess the infiltration rate of soils.

(22) "Piped water system" means a plumbing system that conveys water into a structure from any source including, but not limited to, wells, cisterns, springs, or surface water.

(23) "Pit privy" means a pit that receives undiluted, non-water-carried toilet wastes.

(24) "Replacement system" means a wastewater treatment system proposed to replace a failed, failing, or contaminating system.

(25) "Reviewing authority" means a local board of health or local health officer, as those terms are defined in 50-2-101, MCA, or their designees.

(26) "Sealed pit privy" means an enclosed receptacle designed to receive non-water-carried toilet wastes into a watertight vault.

(27) "Seasonally high groundwater" means the depth from the natural ground surface to the upper surface of the zone of saturation, as measured in an unlined hole or perforated monitoring well during the time of the year when the water table is the highest. The term includes the upper surface of a perched water table.

(28) "Seepage pit" means a covered underground receptacle that receives wastewater after primary treatment and allows the wastewater to seep into the surrounding soil.

(29) "Septic tank" means a storage settling tank in which settled sludge is in immediate contact with the wastewater flowing through the tank while the organic solids are decomposed by anaerobic action.

(30) "Shared wastewater system" means a wastewater system that serves or is intended to serve two living units or commercial structures. The total people served may not exceed 24. In estimating the population served, the reviewing authority shall multiply the number of living units times the county average of persons per living unit based on the most recent census data.

(31) "Site evaluation" means an evaluation to determine if a site is suitable for the installation of a subsurface wastewater treatment system.

(32) "Slope" means the rate that a ground surface declines in feet per 100 feet. It is expressed as percent of grade.

(33) "Soil profile" means a description of the soil strata to a depth of eight feet using the USDA soil classification system.

(34) "Subsurface wastewater treatment system" means the process of wastewater treatment in which the effluent is applied below the soil surface or into a mound by an approved distribution system.

(35) "Variance" means the grant, pursuant to 17.36.922, by the reviewing authority of an exception to the minimum requirements set out in this subchapter or department Circular DEQ-4, 2002 edition.

(36) "Wastewater" means water-carried waste that is discharged from a dwelling, building, or other facility, including:

- (a) household, commercial, or industrial wastes;
- (b) chemicals;
- (c) human excreta; or
- (d) animal and vegetable matter in suspension or solution.

(37) "Wastewater treatment system" or "wastewater disposal system" means a system that receives wastewater for purposes of treatment, storage, or disposal. The term includes, but is not limited to, pit privies and experimental systems.

AUTH: 75-5-201, MCA  
IMP: 75-5-305, MCA

17.36.913 GENERAL REQUIREMENTS (1) No person may construct, alter, extend, or utilize a wastewater treatment or disposal system that may:

(a) contaminate any actual or potential drinking water supply;

(b) cause a public health hazard as a result of access to insects, rodents, or other possible carriers of disease to humans;

(c) cause a public health hazard by being accessible to persons or animals;

(d) violate any law or regulation governing water pollution or wastewater treatment and disposal, including the rules contained in this subchapter;

(e) pollute or contaminate state waters, in violation of 75-5-605, MCA;

(f) degrade state waters unless authorized pursuant to 75-5-303, MCA; or

(g) cause a nuisance due to odor, unsightly appearance or other aesthetic consideration.

AUTH: 75-5-201, MCA  
IMP: 75-5-305, MCA

17.36.914 WASTEWATER TREATMENT SYSTEMS - TECHNICAL REQUIREMENTS (1) Except as provided in 17.36.916, all wastewater treatment systems must be designed and constructed in accordance with the applicable requirements in 17.36.913 and in department Circular DEQ-4, 2002 edition.

(2) Department Circular DEQ-4, 2002 edition, which sets forth standards for subsurface sewage treatment systems is adopted and incorporated by reference for purposes of this subchapter. Copies are available from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901.

(3) Wastewater treatment systems must be located to maximize the vertical separation distance from the bottom of the absorption trench to the seasonally high groundwater level, bedrock, or other limiting layer, but under no circumstances may this vertical separation be less than four feet of natural soil.

(4) A replacement area or replacement plan must be provided for each new or expanded wastewater treatment system.

Replacement areas and plans must comply with the requirements of this subchapter.

(5) A site evaluation must be performed for each wastewater treatment system. As determined by the reviewing authority, the site evaluation may include the following:

(a) soil descriptions for proposed wastewater treatment systems. Soil descriptions must be based on data obtained from test holes within 25 feet of each wastewater treatment location. Test holes must be at least eight feet in depth unless a limiting layer precludes digging to eight feet;

(b) percolation test results within the boundaries of the proposed wastewater treatment system; and

(c) if the applicant or the reviewing authority has reason to believe that groundwater will be within seven feet of the surface at any time of the year within the boundaries of the system, the applicant must provide data to demonstrate that the minimum separation distance required by (3) between the absorption trench bottom and the seasonally high groundwater level can be maintained. The reviewing authority may require the applicant to install ground water observation wells to a depth of at least eight feet to determine the seasonally high groundwater level. The applicant shall monitor the observation wells through the seasonally high groundwater period. Measurement must occur for a long enough period of time to detect a peak and a sustained decline in the groundwater level.

(6) If a department-approved public collection and treatment system is readily available within a distance of 200 feet of the property line for connection to a new source of wastewater, or as a replacement for a failed system, and the owner or managing entity of the public collection and treatment system approves the connection, wastewater must be discharged to the public system. For purposes of this rule:

(a) a public system is not "readily available" if there is evidence demonstrating that connection to the system is physically or economically impractical, or that easements cannot be obtained; and

(b) a connection is "economically impractical" if the cost of connection to the public system equals or exceeds three times the cost of installation of an approvable system on the site.

(7) Wastewater treatment systems, except for sealed components that are designed, constructed, and tested as set out in 17.36.918, may not be located in drainage ways.

AUTH: 75-5-201, MCA

IMP: 75-5-305, MCA

17.36.916 ABSORPTION BEDS, HOLDING TANKS, SEEPAGE PITS, PIT PRIVIES, CESSPOOLS - TECHNICAL REQUIREMENTS AND PROHIBITIONS (1) The wastewater treatment systems described in (3) through (7) may be allowed only if the reviewing authority determines that:

(a) site constraints prevent the applicant from constructing any system described in department Circular DEQ-4, 2002 edition;

(b) all off-site treatment alternatives have been considered and are infeasible;

(c) the requirements of 17.36.913 are met; and

(d) all other requirements in this subchapter applicable to the proposed system are met.

(2) Applications for permits for wastewater treatment systems described in (3) through (7) must include a demonstration that no other alternatives to wastewater disposal are feasible.

(3) Absorption beds may be used for replacement systems only and may not be constructed in unstabilized fill. Absorption beds must also meet the design and construction requirements in department Circular DEQ-4, 2002 edition.

(4) Seepage pits may be used for replacement systems only, and only when no other means of treatment and disposal is available.

(a) Seepage pits must have a minimum vertical separation of 25 feet between the bottom of the pit and groundwater.

(b) Permit applications for seepage pits must include plans for the proposed pit. Seepage pits must meet the design and construction requirements in department Circular DEQ-4, 2002 edition.

(5) Holding tank systems may be approved only if the facility to be served is for seasonal use.

(a) For purposes of this rule "seasonal use" means use for not more than a total of four months (120 days) during any calendar year. Permit applications for holding tanks must show that the property use conforms to the "seasonal use" limitation or that a variance has been granted.

(b) Holding tanks must meet the design and construction requirements in department Circular DEQ-4, 2002 edition.

(c) Permit applications for holding tanks must include plans for the proposed holding tank system. The plans must include the following information:

(i) the method for monitoring tank levels;

(ii) the method for waterproofing the tank;

(iii) a maintenance plan, which must include annual water tightness testing and periodic pumping by a licensed septic tank pumper; and

(iv) the method for tank stabilization if seasonal high groundwater is expected to be within 12 inches of tank's base.

(6) Sealed pit privy systems may be approved only if the facility to be served does not have a piped water supply, and the facility is a seasonal-use recreational site.

(a) Permit applications for sealed pit privies must include plans for the proposed sealed pit. Sealed pit privy systems must meet the design and construction requirements in department Circular DEQ-4, 2002 edition.

(7) Unsealed pit privies may be approved only for seasonal use in remote locations that are not accessible to septic tank pumpers.

(8) New construction or alteration of cesspools is prohibited.

AUTH: 75-5-201, MCA  
IMP: 75-5-305, MCA

17.36.918 HORIZONTAL SETBACKS, FLOODPLAINS

(1) Minimum horizontal setback distances (in feet) are as follows:

TABLE 1  
SETBACK DISTANCES

	Sealed components (1) and other components (2)	Absorption systems (3)
Public or multi-user wells/springs	100	100
Other wells	50	100
Suction lines	50	100
Cisterns	25	50
Roadcuts, escarpments	10 (4)	25
Slopes > 25% (5)	10 (4)	25
Property boundaries	10	10
Subsurface drains	10	10
Water lines	10	10
Drainfields/sand mounds (3)	10	-
Foundation walls	10	10
Surface water, Springs	50	100
Floodplains	--(1) 100 (2)	100

(1) Sealed components include sewer lines, sewer mains, septic tanks, grease traps, dosing tanks, pumping chambers, holding tanks and sealed pit privies. Holding tanks and sealed pit privies must be located at least 10 feet outside the floodplain or any openings must be at least two feet above the floodplain elevation.

(2) Other components include intermittent and recirculating sand filters, package plants, and evapotranspiration systems.

(3) Absorption systems include absorption trenches, absorption beds, sand mounds, and other drainfield type systems that are not lined or sealed. This term also includes seepage pits and unsealed pit privies.

(4) Sewer lines and sewer mains may be located in roadways and on steep slopes if the lines and mains are safeguarded against damage.

(5) Down-gradient of the sealed component, other component, or drainfield/sand mound.

(2) The reviewing authority may require greater horizontal separation distances than those specified in Table 1, if it determines that site conditions or water quality nondegradation requirements indicate a need for the greater distance.

(3) If the floodplain has not been designated and its level relative to a wastewater system is in question, the applicant shall submit evidence adequate to allow the reviewing authority to establish the location of the floodplain.

(4) Sealed components of wastewater treatment systems, if located within a 100-year floodplain, must be designed and constructed to prevent surface water and ground water inundation, and pump lines must be pressure tested prior to use. Pipes must have a pressure rating of at least two times the operating pressure or pump shutoff pressure, whichever is greater. Pipes must be tested at 1½ times the operating pressure or pump shutoff pressure, whichever is greater, or must be tested as specified by the manufacturer.

AUTH: 75-5-201, MCA

IMP: 75-5-305, MCA

17.36.920 PERMITS (1) The reviewing authority shall administer a permit system for the construction, alteration, repair, and extension of wastewater treatment and disposal systems.

(2) Permit applications must:

(a) identify the owner of the system, location of the system, and type of system to be installed;

(b) provide a justification for the type of system proposed;

(c) include a drawing of the lot layout with legend and scale; and

(d) show separation distances for the features indicated in 17.36.918.

(3) The reviewing authority shall maintain records of all permits.

(4) For permits for new or increased sources, the reviewing authority shall show on the permit the method used for the non-significance determination made pursuant to ARM Title 17, chapter 30, subchapter 7.

(5) For permits issued for replacement of wastewater treatment systems that do not meet minimum standards for subdivisions as set out in ARM Title 17, chapter 36, subchapter 3, the reviewing authority shall notify the owner

that the design may limit the ability of the owner to subdivide the property.

AUTH: 75-5-201, MCA  
IMP: 75-5-305, MCA

17.36.922 LOCAL VARIANCES (1) As provided in this rule, a local board of health, as defined in 50-2-101, MCA, may grant variances from the requirements in this subchapter and in department Circular DEQ-4, 2002 edition.

(2) The local board of health may grant a variance from a requirement only if it finds that all conditions in these rules regarding the variance are met, and that granting the variance will not:

(a) contaminate any actual or potential drinking water supply;

(b) cause a public health hazard as a result of access to insects, rodents, or other possible carriers of disease to humans;

(c) cause a public health hazard by being accessible to persons or animals;

(d) violate any law or regulation governing water pollution or wastewater treatment and disposal, including the rules contained in this subchapter except for the rule that the variance is requested from;

(e) pollute or contaminate state waters, in violation of 75-5-605, MCA;

(f) degrade state waters unless authorized pursuant to 75-5-303, MCA; or

(g) cause a nuisance due to odor, unsightly appearance or other aesthetic consideration.

(3) The local board of health may adopt variance criteria in addition to those set out in (2).

(4) The local board of health's decision regarding a variance of a requirement in this subchapter or in department Circular DEQ-4, 2002 edition, may be appealed to the department pursuant to 17.36.924.

AUTH: 75-5-201, MCA  
IMP: 75-5-305, MCA

17.36.924 VARIANCE APPEALS TO THE DEPARTMENT

(1) Upon receiving an appeal of a local board of health's variance decision under 75-5-305, MCA, the department shall determine within 30 days whether the appeal meets the requirements of (2) and notify the appellant in writing of its determination.

(2) The appeal to the department must be in writing and must provide the following information:

(a) the name of the appellant;

(b) the local government entity or entities that made the decision on the application for variance at the local level;

(c) a summary explanation of the project or development for which the variance is requested;

(d) a summary explanation of the variance that is sought;

(e) a statement of the law or ordinance at issue in the matter; and

(f) copies of all applications and supporting materials submitted to the local board of health, and of any written decisions issued by the local board of health.

(3) If the appeal does not fulfill the requirements of (2), the department shall state in its notice to the appellant the deficiencies that must be addressed in a resubmittal. The department shall also notify the appellant in writing when its submittal meets the requirements of (2).

(4) If the appeal fulfills the requirements of (2), the department shall conduct a hearing on the appeal.

(5) The hearing must be conducted under the provisions of the Montana Administrative Procedure Act, Title 2, chapter 4, part 6, MCA. Except as provided in (7), the department must conduct the hearing within 90 days of the department's written notice to the appellant that the appeal meets the requirements of (2).

(6) The department shall review each application under ARM Title 17, chapter 4, subchapter 6 to determine if the department's action may result in significant effects to the quality of the human environment, thereby requiring an environmental impact statement.

(7) If the department's analysis indicates that an environmental impact statement is required, the department shall have 60 days from the date of issuance of the final environmental impact statement to conduct a hearing under this rule.

(8) After conducting the hearing, the department may allow up to 14 days for written comments to be submitted concerning the appeal.

(9) The department shall apply the local government variance requirements at issue in the case, provided the requirements meet the minimum requirements stated in 17.36.913 and 17.36.922.

(10) The department shall issue a formal decision, including findings of fact and conclusions of law, within 30 days after the hearing.

AUTH: 75-5-201, MCA

IMP: 75-5-305, MCA