

# **Carbon County**

## **Onsite Wastewater Treatment Regulations**

**Revised June 11, 2019**

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## **PURPOSE OF REGULATIONS**

A major factor influencing the health of individuals where public sewers are not available is the proper disposal of human excreta. Many diseases such as dysentery, infectious hepatitis, typhoid, paratyphoid, and various types of diarrheal infections are transmitted through the fecal contamination of food and water, largely due to the improper disposal of human waste. For this reason, every effort must be made to prevent such hazards and to dispose of all human waste so that no opportunity will exist for contamination of water and food. Important to this is the proper *treatment* of sewage and *not just* the disposal of sewage.

Safe disposal of all human and domestic wastes is necessary to protect the health of the individual family and community and to prevent the occurrence of nuisances. To accomplish satisfactory results, such wastes must be disposed of so that:

1. They will not contaminate any drinking water supply.
2. They will not give rise to a health hazard by being accessible to insects, rodents or other carriers which may come into contact with water or food.
3. They will not create a hazard by being accessible to children.
4. They will not pollute or present the potential to contaminate any surface or ground water.
5. They will not violate any provisions of the Montana Water Quality Act.
6. They will not give rise to a nuisance due to odor or unsightly appearance.

It is upon this basis that the Carbon County Board of Health has adopted the following regulations. When those criteria are met, and where soil and site conditions are favorable, individual sewage disposal systems can be expected to give safe and satisfactory service.

## **SECTION I - AUTHORITY AND SCOPE OF REGULATIONS**

1.1 These regulations have been written pursuant to Title 50-2-116 (k), Montana Code Annotated (MCA), -- Powers and Duties of Local Boards “subject to the provisions of 50-2-130 MCA, adopt necessary regulations that are not less stringent than state standards for the control and disposal of sewage from private and public buildings and facilities that are not regulated by Title 75, chapter 6, or Title 76, chapter 4. The regulations must describe standards for granting

variances from the minimum requirements that are identical to standards promulgated by the board of environmental review and must provide for appeal of variance decisions to the department as required by 75-5-305 MCA.”

12 The permit system established through these regulations governs *only* the installation and operation of sewage treatment systems. The permit is not to be construed as being a building permit, zoning compliance permit or any other permit that may be required by other agencies or offices to erect a structure in Carbon County.

13 The Permit itself establishes the minimum sizes and distances adopted in Carbon County. The County does not design the system nor does the Permit bind or obligate the County to guarantee the operation of any system.

14 Any property on which there is human occupancy shall be equipped with toilet facilities approved by the Carbon County Environmental Health Department.

15 It shall be unlawful and constitute a violation of these regulations to own, operate or use a malfunctioning or failing sewage treatment system (See section 9).

## **SECTION 2 - EFFECTIVE DATE, REPEALER, SEVERABILITY**

2.1 All provisions established under this regulation shall become effective as of August 26, 2009.

2.2 **Repealer:** Conflicting of Ordinances, Effect of Partial Invalidity: In any case where a provision of this regulation is found to be in conflict with a provision of any zoning, building, fire, safety or health regulation or code of Carbon County, or any municipality within Carbon County, existing on the effective date of this regulation, the provision which, in the judgment of the Carbon County Board of Health or authorized agents, establishes the higher standard for the protection of the health and safety of the people, shall prevail. In any case where a provision of this regulation is found to be in conflict with a provision of any other subordinate ordinance or code of Carbon County, or any municipality within Carbon County, on the effective date of this regulation, the provisions of this regulation shall be deemed to prevail, and such other provisions of any ordinances or codes are hereby declared to be superseded to the extent that they may be found in conflict with this regulation. These regulations supersede all prior regulations or amendments

thereof established by the Carbon County Board of Health pertaining to Wastewater treatment systems in Carbon County.

2.3 If any section, subsection, sentence, clause or phrase of this regulation should be declared invalid for any reason whatsoever, such invalidity shall not affect the remaining portions of this regulation, which shall remain in full force and effect, and to this end, the provisions of this regulation are hereby declared to be severable.

2.4 If Montana law affecting state minimum standards for Wastewater treatment systems is either created or amended, the Carbon County Board of Health reserves the right to amend these regulations without public notice or hearing in order to meet required minimum state standards.

2.5 If Montana law governing the duties, responsibilities and authorities of local boards of health and Health Officers is either created or amended, the Carbon County Board of Health reserves the right to amend these regulations without public notice or hearing as necessary to be consistent with such state law.

2.6 **Severability:** If a court of competent jurisdiction holds any word, phrase, clause, sentence, paragraph, section, or other part of these regulations invalid, that judgment will affect only the part held invalid.

### **SECTION 3 - DEFINITIONS**

**“Administrative Rules of Montana”** (ARM) the rules enacted under statutory authority of the MCA.

**“Absorption Area”** the area determined by multiplying the length and the width of the bottom area of the disposal trench or bed.

**“Absorption Bed”** shall mean an Absorption System that consists of excavation greater than three (3) feet in width, where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground (DEQ 4).

**“Absorption System” or “Drainfield”** means any secondary treatment system including absorption trenches, elevated sand mounds, and evapotranspiration absorption (ETA) systems used for the subsurface disposal of pretreated waste effluent (DEQ 4).

**“Absorption Trench”** an absorption system that consists of excavations 18 to 36 inches in width

where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground.

**“Advanced Treatment”** a treatment process that provides effluent quality in excess of primary treatment.

**“Aerobic Sewage Treatment Unit”** a sewage treatment plant that incorporates a means of introducing air and oxygen into the sewage so as to provide aerobic biochemical stabilization during detention period. Aerobic sewage treatment facilities may include anaerobic processes as part of the treatment system.

**“Alteration”** shall mean physically changing a Sewage treatment system by lengthening, shortening, widening, building structures over or changing the flow into a system by changing or adding Dwelling units or adding to the living capacity of a Dwelling unit. This shall not be construed to mean changing Dwellings in a campground or a trailer court currently licensed by the Montana Department of Public Health and Human Services (DPHHS).

**“Applicant”** shall mean any Person, institution, public or private corporation, partnership or other entity that submits an application for a Permit to install, alter, construct or repair a Sewage treatment system.

**“Approved”** shall mean official consent given in writing, or verbally in the case of an emergency, by the Carbon County Board of Health and/or Health Officer, the Carbon County Environmental Health Department of the Board of Health’s designated representative.

A) **“Application Approval”** issuance of a sewage treatment system **permit to construct** is authorization to install a system as per the approved plans and any permit conditions.

B) **“Installation Approval”** upon inspection and certification by the responsible party and given compilation of all measurements and field notes, permission to backfill system.

C) **“Final Approval”** approval granted upon review and acceptance of the system certification and as-built drawing. The permit to construct that becomes a **permit to operate** the system as approved.

**“Approved Subdivision”** a subdivision of land, which has received approval from MDEQ and has a Release of Sanitary Restrictions or Certificate of Subdivision Plat Approval Statement filed in the Clerk and Records office.

**“As-built”** a post-construction drawing, which accurately depicts the location and configuration of all sewage treatment system components and other on-site features as required per Appendix G and requirements specified on the permit. The as-built drawing and system certification form are required by the Environmental Health Department as certification of the system installation.

**“Authorized Agent”** for the purpose of obtaining a sewage treatment system permit, a person lawfully designated by the legal property owner authorizing that person to work and sign on property owner’s behalf.

**“Backfill”** soil used to cover underground portions of a WWTS.

**“Bedrock”** shall mean 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 (DEQ 4).

**“Bedroom”** any room used for sleeping. *An unfinished basement must be considered as an additional bedroom.*

**“Blackwater”** liquid and solid human body waste and the carriage waters generated through toilet usage.

**“Board” or “BOH”** shall mean the Carbon County Board of Health, as formed in accordance with 50-2-106 MCA.

**“BOD5 (five-day biochemical oxygen demand)”** the quantity of oxygen used in the biochemical oxidation of organic matter in 5 days at 20 degrees centigrade under specified conditions and reported as milligrams per liter (mg/L).

**“Building Drain”** the pipe extending from the interior plumbing to a point 2 feet outside the foundation wall.

**“Building Sewer”** the pipe connecting the house or building drain to the public sewer or private sewer.

**“Certificate of Subdivision Plat Approval”** a statement issued by MDEQ approving a reviewed parcel for structures requiring a water supply and sewer (see Approved Subdivision or Release of Sanitary Restrictions).

“**Cesspool**” shall mean a Seepage Pit without a Septic Tank to pretreat the Wastewater (DEQ 4).

“**Cistern**” shall mean a water tight receptacle of non-toxic material that is designed for the storage of potable water, in accordance with circular DEQ 17, ARM 17.38.

“**Cleanout**” an access to a sewer line at least 4 inches in diameter, extending from the sewer line to the ground surface, used for access to clean a sewer line.

“**Coefficient of Uniformity (CU)**” is equal to  $D_{60}/D_{10}$ , where  $D_{60}$  is the grain diameter (in mm) corresponding to 60 percent passing and  $D_{10}$  is the grain diameter (in mm) corresponding to 10 percent passing, by weight.

“**Commercial**” any venture associated with commerce or trade.

“**Community, Municipal, or Public Treatment System**” shall mean Sewage systems owned or operated by city, town, municipal corporation, county, or state, or other ownership, Approved by the State Department of Environmental Quality (DEQ), consisting of a collection system and necessary trunk lines, pumping facilities, and means of final treatment and disposal, and under Permit from the DEQ (See ARM 17.38.101 et.seq.).

“**Composting Toilet**” a toilet which connects to a watertight compartment or vault designed to receive composting materials sufficient to reduce waste by aerobic decomposition.

“**Construct or Construction**” any excavation for and/or installation of a WWTS.

“**Contaminate**” an increase in the concentration of organic matter, chemicals, viruses, or bacteria in water to a degree which is likely to affect present or future beneficial uses of the water or which violates any applicable ground water or surface water standards.

“**Covenant**” a recorded agreement stating certain activities and/or practices are required or prohibited.

“**Department**” shall mean the Carbon County Environmental Health Department, working as representatives of the Carbon County Health Officer and Carbon County Board of Health.

“**Design Flow**” the peak flow (daily or instantaneous, as appropriate) for sizing hydraulic facilities, such as pumps, piping, storage, and drainfields and means the average daily flow for sizing other treatment systems.

“**DEQ**” or “**MDEQ**” shall mean the Montana Department of Environmental Quality.

“**DEQ 2**” shall mean the circular published by DEQ entitled “*Design Standards for Wastewater Facilities*” 1999 edition, or most current edition.



“**DEQ 4**” shall mean the circular published by DEQ entitled “*Montana Standards for Subsurface Wastewater Treatment Systems*” 2004 edition, or most current edition.

“**DEQ 17**” shall mean the circular published by DEQ entitled “*Montana Standards for Cisterns (Water Storage Tanks) for Individual Non-Public Systems, 2002 edition, or most current edition.*

“*Distribution Box*” shall mean a water tight receptacle that receives Septic Tank effluent and distributes it equally into two or more pipes leading to the absorption area (DEQ 4).

“**Distribution Method**” means of dispersing effluent to a pretreatment device and/or a final absorption system. Three methods are commonly used as follows:

A) “*Gravity*” effluent delivered via gravity equal to the volume displaced by influent from the structure being served. No mechanical means are employed. The degree of dispersal is limited.

B) “*Dosing*” the periodic discharge of a set volume of effluent accomplished through the use of a pump or siphon. The degree of dispersal is improved, utilizing more of the absorption area per dose.

C) “*Pressure Distribution*” the periodic discharge of a set volume of effluent, typically utilizing a pump, where all pipes are pressurized providing uniform distribution across the entire absorption area.

“**Distribution Pipe**” a perforated pipe used for the dispersal of effluent.

“**Dosing Chamber or Dose Tank**” a watertight receptacle that stores raw or pretreated wastewater for periodic discharge to subsequent treatment units or dispersal areas. Pumps or siphons with appropriate switches and alarms are mounted in the tank to discharge the accumulated liquid.

“**Dosing Frequency**” the number of times per day that effluent is applied to a drainfield, sand filter, or sand mound.

“**Dosing Volume**” the volume of effluent (in gallons) applied to a drainfield, sand filter, or sand mound each time a pump is turned on or each time a siphon functions.

“**Drainage Way**” any natural or artificial watercourse, trench, ditch, swale, or similar depression into which surface water flows.

“**Drainrock**” shall mean the rock or coarse aggregate used in the Absorption System, Drainfield, sand mound, or sand filter. Drainrock must be washed, be a maximum of 2 ½ inches in diameter and larger than the orifice size unless shielding is provided to protect the orifice, and contain no

more than 2 percent passing No. 8 sieve. The material must be of sufficient competency to resist slaking or dissolution. Gravels of shale, sandstone, or limestone may degrade and may not be used (DEQ 4).

**“Drop Box”** a watertight receptacle for collecting and distributing effluent in a successive failure or sloped absorption system.

**“Dwelling or Residence”** means any structure, building, or portion thereof, which is intended or designed for human occupancy and is supplied with water by a piped water system (DEQ 4).

**“Effective Size”** the sieve size in millimeters (mm) allowing only 10 percent of the material to pass as determined by wettest sieve analysis method ASTM C 117-95.

**“Effluent”** partially treated sewage from a septic tank or other treatment facility.

**“Effluent Filter”** an effluent treatment device installed on the outlet of a septic tank designed to prevent the passage of suspended matter larger than 1/8 inch in size.

**“Effluent Pump”** a pump used to convey wastewater that has been partially treated from a septic tank or other treatment facility. This wastewater has had settleable or floatable solids removed.

**“Enforcement Division”** the agency within MDEQ that enforces state water quality laws.

**“Engineer (PE)”** a professional engineer registered in the State of Montana. All work submitted by a PE must be signed and sealed per the rules and regulations governing professional engineers.

**“Expansion”** an increase in system capacity. The Environmental Health Department will use the design capacity and/or number of bedrooms as noted on a previous WWTS permit and/or other available county records to determine if the proposal is an expansion.

**“Experimental System”** any wastewater treatment device or system not specifically listed in Circular DEQ 4.

**“Failed System”** an absorption system that does not accept waste at the rate of application (hydraulic failure) or when a septic tank suffers structural failure or whenever a system violates Section 1 of this regulation (treatment failure).

**“Fats, Oils, Grease (FOG)”** a component of sewage typically originating from food stuffs (animal fats or vegetable oils) or consisting of compounds of alcohol or glycerol with fatty acids (soaps and lotions).

**“Fill”** soil that has been displaced from its original location.

**“Floodplain”** the area adjoining a watercourse or drainway which would be covered by the

floodwater of a flood of 100year frequency except for sheet flood areas that receive less than one foot of water per occurrence and are defined as Zone B areas by the Federal Emergency Management Agency (FEMA). The floodplain consists of the floodway and the floodway fringe (Zone A), as defined in 36.15.101, ARM. (To Be Determined by the Carbon County Floodplain Administrator.)

**“Floodway”** that portion of the floodplain which includes the stream channel and adjacent overbank areas that must be reserved in order to discharge a base flood without cumulatively increasing the water surface elevation more than one-half (1/2) foot. This does not include those areas designated Zone A on the National Flood Insurance Rate Maps (FIRM).

**“Flow”** the actual volume in gallons of wastewater entering a system per day.

**“GPD”** gallons per day.

**“Gray Water”** any wastewater other than that containing toilet wastes or industrial wastes.

**“Grease Trap”** a device designed to separate grease and oils from the effluent.

**“Ground Water Table”** the upper surface of ground water in the zone of saturation of a geologic formation; includes the upper surface of a perched water table (see also “Seasonal High Ground Water”).

**“Health Officer”** The Carbon County Health Officer/Director.

**“High Permeability Soil”** a soil with a percolation rate faster than six (6) minutes per inch.

**“High-Strength Waste”** effluent from a septic tank or other treatment device that has BOD5 greater than 300 mg/L, and/or TSS greater than 150mg/L, and/or fats, oils, and grease greater than 25mg/L.

**“High Water”** the highest level reached by a body of water.

**“High Water Line”** the mark left after high water has receded.

**“Holding Tank”** a watertight receptacle for retaining, but not treating wastewater. Any outlet from the tank must be sealed to prevent the tank from discharging wastewater.

**“Impervious Layer”** any layer of material in the soil profile that has a percolation rate slower than 240 minutes per inch.

**“Incinerating Toilets”** means a self-contained unit consisting of a traditional commode-type seat connected to a holding tank and a gas fired or electric heating system to incinerate waste products deposited in the holding tank. The incineration by products are primarily water and fine ash.

**“Increased Use”** the enlargement or change in use of a structure served by a WWTS where the enlargement or change in use is likely to increase the effluent flow and/or wastewater strength from the structure. This includes but is not limited to the addition to a residence of one or more spaces that can be used as bedrooms.

**“Individual Wastewater Treatment System”** a system designed to serve one living unit or commercial unit. Two individual WWTS are not allowed under one permit even though they may be located in the same area. The term does not include a public sewage system as defined in 75-6-102, MCA.

**“Infiltrative Surface”** the soil interface that receives the effluent wastewater below the drain rock or sand.

**“Influent”** the wastewater flow stream prior to any treatment.

**“Irrigation”** those systems that provide subsurface application of wastewater to any planted material by means of a piping system.

**“Key”** means to hollow out in the form of a furrow or groove

**“Laterals”** the individual legs of an absorption area or the individual lines of perforated piping laid in an absorption bed.

**“Licensed Installer”** shall mean an individual, partnership, or company that holds a current license, issued by this Department, to install, alter or repair Individual Sewage Treatment Systems under the terms of these regulations.

**“Licensed Professional Engineer”** means a Person licensed as an engineer by the state of Montana (37-67-101(8) MCA).

**“Licensed Septic Tank Pumper”** means a Person licensed under state law to remove and dispose of Wastewater treatment system residues in an Approved manner at a site Approved by DEQ and the Carbon County Board of Health (75-10-1022 MCA).

**“Licensed Site Evaluator”** means a Person licensed by the Board of Health to perform necessary testing and to compile necessary data to complete the environmental Site Evaluation for a parcel of land. The testing includes, but is not limited to the following: Soil Profiles, Percolation Testing, groundwater determinations and monitoring, slopes of land, well isolation zones, Floodplains, lot layouts, non-degradation analysis, and the rules, regulations and technical information regarding onsite Wastewater treatment systems.

**“Limiting Layer”** means Bedrock, an Impervious Layer, or Seasonally High Groundwater (ARM 17.36.101(21)).

**“Living Unit”** means the area under one roof occupied by a family. For example, a duplex is considered two Living Units (ARM 17.36.101(22)).

**“Malfunctioning or Failing Sewage Treatment System”** shall mean any Sewage treatment system not properly performing in accordance with its design and shall include but not be limited to:

- A.) Systems that have Sewage or effluent overflow from any of their component parts that ponds or flows on the ground surface.
- B.) Systems that back Sewage or effluent into any portion of the building or plumbing system.
- C.) Sewage treatment systems with failed structural components.
- D.) Systems which cause pollution of state waters as defined in the Montana Water Quality Act, Title 75, Chapter 5, MCA.

(ARM 17.36.912(9))

**“Manifold”** a solid (nonperforated) main wastewater line that distributes effluent to individual distribution pipes.

**“Monitoring Well”** an inspection and/or sampling port, and may be one of two types:

- A) *“Ground Water Level Monitoring Well”* this type of monitoring well may be used to measure ground water levels.
- B) *“Chemical/Biological Monitoring Well”* this type of monitoring well will be required for ground water sampling of chemical and/or biological parameters. The monitoring well must be constructed in accordance with Appendix L and must meet all specifications as required in 36.21.801, ARM.

**“Montana Codes Annotated (MCA)”** the legislative laws of Montana.

**“Multiple User Water and/or Wastewater System”** shall mean a non-public water supply or Wastewater system designed to serve three to 14 Living Units or three to fourteen 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 unit based on the most recent census data (DEQ 4).

**“Non-degradation Review”** an analysis of potential nitrogen and phosphorous impacts to state waters in order to verify that no significant changes in water quality will result from a proposed WWTS pursuant to 75-5-300, MCA.

**“Nuisance”** anything that is indecent or offensive to the senses as defined by 27-30-101, MCA.

**“Obsolete”** a WWTS or component thereof may be considered obsolete due to component/system type and/or change in usage.

A) Components/system types considered to be obsolete include outhouses, cesspools, seepage pits, and metal tanks.

B) Change in usage pertains to any WWTS serving a structure producing wastewater that exceeds original design capacity in terms of quantity and/or strength. This applies to systems installed prior to January 1, 1966, and those installed thereafter. The design or system capacity may have to be determined.

C) RSR stipulations of system components (primary and secondary treatment) that are not in compliance with these regulations.

**“Percolation Test or “perc test”** a standardized test used to assess the infiltration rate of soils and to aid in sizing absorption areas and in determining site suitability. Soil profile information may be used over percolation test results

**“Permit”** a legal document issued by the Environmental Health Department. The permit number will apply to the following two stages of authorization:

*A) “Permit to Construct” upon issuance a permit allows the construction, repair, replacement, or alteration of a WWTS as approved.*

*B) “Permit to Operate” upon final approval of the system installation being given by EHD, a permit becomes an authorization to operate the WWTS as approved.*

**“Permit Fee”** those fees associated with the processing of a permit application for a particular system.

**“Permitting and Compliance Division”** the primary state agency within MDEQ that administers state water quality laws.

**“Pit Privy”** means a structure with a hole, or pit, in the ground that receives non-water carried toilet wastes (ARM 17.36.912(23)).

**“Premises”** shall mean a definite portion of real estate or land with its appurtenances, also to include a building or part of a building. This shall include but not be limited to residential Dwellings,

commercial or industrial structures, apartments, condominiums, and townhouses

**“Pressure Distribution”** an effluent distribution system where all pipes are pressurized and the effluent is pumped or delivered by siphon to the next portion of the treatment system in a specific time interval.

**“Pretreatment”** the wastewater treatment that takes place after primary treatment but prior to discharge to any sewage dispersal system. Pretreatment may include, but is not limited to pH adjustment, oil and grease removal, BOD5, TSS reduction, screening, and detoxification. **“Primary Absorption Area”** the first of two required absorption areas to be utilized at a given site for a WWTS. (See also replacement absorption area).

**“Primary Treatment”** a treatment system, such as a septic tank, that provides retention time to settle the solids in raw wastewater and that retains scum within the system.

**“Private Sewer”** a sewer receiving the discharge from one building sewer and conveying it to a public sewer system or an on-site WWTS.

**“Property Owner”** the legal title-holder of a parcel of land.

**“Public Wastewater Treatment System”** a system of collection, transportation, treatment, or dispersal of sewage that is designed to serve or serves 15 or more living units or connections or 25 or more persons daily for a period of at least 60 days out of the calendar year [75-6-102, MCA]. In estimating the population that will be served by a proposed residential system, the EHD shall multiply the number of living units times 2.5 people per living unit, so that 10 or more proposed residential connections will be considered a public system.

**“Registration of Competency”** a registration issued by the Environmental Health Department to an individual who has demonstrated sufficient evidence of competence to either install WWTS in Carbon County.

**“Release of Sanitary Restrictions (RSR)”** the lifting of sanitary restrictions as imposed by the Sanitation in Subdivisions Act (76-4-121, MCA). (See Approved Subdivision or Certificate of Subdivision Plat Approval)

**“Repair”** repairing or replacing any component of a WWTS. Repairs are considered major when any part of the WWTS is moved from its original permitted location or when repairs are made to accommodate additional flows. Minor repairs do not result in the relocation of any component of a WWTS or are not made as a result of additional flows. Minor repairs do not need a new permit but all

such repairs should be noted on the original permit. The replacement of a septic tank is not considered a minor repair. EHD shall make the determination if a repair is major or minor.

**“Replacement Absorption Area”** an area set aside for a 100% replacement of the primary absorption area in the event of a failure or when upgrading a WWTS into compliance with current regulations. Setback, soil and siting requirements in this regulation apply equally to both primary and replacement systems.

**“Residential Strength Wastewater”** effluent from a septic tank or other treatment device with a BOD5 less than or equal to 300 mg/L, TSS less than or equal to 150 mg/L, and fats, oils, and grease less than or equal to 25 mg/L.

**“Reviewing Authority”** MDEQ/EHD, a division of local government delegated to review public sewage systems pursuant to 17.38.102, ARM, a local unit of government that has adopted these standards pursuant to 76-3-504, MCA, or a local Board of Health that has adopted these standards pursuant to 50-2-116, MCA.

**“Sanitary Restriction”** a prohibition against the erection of any dwelling, shelter, or building requiring facilities for the supply of water or the disposition of sewage or solid waste or the construction of water supply or sewage or solid waste disposal facilities until MDEQ has approved plans for those facilities.

**“Sealed Pit Privy”** a watertight holding tank designed to receive non-water carried toilet waste.

**“Seasonal High Ground Water”** the closest vertical distance that water comes to the natural ground surface at any given time of the year. When observed, mottling (soil color patterns) or other indicators of previous saturation levels must be reported.

**“Seasonal Residence”** a residence that is occupied for not more than 120 days in a calendar year and which would not qualify as the primary residence of a taxpayer for federal income tax purposes related to capital gains on the sale or exchange of residential property.

**“Seepage Pit”** means a covered underground receptacle that receives Wastewater after primary treatment in a Septic Tank and allows the Wastewater to seep into the surrounding soil (ARM 17.36.101(43)).

**“Septic Tank”** a watertight storage tank receiving raw sewage and providing primary treatment by means of settling, anaerobic digestion, and scum removal. “Sewage/Wastewater” water-carried waste products from residences, public buildings, institutions, or other buildings,



including discharge from human beings or animals, together with ground water infiltration and surface water present.

**“Sewer Invert”** inside bottom (or flow line) of a sewer pipe.

**“Sewer Line”** the PVC pipe connecting the house to the septic (see also transport line). “Shared

**“Sewage System”** a WWTS that serves or is intended to serve two living units and/or commercial structures.

**“Siphon”** a pipe fashioned in an inverted U shape and filled until atmospheric pressure is sufficient to force a liquid from a reservoir in one end of the pipe over a barrier and out the other end. Siphons are sometimes used to dose a drainfield from a dosing tank or chamber.

**“Site Evaluation”** the determination that a particular site is suitable or not suitable for a WWTS. Standards for site evaluations are outlined in these regulations.

**“Slope”** the quotient of the vertical rise divided by the horizontal run and is expressed as a percentage.

**“Soil Profile”** a detailed description of the soil strata to a depth of at least eight (8) feet, using the U.S. Department of Agriculture's Soil Classification System. Deeper soil profile descriptions may be required by EHD (e.g. for deep absorption systems). The description of the soil shall be provided by a SE or PE.

**“Standard Trench”** an excavation that is 12 to 36 inches in depth and 2 feet in width for systems utilizing gravity or dosed and may be 3 feet in width for systems utilizing pressure distribution. Standard trench construction uses PVC pipe and drainrock as detailed in these regulations.

**“Subdivision”** shall mean a division of land as defined in the most current revision of the Sanitation in Subdivision Act (Title 76, Chapter 4, MCA).

**“Subsurface Drain”** foundation drains, vertical drains, french drains or other drainage systems designed to permanently lower the ground water table.

**“Surface Water”** any body of water or watercourse, including lakes, ponds, rivers, creeks, streams, intermittent streams, irrigation ditches, seeps, and swamps.

**“Swamp or Seep”** an area that generally contains visible surface water during most years and is not a lake, pond or stream.

**“Synthetic Drainage Fabric”** a non-woven drainage fabric with a minimum weight per square

yard of 4 ounces, a water flow rate of 100 to 200 gallons per minute per square foot, and an apparent opening size equivalent to a #50 to #110 sieve.

**“System Certification”** a written acknowledgment that a particular system was constructed and functioning in accordance with approved plans and regulations at the time of installation.

System certification is required on all systems installed in Carbon County. Standards for the certification are contained within this regulation.

**“Trailer Court”** a tract of land providing two (2) or more mobile home lots for lease or rent to the public. This term also refers to mobile home parks. Trailer courts must be licensed by the Montana Department of Public Health and Human Services (MDPHHS) and approved by the State of Montana Department of Environmental Quality (DEQ).

**“Transport Line”** means the PolyVinyl Chloride (PVC) pipe or other approved material which transports wastewater from the septic and/or pump tank(s) to the secondary treatment.

**“TSS (Total Suspended Solids)”** solids in sewage that can be removed readily by standard filtering procedures in a laboratory and is reported as milligrams per liter (mg/L).

**“Uniform Distribution”** a means to distribute effluent into a sand filter, sand mound, or drainfield such that the difference in flow (measured in gallons per day per square foot) throughout the drainfield, sand filter, or sand mound is less than 10 percent.

**“Upgrade”** the addition of a component and/or treatment technology to an existing system beyond what was previously permitted.

**“Variance”** official permission from the Carbon County (Board of Health,) to deviate from state and/or local regulations governing on-site WWTS (16.17.105 and 106, ARM). **“Variance Fee”** a fee assessed to those applications requiring or requesting a variance. Variance fees are non-refundable if public notification has taken place.

**“Wastewater/Sewage”** liquid waste that is discharged from a dwelling, building, or other facility, including household, commercial, or industrial wastes; human excreta; or animal and vegetable matter in suspension or solution and includes gray water.

**“Wastewater Treatment System(s) (WWTS)”** a system for the sanitary collection, transportation, treatment, and disposal of wastewater, operated in accordance with Carbon County Health Department.

**“Wetlands”** areas which meet the criteria established by the United States Corp of Engineers in

#### **SECTION 4 – PERMITS**

4.1 It shall be unlawful for any Person to construct, alter or repair an Individual Sewage Treatment System within Carbon County unless that Person holds a valid Permit issued by the Health Officer or his/her representative, in the name of such Person for which the specific construction, Alteration, repair or operation is proposed.

4.2 It shall be unlawful

- (1) To violate any provision of these regulations.
- (2) To 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.

#### 4.3. Reference

1) As provided by 50-2-116(1)(i), MCA, the Carbon County Board of Health hereby adopts by reference ARM Title 17, Chapter 36, Subchapters 1-8, *Subdivision Rules* and Title 17, Chapter 36, Subchapter 9, *Onsite subsurface Wastewater treatment* and MDEQ Circular DEQ 4,

2004 edition, or most current edition, as part of the Carbon County Onsite Wastewater Treatment Regulations. Copies of the MCA's, ARM's and Circulars can be obtained from the Environmental Health Office.

4.4. It shall be unlawful for any Person, except as delineated in this section, to construct, alter or repair an Individual Sewage Treatment System within Carbon County unless that Person holds a valid Carbon County Sewage Treatment System Installer's License. A homeowner constructing, altering or repairing an Individual Sewage Treatment System for his or her own Residence upon his or her own property is not required to have an installer's license. A homeowner will be required to pass an examination prior to being granted permission to install one septic system at their Residence. A homeowner must have the septic system installation inspected and Approved by the Environmental Health Office before the system may be back filled. (NOTE: It is not intended to be construed by builders who may own several parcels of land and who build structures on these parcels for sale, rent or lease and is not for the purpose of their residing in said structures, that they be declared a homeowner and not subject to be licensed as an installer by the Department. Builders, as described, are sometimes referred to as speculation builders).

4.5. All applications for Permits shall be made to the Carbon County Environmental Health, acting for the Health Officer or his/her representative. Permits shall be issued upon compliance by the Applicant with provisions of these regulations.

4.6. Application for an Individual Sewage Treatment System Permit shall be made only by the Owner or lessee of the property for which the system is proposed or his/her duly authorized agent or assigns and shall be in writing bearing the Applicant's signature. Application for a Permit shall be made to the Environmental Health Department, on forms provided by the Department and shall include the following:

- A.) Name, mailing address, and phone number of property Owner.
- B.) Legal description of property (quarter-quarter/ Section #, Township, Range).
- C.) With this legal description the Applicant **MUST ALSO PROVIDE** a visual representation of the property: for example, a copy of a Certificate of Survey (COS) that created the property, a copy of a Plat Deed Exhibit, DEQ Approved lot layout (if available), or similar maps of the property. Some of this material can be obtained at the Clerk and Recorder's Office.

- D.) Parcel size.
  - E.) Name, current address and phone number of the Applicant's (Owner's) designated representative.
  - F.) The authorized road address of the property the system is to be installed on. Authorized road addresses may be obtained from the Carbon County Planning Department.
  - G.) If the parcel has DEQ approval, a copy of the Certificate of Subdivision Approval (COSA) and a copy of the Approved lot layout.
  - H.) Proposed Dwelling(s) or other structure(s) to be erected on the property, and whether, or not, there are existing structures on the property.
- NOTE: If there are existing structures, they must be identified as to the type and the length of time they have existed on this property.
- I.) A lot layout, drawn to scale per section 4.7—*Site Evaluation (by a qualified site evaluator), if the property does not have a DEQ Approved lot layout.*
  - J.) Type of use: For example, residential or commercial.
  - K.) Number of bedrooms or expected flow and how this flow was determined. Estimated flow charts may be found in DEQ 4, Chapter 5. (NOTE: Unfinished basements must be counted as another bedroom pursuant to ARM 17.36.101(2))
  - L.) Some indication as to whether, or not, the proposed structure will be in compliance with current zoning requirements in that specific area may also be required.
  - M.) The name, if known, of the contractor who will be installing the system.
  - N.) The method of water supply to the proposed structure. (e.g spring, well, etc.).

**\*For the purpose of permit application review, parcels of land in Carbon County fall within one of three general categories:**

**A) Parcels that have undergone subdivision review.**

1) These parcels have been reviewed under the Sanitation in Subdivision Act and issued a Certificate of Subdivision Plat Approval statement, which constitutes a Release of Sanitary Restrictions (RSR). State and local RSR documents must be filed with the C & R prior to a permit being issued. Copies of this document should be available at EHD and/or at the C & R.

2) The Certificate of Subdivision Plat Approval/RSR contains conditions and stipulations for the development of the described lot(s). These stipulations include the number and type of structures allowed. In older plat approval statements where this is

not stipulated, approval is assumed to be for one single-family dwelling or one commercial establishment per lot.

3) Most plat approval statements include requirements for drinking water supply type and location and WWTS type, size and location. Older plat approvals may not stipulate locations or WWTS type and sizing requirements. The latter may require a new site evaluation report be obtained for permit application. Nondegradation analysis may also be required for lots subdivided prior to the adoption of the Sanitation in Subdivision Act (February 28, 1961).

4) Where the RSR stipulates system components and/or sizing (primary and secondary treatment) that are not in compliance with these regulations, EHD will require adherence to these regulations.

5) Any desired changes to the conditions and stipulations contained in a Certificate of Subdivision Plat Approval will require an amended plat approval prior to submittal of a local permit application.

**B) Parcels that are not or were not subject to subdivision review under the Sanitation in Subdivision Act.**

1) Some parcels are not or were not subject to State review at the time they were created. Factors affecting the need for subdivision review include, but are not limited to; the date of filing, number of lots created, lot creation by court order, highway construction exemption, lots created for mortgage purposes, etc.

2) These parcels require a site evaluation be conducted and site-specific information submitted with a permit application as required by these regulations. Review of the water supply and WWTS will be done at the local level.

3) These parcels require nondegradation review and site-specific information submitted with a permit.

4) Local permit issuance is only for the installation of the approved WWTS as designed. Subsequent subdivision of a parcel may be subject to additional local and/or state review.

**C) Parcels that were created incorrectly or through an exemption that leaves sanitary restrictions in place.**

1) Some parcels were created without review under the Sanitation in Subdivision Act although such review was required under laws in effect at the time. Other parcels were exempt from review under the condition that no development which required water supply or which generated wastewater would occur.

2) These parcels will be required to be reviewed under the Sanitation in Subdivision Act before a local permit application will be accepted.

#### 4.7 Evaluation (Done by Licensed Engineer/ Licensed Site Evaluator)

If there is **no** CERTIFICATE OF SUBDIVISION APPROVAL (COSA) and/or DEQ Approved lot layout, a Site Evaluation Report must be submitted with the following information:

1) A lot layout, drawn to scale, to include:

- a. property lines;
- b. all existing and proposed structures; location of house site(s) outbuildings, etc. and proximity to septic tank and absorption systems.
- c. The locations of all wells and water supplies (per state approval and/or otherwise, proposed and existing) on the parcel and their distances to at least two (2) property lines. All wells (or well locations approved per state or local authority) must have a designated 100-foot radius zone of influence area shown) or water sources;
- d. A statement verifying that there are no wells or surface water within 100ft. of the proposed drainfield. For tank settings only, a statement verifying there are no wells or surface water within 50 feet of the proposed tank location (Public Wellheads must be at least 100ft away from a septic and/or pump tank).
- e. all streams, lakes, springs, ponds, irrigation ditches or other Surface Water sources within 100 feet of property lines;
- f. If applicable, base flood elevations;
- g. roads, driveways, parking areas;
- h. proposed and existing utility lines and any easements: this includes all water lines and Drainfields, pipelines, cables, powerlines, access easements, or other similar lines and easements;
- i. the scale used (for example: 1 inch = 200 feet);
- j. percentage and direction of slope in the proposed Drainfield area(s);
- k. Location of slopes greater than 15%; within 50 feet of the proposed drainfield areas.
- l. proposed and existing primary and replacement Drainfield areas;
- m. North arrow;

- n. legend;
- o. location of soils profiles, perc tests and groundwater monitoring sites
- p. Any site conditions that may impact the onsite Wastewater treatment system.

2) Soil Profile and Percolation Test data in accordance with state law. A minimum of one test hole must describe soils a minimum of 8' below natural ground surface (ARM 17.36.101(51)) and be within 25 feet of each proposed Drainfield location (ARM 17.36.325(3)).

- a. Soil texture and structure in accordance with USDA-NRCS soil characteristics (see also DEQ 4, Appendix B).
- b. Approximate percentage of gravel, cobbles, and boulders.
- c. Limiting Layers including Bedrock, impermeable clay layers, groundwater or other limiting conditions in the Soil Profile.
- d. Mottling or signs of high water levels or saturated conditions.
- e. Date the holes were dug and weather conditions.

3) Non-degradation analysis performed in accordance with state laws and statutes and DEQ guidelines "How to Perform Non-degradation Analysis" The following information must be included on the site plan:

- a. Mixing zone for each proposed onsite Wastewater treatment system.
- b. Direction of ground water flow (hydraulic gradient)
- c. The approximate locations and identifications of all wells used in the nondegradation review must either be shown on the site plan, or on an accompanying USGS topographic map or other similar map.
  - Provide copies of well logs for all wells used in the non-significance determination, or
  - A printout of well information from the Montana Bureau of Mines and Geology (MBMG) Ground Water Information Center (GWIC) that includes all the pertinent well construction, pump test, water level, location, ownership and lithological data may be submitted instead of actual well log copies.



- d. The location of all state surface waters within ½ mile of the proposed development must be shown on the site plan, or on an accompanying USGS topographic map or similar map.
- e. The location of all onsite or offsite wells (existing or approve per an RSR) that are within 200 feet of any proposed/existing mixing zones or drainfields.

4) Flood plain information per currently adapted Flood Insurance Rate Map (FIRM) from the Federal Emergency Management Agency (FEMA).

5) Groundwater monitoring information, if applicable. If groundwater, or evidence of groundwater, is found within 7' of the natural ground surface, groundwater monitoring must be performed in accordance with DEQ 4, Appendix C. *Ground water monitoring, if required shall be performed by a person approved by Carbon County Health Department.*

6) Percolation data may be required. Perc tests must be performed per DEQ 4, Appendix A.

7) Copy of Certificate of Survey (COS) or survey that created parcel.

8) The report must be signed by a Licensed Site Evaluator or other qualified Person.

#### 4.8 Licensed Site Evaluators:

Licensed Site Evaluators:

1) First time Applicants for Site Evaluator licenses must complete the following requirements:

a) Attend the Carbon County Site Evaluator's Class, or other Approved Site Evaluator course;

b) Pass the Site Evaluator's examination with a score of 80% or better for the open book written examination;

2) It shall be the responsibility of the Site Evaluator to perform the testing, collect the data, and compute calculations completely, accurately, and in accordance with the most current referenced state and local rules, regulations and standards.

3) Professional Engineers and Registered Sanitarians, licensed by the State of Montana, and qualified to submit soils data, may not be required to take the class or examinations, but they

must license as Site Evaluators.

4) Site Evaluators licensed in other counties, but not PE's or RS's, may license without examination if their original licensing agency grants reciprocity to Carbon County license holders. If there is no reciprocity, then they must take the class and examinations to license.

4.9 The Department shall not issue a Permit for a Sewage treatment system installation, Alteration, or repair until all pertinent site data has been received, reviewed and determined to be in full compliance with all provisions contained in these regulations. No Permit shall be issued until all appropriate fees have been paid.

#### 4.10 PERMIT FEES

- A.) A Permit application fee shall be required of Applicants, payable upon submission of the Permit application to the Department for review. Fees are to be set by the Carbon County Board of Health and any changes in set fees shall be made by that body.
- B.) Fees shall be as follows:

1.	Individual Lot/Parcel	\$125.00
2.	Previously approved COSA (Replacement)	\$75.00
3.	Type of Wastewater System	
	a) If new gravity fed system	\$95.00
	b) If dosed system	\$190.00
4.	New Multiple User wastewater system (non-public) -lot/living unit	\$70.00
5.	Nondegradation review	\$60.00
6.	Extension of a previously Approved Permit:	\$100.00
7.	Board of Health Variance Request	\$200.00
	Variance Inspections Fee	\$150.00
8.	Carbon County: Septic System Inspection, Operating Permit	\$150.00

9.	If DEQ Approved System Fee	\$150.00
10.	Repair/Replacement System	\$100.00

- In most instances for a new system without DEQ approval, the applicant will pay \$125 for the individual Lot/Parcel, Type of Wastewater System (gravity-\$95/ or dosed-\$190), Nondegradation review \$60, and the Carbon County: Septic System Inspection, Operating fee \$150. Total=\$430 (Gravity System), \$525 (Dosed System)
- **If DEQ approval you only pay \$150**

## SECTION 5 - EXPIRATION OF PERMITS

**5.1** If a Sewage treatment system for which a Permit has been issued has not been installed, inspected and Approved by the Department within two years, for new onsite wastewater treatment systems, after the issuance of such Permit, said Permit shall expire and be officially voided by the Department. Permits for replacement systems, Alterations, or repairs of existing systems shall be valid for three months. Should a Permit be officially voided by the Department, the Applicant must re-apply for installation, Alteration or repair of a Sewage treatment system in the same manner and subject to all requirements that exist at the time the re-application is made. **Permit holders are encouraged to contact the Environmental Health Office to extend the Permit before it expires.**

**5.2** Should a Sewage treatment system be installed, altered or repaired after such time the Permit initially issued to install, alter or repair the system, has been voided, this shall constitute a violation of these regulations. All violations will be handled as declared under Section 9 - Violations, Penalties and Enforcement.

**5.3** The Department is not obligated in any way to issue a Permit, should the initial Permit be allowed to expire, to an Applicant using the same specifications as was required on the initial Permit. Nor is the Department obligated in any way to issue a Permit to an Applicant, should the initial Permit be allowed to expire, if information becomes available indicating that a Permit cannot now be issued and be in full compliance with the regulations that exist at the time of re- application.

5.4 Any changes in plans, details or specifications of construction, not Approved by the Environmental Health Department after the Permit has been issued, invalidates the Permit.

5.4 There will be no reimbursement of fees received for the issuance of the Permit to any Applicant.

## SECTION 6 - DENIAL OF PERMITS

6.1 The Environmental Health Department may deny an application for the installation, Alteration or repair of Sewage treatment system if:

- A.) The Individual Sewage Treatment System, as proposed, will not comply with the requirements or specifications of these regulations, or;
- B.) The Applicant has failed to supply all data necessary to make a determination as to whether or not the proposed Individual Sewage Treatment System complies with the requirements or specifications of these regulations, or;
- C.) The Applicant has failed to pay the required fees and has failed to make such payment for thirty (30) days after notice of non-payment has been filed.

6.2 If a tract of land is presently under review as a Subdivision, NO Permit can be issued for any structure on that tract of land, until the review of said Subdivision has been completed, in full, and approved.

6.3 A Permit for a Sewage treatment system may be denied if it is found that any provision of a Certificate of Subdivision Plat Approval has been violated or there is a departure from any criteria set forth in the Approved plans and specifications of said approval.

6.4 A Permit for a Sewage treatment system may be denied if it is found that such installation is in conflict with the requirements of the Sanitation in Subdivision Act or its regulations, or if such installation is intended as a means of avoiding the requirements of the Sanitation in Subdivision Act or its regulations.

6.5 A Permit to construct a Sewage treatment system for a structure of any tract of land, regardless of size, where there already exists another structure or structures, serviced by a separate Sewage treatment system (s), shall be denied if the Applicant cannot provide substantiating evidence that a second septic system is allowed, in accordance with state and local approvals and regulations, on the parcel. If a second structure and drainfield is allowed, the Applicant must show adequate available area for the construction of said system, that there is sufficient area to construct a 100% replacement system for that system and any other Sewage treatment system on that tract of land, and the system meets all state and local regulations. See also 8.2.

NOTE: When determining available area, standard Sewage treatment trenches shall be used. Absorption Beds or other alternate designs of secondary treatment system cannot be

used.

6.6 Any denial of a Permit shall be made with detailed reasons for such a denial and should the Applicant request a variance from any provision of these regulations that may have caused or resulted in the denial, the variance request shall be made in writing and submitted to the Carbon County Board of Health.

## 6.7 VARIANCES

A.) As provided in A.R.M. 17.36.922, the Carbon County Board of Health may grant a variance from the requirements of these regulations, A.R.M. 17.36. subchapter 9, and Circular DEQ-4. A variance may be granted only if it does not violate any other regulations except for the rule the variance is requested from.

B.) Any Person wishing to apply for a variance shall submit written application to the Carbon County Board of Health. The Applicant must supply all information deemed necessary by the Carbon County Board of Health, or its representative, to properly evaluate the proposal.

C.) A fee of **\$150** must accompany the written request.

D.) A variance may be Approved only in the event that all of the following circumstances are found to exist:

6.4.1 The strict application of the regulations would result in extreme difficulty or undue hardship for the Applicant;

6.4.2 The Applicant provides sufficient evidence demonstrating that the proposal for a variance would not be detrimental to the purposes of these regulations; and

6.4.3 The variance proposed is the minimum variation which would alleviate the specified practical difficulty as found by the Carbon County Board of Health;

D.) Decisions made by the Carbon County Board of Health may be appealed to the Montana Department of Environmental Quality pursuant to A.R.M. 17.36.924.

## SECTION 7 - INSPECTION OF SEWAGE TREATMENT SYSTEMS

7.1 Once a Permit application has been reviewed and Approved by the Department the Applicant may begin construction of that system. It **SHALL** be required in Carbon County that all systems, for which a Permit was obtained, be inspected by the Department **PRIOR** to backfilling all or any portion of said system, unless specific permission has been granted by the Department to backfill a portion of the system for justified reason. It shall be the responsibility of the Applicant, or the Applicant's contractor, to notify the Department forty-eight (48) hours in advance of the anticipated completion time of construction of said system, for the purpose of arranging a time for inspection, to determine compliance with these regulations and the specifications of the Permit. Requests for inspections must be made for normal Department work hours, excluding Saturdays, Sundays, and declared Carbon County Holidays.

7.2 Should the inspector find that any aspect of the materials and/or construction of the Sewage treatment system is not in full compliance with these regulations and/or the specifications of the Permit, he/she shall, in detail, describe these deficiencies in writing on the Department's copy of the application. The Department shall then notify the Applicant immediately, in Person or by mail, of all deficiencies and require that corrective action be taken. A re-inspection shall be made upon notification by the Applicant or the Applicant's contractor, as specified in this Section, to ensure that the deficiencies have been corrected and that the system has been brought into compliance with these regulations and/or the specifications of the Permit. The reinspection of the system shall verify this compliance. **A reinspection fee of \$100 may be charged to the installer.**

7.3 Should the deficiencies as described by the Department not be corrected within fifteen (15) days after the Department notifies the Applicant of such deficiencies, the Department shall, unless otherwise notified, consider that the system constitutes a violation and shall proceed accordingly (See Violations Section 9).

7.4 Any Sewage treatment system that has been inspected and Approved by the Department May not be altered in any manner unless said Alteration is Approved by the Environmental Health Department prior to the proposed change. The Department may determine that such Alteration subjects the proposal to the full application-Permit procedure as described in (Section 4-Permits)

of these regulations.

## **SECTION 8 - MINIMUM REQUIREMENTS FOR ON-SITE WASTEWATER TREATMENT SYSTEMS**

### **8.1 General**

- A.) The Sewage treatment system shall consist of an inlet line from a point two (2) feet outside the foundation wall to the Septic Tank or other Approved primary treatment device and a secondary treatment system consisting of a subsurface absorption field (DEQ 4).
- B.) The Sewage treatment system shall be designed to accept domestic wastes, not to include toxic chemical wastes, e.g. developing solutions from photographic activity, industrial wastes, wash down of chemical containers, etc. Water from roof drains, surface runoff, gutters, and sump pumps shall not be discharged into a Sewage treatment system and should be purposely directed to discharge to locations that will not in any way affect a Sewage system (DEQ 4).

**NOTE: Grey Water must be treated as Sewage and disposed of through an Approved Sewage treatment system.**

### **8.2 Lot size:**

- A.) Where individual water and Sewage treatment systems are to be utilized, the minimum lot size shall generally be one acre of area per Living Unit or 700 gallons per day (gpd) of non-residential uses/commercial Wastewater flow. Smaller lot sizes will only be considered if the Applicant or his representative provides information from qualified professional consultants indicating no sanitary problems will occur. Each lot will be considered separately. (ARM 17.36.340.)
- B.) Where either an individual water supply system or an individual Sewage system is proposed and the other service is proposed to be provided by an Approved public or multiple family water or Sewage system, the minimum lot size shall generally be 20,000 square feet of area, unless a smaller lot size can be justified (ARM 17.36.340.)
- C.) In no case shall lot sizes of less than 10,000 square feet be considered suitable for individual on-site disposal systems (ARM 17.36.340.)



### **8.3 Locations:**

- A.) The location and installation of a Sewage treatment system, and each part thereof shall be such that, with reasonable maintenance, it will function in a sanitary manner and will not create a nuisance nor constitute a hazard to public health nor endanger the safety of any actual or potential domestic water supply, nor directly enter the waters of the State of Montana. In determining a suitable location of the system, consideration shall be given to the size and shape of a lot, soil conditions, slope of the land, depth to groundwater, proximity to existing and future water supplies, to existing Sewage treatment systems, to State waters, depth to Bedrock and/or other impervious materials, and to areas for expansion or replacement of the treatment system.
- B.) Minimum distances/separations have been established for location of the various component parts of the Sewage treatment system and these distances/separations are shown in ARM 17.36.323, Table 3:

TABLE 3  
SETBACK DISTANCES

	Water Supply Wells	Sealed Components (1) and Other Components (2)	Drainfield/ Sand Mounds
Public or Multi-user Wells/Springs	-	100	100
Other Wells	-	50	100
Suction Lines	-	50	100
Cisterns	-	25	50
Roadcuts, Escarpment	-	10 (3)	25
Slopes > 25% (4)	-	10 (3)	25
Property Boundaries	10	10	10
Subsurface Drains	-	10	10
Water Lines	-	10	10
Drainfields/ Sand Mounds	100	10	-
Foundation Walls	-	10	10
Surface Water, Springs	100 (5)	50	100
Floodplains	10	- (1) 100 (2)	100

(1) Sealed components include sewer lines, sewer mains, Septic Tanks, Grease Traps, dosing tanks and pumping chambers.

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

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

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

(5) A waiver of this requirement may be granted by the department pursuant to ARM 17.36.601.

C.) No component of any Sewage treatment system shall be located under driveways, parking areas or areas subject to heavy loading and no vehicles shall be driven over the system after installation, except those portions properly installed to accept traffic loads. In addition, no component part of any Sewage treatment system shall be installed in an area that might later be used for building additions, garages, sheds or other structures that will restrict immediate access to any portion of the system for necessary maintenance or repair.

NOTE: No Absorption System shall be placed under driveways, roadways, parking areas or areas that may be subject to continued/periodic vehicular traffic, regardless of design and installation (DEQ 4).

D.) Sewers mains crossing water mains must be laid to provide a minimum vertical distance of 18 inches between the outside of the water line and the outside of the sewer. This must be the case whether the water line is above or below the sewer. The crossing must be arranged so that the sewer joints will be equidistant and as far as possible from the water line joints” (DEQ 4).

E.) The Sewage treatment system may not be located in an area where surface runoff will accumulate. Careful consideration must be made to minimize any accumulation of water over the Sewage treatment system by properly landscaping to direct drainage away from the system (DEQ 4).

#### 8.4 Primary Treatment

A.) Primary treatment must be used. Septic tank size standards are in DEQ 4. Smaller tanks or those other than concrete may only be used if Approved by the Carbon County Health Department. Any primary treatment device other than a concrete Septic Tank must be reviewed and Approved by the Department.

B.) Any Person, firm, partnership or other entity that proposes construction of Septic Tanks for sale and distribution to the public must have the plans and specifications for such construction Approved by the Department prior to any sale, construction or distribution.

C.) Any Person, firm, partnership or other entity that proposes construction of a Septic Tank(s) for their own Personal use, must have the plans and specifications of the Septic Tank(s) reviewed and Approved by the Department prior to construction.

D.) Specifications of Septic Tanks shall be reviewed in accordance to the DEQ’s most

current edition of DEQ 4 and any other publication deemed pertinent by the Department for Septic Tank design.

- E.) Multiple compartment tanks are recommended.
- F.) Grease Traps---Establishments such as restaurants that produce grease exceeding the limits of residential strength Wastewater must be provided with Grease Traps and meet the requirements of DEQ 4, Section 5.4.
- G.) Inspection ports measuring at least 8 inches in diameter must be provided above each inlet and outlet and marked with rebar. An access at least 1.75 square feet in size must be provided into each compartment. Each access must be extended to within 12 inches of the finished ground surface. An access of the Effluent Filter of a size large enough to maintain the filter must be provided and must be extended to finished ground surface. (DEQ 4 section 7.2.9)
- H.) Inlet and outlet connections must be watertight.

## 8.5 References

A.) On-site Wastewater treatment systems shall be designed and constructed in accordance with the requirements described in ARM Title 17, Chapter 36, Subchapters 1-8, Subdivision Rules, and ARM Title 17, Chapter 36, Subchapter 9, On-site Subsurface Wastewater Treatment, and Montana Department of Environmental Quality Circular DEQ 4, 2004 edition, and “How to Perform a Non-degradation Analysis for Subsurface Wastewater Treatment Systems Under the Subdivision Review Process”, Revised February 2009, or most recent editions.

8.21 Holding Tanks: As defined in the definitions, this system collects sewage; no effluent is discharged. This type of system will not be Permitted to be used or installed in Carbon County without a variance granted by the Carbon County Board of Health.

## **SECTION 9 - VIOLATIONS, PENALTIES, and ENFORCEMENT**

9.1 Notice of Violation: If the Department discovers there has been a violation of any provision of these regulations or order of the Board of Health or authorized agents, the Health Officer, Board of Health, Environmental Health staff, or their designated representative shall give notice of such violation to the responsible Person or Persons. Such notice shall be in writing and shall state the violation, the required corrective action, and provide a reasonable time for correction. Service of such notice shall be by means of certified mail or Personal delivery. If the responsible Person or

Persons cannot be found or served after a diligent effort to do so, service may be made by posting a notice in a conspicuous place on or about the property affected by the notice. The Department shall include in the record a statement as to why such posting was necessary. A re-inspection shall be made by the Department upon receipt of notification the violation has been corrected or at the end of the time period allowed for the corrective action. If the violation has not been corrected or an order has been violated, the Board of Health or its authorized agents may seek criminal prosecution as per section 9.3.

92 Misrepresentation: Any Permit or approval granted under these regulations which is based upon or is granted in reliance upon any misrepresentation, or failure to make a material fact or circumstances known or should have been known, by the Applicant or his agent, shall be void. Any construction, Alteration, repair or use of a Sewage treatment system after the Permit for said system has been voided shall constitute a violation. (See subsection 9.1)

93 A). The Carbon County Board of Health or its authorized agents may assess a penalty for violation of these regulations. The penalty shall not exceed \$500 per violation and shall be assigned according to the severity of the violation. Each day of violation may be considered a separate violation.

B). Any violation of these regulations or order of the Carbon County Board of Health is subject to criminal prosecution in accordance with 50-2-123-124, MCA, and may be convicted of a misdemeanor.

As per 50-2-123, MCA: **Compliance order authorized.** If a Person refuses or neglects to comply with a written order of a state or local Health Officer within a reasonable time specified in the order, the state or local Health Officer may cause the order to be complied with and initiate an action to recover any expenses incurred from the Person who refused or neglected to comply with the order. The action to recover expenses shall be brought in the name of the city or county.

As per 50-2-124, MCA: **Penalties for violations.** (1) A person who does not comply with rules adopted by a local board is guilty of a misdemeanor. On conviction, he shall be fined not less than \$10 or more than \$200.

(2) Except as provided in subsection (1) of this section and 50-2-123, a Person who violates the provisions of this chapter or rules adopted by the department under the provisions of this chapter is guilty of a misdemeanor. On conviction, he shall be fined not less than \$10 or more than \$500, imprisoned for not more than 90 days, or both.

(3) Each day of violation constitutes a separate offense.

(4) Fines, except justice's court fines, shall be paid to the county treasurer of the county in which the violation occurs.

### **SECTION 10 - LICENSED INSTALLERS and SITE EVALUATORS**

10.1 A Person may become licensed to install on-site Sewage disposal systems as required by Subsection 4.1, or may become licensed to submit Site Evaluation reports as required by Subsection 4.9, provided the provisions of these regulations are followed.

10.2 Licensing Procedure: Licenses will be granted by the Department when the following requirements are met:

- A.) A completed application has been submitted.
- B.) A filing fee of one hundred dollars (\$100) has been paid.

C.) The Applicant has passed the required examination with a score of at least 80% correct. The exam shall be open book. Site Evaluators must meet additional requirements as listed in section 4.8.

10.1 License Expiration and Renewal:

- A.) Licenses shall be valid from January 1 through December 31 of each year.
- B.) License renewal will be granted upon receipt of the renewal fee of fifty \$50.00 on or before January 31 of each consecutive year.
- C.) Failure to renew within the required time period will require a new filing fee and re-examination.
- D.) Licenses are not transferable.

E.) Reciprocity: Anyone licensed in other counties, as septic installers or Site Evaluators, may license without examination if their original licensing agency grants reciprocity to Carbon County license holders. If there is no reciprocity, then they must meet Carbon County's requirements for first time license Applicants.

10.2 License Probation, Suspension and Revocation:

- A.) A Licensed Installer or Site Evaluator shall be placed on probation upon receiving a written notice of violation from the Department for one of the following:
  - i) Septic system installed or altered without a valid Permit.
  - ii) The Department is not called for final inspection.

iii) The licensee offers false information concerning a system installation, site conditions, or system location.

iv) The installer installs the system in violation of the Caron County Onsite Wastewater Treatment Regulations.

v) The installer deviates from the Permit application plans Approved by the Department.

vi) The licensee submits a Permit application for review containing insufficient information for review or information proposing installation in violation of these regulations, or

vii) The installer fails to send in as built drawings within 10 days of inspection.

B.) The installer or Site Evaluator license shall be suspended by the Department for a period not to exceed six (6) months upon receiving his second (2nd) notice of violation. A hearing before the Carbon County Board of Health may be requested by the licensee. This request must be in writing and made within ten (10) days of receipt of his 2nd notice of violation.

C.) An installer's or Site Evaluator's license may be revoked by the Department for repeated violations. The licensee shall be notified in writing as to the intent of and basis for license revocation. A hearing before the Carbon County Board of Health may be requested by the licensee. This request must be made in writing and must be made within ten (10) days of receipt of the Notification of Intent to Revoke License. Failure to make the hearing request in writing within ten (10) days shall result in license revocation. A license may be suspended for cause prior to revocation.

10.3 License Denial: A license to install on-site Sewage disposal systems or to perform Site Evaluations in Carbon County shall be denied for any of the following:

- A.) The requirements of Subsection 8.2 and 8.3 are not met;
- B.) License application is made within twelve (12) months Applicant has had a license revoked;
- C.) Failure to comply with Carbon County Onsite Wastewater Treatment Regulations; or
- D.) The licensee has had a license revoked twice.

10.4 Inspections: Licensed Installers shall call for an inspection forty-eight (48) hours prior to backfilling. Request for inspections must be made for normal Department working hours. Licensed Site Evaluators shall call and inform the sanitarian when they are conducting a Site Evaluation. The sanitarian may decide to be present during the Site Evaluation to observe site conditions and soils test pits.

## **SECTION 11 – PUBLIC WASTEWATER TREATMENT SYSTEMS**

11.1 Public Wastewater Systems must be designed and installed in accordance with the requirements of 75-6-101, MCA et seq. DEQ is the reviewing authority for all public wastewater systems.

11.2 A complete set of plans showing all aspects of the proposal shall be submitted to the Department for concurrent review with the DEQ.

11.3 Plans submitted to the Department in accordance with this section shall meet all the requirements of these regulations.

11.4 No Permit applications submitted in accordance with this section shall be considered Approved until Applicant has received a written approval statement from the Montana Department of Environmental Quality and the application has been Approved by this Department.

11.5 Within ninety (90) days after construction or Alteration is completed upon a Public Wastewater System prior to any occupancy of the site or use of the system, the Applicant shall certify to the Department that the construction or Alteration was completed in accordance with the plans Approved by the Department. In cases where



the system was designed by a professional engineer, the Applicant shall submit a professional engineer's certification that the system was built in accordance with the Approved plans. The certification shall be accompanied by a complete set of "as built" drawings signed by the Applicant.

## **SECTION 12 - INDUSTRIAL**

12.1 Industrial Wastewater systems must be designed and installed in accordance with the requirements of ARM 17.30. Subchapter 10 "Montana Groundwater Pollution Control System", and any other applicable state and federal statutes.

12.2 A complete set of plans showing all aspects of the proposal shall be submitted to the Department for concurrent review.

12.3 Plans submitted to the Department in accordance with this section shall meet all the requirements of these regulations.

12.4 A.) No Permit application submitted in accordance with this section shall be considered Approved until Applicant has received written approval by this Department.

B.) For those systems requiring MDEQ approval, the application submitted in accordance with section, and shall not be considered Approved until the Applicant has received a written approval statement from the MDEQ, the application has been reviewed by this Department and the department has issued a septic Permit.

12.5 Within ninety (90) days after construction or Alteration is completed upon an industrial Wastewater system prior to any occupancy of the site or use of the system, the Applicant shall certify to the Department that the construction or Alteration was completed in accordance with the plans Approved by the Department. In cases where the system was designed by a professional engineer, the Applicant shall submit a professional engineer's certification that the system was built in accordance with the Approved plans. The certification shall be accompanied by a complete set of "as built" drawings signed by the Applicant.

## **SECTION 13 - NONSEWERED TOILET SYSTEMS FOR SPECIAL EVENTS AND WORKSITES**

### 13.1 Purpose

The Carbon County Board of Health hereby finds and declares that employees at all worksites and general public attending special events that are inadequately served by sewerer toilet facilities shall have easy access to non-sewered toilet systems that are maintained in a clean, sanitary and functional condition, for the protection of human health, safety and welfare.

### 13.2 Definitions

“Agriculture Work Site” means a site on ranches and farms at which farming and ranching activities take place involving less than five (5) employees at a given location.

“Enforcement agency” means Carbon County Board of Health and its designated agents to administer the provisions of this rule.

“Nonsewered Toilet System” means any portable structure used for the collection of human feces and urine that is not connected to water and sewer systems.

“Special Event” means any public activity that is sponsored, organized, promoted, managed or financed by any Person, group of Persons, partnership, organization, corporation, business, or government entity where individuals congregate to participate in or observe an activity in an outdoor setting or semi-enclosed structure for more than four (4) consecutive hours. Agricultural work sites will be exempt if there are less than five (5) employees for periods of less than four (4) consecutive hours. Unadvertised roping and branding sessions on private property are also exempted.

“Employer” means any Person, organization, corporation, business, partnership or government entity employing people to perform work at a specific work site.

### 13.3 Requirement for Providing Nonsewered Toilet Systems to Employees and General Public

The Enforcement agency shall ensure that all employers and sponsors of special events provide acceptable nonsewered toilet systems (where sewerer toilets

are not available or are insufficient in number) that are maintained in a clean, sanitary and functional condition according to the provisions of Section 13.4.

13.4 Accessible nonsewered toilets shall be provided in the ratio of one toilet per 20 employees according to Table 1. Separate toilets shall be provided for each sex in the same ratio when there are more than 20 employees consisting of both sexes.

TABLE 1: Minimum Number of Toilet Facilities

(1) Toilets shall be provided for employees according to the following table: Number of Employees                      Minimum Number of Facilities

less than 20	1
20 or more	1 seat and 1 urinal per 40 workers
200 or more	1 seat and 1 urinal per 50 workers

(2) Under temporary field conditions, provisions shall be made to assure not less than one toilet facility is available.

(3) Job sites, not provided with a sanitary sewer, shall be provided with one of the following toilet facilities:

- i) Chemical toilets
- ii) Recirculating toilets
- iii) Combustion toilets

4) Portable toilet units on work sites shall be serviced weekly or more frequently as necessary.

Special events sponsors shall obtain approval for needed non-sewered toilets as a requirement for authorization to hold the event. Determination of the number of toilets required during anticipated peak attendance at the special event by the enforcement agency when considering issuance of the approvals. (Building sites will be monitored by the Health Department with assistance from the Building Inspector).

13.5 Standards for Construction and Service of Nonsewered Toilet Systems:

A) Nonsewered toilet systems shall be constructed in the following prescribed manner and maintained in a clean, sanitary and functional condition.

B) A nonsewered (portable) toilet is a self-contained unit equipped with a waste receiving holding container.

C) Handwashing facilities should be provided in the area of the portable toilets. If handwashing facilities are not available, dispensers with Approved hand-sanitizing solutions must be provided.

D) Rooms, buildings or shelters housing toilets shall be of solid construction, easy to clean, providing shelter and privacy. The toilet room shall be ventilated to the outside. Open vents shall be covered with 16 mesh screen. Internal latches shall be provided to secure unit from inadvertent entry.

E) Waste containers shall be fabricated from impervious materials, ie. Plastic, steel, fiberglass or their equivalent. Containers shall be watertight and capable of containing the waste in a sanitary manner. Containers shall be adequate in size to be used by the number of Persons according to the schedule for minimum requirements without filling the container to more than half of its volume before regularly scheduled service.

F) Servicing shall include the use of a cleaning solution for cleaning urinals and seats. Removing waste from containers, recharging containers with an odor controlling solution and installing an adequate supply of toilet tissue. Employers and event sponsors are responsible for contracting service intervals frequent enough to ensure clean, sanitary facilities.

G) Any defective or inadequate toilet unit shall be repaired or withdrawn from service by locking or removal.

H) Removal of waste shall be handled in a clean and sanitary manner by a Licensed Septic Pumper, by means of a vacuum hose and received by a leak-proof tank truck. All ports on the tank shall be valved and capped.

I) Provisions shall be made so service trucks have safe and convenient access to the toilets to be serviced.

J) Disposal of waste from tank trucks shall be in accordance with state laws and local health department requirements.

### 13.6 Location of Nonsewered Toilet Facilities:

A) The location of nonsewered toilets as required by Section 13.3 of these rules shall be as close as practical to the highest concentration of employees, or participants, observers and employees of special event. The safety of users shall be a consideration in placement of units.

B) At all work sites, toilet facilities shall be located within 200 feet horizontally of all employees.

C) On multi-story structures that are work sites, toilet facilities shall be located on floors not more than 30 feet vertically from each other.

D) At special events toilet facilities shall be located convenient to participants and accessible for maintenance by truck.

### 13.7 Exclusion from Requirements for Nonsewered Facilities

The requirements of Section 13.3 do not apply to normally unattended work locations as long as employees working at those locations for time periods of more than 4 hours have transportation immediately available, within the normal course of their duties, to nearby facilities otherwise meeting the requirements of Section 13.4

For Agricultural Exclusions refer to Agricultural Sites. Unadvertised roping and branding activities on private property are exempt.

### 13.8 Responsibility of Multi-employer Worksites

The prime contractor/employer shall ensure that the requirements of Sections 13.3, 13.4, 13.5 are met. All employers are responsible for meeting Sections 13.3, 13.4, 13.5 toilet facility requirements for their employees.

### 13.9 Violation

Violations of the Rules are punishable by a fine of \$50 per violation per day.