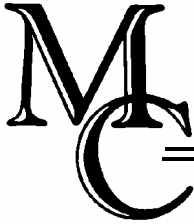


MISSOULA
COUNTY



MISSOULA CITY-COUNTY HEALTH DEPARTMENT
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MISSOULA CITY-COUNTY HEALTH CODE

DATE OF ADOPTION: July 21, 1994

EFFECTIVE DATE: August 15, 1994

AMENDED DATE: March 22, 1996

AMENDED DATE: March 25, 1999

AMENDED DATE: June 21, 2001

AMENDED DATE: May 20, 2004

AMENDED DATE: February 15, 2007

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MISSOULA CITY-COUNTY HEALTH CODE

- I. PURPOSE OF CODE AND AUTHORITY.** The purpose of the Missoula City-County Health Code (Code) is to abate nuisances, control communicable diseases and remove filth within Missoula County, pursuant to sections 50-2-111 through 50-2-124, MCA to ensure public health and safety and to preserve and protect the quality of life and the environment in Missoula County. The regulations contained in this Code facilitate this purpose while allowing for responsible management of the area as the population grows and places an increased burden on our limited resources.
- II. DEFINITIONS.** The following definitions apply to this Code unless terms are otherwise defined under a specific regulation.
- (A) Board: the Missoula City-County Board of Health.
- (B) Department: the Missoula City-County Health Department or a representative thereof.
- (C) Facility: a business, residence, structure, system, area, or location.
- (D) Health Officer: the Missoula City-County Health Officer or a designated representative.
- (E) DEQ: the Montana Department of Environmental Quality.
- (F) Person: any individual, partnership, firm, association, municipality, public or private corporation, subdivision or agency of the state, trust, estate or any other legal entity.
- III. ENFORCEMENT AND REVIEW.**
- (A) Notices of Violation and Orders To Take Corrective Action. When the Department determines that a violation of the code has occurred, the Department may issue written notice to the offender or an agent of the offender, either personally or by certified mail. Such notice shall specify the provision or provisions of the Code alleged to have been violated along with a short and plain statement of the facts that constitute the violation. The notice shall include an ORDER TO TAKE CORRECTIVE ACTION within a reasonable time as stated in the order. The order is final unless, within five working days after the order is received, the offender submits a written request for an administrative review as provided for in Section III (E), or within ten working days of receipt of the Department's decision concluding the administrative review, the offender submits a written request for a hearing before the Board, as provided for in Section III (F). Upon good cause shown, the time frame for requesting an administrative review or a Board review may be extended if made within the time specified for compliance in the Notice of Violation and Order To Take Corrective Action. A request for administrative review does not stay the order. In no case, however, shall a request for administrative review or Board Hearing be granted if requested after the compliance date required in the Department's Order to Take Corrective Action.
- (B) Penalties. Any person who violates any regulation, provision, or rule enforced under this Code, or any order made pursuant to this Code shall be guilty of a misdemeanor and subject to, upon conviction, a fine of not less than \$10.00 or more than \$200.00 per offense. Each day of violation constitutes a separate offense.
- (C) Other Remedies. Action under this part shall not bar enforcement of this Code by injunction or other appropriate remedy.
- (D) This section does not prevent the Board or Department from making efforts to obtain voluntary compliance through warning, conference, or any other appropriate means.
- (E) Administrative review.
- (1) Any person subject to a Department Notice of Violation and Order to Take Corrective Action may request an administrative review by the Health Officer, or in the case of Health Officer absence, his or her designee (Hearing Officer).

(2) The Hearing Officer shall schedule an administrative review hearing as soon as possible within the timeframe for compliance required in the Department's Order to Take Corrective Action. The administrative review hearing may be scheduled at a time beyond ten days of receipt of the request by mutual consent of the Department and the party requesting the hearing. The Hearing officer shall provide written or verbal notice of the date, time and location of the scheduled hearing to the person requesting the hearing.

(3) At the administrative hearing the Hearing Officer shall first hear the staff report, if any, on the Notice of Violation and Order To Take Corrective Action. Second, the person who requested the hearing may present relevant information to the hearing officer. Third, the Hearing Officer may hear any person who has relevant information regarding the Notice of Violation and Order to Take Corrective Action. The Hearing Officer may continue its administrative review for a reasonable time period following the administrative review hearing in order to obtain information necessary to make a decision.

(4) The Hearing Officer shall affirm, modify or revoke the Notice of Violation and Order to Take Corrective Action, in writing, following completion of the administrative review. A copy of this decision shall be sent by certified mail or delivered personally to the person who requested the administrative review.

(F) Board Hearings.

(1) Persons subject to a Department Notice of Violation and Order to Take Corrective Action may submit a written request for a hearing before the Board following conclusion of an Administrative Review, within ten days of receipt of the Hearing Officer's decision concluding the administrative review. Upon good cause shown, the time frame for requesting a hearing may be extended if made within the time specified for compliance in the Notice of Violation and Order to Take Corrective Action.

(2) The Board shall schedule a hearing within 45 days of receipt of this request

(3) Notice of hearing shall be given by the Department to persons requesting a hearing at the address stated on the request for hearing or at the last known address, by personal service or by mail, not less than seven days before the hearing is scheduled. Notice is complete on the date of delivery or mailing.

(4) The Department shall publish a notice of hearing in a newspaper of general circulation in Missoula County. The notice shall be published twice, with at least six (6) days separating publication.

(5) At the hearing, The Board shall first hear the staff report, if any, on the Notice of Violation and Order To Take Corrective Action. Second, the person who requested the hearing may present relevant information to the Board. Third, the Board may hear any person who has relevant information regarding the Notice of Violation and Order to Take Corrective Action. The hearing may be conducted informally and need not follow rules of evidence or procedure applicable to judicial hearings. The Board chair may impose rules for the orderly conduct of the hearing.

(6) The Board shall affirm, modify, or revoke the Notice of Violation and Order to Take Corrective Action, in writing, following completion of its review. A copy of this decision shall be sent by certified mail or delivered personally to the person who requested the hearing. The Board shall maintain a written record of the hearings and document its final decision in the record.

(G) Judicial Review. Except as otherwise provided, persons subject to a hearing decision of the Board may appeal the decision to the district court pursuant to the contested case provisions of the Montana Administrative Procedure Act after the Department's appeals process is exhausted.

IV. INSPECTIONS.

(A) Inspections for approval. The Department may require an inspection to determine compliance with this Code before granting approval for the completion or use of a wastewater treatment and disposal system or before the commencement of a group function. When a final inspection is required and a time appointed, applicants or their agents may not refuse entrance onto the site, interfere with, or substantially delay the authorized Department

representative performing the inspection. Such actions are grounds for the Department to withhold approval and/or invalidate the applicant's permit or permit application. The Department may conduct inspections, which have been previously scheduled at the appointed time regardless of whether the applicant or authorized agent is present at the site when the inspection is being conducted.

(B) Inspections to ensure sanitary conditions. The Department may enter and inspect facilities regulated by this Code to ensure compliance. Inspections may be carried out, without prior notice, at reasonable times upon showing proper credentials. Reasonable times for inspections of facilities used in the course of business shall include regular business hours. Nothing in this section shall be construed to allow entry into a private residence, by the Department unless permission has been granted or a search warrant issued

(C) Inspection purpose. Inspections performed by the Department are conducted solely for the purpose of ensuring compliance with the requirements set forth in this Code. Inspections are not performed to ensure proper workmanship or to guarantee life expectancy or operation of the facilities or for any other purpose.

V. **PERMITS AND APPLICATIONS.**

Applications for permits are available at the Department located at 301 West Alder in Missoula. Applicants may obtain a permit from the Department upon compliance by the applicant with the application requirements and provisions of the applicable regulation and payment of fees.

(A) Permit required. No person shall conduct the following activities until the Department has issued a permit:

(1) Wastewater Treatment and Disposal Systems. No person shall install, construct, extend, alter, or operate a wastewater treatment and disposal system within Missoula County without first obtaining a permit from the Department in accordance with Regulation 1, Section III (A).

(2) Group Functions. No person shall operate a group function or cause persons to gather for the purpose of a group function within Missoula County without first obtaining a permit from the Department.

(B) Permit Applications and Fees. The Department may not issue a permit, registration or conduct work for which a fee is set until the following requirements are satisfied:

(1) The applicant furnishes the Department with necessary information required by the applicable regulation; and,

(2) All required fees are paid. Application fees are non-refundable.

(C) Revocation. The Department may revoke any permit for failure to comply with permit conditions or any applicable part of these regulations.

VI. **VARIANCES.**

(A) Purpose. A variance provides limited flexibility from strict compliance with Health Department regulations.

(B) Applicability. When certain conditions or circumstances preclude compliance with requirements of Health Department regulations, a person may apply to the Board for a variance from the applicable regulation.

(C) Scope of variance.

(1) Variances are non-transferable and remain valid only for the applicant to whom they are granted for the period stipulated.

(2) All provisions of Health Department regulations shall apply to variance recipients except those specifically exempted by the Board pursuant to the variance.

(D) Fees. The Board shall establish a fair and reasonable variance application fee based on the cost to give notice of hearing and review and prepare for hearing. The application fee must be paid in full before a variance will be considered. Application fees are non-refundable. The Board may approve changes in fees at regularly scheduled board meetings.

(E) Criteria for variance. The Board may approve a variance only if it finds all of the following:

(1) Special circumstances exist which are:

(a) peculiar to the applicant's property or situation; and

(b) not caused by the applicant's action or inaction; and

(2) Substantial undue hardship would result from requiring strict compliance to the provision or provisions from which the variance is sought by:

(a) creating an unreasonable financial burden on the applicant; and

(b) depriving the applicant of rights commonly enjoyed by other persons similarly situated under the terms of this Code.

(3) Additional criteria are required for a variance from Regulation 1. The Board may approve a variance from Regulation 1 only if it finds, in addition to all the elements required in section VI (E)(1) and (2) above, the following:

(a) the system that would be allowed by the variance will not cause pollution of state waters in violation of 75-5-605, MCA; and

(b) the granting of the variance will protect the quality and potability of water for public water supplies and domestic uses, and will protect the quality of water for other beneficial uses, including those uses specified in 76-4-101, MCA.

(F) Restrictions on variance.

(1) No adverse effect. The Board shall not approve a variance if the applicant's proposal may adversely affect the health, safety, or welfare of any individual or cause adverse environmental effects greater than those effects caused by uses commonly permitted by the Code.

(2) Revisions or modifications made to Health Department regulations shall not be grounds for variance.

(3) Expiration of variance. Unless otherwise specified in Health Department regulations, the privilege to execute a variance expires one year following approval by the Board.

(4) No variance granted pursuant to this section shall be construed to prevent or limit the application of emergency provisions and procedures established in Health Department regulations or relieve applicant of responsibility of complying with other applicable local, state, or federal rules or standards.

(G) Variance procedure.

(1) A complete variance application shall be submitted to the Department within 30 days after a permit or proposed action is denied. If the Department does not receive a variance application within the prescribed time, then a variance shall not be granted

(2) Department shall have 10 working days to determine if an applicant has adequately addressed criteria in Section VI (E) (1-3) and VI (H) (1-7).

(3) If the Department determines that an application has not addressed Section VI (E) (1-3) and VI (H) (1-7) adequately, or is otherwise not complete, it shall notify the applicant of the deficiencies.

(4) If the Department determines that an applicant has adequately addressed criteria in Section VI (E) (1-3) and VI (H) (1-7), the Board shall schedule a public hearing within 60 days of the Department's determination.

(5) The Department shall serve notice of hearing to the applicant's last known address by personal service or certified mail at least 14 days before the hearing is scheduled. The Department shall publish the notice twice, with at least 6 days separating publication.

(6) Notice shall include:

- (a) Name and address of applicant;
- (b) Time, location and nature of hearing;
- (c) Address and phone number where interested persons may obtain further information.

(7) Notice shall be sent by the Department to adjacent property owners using the list of names and addresses supplied by the applicant.

(H) Completed applications. Variance applications shall include:

- (1) Applicant's name and address.
- (2) Specific provision or provisions of the Code from which a variance is requested.
- (3) Legal description or address where variance is requested.
- (4) Detailed and accurate description of the proposed project or circumstances under consideration.
- (5) Written explanation addressing each criteria under section VI (E)(1) and (2).
- (6) A list of the names and address of all adjacent property owners. Failure to provide a complete and accurate list may result in delay or denial of the variance.
- (7) Any further relevant information which the Department determines will assist the Board in making its decision and which is reasonably obtainable by the applicant.

(I) Order of hearing. Variance hearings shall proceed in the following order:

- (1) First, the Board shall hear the staff report, if any, on the proposed variance.
- (2) Second, the applicant shall present relevant evidence to the Board.
- (3) Third, the Board shall hear any person in support of or in opposition to the proposed variance and shall accept any related letters, documents, or materials.

(J) Disposition of hearing and continuances.

- (1) The Board shall deny, approve, or approve with conditions an application for variance.
- (2) The Board shall inform an applicant of its decision in writing, along with reasons for approving or denying the variance and the terms or conditions imposed, within 15 days of its decision.
- (3) The Board may continue a hearing for a period not to exceed 45 days.
- (4) A hearing may be continued for longer than 45 days only if circumstances require a longer period and both the Board and the applicant agree to a specific period.

(K) Appeals. Any person adversely affected by a variance decision of the Board may initiate judicial review pursuant to the Montana Administrative Procedure Act, except that applicants for variance to the Wastewater Treatment and Disposal System regulation shall first appeal to the Montana Department of Environmental Quality.

(L) Variance Revocation. A variance may be revoked by the Board if information is withheld or inaccurately supplied by the applicant.

VII. CONFLICTS AND SEVERABILITY

(A) In any case where a provision of this Code is found to be in conflict with a provision of any zoning, building, fire, safety or health ordinance or code of the City or County of Missoula, the provision which, in the judgment of

the Department, establishes the higher health standard for the promotion and protection of public and environmental health and safety shall prevail.

(B) If any section, subsection, paragraph, sentence clause or phrase of this Code should be declared invalid for any reason, such decision shall not affect the remaining portions of this Code which shall remain in effect; and, to this end, the provisions of this rule are hereby declared to be severable.

VIII. FEES

The Board may adopt fees that are fair and reasonable for permit applications, Department services, tests, or certifications established by this Code. Fees may be adopted or changed at any regularly scheduled meeting of the Board providing that the action is scheduled on the Board agenda and public comment allowed.

IX. AMENDMENTS AND REVISIONS

The Board may enact amendments or revisions to this Code after a public hearing, which has been advertised in a daily newspaper, published in Missoula County. The notice must be published twice, with at least 6 days separating publication.

REGULATION 1: WASTEWATER TREATMENT AND DISPOSAL SYSTEMS

I. GENERAL.

(A) Prohibited activities and exceptions.

- (1) No person may construct, alter, extend, repair, use or increase the use of an on-site wastewater treatment and 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,
 - (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.
 - (h) enter directly into subsurface groundwater. A wastewater system that discharges at an elevation at or below peak seasonal groundwater is presumed to discharge directly to groundwater.
- (2) Construction or repair of cesspools, or increased use of a system without primary and secondary treatment is prohibited unless permitted in accordance with section III (D).
- (3) It shall be unlawful for any person to discharge wastewater onto the surface of the ground except for a permitted system designed for surface application and licensed septic tank pumpers discharging septic wastes onto disposal sites approved by the Department.
- (4) Unless an Underground Injection Control (UIC) permit is obtained from the U.S. Environmental Protection Agency, it shall be unlawful for any person to install or use any sump, dry well, or septic system for disposal of waste fluids from the washing, servicing, maintenance, or storage of any vehicle, equipment or components that are associated with an internal combustion engine.
- (5) No person may use an on-site wastewater treatment and disposal system that is located in a floodplain unless the system was legally installed.

(B) System required. Structures regularly occupied by people shall maintain a system or other approved toilet facilities for the structure or have access to an existing system or approved toilet facilities within 200 feet of the structure. Structures with interior plumbing or running water shall not be occupied unless a wastewater treatment and disposal system is installed and maintained, unless connected to a publicly owned sewage treatment system.

(C) Connection to public system. All new and replacement sewage disposal facilities shall be in compliance with the Uniform Plumbing Code, Section 1101, requiring connection to publicly owned sewage treatment plants. No person owning real property with a structure that generates sewage shall be issued a permit to install or replace a wastewater treatment and disposal system when public sewer abuts the property, and is within 200 feet of the structure served or is within 200 feet of any part of the subsurface disposal system. Existing cesspool or septic tank systems may remain in service until ordered disconnected by the Health Board or other jurisdiction, or until the system fails as defined in Section II of this regulation. This section (C) shall not apply when the public entity owning the public system refuses to allow connection.

II. DEFINITIONS.

Absorption Area: that area determined by multiplying the length and width of the bottom area of the disposal trench.

Absorption System: a secondary treatment system including conventional drainfields, alternative systems, and experimental systems used for subsurface disposal of pre-treated waste effluent.

Absorption Trench: excavations less than or equal to 3 feet in width where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground.

Alternative Systems: wastewater treatment and disposal systems approved by the Department to be used in lieu of conventional systems.

Bedrock: 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.

Bedroom: any room that is or may be used for sleeping. An unfinished basement is considered as an additional bedroom.

Certified Installers: installers of wastewater treatment and disposal systems who have passed an annual examination to ensure sufficient knowledge of the sewer regulation.

Cesspool: a seepage pit without a septic tank to pretreat the wastewater.

Class I Exam: the exam that an installer must pass to become certified to install conventional systems and alternative systems.

Class II Exam: the exam that an installer must pass to become certified to install conventional systems and replacement systems.

Community Wastewater Treatment and Disposal System: a public wastewater treatment and disposal system which serves a non-transient population characterized by residential development.

Construction Season: March 1st through November 30th.

Contaminate: an increase in the concentration of 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 standard.

Conventional System: a subsurface wastewater treatment and disposal system which consists of a septic tank and a drainfield.

Disposal Trench: an excavation in which the piping for an absorption system is laid for the purpose of distributing pre-treated waste effluent into the ground.

Distribution Box: a receptacle that receives septic tank effluent and distributes it equally into two or more header pipes leading to the absorption area.

Dosing Tank: a water-tight receptacle placed after the septic tank or other treatment device approved by the Department, equipped with an automatic siphon or pump designed to discharge effluent.

Drainageway: a course or channel along which stormwater moves in draining an area.

Drainfield-equivalent secondary treatment: secondary treatment that is similar to or better than the treatment provided by a drainfield meeting all requirements of Section V(B) and (C). Absorption beds qualify only when minimum separations are met and there is not enough room for a drainfield. Seepage pits qualify only when minimum separations are met and there is not enough room for a drainfield or absorption bed. If a replacement system will not meet minimum separations, the Department can require elevated systems or alternative treatment systems that improve the quality of wastewater before discharge.

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

Escarpment: any slope greater than 50% which extends vertically six (6) feet or more as measured from toe to top.

Experimental Systems: a wastewater treatment system, which is neither conventional nor alternative, which needs to be evaluated and approved by the Department using rigorous scientific methods.

Failed Wastewater Treatment and Disposal System: A system shall be deemed to be a failed system whenever the absorption system fails to accept waste at the rate of application, no longer provides the treatment and/or disposal for which it was intended, when a septic tank suffers structural failure, or whenever a system violates section I (A) of this regulation.

Floodplain: that portion of land adjacent to a water-way which is inundated when the water-way overflows on an average frequency of once per one hundred years, including all land area designated by the Federal Emergency Management Agency as being in the 100 year floodplain on the National Flood Insurance Rate map.

Flood-prone Areas: areas where information indicates that the land is subject to flooding in a 100-year flood event but not included on Flood Insurance Rate Maps

Groundwater Table: the upper surface of the zone of water saturation of a geologic formation. The upper surface of a perched water table is included in this definition.

High Seasonal Groundwater: 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 year when the water table is the highest. The term includes the upper surface of a perched water table.

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

Impervious layer: any layer of material in the soil profile that has a percolation rate slower than 120 minutes per inch .

Increased Use: the enlargement or change in use of a structure served by a wastewater treatment and disposal system where the enlargement or change in use would potentially increase the effluent flow from the structure. Increased use includes but is not limited to the enlargement of a residence by adding one or more spaces which can be used as bedrooms. It also includes increasing a room or building's total square footage in a way that could lead to increased use in the future. The Department has the sole discretion to determine if an enlargement or change in use is an increased use.

Individual Wastewater Treatment and Disposal System: any wastewater treatment and disposal system that serves one or two single-family dwelling units.

Limiting layer: bedrock, an impervious layer, or seasonally high groundwater.

Living unit: the area under one roof occupied by a household. For example, a duplex is considered two living units. .

Lot: synonymous with "tract" or "parcel"

Mobile Home: A transportable structure constructed without a permanent foundation.

Multi-User Wastewater Treatment and Disposal Systems: those wastewater treatment and disposal systems which serve or are intended to serve three (3) to nine 14 connections where the total number of people served does not exceed twenty-four (24). In estimating the population served, the Department shall multiply the number of living units times the county or census tract average or persons per living unit based on the most recent census data.

Natural Soil: soil that has developed through natural processes, and where no fill material has been added.

Non-Community Public Wastewater Treatment and Disposal Systems: public wastewater treatment and disposal systems which serve a transient population such as a restaurant or bar.

Parcel: a part of land which is created by a division of land or a space in an area used for recreational camping vehicles or mobile homes.

Percolation Test: a standardized test used to determine soil permeability. This test is described in Appendix B.

Permit: a written authorization issued by the Department, permitting the construction, alteration, extension, or operation of a wastewater treatment and disposal system under this regulation.

Public Wastewater Treatment and Disposal Systems: those wastewater treatment and disposal systems which serve fifteen (15) or more connections or twenty-five (25) or more people for a period of at least 60 days out of the calendar year. In estimating the population served, the Department shall multiply the number of living units times the county or census tract average or persons per living unit based on the most recent census data.

Public Nuisance: any condition which affects an indefinite number of persons, or all the residents of a particular locality, or all persons coming within the extent of its range or operation by being injurious to health, annoying, or indecent or offensive to the senses, although the extent of the effect on individuals may vary.

Replacement System: a wastewater treatment and disposal system that is installed to replace an existing system.

Scarify: to break up and loosen the surface of the soil.

Sealed pit privy: an enclosed receptacle designed to receive non-water carried toilet wastes into a lined vault.

Secondary Treatment: a biological wastewater treatment process occurring after solid/liquid separation in a septic tank or equivalent.

Seepage Pits: deep excavations used for the subsurface disposal of pre-treated effluent. Covered porous walled chambers are placed in the excavation and surrounded by rock.

Septic tank: 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.

Significant Improvement: when a structure has suffered 50% or greater destruction and is being replaced. The destruction can be intentional or unintentional, resulting from things like fire, flood or remodeling.

Site Evaluation: an evaluation to determine if a site is suitable for the installation of a subsurface wastewater treatment and disposal system.

Site Evaluator: any individual who has a knowledge of soils and how they relate to the design and function of subsurface wastewater treatment and disposal systems and who is approved by the Department to conduct site evaluations.

Slope: the rate that a ground surface declines in feet per one hundred (100) feet. It is expressed as percent of grade.

Soil Profile: a description of the soil strata to a depth of ten (10) feet using the USDA soil classification system.

Soil Texture: the amount of sand, silt or clay, measured separately in a soil mixture. (For individual definitions, see Appendix A)

STEP: Septic Tank Effluent Pump

STEP Septic Tank: a septic tank designed to accept pumping equipment to pump effluent into a municipal sewer system which meets the design criteria established by the City of Missoula Public Works division.

Structure: that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed or parts joined together in some definite manner, including but not limited to dwelling units, mobile homes, sleeping quarters, business establishments, grandstands, amphitheaters, and warehouses.

Subdivision: means a division of land or land so divided that creates one or more parcels containing less than 20 acres, exclusive of public roadways, in order that the title to or possession of the parcels may be sold, rented, leased, or otherwise conveyed and includes any re-subdivision and any condominium or area, regardless of size, that provides permanent multiple space for recreational camping vehicles or mobile homes.

Useable acreage: The total area of a lot minus flood plain, flood prone area and area where slope exceeds 25%.

Wastewater: liquid waste which may include chemicals, household, commercial or industrial wastes, human excreta, animal and vegetable matter in suspension or solution, discharged from a dwelling, building, or other establishment.

Wastewater Treatment and Disposal System: any wastewater system including individual, multi-user, and public systems which receives human excreta, liquid waste, or both; treats the effluent; and disposes of the effluent through application into or onto the soil, or into any device, sealed vault, or holding tank. Included within the scope of this definition are pit privies, subsurface drainage systems, and alternative and experimental systems that are addressed by this regulation.

Zone of Saturation: that area beneath the ground in which all open spaces are filled with groundwater.

III. PERMITS.

(A) Requirements. No person shall install, construct, extend, alter, repair, replace, or increase use of a wastewater treatment and disposal system within Missoula County without first obtaining a permit from the Department, except for repairs to piping between a structure and a septic tank or a septic tank and a header to an absorption system. Parcels must be recorded with the County Clerk and Recorder before a permit is issued by the Department. Permits will only be issued in the name of the parcel's owner. A permit shall be issued by the Department following the submittal of a complete and accurate permit application form and a satisfactory site evaluation demonstrating compliance with all applicable regulations. All systems must receive final approval from the Department or from a certified installer authorized by the Department to conduct a final inspection in order for a permit to remain valid. The Department may place any conditions on a permit, which will facilitate compliance with the provisions of this regulation or subdivision approval.

(B) No person shall operate a septic system that does not have a permit issued by the Department if one was required at the time of construction.

(C) No permit shall be issued for a system when use of the system would constitute a violation of any ordinance, rule, law or conditional approval including but not limited to a Certificate of Subdivision Approval.

(D) Temporary Repair and Increased Use Permits

(1) Seepage pits, cesspools, and drainfields which are deemed by the Department to be failed systems may be temporarily repaired in areas which have received construction grants or loans, and where a government entity is actively organizing the public funding, RSID or SID necessary to install public sewer interceptor or collector systems. Temporary repairs may be accomplished by the addition of absorptive area to currently existing system. The practice is commonly called re-rocking.

(2) Seepage pits, cesspools and drainfields may receive increased use, including the enlargement or change in use of a structure such as the addition to a residence of one or more spaces which may be used as bedrooms, in areas which have received construction grants or loans, and where a government entity is actively organizing

the public funding, RSID or SID necessary to install public sewer interceptor or collector systems. Such temporary increased use may be permitted by the Department only for systems which are currently accepting waste at the rate of application from the source.

(3) A minimal administrative fee as established by the Board will be charged for a temporary repair or increased use permit. The Department is not required to inspect such repairs or increased use. Inspections must be performed by licensed installers.

(4) Prior to the issuance of a temporary repair permit, the owner of the property shall be required to execute any contracts, petitions, or agreements required by the utility, the Department or other entity for the creation of S.I.D.'s or R.S.I.D.'s and other conditions which the municipality, the Department or utility may require. The homeowner shall be required to sign a document indicating that he or she will connect to public sewer within 180 days after the installation of the sewer mains designed to service the property.

(5) A temporary repair or increased use permit satisfies the requirements of Section XIII, which establishes requirements for replacement systems.

(6) Applicants for temporary permits may instead apply for a normal replacement permit, using the established fees and requirements of the Department. The Department shall notify persons who obtain temporary repair or increased use permits that the granting of such a permit does not guarantee a life expectancy or operation of the system, the system will not be inspected by the Department, and that if the system fails prior to availability of public sewer, further repairs or upgrades to the system may be required by the Department.

(E) Applications. A completed application for a permit shall be written on forms provided by the Department and shall include the following information:

(1) Name and address of applicant and a complete legal description and address of the property on which installation, repair, construction, alteration, temporary repair or extension is proposed.

(2) Information substantiating that the proposed site meets minimum site requirements in section I (A) and V_of this regulation. The following information shall be required to supplement a permit application.

(a) The number, location, size, and type of structures, both existing and proposed, to be connected to the system.

(b) The location and type of any existing systems.

(c) The location of all water supplies (within minimum separation distances contained in Table I), water supply piping, existing wastewater treatment systems, buildings or dwellings, adjacent lot lines, streams, irrigation ditches, floodplain and flood-prone areas.

(d) Plan of the proposed wastewater treatment and disposal system to be installed, constructed, altered, or extended.

(e) In the case of a new system permit application, an acceptable site evaluation as described in section IV or DEQ Certificate of Subdivision Approval.

(f) Such further relevant information as required by the Department to substantiate that the proposed installation, construction, alteration, temporary repair or extension complies with rules and regulations promulgated by the local or State Department of Environmental Quality.

(g) In the case of new construction of any size, evidence indicating that zoning and building officials have been notified.

(3) The following additional information is required when the system uses a pump or siphon:

(a) Pump chamber specifications, including dimensions and volume;

(b) Depth from existing ground surface at pump chamber site to the top of the pump chamber;

(c) Elevation difference between ground surface at dosing tank and ground surface at distribution box or header line of the drainfield.

(d) Pump specifications, including pump curve or equivalent information to determine adequacy of pump;

(e) Style and location of the safety disconnect switch;

(f) Type, size and length of transport pipe and fittings.

- (g) Friction loss estimates for pipe and fittings;
- (h) Method of freeze protection for transport pipe;
- (i) Schematic of distribution trenches in drainfield;
- (j) Siphon prevention measure where needed; and
- (k) Length of drainfield or size of distribution system.

(4) Payment of application fee.

(F) Expiration and extension.

(1) A permit expires if the system for which the permit was issued is not installed, inspected, and approved by the Department within:

- (a) one year after issuance for an individual system; or
- (b) two years after issuance for a multi-user or public system.

(2) A permit may be extended one time by the Department for one year if:

- (a) the permit holder requests an extension from the Department prior to expiration of the permit;
- (b) the requirements of the permit and this regulation are satisfied; and
- (c) any differences in permit application fees are paid in full.

(G) Construction without Permit. The Department shall charge a fee three times the permit application fee when the construction or repair of a system starts prior to a valid permit being issued.

(H) Notice of denial. When requested by an applicant, written notice that a permit has been denied shall be given to the applicant by personal service or certified mail within ten (10) working days of receipt of a completed application. The notice shall list deficiencies and reasons for the denial.

(I) Unapproved changes: Unapproved changes in plans or specifications after a permit has been issued or any falsification or significant error in information submitted by an applicant shall invalidate the permit

IV. SITE EVALUATIONS. A site evaluation shall be conducted in the location of each proposed system. The following factors must be evaluated: size and shape of the lot, soil conditions, slope of natural and finished grade, depth to groundwater, proximity to existing and future water supplies, proximity to existing systems, proximity to state water, floodplain and flood prone areas, escarpments, area available for expansion or replacement of the system. Special guidelines govern the following criteria:

(A) Soil conditions. Soil texture and structure must be determined for the site where the absorption system is to be located. Where the Department determines adequate soils information is not available, soil conditions shall be obtained by digging two holes, one to a depth of at least ten (10) feet and a second to a depth of at least five (5) feet, located at each end of the proposed absorption system site. The U.S. Department of Agriculture's "Soils Classification System" shall be used to describe and determine soil texture. (see Appendix A)

(B) Soil Profile Observations. Soil pits are recommended for soil observation (in preference to bore holes). The following factors shall be included in any soils evaluation.

- (1) Thickness of layers or horizons of soil profile.
- (2) Texture (USDA Soils Classification System) and structure of horizons.
- (3) General color, and color variation (mottling).
- (4) Depth to water (if observed) or a verifiable statement that groundwater depth exceeds six feet throughout the entire year based on pits or borings or other substantiation. Monitoring pipes may be required.
- (5) Depth to bedrock or impervious layer (if observed).

(6) Other prominent features that would have a bearing on a site's compatibility for use as a wastewater absorption site. Additional soils information may be required. The site of the soil testing shall be clearly identified by staking or other means of identification.

(C) If the Department performs a site evaluation it may require as many soil profile holes be dug in the area of the proposed wastewater treatment field as the Department determines is necessary to describe and evaluate the soils of the site. A percolation test is not part of the site evaluation conducted by the Department. When required, percolation tests must be conducted by or under the supervision of an approved site evaluator.

(D) Any person performing a site evaluation on a parcel shall submit to the Department all data and locations on all test holes and percolation tests performed on the parcel.

(E) Percolation Tests and Exceptions.

(1) A percolation test must be completed if the soils in the area of the proposed system are of the following types:

- (a) Soils finer than silt loam
- (b) Soils coarser than medium sand, unless a sand-lined, pressure distribution system is to be installed
- (c) Compacted silt loam
- (d) If a potential impervious layer is present less than six feet below ground level.

(2) Three percolation tests shall be conducted, when required, in accordance with DEQ 4, Appendix A on absorption system sites. Test holes shall be evenly spaced throughout the area of the proposed absorption site.

(3) Percolation tests must be conducted by persons approved by the Department.

(F) Non-degradation Mixing Zones – All new and increased use systems, must provide evidence that they comply with ARM 17.30.5 and ARM 17.30.7.

V. DESIGN AND INSTALLATION OF CONVENTIONAL SYSTEM.

(A) General.

(1) All systems must be designed in accordance with DEQ4, which is hereby incorporated by reference, unless a more specific or stringent requirement is included in this Code.

(2) Applicants proposing a new system, or increased use of a system shall designate a replacement area that meets all the criteria for the initial drainfield or absorption system.

(3) No structure, movable or immovable, shall be located over, or moved onto, any part of the system. No vehicles shall be driven over the system after installation, except those portions properly designed to accept traffic loads. The drainfield or other absorption system shall be located and protected in a manner that prevents vehicles from passing over or parking on top of the system. This area shall be kept free of all obstructions, including pavement, which will prevent air from penetrating the soil.

(B) Prohibited locations.

(1) Slopes. No system or any portion of a system shall be permitted on slopes that exceed 25 percent. Slopes greater than 15 percent shall preclude the use of subsurface wastewater treatment and disposal systems unless a registered professional engineer or a person qualified to evaluate and identify soil in accordance with ASTM Standard D5921-96e1 (Standard Practice for On-Site Septic Systems) submits adequate evidence that conditions are such that there will be no visible outflow of effluent down slope from the installation of the system.

(2) Floodplain or flood-prone areas: Subsurface wastewater treatment and disposal systems shall not be permitted within 100 feet of a floodplain or flood-prone area or in a drainageway, natural or manmade intermittent watercourse.

(3) Groundwater. Groundwater depth at any time of less than 6 feet from the natural ground surface shall preclude the use of conventional subsurface wastewater treatment and disposal systems. There shall be minimum separation of at least 4 feet between the bottom of the drainfield and the maximum high groundwater elevation.

(a) If the groundwater is within 10 feet or less of the ground surface, or if there is any reason to believe that the groundwater will be within 10 feet of the natural ground surface during any time of the year, groundwater test holes to a depth of 9 feet shall be provided in the area of the drainfield to determine the high groundwater during its peak occurrence, unless shallow groundwater or an impervious layer is encountered during excavation of the test holes at a depth less than 9 feet.

(b) The Department may require the applicant to provide one (1) year of groundwater monitoring conducted by the Department to delineate the highest groundwater level.

(c) The Department may refuse to accept seasonal high groundwater data when total precipitation for the previous year (defined as May 1 of the previous year through April 30 of the current year), or April 1 snowpack water equivalent, measured at the nearest officially recognized monitoring station, is more than 20% below the historical average.

(d) The Department may consider soil morphology data, and data from nearby groundwater monitoring sites with similar soil, geology and proximity to streams or irrigation ditches, if available, to determine maximum groundwater elevation.

(4) Bedrock and impervious layers. A six (6) foot separation between the natural ground surface and bedrock or an impervious layer shall be maintained throughout the proposed drainfield site and replacement area. Absorption trenches 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 4 feet.

(C) Location of systems.

(1) Minimum horizontal setback distances. To ensure proper location of a system, the minimum horizontal setback distances shown in Table 1 below are required. These minimum distances are also shown in Appendix B.

TABLE 1

Minimum Horizontal Setback Distances in Feet

FROM:	TO:		ABSORPTION SYSTEMS(c)
	Sealed components (a)	Other components (b)	
1. Public or multi-user wells/springs	100	100	100
2. Other wells	50	50	100
3. Property Boundaries	10	10	10
4. Foundation Walls	10	10	10
5. Suction lines	50	50	100
6. Cisterns	25	25	50
7. Stream, Lake, or Irrigation Ditch, springs	50	50	100
8. Roadcuts, escarpments	10 (d)	10	25 (f)
9. Floodplain or flood prone area	10	100	100
10. Slopes > 25% (e)	10 (d)	10(d)	25
11. Subsurface drains	10	10	10
12. Water Lines	10	10	10
13. Drainfields/sand mounds (c)	10	10	-
14. Surface water, springs	50	50	100

- (a) 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.
 - (b) Other components include intermittent and recirculating sand filters, package plants and evapotranspiration systems.
 - (c) 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.
 - (d) Sewer lines and sewer mains may be located in roadways and on steep slopes if the lines and mains are safeguarded against damage.
 - (e) Down-gradient of the sealed component, other component or drainfield/sand mound.
 - (f) The minimum horizontal setback from an escarpment applies in both the upgradient and downgradient direction from the escarpment.
- (2) The Department 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 Department to establish the location of the floodplain.
- (4) Sealed components of a wastewater system located in 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 1.5 times the operating pressure or pump shutoff pressure, whichever is greater, or must be tested as specified by the manufacturer.
- (5) Exceptions
- (a) The setback_distance from an irrigation ditch to an absorption system may be reduced to a minimum of 50 feet provided the ditch is sealed prior to construction of the system to prevent seepage of water out of the ditch and seepage of wastewater into the ditch, and a waiver has been issued by the MDEQ pursuant to ARM 17.36.323 and 17.36.601. If the absorption system is to be placed at an elevation equal to or lower than the flow line of the ditch to prevent wastewater effluent from entering the ditch and groundwater monitoring during the peak season demonstrates that seepage of water from the ditch will not result in a depth to groundwater of less than six (6) feet in the area of the absorption system, the setback_distance may be reduced to a minimum of 50 feet provided that a waiver has been issued by the MDEQ pursuant to ARM 17.36.323 and 17.36.601.
- (6) Separation of Water and Sewer
- (a) Horizontal separation of at least ten feet is required between sewer and water mains, unless the sewer main must cross the water line. The distance shall be measured from the inside edge of each pipe.
 - (b) Sewer mains which must cross water mains shall be laid to provide a minimum distance of 18 inches between the outside of the pipes. Service lines shall be constructed in accordance with the Uniform Plumbing Code.
- (D) Maximum land application rates
- (1) Wastewater application into the soil of property or properties shall not exceed 700 gallons/useable acre/day for any system or group of systems except as provided in V, (D), (2) below.
 - (2) Exception: A lot or number of contiguous lots under common ownership, totaling less than 1/2 acre, shall be limited to an application rate of 350 gallons per day. The acreage of all contiguous parcels under one ownership shall be combined for the purposes of this exception. A lot or number of contiguous lots totaling less than 1/2 acre, may be considered separate from other contiguous lots only if under separate ownership prior to

May 19, 1988. New systems permitted under this exception must meet all other requirements of this regulation.

(3) Contiguous lots under common ownership totaling more than 1/2 acre shall be allowed a prorated wastewater application equivalent to 700 gallons/acre/day.

(4) A parcel or parcels of land served by community system(s), multi-user system(s) or system(s) with three or more service connections may dispose of effluent through a common absorption system. Total area for the purpose of calculating the maximum land application rate shall include lots, interior parks, and public right of ways within the subdivision, minus floodplain or flood-prone area and area in excess of 25% slope.

(5) For the purpose of calculating the application rate limits described in V, (D), (1) and (2), the flows found in Table II shall be used for residential dwelling units, including multi-user units. All Single-family dwelling units will be considered to have a minimum of 350 gallons per day discharge. These flows are also used for sizing absorption systems.

TABLE II

1 bedroom	150 gpd
2 bedrooms	225 gpd
3 bedrooms	300 gpd
4 bedrooms	350 gpd
5 bedrooms	400 gpd
Each additional bedroom	add 50 gpd

Flow rates for Industrial and non-residential establishments shall be as determined by design in accordance with DEQ 4, Chapter 5.

NOTE: Any space or room such as a den, study, storage area, or any area that can easily be converted to a bedroom shall be considered an additional bedroom.

VI. INSPECTIONS.

(A) Wastewater treatment and disposal systems require a final inspection prior to covering the system unless specific permission has been granted by the Department to backfill a portion of the system for a justified reason. When final approval is withheld, a written notice of deficiencies and required corrective action shall be given to the applicant. A reinspection shall be made upon notification that the deficiencies have been corrected and the system is in compliance with these regulations. The Department may charge a re-inspection fee established by the Board.

(B) The applicant or installer shall notify the Department that an inspection will be necessary not less than eight (8) working hours prior to completion. Certified installers, after notifying the Department of completion, may be allowed to inspect their own installations and certify the system is installed in compliance with these regulations on forms provided by the Department when Department personnel are unable to inspect the system within one (1) hour of the scheduled inspection time. A completed inspection of the system, including a drawing and location of the disposal system, must be filed with the Department within two (2) working days after the initial notice for inspection.

(C) Inspections of alternative and experimental systems shall be conducted as specified under the requirements for those specific systems. The Department may inspect these systems in accordance with Section X of this Code.

(D) Acceptance of a permit by the applicant shall confer upon the Department the authority to access the installation site at reasonable times to collect samples. The Department may inspect existing systems that have been subject to complaints, create health hazards, or become public nuisances.

(E) Deviations from the approved plans, which do not violate the regulation, may be approved by the Department conducting an inspection. Approved deviations shall be noted on the inspection form.

VII. PRIMARY TREATMENT REQUIREMENTS

(A) Primary treatment is provided in a septic tank containing one or more chambers. All wastewater treatment systems must provide at least a primary treatment device prior to disposal in an absorption system

(B) The primary treatment device shall consist of a concrete septic tank or a septic tank installed using other materials and installation procedures approved by the Department. Septic tanks shall conform to the design and installation requirements established by DEQ Circular 4 Chapter 7.

(C) Septic tanks shall be located where they are readily accessible for inspection and maintenance.

(D) Sizing of Septic Tanks

(1) Residential

(a) For 3 bedrooms, the minimum size septic tank is 1,000 gallons.

(b) For 4 to 5 bedrooms, the minimum size septic tank is 1,500 gallons.

(c) For 6 to 7 bedrooms, the minimum size septic tank is 2,000 gallons.

(d) For 8 or more bedrooms, the minimum size septic tank is 2,000 gallons plus 250 gallons for each bedroom greater than 7 bedrooms (i.e. 8 bedrooms requires a 2,250 gallon tank; 9 bedrooms requires a 2,500 gallon tank).

(2) Non-Residential

(a) for non-residential flows of less than or equal to 1,500 gallons per day, the tank must have a capacity of at least 2.7 times the average daily flow.

(b) For non-residential flows of greater than 1,500 gallons per day, the tank must have a minimum capacity equal to 2.25 times the average daily flow.

(3) Dose tank volume is not included as part of the septic tank volume.

(E) The pipe between the structure and the septic tank shall be schedule 40 PVC pipe and have a minimum inside diameter of four inches and lie on a slope of not less than 1/4 inch per foot. No single bend of more than 45° is allowed.

(F) All liquid waste and wash water shall discharge into the primary treatment device. Roof, footing, garage, surface water drainage and cooling water shall be excluded.

(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 (22 inch inside diameter) must be provided into each compartment. Each access must be extended to within 12 inches of the finished ground surface. An access to the effluent filter of a size large enough to maintain the filter must be provided and must be extended to the finished ground surface.

(H) The septic tank shall be set on undisturbed ground or properly bedded with sand to prevent settling of the tank. The tank shall be installed level and the inlet and outlets shall be sealed to prevent leaking.

(I) Septic tank outlets must include an effluent filter or another approved device such as a screened pump vault. On combination septic/dosing tanks, the septic tank outlet is considered to be in the wall dividing the septic compartment(s) and the dosing compartment. All wastewater must pass through the effluent filter.

VIII. CONVENTIONAL SECONDARY TREATMENT. Conventional secondary treatment consists of a drainfield.

(A) Drainfield wastewater flow rates.

(1) Design wastewater flow for residential dwelling units shall be in accordance with TABLE III. Single-family dwelling units will be considered to have a minimum of three bedrooms for the purpose of determining drainfield and septic tank sizes. An unfinished basement shall be considered as an additional bedroom. No more than one bedroom can be constructed in the basement unless the system is designed for additional bedrooms or a permit for increased use is obtained. Any space or room such as a den, study, storage area, or any area that can easily be converted shall also be considered an additional bedroom.

TABLE III

3 bedrooms	300 gpd
4 bedrooms	350 gpd
5 bedrooms	400 gpd
Each additional bedroom	add 50 gpd

(2) Wastewater flow rates for multi-user, non-residential, industrial, recreational and commercial establishments shall be determined by:

- (a) DEQ 4, Chapter 5; or
- (b) Applicable tables and charts found in the EPA Design Manual for Onsite Wastewater Treatment and Disposal Systems; or
- (c) Metered flow data which has been approved by the Department gathered from comparable facilities.

(B) Drainfield application rates.

(1) Application rates for residential and non-residential drainfields shall be determined using Table IV.

TABLE IV

Texture	Est. Perc rate (min/in)	App. rate (gpd/ft²)
Gravelly sand or very coarse sands	< 3 (a)	0.8(a)
Loamy sand, coarse sand	3 - < 6	0.8
Medium sand, sandy loam	6 - <10	0.6
Fine sandy loam, loam, silt loam	10 - <16	0.5
Very fine sand, sandy clay loam	16 - <31	0.4
Clay loam, silty clay loam	31 - <51	0.3
Sandy clay, clay, or silty clay	51 - <121(b)(c)	0.2
Clays, silts, silty clays (soil is reported throughout the soil profile) (USE EVTA BED)	≥ 121 (d)	0.15
Clays or silts, pan evaporation rates do not allow for EVTA use	≥ 121	NP

(a) If the soil for 3 feet below the infiltrative surface is gravelly sand or very coarse sand and the perc rate is less than 3 minutes per inch, or if the soil is gravelly sand or very coarse sand and there is less than 6 feet between the bottom of the trench and a limiting layer, the trench must be sand-lined and pressured-dosed or other treatment provided as approved by the Department.

- (b) Pressure distribution will be required if more than 500 lineal feet (or 1000 square feet) of distribution line is needed.
- (c) Comparison of soils profile report, percolation rate, and USDA soils report will be used to select applicable square footage.
- (d) Square footage is increased because the trench sidewall is not available in EVTA bed systems.

NP – Not permitted

- (2) The following formula shall be used to determine the size in lineal feet of the drainfield.

$$\text{Lineal feet} = \frac{\text{gallons effluent per day}}{\text{application rate} \times \text{width of trench in feet}}$$

(C) Drainfield construction details.

- (1) Gravity Drainfield construction details shall conform to the standards found in Table V and the guidelines listed below:

TABLE V

	Units	Gravity Maximum	Gravity Minimum
Trench length	feet	100	0
Trench width	inches	24	12
Trench depth	inches	36	18
Slope of drainfield lines	percent	0	0
Slope of trench bottom	percent	0	0
Slope of header pipe	percent	0	0
Depth of coarse material	inches		
Under pipe		-	6
Over pipe		-	2
Size of coarse material	inches	2.5	.75
Space between centers	feet	-	7
Number of laterals		-	2

- (a) If chamber systems are used, maximum widths are 22 inches for gravity distribution and 34 inches for pressure distribution. These widths are equivalent to a 24 inch and 36 inch width drainfield respectively.
- (b) Coarse material around drainfield pipes shall be clean, crushed stone, gravel, or similar permeable material placed six (6) inches below the drainpipe to two (2) inches above the drainpipe.

- (c) Coarse material shall be covered with a minimum of two layers of untreated building paper, synthetic drainage fabric or other approved material before backfill.
- (d) For gravity fed systems, the pipe connecting the septic tank and the drainfield shall be properly bedded and consist of schedule 40 PVC pipe at least three inches in diameter and lie on a slope of not less than 1/8 inch/ft.
- (e) Pipe used in a gravity flow drainfields shall be perforated PVC pipe at least four (4) inches in diameter.
- (f) Header pipes shall consist of solid PVC pipe.
- (g) The ends of drainfield laterals shall be capped.
- (h) Perforations in drainfield pipe shall be placed at five (5) and seven (7) o'clock.
- (i) Perforated pipe connecting the ends of the drainfield laterals shall not be included when calculating absorption area sizing.
- (j) When trenches have been excavated, the sides and bottom must be raked to scarify any smeared soil surfaces. Construction equipment not needed to construct the system must be kept off the absorption area to prevent soil compaction. Construction must not be initiated when the soil moisture content is high.

(2) Distribution Boxes. Equal distribution of septic tank effluent throughout the secondary treatment system shall be required. When a drainfield cannot be installed level and still meet the minimum and maximum depth requirements of this regulation, the Department shall require installation of a dosing distribution box as shown in Appendix C which conforms to all of the following requirements:

- (a) The total length of perforated pipe of each connection to a distribution box shall be approximately equal;
- (b) The bottom of all outlets of the distribution box shall be level, and the bottom of the inlet shall be at least one (1) inch above the outlets;
- (c) The distribution box shall be adequately bedded to prevent settling
- (d) The area where the distribution box is installed shall be marked by an iron pipe or re-bar to facilitate locating the distribution box for maintenance and inspection;
- (e) At least five (5) feet of solid pipe shall extend from a distribution box;
- (f) An installer of a distribution box shall test the distribution box before or at the time of inspection by filling it with water to ensure equal distribution; and

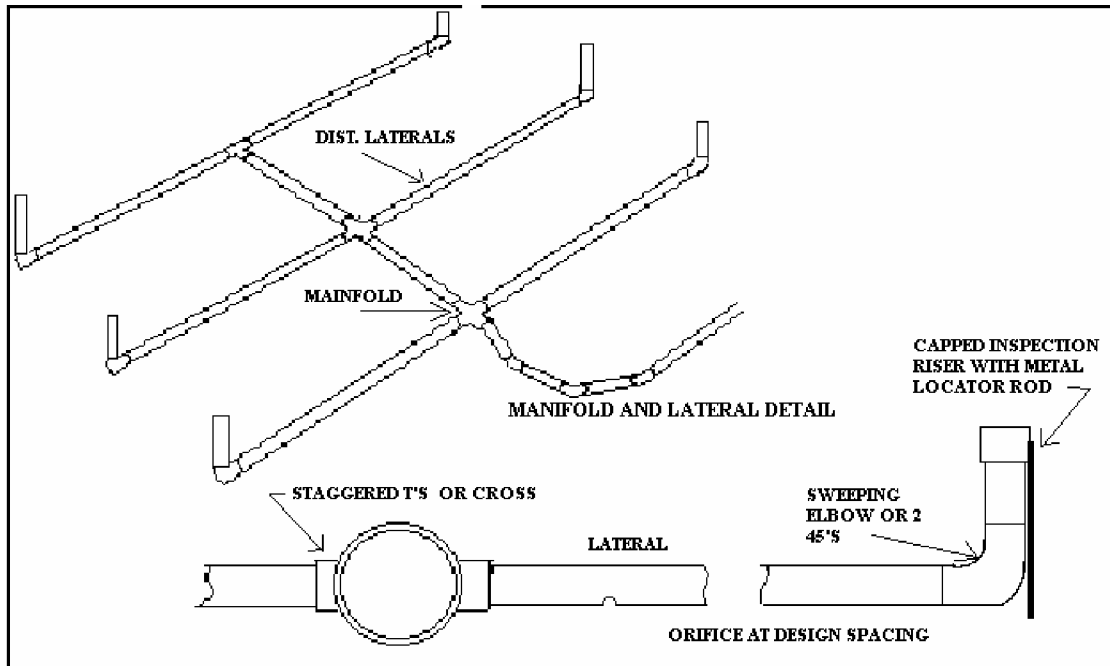
(D) Pressure Distribution Secondary Treatment

(1) Pressure distribution is used to obtain uniform distribution of effluent throughout a drainfield.

(2) Pressure distribution of effluent to the absorption system is required whenever the design wastewater flow requires more than 500 lineal feet or 1000 square feet of distribution lines. It is required to be used in the design and construction of Capping Fill and Elevated Mound systems. It may also be required in other alternative or experimental systems.

(3) When pressure distribution is used, a 3' trench width with 4' separation between trench edges is allowed. A pump is used to provide pressure to force effluent through small diameter piping. Piping size, hole size, distance between holes and the size of pump are variable; determination of these variables usually requires an engineer. A typical layout for a pressure distribution is depicted in figure 1.

**FIGURE 1
PRESSURE DISTRIBUTION NETWORK**



(4) Care must be taken to ensure equal distribution throughout the drainfield. The distribution system should be designed by an engineer or someone experienced in the design of pressure distribution systems.

(5) Dosing tanks must be provided with access ports sufficiently large to maintain the tank and pumps, and shall be vented. Pumps, valves and other apparatus, which require maintenance, shall be accessible from the surface without entering the tank or be located in a dry tank adjacent to the wet chamber. Pumps and controls must be corrosion resistant and meet National Electrical Code requirements.

(6) The dose volume shall be equal to the drained volume of the discharge pipe and manifold plus a volume that should be 10 times but shall not be less than five times the distribution pipe volume.

(7) The size of the dosing pumps and siphons shall be selected to provide a minimum pressure of one psi (2.3 feet of head) at the end of each distribution line.

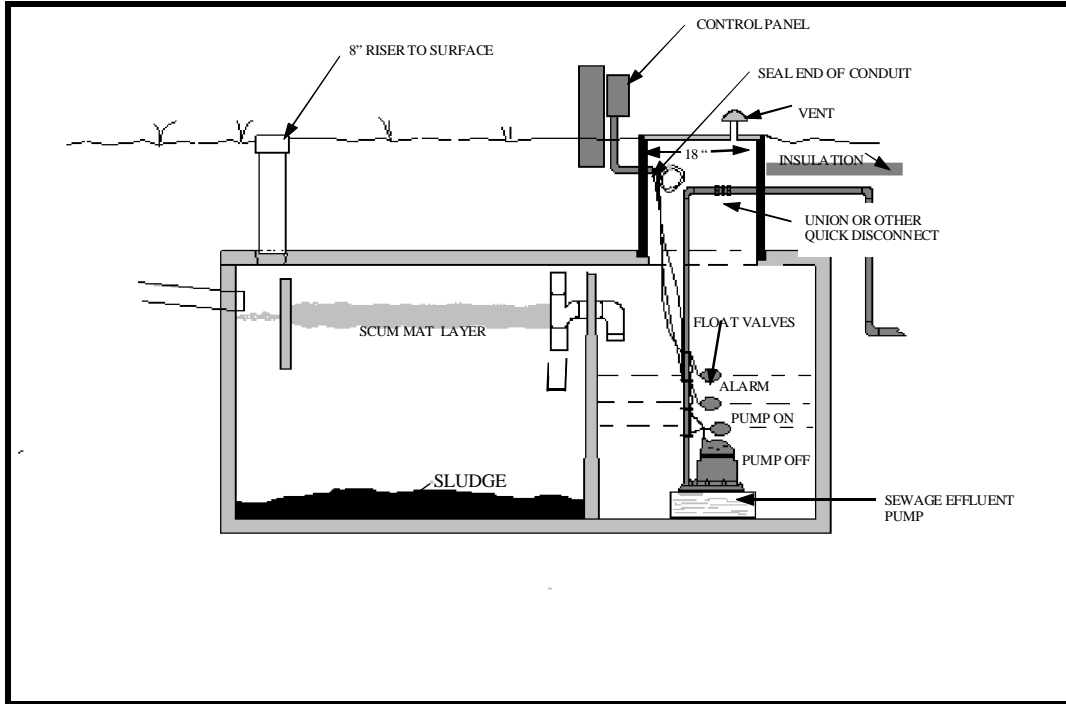
(8) All lateral and manifold piping shall be Schedule 40 or stronger PVC pipe. The pipe shall have a single row of perforations 1/8 inch diameter or larger in a straight line along the bottom of the pipe. Maximum perforation spacing shall be 5 feet. An equivalent design that assures uniform distribution may be provided with the approval of the reviewing authority.

(9) A hydraulic analysis demonstrating uniform distribution shall be provided. The analysis shall show no greater than 10 percent variation in distribution of dose across the entire drainfield.

(10) Distribution pipes of pressure-dosed drainfields must have capped inspection risers that terminate slightly below ground surface. A metal location marker shall be provided for each inspection riser. These inspection risers shall be installed with a long-sweep elbow or two 45° bends.

(11) Pressure distribution systems shall be field tested to demonstrate uniform flow distribution prior to approval of the system. The system will be tested before covering the distribution pipe with gravel by pressurizing it with water. Holes must be facing up for this test. The elevation of the spray from each hole must be a minimum of 2.3 feet and maintain a minimum flow variance of 10%.

FIGURE 2
COMBINATION SEPTIC TANK / PUMP VAULT



(E) Additional Requirements for Pumping Septic Tank Effluent

The following rules apply whenever a pump or siphon is used to move effluent from the tank to the absorption system (to keep the drainfield shallow, to provide for dosing or pressure distribution or to transport the effluent off site or for long distances)

(1) Dosing tanks, except those designed in accordance with the City of Missoula's Standard Installation Manual for Residential On-Site STEP System Sanitary Sewer Connection, must comply with the following requirements unless the Department approves alterations that have been justified by a Professional Engineer.

(a) The dosing tank must have adequate volume to provide storage for the necessary effluent dose, the transport line (if the line drains back) and the required reserve capacity.

(b) Minimum dose size for standard drainfields using 4" PVC pipe must be 75% of the internal volume of the pipe (0.65 gallon per lineal foot of 4" pipe.)

(c) Dose size for pressure distribution systems will be in accordance with approved design, but cannot be less than five times the internal pipe volume unless a programmable timer is used. If a timer is used, the minimum dose size may be equal to two times the internal pipe volume.

(d) Transport line volume, for systems in which the effluent drains back into the dosing tank, are calculated using the Table VI below:

TABLE VI
PIPE VOLUME
(GAL/FT OF LENGTH)

PIPE DIAMETER	SCH 40	CLASS 200	CLASS 160
1"	.045	.058	.058
1.25"	.078	.092	.096

1.5"	.105	.105	.120
2.0"	.175	.189	.196

- (e) The reserve volume must be equal to at least 25% of the daily flow.
 - (f) Dosing tanks must be made of reinforced concrete meeting the same structural standards as those required for septic tanks in DEQ Circular 4 or an approved equivalent.
 - (g) Manholes and risers for pump access must be a minimum of 18" inside diameter and must be constructed of concrete, ribbed fiberglass or other approved non-corrosive durable material. The pump access must extend to finished grade and have a secure cover made of concrete or fiberglass.
 - (h) Pump vaults shall be installed (in such a way as) to allow for venting back through the septic tank or a minimum 2" ventilation port shall be installed on the top of the manhole riser. A vent with an activated carbon filter is recommended and is required if an odor nuisance is created.
- (2) Pumps must comply with the following requirements:
- (a) Pumps used for dosing systems must be sized to provide a minimum flow of 3.5 gallons per minute (gpm) per 100' of trench (example: 300' of drainfield requires at least 11.5 gpm). Pumps must be capable of pumping this minimum flow under the amount of head required for the system. The head must be within the manufacturer's recommended operating range for that pump.
 - (b) Pumping head is determined using the elevation distance between the lowest pumping level in the dosing tank and the highest level in the drainfield system and adding the total of the friction losses for the transport pipe and any fittings. Tables VII and VIII provide friction losses for different sizes of PVC pipe. When manufacturer's specifications differ from these numbers, the manufacturer's specifications will be used to determine friction loss.
 - (c) Pumps must be designed and improved for intended use.
 - (d) The effluent must be screened through a 1/8" filter before it enters the pump chamber.
 - (e) Pumps used for pressure distribution systems must meet the specifications determined by the pressure distribution design criteria.
 - (f) Pumps must be installed to be easily removed without entering the access port. Pumps must be provided with an easy, readily available means of electrical and plumbing disconnect, and a non-corrosive lifting device as a means of removal for servicing.
 - (g) Pump systems must be designed to keep the pump motor submerged unless an explosion proof pump is installed that is acceptable for use in a hazardous environment in accordance with the National Electric Code ANSI/NFPA 70.

TABLE VII

FRICTION LOSS THROUGH PVC PIPE				
FLOW (gpm)	-PIPE DIAMETER (in)-			2
	1	1 1/4	1 1/2	
	-----FT/100 FT-----			
1	0.07			
2	0.28	0.07		
3	0.60	0.16	0.07	
4	1.01	0.25	0.12	
5	1.52	0.39	0.18	
6	2.14	0.55	0.25	0.07
7	2.89	0.76	0.36	0.10
8	3.63	0.97	0.46	0.14
9	4.57	1.21	0.58	0.17
10	5.50	1.46	0.70	0.21
11		1.77	0.84	0.25
12		2.09	1.01	0.30
13		2.42	1.17	0.35
14		2.74	1.33	0.39
15		3.06	1.45	0.44
16		3.49	1.65	0.50
17		3.93	1.86	0.56
18		4.37	2.07	0.62
19		4.81	2.28	0.68
20		5.23	2.46	0.74
*		*	*	*
25			3.75	1.10
30			5.22	1.54
35				2.05
40				2.62
45				3.27
50				3.98

TABLE VIII
FRICTION LOSS THROUGH PIPE FITTINGS
(note: check manufacturers specifications)

Size of Pipe in Inches	GATE VALVE				Globe Valve	Ang'le Valve	Check Valve	Standard 90 Degree Elbow	High/Low 90 Degree Elbow	Long Sweep 90 Degree Elbow
	Wide Open	1/4 Closed	1/2 Closed	3/4 Closed	Wide Open	Wide Open	Wide Open			
STRAIGHT PIPE IN FEET (EQUIVALENT LENGTH)										
1"	.61	3.4	18.	70	29	15	7	2.7	2.5	2.0
1 1/4"	.79	4.8	24.	96	38	21	9	3.6	3.5	2.5
1 1/2"	.93	5.6	28.	116	46	23	11	4.5	4.0	2.9
2"	1.21	7.0	36.	146	58	29	15	5.4	5.0	3.6

(3) Siphons must comply with the following requirements:

- (a) The specifications for the siphon must be submitted to the Department for review and approval for use in the specific application proposed.
 - (b) Siphons must be constructed of corrosion-resistant materials and installed according to manufacturer's recommendation.
 - (c) Effluent screens or filters must be installed to protect the siphon snifter tube from plugging.
 - (d) Systems that are required to be dosed or pressurized shall include an electrically operated device that tracks the operation of the siphon by measuring cycle events and records them by means of an event counter mounted within the dwelling or structure served.
- (4) Transport pipes must comply with the following requirements:
- (a) All pressure transport pipe and fittings shall meet or exceed ASTM Specification D-2241. Polyvinyl chloride (PVC) or polyethylene (PE) transport pipe of one inch or less shall have a minimum pressure rating of 200 pounds per square inch (psi). For diameters greater than one inch, the minimum pressure shall be 160 psi.
 - (b) Continuously pressurized transport lines (systems with check valves) must be buried a minimum of 60 inches deep unless the line is insulated with two inches of high density styrofoam insulation capable of providing a thermal resistance of 10.8 at 40°F mean temperature. Insulated lines may not be shallower than twenty-four inches. This requirement includes any portion of a pressurized line that is shallower than sixty inches. Transport lines designed to flow back after each dose must be buried at least two feet deep.
 - (c) An isolation valve must be placed on a continuously pressurized transport pipe in or near the dosing tank to allow for repairs without flowback of sewage.
 - (d) Transport pipes must be installed to prevent siphoning of the drainfield back into the tank or the tank effluent into the drainfield. This may be accomplished using weep holes or anti-siphon valves.
- (5) Every new or replacement system requiring a pump must have an audible high water alarm with a manual silencing switch located in or near the building served by the system. An electrical safety switch shall be installed near this alarm. The alarm must be installed on a separate circuit from the pump. The electrical and alarm systems must be installed in accordance with the National Electric Code and other applicable rules.
- (6) All pumps, siphons, controls, alarms and related apparatus must be field tested under working conditions by the installer to ensure the system is working satisfactory.

IX. ALTERNATIVE TREATMENT SYSTEMS.

- Alternative forms of treatment may be approved by the Department and listed as an approved alternative system. Alternative treatment systems shall meet minimum requirements prescribed ARM 17.36.913 and in DEQ-4.
- (A) Alternative wastewater systems may be approved by the Department to be used in lieu of conventional systems. The applicant shall provide substantial scientific field testing information available concerning a particular system design before the system may be approved as an alternative. The information must indicate that the system will perform over a period of years with proper maintenance for the purpose for which it is designed.
- (B) Unless a provision under an alternative system provides otherwise, all rules pertaining to conventional drainfields and septic tanks shall apply to alternative systems.
- (C) Alternative systems may require additional inspections during and after installation and an additional inspection fee may be charged for each inspection. The Department shall provide a written report of each inspection to the system owner listing deficiencies of the system and corrections needed for the system.
- (D) Use of an alternative system may preclude future divisions of the property pursuant to State requirements. The applicant and future owners shall assume responsibility for any restrictions, liabilities or encumbrances that are caused by the use of an alternative system.

(E) All alternative system designs shall provide for replacement areas equivalent to those required for conventional systems in the event of system failure.

(F) The Department may place any restrictions or requirements on the design, installation and operation of an alternative system that it deems necessary to ensure that the system will achieve the desired results in any installation. Such restrictions or requirements include but are not limited to temporary or ongoing monitoring, discharge limitations on pollutants, and provisions to ensure proper maintenance and operation of alternative systems. In such cases the Department shall be permitted access to the property to ensure such restrictions or requirements are carried out. Failure to properly follow permit restrictions or conditions, or failure to properly maintain an alternative system is a violation of this rule and grounds for permit revocation.

(G) Design criteria for the alternative systems approved for use by the Department are available at the Environmental Health Division Office.

X. WATERLESS SYSTEMS, WATERTIGHT VAULTS, AND CHEMICAL TOILETS.

(A) Pit Privies

(1) Pit privies shall not be permitted when the structures served have plumbing fixtures or running water. Pit privies shall be prohibited on small lots in areas characterized as residential or commercial developments.

(2) Pit privies shall not be installed closer than 100 feet from a stream, lake, well or other water supply.

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

(B) Sealed Pit Privies

(1) Sealed pit Privies may be used only at seasonal public recreational facilities operated by governmental institutions or a licensed campground.

(a) For the purpose 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. The use of sealed pit privies must cease when the property on which they are located is no longer a public recreational facility operated by a governmental institution or a licensed campground.

(2) Sealed pit privy systems may be approved only if the structure to be served does not have a piped water supply. 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

(3) A sealed pit privy may be required instead of permitting a pit privy if the Department determines that waste from the pit privy could potentially pollute groundwater or cause a nuisance.

(4) A sealed pit privy may be used in a floodplain or flood-prone area or high ground water area provided that the floor surface is one foot above flood plain elevation and the mass of the structure is adequate to prevent the vault from floating during a flood when the vault is empty. Except for floodplain or flood-prone area separation, permanently sealed pit privies shall follow the location requirements for septic tanks in section V(C). This provision does not release the applicant from obtaining required flood-plain permits.

(5) Sealed pit privies must be emptied as needed by a licensed septic tank pumping service.

(C) Composting or Waterless Toilets and Other Conservation Methods. Waterless toilets are permitted. A properly sized septic tank/absorption system is also required if a piped water source is provided to the structure served by the waterless toilet.

(D) Chemical Toilets. Chemical toilets may be used for temporary events, construction sites and at other locations where a permanent system is not required. Chemical toilets shall not be used to serve as a sewer system for structures.

XI. EXPERIMENTAL SYSTEMS.

(A) Treatment systems not specifically allowed under this regulation may receive a permit for an experimental system. Experimental systems shall only be considered under the following conditions:

(1) The applicant shall provide adequate information to the Department that ensures the system will effectively treat the wastewater in a manner that will prevent groundwater contamination and will meet all of the requirements in section I (A) and ARM 17.30.9 at all times. Failure to meet the requirements of section I(A) and ARM 17.30.9 or any permit conditions shall invalidate the permit and be grounds to order cessation of use of the system and buildings that the system serves.

(2) The application shall include a complete description of a scientific evaluation process to be carried out by a scientific, educational, governmental or engineering organization.

(3) The applicant shall provide for any funding necessary to provide adequate design, installation, monitoring, and maintenance.

(4) The system shall be designed by a Professional Engineer, sanitarian or other professional acceptable to the Department.

(B) A maximum of three experimental permits may be issued per year countywide.

(C) The Department may place any requirements or restriction it deems necessary on a permit for an experimental system. All provisions of Health Department regulations shall apply to experimental systems except those specifically exempted by the permit. A permit to construct an experimental system is not transferable from person to person. Applicants shall provide for inspections to be made by persons approved by the Department. Monitoring and inspection results shall be submitted annually to the Department for up to five (5) years. The Department may refuse to issue a permit for an experimental system for any reason related to the proposed system. The Department may require a redundant conventional system.

(D) Any person who sells a property containing an experimental system shall disclose all permit, monitoring and maintenance requirements to the buyer.

(E) Experimental systems may be re-classified by the Department to the designation of alternative system after sufficient evidence has been collected to show that the system functions satisfactorily over time.

XII. REPLACEMENT SYSTEMS.

(A) No person shall operate a wastewater treatment and disposal system that has failed, as defined in section II of this regulation. Failed systems shall be replaced and meet the following requirements.

(B) Replacement systems shall be designed and constructed to allow the best treatment practicable. Drainfields will be required for all situations where there is adequate room and shall be required for replacement when there is potential for contamination of groundwater or surface water.

(C) If room is unavailable for a drainfield, then an absorption bed shall be required as a second alternative before a seepage pit is permitted. An absorption bed shall be required unless a seepage pit may be permitted pursuant to Section XIII (D) or (E) below.

(D) Seepage Pits shall only be allowed for replacement systems in cases where inadequate room or other conditions prohibit a drainfield or absorption bed. Seepage pits may only be constructed or allowed to remain in use in situations where groundwater is shown to be a minimum of 25 feet below the bottom of the proposed seepage pit.

(E) Seepage pits may be permitted for replacement systems in areas that are expected to receive public sewer service within five years, as determined by the Department. Seepage pit replacement permits will be temporary, and the owner must execute a deed restriction waiving the right to protest an SID or RSID for the installation of public sewer and agreeing to connect to public sewer within 180 days of its availability to serve the property, as required in Section XV (A) (1).

(F) Four (4) feet of separation between the bottom (floor) of any replacement absorption system and the high groundwater elevation or bedrock shall be required. Seepage pits shall require a 25-foot separation to groundwater from the bottom of the pit. Pump systems are required when these minimum separations cannot be met.

(G) Seepage pits and cesspools shall be filled with soil, sand, concrete or other approved material when they are replaced with an absorption bed or drainfield.

(H) Replacement of systems in floodplain.

(1) A system in a floodplain or flood-prone area that was legally installed may be replaced with an elevated sand mound or other drainfield-equivalent secondary treatment. The bottom of the drainfield must be above floodplain elevation or the system must include advanced secondary treatment before wastewater is discharged into the soil.

(2) Replacement tanks and pump chambers must be designed to prevent floating in a flood.

(3) A system that was not legally installed must be replaced with a system that is in full compliance with this Code.

(I) Drainfields in Fill. Drainfields may be installed in fill only for replacement of failing systems.

(1) Location

(a) Any parcel that will undergo land modification by filling must have enough area suitable for absorption system placement. The entire area necessary for the replacement absorption system must be filled with appropriate soils prior to final approval of the system.

(b) Fill systems may not be installed on soils with a percolation rate slower than 60 minutes per inch. Three percolation tests are required in the native material before fill is installed. Side slopes on the fill may not exceed 25 percent (4:1).

(2) Fill material

(a) Soils used for fill may not be finer than sandy loam with a maximum of 20 percent passing the No. 100 sieve.

(3) Design

(a) System configuration, dimensions, and orientation must be approved by the Department prior to the placement of fill material.

(b) Fill must be of suitable depth to provide the minimum separation distances from the finished ground surface to a limiting layer. Fill shall not be used to overcome minimum vertical or horizontal separation distances in Sections V (B) and (C) of this regulation.

(c) Three percolation tests evenly spaced across the completed fill must be performed at the depth of the proposed infiltrative surface as a basis for design application rate.

(d) The absorption system must be sized on the basis of the percolation rate for either the soil beneath the fill material or the percolation rate of the fill material, whichever is slower.

(4) Construction

(a) All vegetative cover must be removed for the area to be filled.

(b) Fill material must not be put in place when the fill or the original soil surface is frozen.

(c) Fill material must be placed in lifts specified by the engineer to obtain stable soil structure conditions.

- (d) Absorption trenches must be set back at least 24 feet from the lower edge of the filled area on slopes of 6 percent or greater. For slopes less than 6 percent, absorption trenches must be set back at least 3 feet on all sides prior to starting the side slope.
- (e) The fill area must be seeded with a suitable grass to aid in stabilization.

XIII. INCREASED USE, CHANGES OF USE, AND ENLARGEMENT OF STRUCTURES.

(A) No person may increase use to an existing system or operate an existing system that has increased use unless the system meets all current requirements of this regulation or a temporary increased use permit is granted pursuant to Section III (D).

(B) To increase use to an existing system in MWTPSA, a person shall file a waiver of protest as described in Section XVII(A)(1) of this rule.

(C) No person may install, cause to install or operate additional wastewater systems on a parcel of land or subdivide a parcel of land with a cesspool or other system that does not meet the requirements of Section I (A) of this regulation. Substandard systems must be upgraded to meet Section I (A), provide primary and secondary treatment and reserve a full replacement area that meets current requirements of this regulation.

(D) No person may connect to a wastewater treatment and disposal system when the system or connection point (in the case of a multiple connection system) has been unused or disconnected from any residence or structure for more than one (1) year unless the system meets the requirements of Section I (A) of this regulation; has primary and secondary treatment; and meets the separation requirements in V(B) & (C) of this regulation.

(E) No person may operate a system that serves a structure if the structure undergoes significant improvement unless the system meets the requirements of Section I (A) and provides primary and drainfield-equivalent secondary treatment.

(F) No person may replace a mobile home with a permanent structure unless the absorption system is located at least 100 feet out of the floodplain and flood-prone areas and all the conditions in XIII(G) regarding expansions of structures are met.

(G) The following conditions apply to expansions of structures:

- (1) No person may begin construction on a structure expansion until Department issues either a septic permit or a written determination that no septic permit is needed for the proposed project, and;
- (2) No person may build over any portion of a system except the pipe from the structure to the septic tank. The exit pipe must be schedule 40 PVC and adequately protected from settlement. Foundation walls must be at least 10 feet from the tank(s) and absorption system, and;
- (3) An adequate replacement area must be preserved that is at least equivalent to what was available before the proposed expansion, and;
- (4) The system must provide primary and drainfield-equivalent secondary treatment, and;
- (5) The system must meet Section I(A)(1) of this regulation, and;
- (6) If public sewer is available as described in Section I (C), the applicant shall connect to public sewer.

(H) Septic Determinations for Enlargement of Structures.

- (1) A completed application for a determination must be submitted on forms provided by the Department and must include the following:
 - (a) Applicant name and mailing address
 - (b) Property owner and mailing address
 - (c) Address and legal description of property

- (d) A brief description of proposed project
- (e) A site plan, on paper no larger than 11" x 17", accurately showing all buildings, wells, septic systems, replacement areas, surface water and floodplains on or within 100 feet of the property
- (f) Detailed floor plans, on paper no larger than 11" x 17", showing the proposed project
- (g) Other relevant information as required by the Department to clearly define the scope of the project and to ascertain compliance with this Code
- (h) Evidence that zoning and building officials have been notified
- (i) Septic determination application fee

(2) Unapproved changes in plans or specifications after a determination is issued or any falsification or significant error in information submitted by an applicant invalidates the determination.

(3) The Department may place conditions in a determination regarding future use of the enlarged structure to facilitate compliance with the provisions of this regulation.

XIV. ABSORPTION BEDS.

(A) Absorption beds may be used as replacement wastewater systems on existing lots where standard absorption trenches cannot be used. Absorption beds may be used as replacement systems for seepage pits. Absorption beds may not be used on new lots unless the system existed before the proposed subdivision, has been in continuous use, and was permitted by the Department. Absorption beds may be used as replacement for previously approved seepage pits when a re-write of the certificate of subdivision approval is completed.

(B) An absorption bed is similar in operation to a drainfield but is constructed as shown in Appendix C. Since the operation of the absorption bed depends on the infiltration capacity of the bed bottom, care must be taken during construction so that the bottom of the bed is not compacted by equipment.

(C) No person shall install an absorption bed in soils finer than a silt loam or having a percolation rate slower than 60 minutes per inch

(D) All the requirements for conventional drainfields shall apply to absorption beds except for specific requirements listed below.

(1) Design.

- (a) Absorption beds shall have a minimum of two distribution lines.
- (b) Absorption beds shall be designed using the application rates shown in Table IV:
- (c) The distribution lines within an absorption bed shall be uniformly spaced no more than four (4) feet or less than four thirty (30) inches apart. The distribution lines shall be installed no more than two and one-half (2-1/2) feet or less than one and one-half (1-1/2) feet from the side wall of the bed.
- (d) The depth of absorption beds shall be no less than 12 inches and no more than 36 inches deep.
- (e) Both the floor of the absorption bed and the distribution lines (at least 4 inches of perforated PVC for gravity distribution) shall be level.
- (f) Pressure dosing or pressure distribution must be used
- (g) When the bed has been excavated, the sides and bottom of the bed shall be raked to scarify any smeared soil surfaces and loose material shall be removed.

XV. SEEPAGE PITS.

(A) Seepage pits must be installed to meet the following requirements and be designed in accordance with DEQ 4 chapter 27.

(1) A seepage pit shall have a concrete ring with a minimum diameter of three feet and a minimum height of 3.5 feet.

(2) Seepage pits shall be sized according to the permeability of the soils where wastewater will be discharged.

(3) A seepage pit that is excavated to four-foot depth and a five-foot diameter shall be equivalent to 50 square feet of absorption area.

- (4) Where more than one set of rings is required, the minimum edge-to-edge separation between the edges of the rings is three feet.
- (5) The area immediately surrounding the chamber shall be filled with a minimum average of three (3) feet of clean rock or gravel at least three (3) inches in diameter.
- (6) The conventional location requirements in section V(C) shall be used, if possible, for seepage pits.
Justification: addressed in Section XIII above.

XVI. MULTI-USER OR PUBLIC SYSTEMS.

(A) Minimum Lot Size - Public or Multiple User Water or Wastewater System Required.

(1) If a proposed subdivision submitted to the Department pursuant to the Montana Sanitation in Subdivisions Act (MCA Title 74, Chapter 4) contains 15 or more parcels less than one acre in size, or if the subdivision will contain more 25 or more people for at least 60 days during a calendar year, a public water supply system or a public sewage system as defined in MCA 75-6-102 must be provided for the lots less than one acre in size.

(2) If a proposed subdivision contains 3 through 9 parcels less than one acre in size, the subdivision must provide one of the following for the lots less than one acre in size:

- (a) a public water system as defined in MCA 75-6-102 or a multiple family water supply system as defined in ARM 17.36.101 and designed by a professional engineer, or
- (b) a public sewage system defined in MCA 75-6-102 or a multiple family sewage system as defined in ARM 17.36.101. 0

(B) Plans for public and multi-user wastewater treatment and disposal systems shall be approved and permitted by the Department. The applicant or installer shall notify the Department not less than eight (8) working hours prior to completion of the system that an inspection will be necessary. Public systems shall also be approved by the State Department of Environmental Quality. Plans shall be designed to comply with this regulation and with requirements of the State Department of Environmental Quality in effect at the time the plans are submitted.

(C) Community wastewater disposal systems shall be designed by a registered professional engineer. Written certification shall be required from a registered engineer that the system was installed according to plans. A copy of the "as built" shall be filed with the Department within thirty days of inspection.

(D) Multi-user, community, and non-community systems shall be designed in accordance with DEQ Circular 4 and according to this rule. Multi-user and community systems built in the MWTPSA shall also be designed and built to City standards. Multi-user systems shall be designed by a registered professional engineer when more than 1000 square feet of absorption area are required. A maintenance and operation plan, designating who is responsible for maintenance and operation of the system, shall be submitted to the Department. Maintenance and operation shall be carried out according to the approved plans.

(E) Multi-user, community, and non-community systems shall have all primary and secondary treatment installed for all parcels served before the system is put into use. In the case of a phased subdivision, the treatment system installed shall be adequate to serve a particular phase before the system is put into use. Multi-user and community systems must be installed within two years of permit issuance and before structures are occupied.

(F) Any connection to a multi-user system which requires individual septic tanks shall be permitted and inspected by the Department. Individual connections to a community system shall be inspected by the certified operator for the system or by the design engineer.

(G) Screens, rock filters or other devices approved by the Department shall be required where individual septic tanks shall connected to a Multifamily or community drainfield.

(H) Absorption systems proposed to serve separate buildings located on three or more lots must satisfy the following requirements before a permit will be issued. These requirements ensure the system is installed according to plans, completed in time to serve any occupied structure, and properly operated and maintained with a

designated person, partnership, corporation, district, association, or other entity identified as having a clear legal duty to operate and maintain the system.

(1) The applicant for a permit shall provide a performance bond or other satisfactory security in the amount of the estimated cost of the proposed system, in favor of Missoula County, to secure performance of the installation of the system according to approved plans before occupancy of any structure to be served by the system and in any case within 24 months after issuance of the permit.

(2) The performance bond or other satisfactory security shall remain in effect until the system is installed according to approved plans. A multi-user or public system must be installed, inspected, and approved within 24 months after issuance of the permit.

(3) "Other satisfactory security" may include, but is not limited to, one or more of the following: Special Improvement District, Rural Special Improvement District, county or municipal sewer district, performance or property bond, escrow agreement, lien on property, or similar security arrangement approved by the Department and made a condition of the permit.

(4) The performance bond or other satisfactory security shall be released following installation of the system in accordance with approved plans, after inspection by the Department.

(5) If the Department determines that installation of the system has not been in substantial compliance with approved plans, the Department shall furnish the applicant with a written notice of specific deficiencies to be remedied within a reasonable time not to exceed two (2) months. Missoula County shall be entitled to retain sufficient security to ensure substantial compliance. Missoula County shall be entitled to proceed against the performance bond or other security and utilize the proceeds to construct the system in accordance with approved plans if the applicant fails to remedy all deficiencies within a reasonable time stated in the notice.

(6) The applicant for a permit shall provide the Department with information as to the ownership of the system and all components thereof. The applicant shall provide to the Department satisfactory evidence that a designated person, partnership, corporation, district, association or other entity has a clear legal duty and the ability to operate the system. "Satisfactory evidence" may include, but is not limited to, a special improvement maintenance district, county or municipal sewer district, homeowners' association agreement, or a contractual obligation to operate and maintain the system together with the apparent means and ability to perform. A person designated as the operator of a public wastewater disposal system shall be certified in accordance with Title 37 Chapter 42, Part 3 M.C.A. The ownership of the system and responsibility for operating and maintaining it shall be designated on the permit as a condition thereof.

(I) A multi-user and community system must be installed on a separate utility lot, in a common area, in an easement or on the same lot as all the structures served so that it can easily and legally be accessed by the system's users for maintenance and repair of the system

XVII. SPECIAL MANAGEMENT AREAS.

(A) Missoula Wastewater Treatment Plant Service Area (MWTPSA). The purpose of the MWTPSA requirements are to place landowners on notice that permission to use wastewater disposal in this area is temporary and is intended to be replaced with discharge to a public sewage treatment plant. The following restrictions shall apply to all land within the Missoula Wastewater Treatment Plant Service Area depicted on the map in Appendix D:

1) The Department shall not issue a permit for an increased use or new wastewater absorption system permit, or a replacement seepage pit system permit issued in accordance with Section XII (E)), in the MWTPSA unless the owner(s) execute a deed restriction waiving the right to protest the creation of a Special Improvement District (SID) or a Rural Special Improvement District (RSID) for the installation of public sewer, using the language set forth below. The filing of a deed restriction shall not be required if previously filed for the same parcel, or where similar language has been shown on an approved and filed subdivision plat.

"I/We, the undersigned, hereby certify that I/we are the owners of the real property located at (legal description) which is located in an area where public sewer is planned to be installed. I/we hereby waive any right to protest an RSIDs or SIDs affecting said property for the purpose of financing the design and

construction of a public sewer benefiting said property. Further, my/our signatures on this waiver may be used in lieu of my/our signature(s) on an RSID or SID petition for the creation of one or more RSID or SID petitions for the purpose of financing the design and construction of a public sewer benefiting the above-described property. This deed restriction is granted to the County or City of Missoula in exchange for permission to discharge sewage into the ground until such time that public sewer is installed

This deed restriction shall also constitute an agreement whereby the owner(s) shall connect to public sewer within 180 days after public sewer mains are installed and available to the property.

This waiver shall run with the land and shall be binding on the transferees, successors, and assigns of the owners of the land described herein.

All documents of conveyance shall refer to and incorporate this waiver."

- 2) All new divisions of land, including all subdivisions as defined in Section II within the MWTPSA shall exhibit language consistent with section XV, (A), (1), of this regulation on the face of the recorded plat or on a deed restriction recorded with the plat. Language approved by the City and County Attorney shall be available at the Department.
- 3) Any person installing a new or replacement septic tank in an area of the MWTPSA designated for STEP (on Appendix D) or approved for STEP via any applicable subdivision approval process shall install a STEP septic tank with manway. A list of subdivisions containing lots which require STEP tanks as a condition of an applicable approval process is contained in Appendix G.
- 4) Individual and multi-user or community septic tanks, and multi-user or community system mains and service lines installed in the MWTPSA shall conform to the design criteria established by the City of Missoula Engineering Department. The design, installation and inspection of all mains, service lines connected to mains STEP tanks and related appurtenances must be approved by the City of Missoula Engineering Department. As-built plans for all multi-user, community, or dry laid systems must be submitted to the City of Missoula Engineering Department and the Department by the applicant within 60 days of installation.
- 5) If a property in the MWTPSA is part of a proposed division or subdivision of land, as defined in MCA 76-3-102 containing three or more lots of less than five acres per lot, the developer must provide a multi-user or community system that may be easily connected to public sewer when sewer mains are available to service the property except as provided below.
 - (a) In areas where STEP tanks are required and the division or subdivision of land contains no more than fourteen lots in all phases approved after September 21st, 1994, a properly designed, installed and inspected dry laid pressure main connecting the lots with appropriate easements may be used.
 - (b) In areas where STEP tanks are not required and the division or subdivision of land contains no more than fourteen lots in all phases approved after September 21st, 1994, a properly designed, installed and inspected dry laid pressure or gravity main connecting the lots with appropriate easements may be used with written permission and approval from the City Engineering Department.
 - (c) When the division of land includes perpetually dedicated common areas and wildlands or an area reserved from development by deed restriction until public sewer becomes available, the Department shall divide the area of such dedicated land by the number of lots and add the result to each lot area for the purposes of determining applicability of this requirement.
 - (d) All portions of the proposed multi-user or community system, except for on lot service lines, shall be installed before the system may be used. Installation of the system may be phased with the Department's approval so long as the system is installed within two years of final plat approval and an improvement guarantee approved by the Department is provided by the developer.

(B) Rattlesnake Valley Special Management Area. The following restriction shall apply for wastewater treatment and disposal systems in that portion of the Rattlesnake Creek Drainage above the Mountain Water intake dam which is classified as A-closed by DEQ (see Appendix E). A wastewater treatment and disposal system serving one single family dwelling or other use with flows less than or equal to a single family dwelling per lot or parcel will be allowed provided that all other requirements are met. The Department may not issue any permits or approve any Certificates of Subdivision Approval for subsurface disposal of wastewater for any new divisions or subdivision of land inside the special management area. The Department may place any conditions on a wastewater treatment and disposal system permit it deems necessary to ensure compliance with the A-closed classification standards, including but not limited to requiring an alternative treatment system such as a sand filter, trickling filter or other system effective at removing pathogens.

(C) Linda Vista Special Management Area. (see Appendix F) The Department shall approve no permits for subsurface disposal of wastewater inside the special management area. The Department shall approve no lifting of sanitary restrictions for any new divisions or subdivisions of land inside the special management area, unless they are served by municipal sewer.

The following restrictions apply to all buildings within the Linda Vista public sewer master plan area that produce sewage effluent (see Appendix F). The owners of regulated buildings inside the entire Linda Vista public sewer master plan area (see Appendix G) shall cease discharge of sewage to the subsurface and shall connect to public sewer within 90 construction-season days after a transfer of ownership if public sewer mains are installed and located within 200 feet of the property.

(D) Roman Creek/Touchette Lane Special-Management Area. The following restrictions shall apply to all land included within the E 1/2 of Section 29, W 1/2 of Section 27, Section 28, T15N, R21W, bordered on the north by the Frenchtown Irrigation Canal and bordered on the south by U.S. Interstate 90.

(1) All parcels with existing plat approvals shall be permitted to install systems if the site meets the four (4) foot separation required from the bottom of the disposal trench to high seasonal groundwater. High groundwater testing may be required to satisfy this requirement.

(2) The Department shall perform a preliminary inspection of the site with the excavator at the start of construction to ensure that:

- (a) maximum depth is maintained; and
- (b) the absorption system is located properly.

(3) Wells shall be grouted to a minimum twenty (20) feet. Bacterial samples are recommended and disinfection may be necessary to ensure a potable water supply. A copy of the well log shall be submitted to the Department showing adequate compliance with the plat approval and Montana DNRC Well Drilling Requirements.

(4) The Department may not approve further subdivision in the area until the cause of water contamination is discovered and the problem corrected.

XVIII. CERTIFIED INSTALLERS AND SITE EVALUATORS.

(A) Certification. All installation, construction, extension, alteration or repairs of wastewater treatment and disposal systems that requires a permit in accordance with Section III shall be supervised by a person who has passed an examination as described in subsection (2) below to ensure they have sufficient knowledge and training to complete the work in compliance with this regulation before installing any system in Missoula County. Upon passing the exam, an installer shall be certified for the calendar year in which the exam was taken. Certification shall expire annually on December 31st.

(1) Certification allows installers to install or repair wastewater treatment and disposal systems in Missoula County. A certified installer shall be on site at all times during installation.

(2) To become certified installers shall take a Class II exam, which allows the installation of conventional and replacement systems and may take a Class I exam, which allows the installation of experimental and alternative systems.

(3) Applications for certification and certification renewal shall be in writing on forms provided by the Department and shall include the name, address and phone number of the applicant and the name of the business that the applicant is representing. Applications shall be accompanied by an application fee determined by the Board to defray the costs for training and exams.

(4) Certified commercial installers must pass an annual take-home exam for re-certification. These exams shall be submitted to the Department with the application for re-certification.

(5) Certified installers shall have evidence of certification at the installation site available for inspection by the Department and a copy of the appropriate permit.

(6) The Department shall not approve a system when there is no certified installer on site during an installation until a certified installer completes the system or until the installer becomes certified and the system meets all requirements. When there is no certified installer on site during an inspection the Department shall charge a reinspection fee to return and reinspect the system when a certified installer is on site. The Department may waive the requirement to have a certified installer on site during an inspection by arrangements made prior to the inspection.

(7) Certification may be revoked by the Department from an individual or from a single employer and its employees for any of the following reasons:

(a) A single occurrence of installing or attempting to install a system without a valid permit.

(b) A single occurrence of deliberately falsifying an inspection.

(c) Repeated mistakes in installing a system with regards to the requirements of this regulation. The Department shall issue two written warnings in a two-year period prior to revoking an installer's certification.

(d) Failure to correct deficiencies noted during the inspection of an installation.

(8) Revocation of certification may extend for up to one year.

(9) Installers who have their certification revoked may request a hearing before the Board in accordance with the provisions of this Code.

(B) Site Evaluators. Professional Engineers specializing in civil, environmental, sanitary, or agricultural engineering; persons with B.S. degrees in geology, hydrogeology, or soils science; and Registered Sanitarians with sufficient soils course work or specialized soils training are authorized to perform site evaluations. Other persons may be approved by the Department if they demonstrate sufficient knowledge of soils enabling them to perform satisfactory site evaluations.

(1) When a site evaluation is required, the evaluation may be performed by a person approved by the Department to conduct site evaluations; or the applicant may request that the Department perform a site evaluation.

(2) Site evaluators or persons under their direct supervision shall be required to conduct percolation tests as described in this regulation on all proposed drainfield sites except that site evaluators who pass a soils textural classification test administered by the Department may have the percolation test requirement waived for sites having soils with textures ranging from a medium sand to a silt loam.

(3) If a site evaluation is conducted by an approved site evaluator, the Department may require access to the property where the proposed site is located to confirm information submitted by the applicant. The Department may reject a site evaluation if access is denied.

(4) The Department may refuse to accept site evaluations from persons who have a documented history of supplying incorrect site evaluations or incomplete information as required

REGULATION 2: GROUP FUNCTIONS

I. PURPOSE The purpose of this regulation is to establish standards for the management of large groups to protect public and environmental health and safety. Such standards shall ensure proper food preparation and handling, traffic control, law enforcement, waste disposal, fire protection, and medical services.

II. AUTHORITY. Authority for this regulation is provided for in 50-2-116, MCA; under which a local health board may adopt rules for the control of communicable diseases, for the removal of filth which might affect public health, and to abate nuisances affecting public health and safety.

III. DEFINITIONS. The following definitions apply for the purpose of this regulation.

(A) "Board" means the Missoula City-County Board of Health.

(B) "Group function" means one thousand (1,000) or more persons simultaneously gathered in a common area, both public and private, for three hours or more. Group function does not include a gathering at a permanent facility such as a theater, auditorium, or stadium where there are permanent facilities available, and normal operational procedures in place which meet all of the criteria in IV, (B), (5) normally required by the Department under this rule.

(C) "Person" means any natural person, partnership, voluntary association, corporation, or political entity.

IV. APPLICATION FOR GROUP FUNCTION PERMIT.

(A) Applicants shall submit a complete application on forms provided by the Department to the Department at least 45 days before the date of the group function. The Department may accept late applications if sufficient reasons and sufficient staff time is available for permit approval.

(B) Complete application. A group function application shall include the following:

(1) Name, address, and phone number of the person organizing the group function; or if other than a natural person, the name, address, and phone number of a responsible officer.

(2) The purpose, location, dates, and hours of the group function.

(3) The means of entry and exit for the group function.

(4) The estimated total attendance at the group function and the estimated peak attendance during the group function.

(5) Provisions that have been or will be made for the following services:

(a) sanitary disposal of human waste;

(b) sanitary disposal of garbage and other nonhuman wastes;

(c) sanitary preparation, handling, and serving of food, water, and beverages;

(d) safe and adequate supply of water;

(e) traffic control; and

(f) law enforcement, medical services, and fire protection.

(C) Application fees. A fee established by the Board for every 1,000 persons projected to attend the group function shall be paid when the application is submitted to the Department. Application fees are non-refundable.

(D) Review by Department. The Department shall determine if an application is complete and whether necessary services have been provided to ensure public health and safety within 10 working days after receipt of a complete application.

REGULATION 3: SOLID WASTE MANAGEMENT

- I. PURPOSE.** The purpose of this rule is to establish standards for proper storage, handling and disposal of solid waste to protect public health, safety and the environment.
- II. AUTHORITY.** Authority for regulations promulgated in this rule is provided for in 50-2-116, MCA, under which a local health board may adopt rules that do not conflict with rules adopted by the Montana Department of Health and Environmental Sciences for the removal of filth that might cause disease or adversely affect public health.
- III. DEFINITIONS.** The following definitions shall apply in the interpretation and enforcement of this rule.
- (A) "Class II landfill" means a facility licensed by the State of Montana to accept group II and group III wastes.
- (B) "Class III landfill" means a facility licensed by the state of Montana to accept group III wastes only.
- (C) "Clean fill" means uncontaminated soil, dirt, rock, sand, gravel, and portland cement concrete free of reinforcing steel.
- (D) "Group I wastes" means hazardous waste as defined by 40 CFR 261 and ARM 16.14.503.
- (E) "Group II wastes" means decomposable household and commercial wastes, or mixed solid wastes, excluding hazardous wastes. Examples include but are not limited to the following:
- (a) Municipal and domestic waste such as garbage, and putrescible organic materials, paper, cardboard, cloth, glass, metal, plastics, street sweepings, yard and garden wastes, digested sewage treatment sludges, water treatment sludges, ashes, dead animals, offal, discarded appliances, vehicle parts, and properly sterilized medical wastes; and,
- (b) commercial and industrial wastes such as packaging materials, containers, and any liquid or solid industrial wastes which are chemically or biologically decomposable and which are not classified or identified as hazardous waste in 40 CFR 250.1, crop residues, manure, and food waste.
- (F) "Group III wastes" means untreated wood wastes and non-water soluble solids, such as brick, rock, and portland cement concrete.
- (G) "Litter" means any quantity of paper, cardboard, metal, plastic, glass, or other miscellaneous solid waste which is not disposed of in a garbage container.
- (H) "Person" means any individual, firm, partnership, company, association, corporation, city, town, local governmental entity, or any other state, federal, or private entity, whether organized for profit or not.
- (I) "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, sludge from sewage treatment plants, water supply treatment plants or air pollution control facilities; construction and demolition wastes; dead animals, including offal; discarded home and industrial appliances; and wood products or wood byproducts and inert materials.
- IV. STORAGE AND COLLECTION.**
- (A) Any person owning, controlling, or in possession of property from which any group II waste is generated shall maintain at all times in a place easily accessible to the garbage collector, and where it will not be offensive or a public nuisance, one or more residential or commercial garbage containers as defined in this rule.
- (1) The capacity of the containers shall be adequate to hold all refuse generated between collections.
- (2) All group II waste and litter accumulated on the premises shall be placed in the garbage containers and delivered by a commercial garbage collection company or by the generator to a Class II landfill or transfer station after an accumulation period of not more than seven days.

- (3) Effective August 15, 1994, in all areas of Missoula County that have available commercial garbage collection services, the owner of any rental dwelling, including apartments, rental manufactured homes, duplexes, or single family rental units, shall subscribe to commercial garbage collection, transport, and disposal of all group II waste generated on the premises. Garbage collection shall occur on an interval of not more than seven days.
- (4) Residential containers:
- (a) shall be designed and manufactured as garbage containers and have a capacity of not less than ten or more than thirty-two gallons. No containers shall be used to hold hot ashes, or liquids. No containers shall be left out for collection which weigh more than seventy pounds; and
 - (b) shall have tight fitting lids and be kept covered; and
 - (c) shall be placed at the rear property line adjacent to the alley or on the front curb where no adequate alley exists; in some cases, if approved by the Department, another location may be designated. Residential containers may not be placed on a public street or road more than 12 hours before or eight hours after the time of collection; and,
 - (d) shall be equipped with racks, stakes or holders to securely hold garbage containers when they are placed outdoors so the containers cannot be spilled, tipped or overturned by animals or wind. They must be designed and installed to facilitate cleaning around them; and
 - (e) shall not be recessed into the ground; and
 - (f) may consist of plastic bags when filled with solely grass clippings or leaves, provided that each bag is closed with a tie and does not exceed fifteen pounds.
- (5) Commercial containers:
- (a) shall be constructed to be mechanically dumped by the garbage collector; and
 - (b) shall have no restrictions as to size of the container or weight of the material placed therein; and
 - (c) shall be kept covered at all times; and
 - (d) shall be placed on a hard level surface for emptying; and
 - (e) shall be required of all of the following: trailer courts with three or more units, hotels, motels, retirement homes, nursing homes, hospitals, schools, establishments selling food or drink for consumption on or off the premises, and apartments or apartment complexes having three or more living units or any other establishment which in the judgment of the Department generates sufficient solid waste to warrant a commercial container.
- (6) No commercial or residential containers shall be stored or set out for collection in the public right-of-way so as to impede or block public access or use or constitute a hazard or nuisance.
- (7) Any solid waste container which is not watertight, has sharp or ragged edges, which does not conform to prescribed standards or which has defects likely to hamper collection or injure the person collecting the contents thereof or the public generally, shall be replaced promptly by the owner or user of the container.
- (8) It is the duty of the owner, agent, occupant, or lessee of property to keep garbage containers maintained by them reasonably clean and free of offensive odors.

(B) It is unlawful for the owner, agent or contractor in charge of any construction or demolition site to cause, maintain, permit or allow to be caused, maintained or permitted the accumulation of any litter or other solid waste on site before, during or after completion of the construction or demolition project.

(1) It is the duty of the owner, agent, or contractor in charge of any demolition or construction project:

(a) to have adequate containers for the disposal of litter and other solid waste generated on site; and

(b) to provide for disposal at a properly licensed solid waste facility; and

(c) to remove any litter and other solid waste which has not been containerized at the end of each working day.

(C) No person shall store or allow to be stored any solid waste on public or private land within the county where it will create a public nuisance, or be to any degree offensive or if the Department determines it may constitute a public health, environmental health or safety hazard.

(D) It is the duty of the owner, agent, occupant, or lessee of property to keep premises free of litter and other solid waste.

(E) It is unlawful to sweep or push litter or other solid waste from sidewalks and boulevards into streets.

V. TRANSPORTATION.

(A) Odorous solid waste shall be completely containerized during transportation so that it will not be offensive.

(B) Solid waste must be covered, containerized, or tied to the vehicle during transportation.

(C) Solid waste shall be loaded and transported in such a manner that none of it shall fall, drop or spill upon the roadway or ground.

VI. BURNING SOLID WASTE.

No person shall burn any solid waste on public or private land within the County, unless the burning is permitted in accordance with the Missoula City-County Air Pollution Control Program regulations.

VII. BURYING SOLID WASTE.

(A) No person shall bury any solid waste on public or private land within the county, unless:

(1) the solid waste qualifies as clean fill and permission has been granted by the property owner or owners; or

(2) the solid waste is organic agricultural or silvicultural waste; and the solid waste originated on the property where it is to be buried; and the Department determines that the practice will not be offensive or endanger public or environmental health; or

(3) the site is licensed as a landfill by the DEQ.

VIII. ILLEGAL DUMPING.

(A) No person shall dump, store, place or leave or cause to be dumped, placed or left any solid waste upon any public or private property within the county, unless the solid waste is clean fill and permission has been granted by the property owner or owners.

(B) No person shall dump, place or leave or cause to be dumped, placed or left any solid waste in residential or commercial containers maintained for the use of other residences or establishments.

IX. HAZARDOUS WASTE.

No person shall transport, store, or dispose of any Group I waste except as provided for in ARM 16.44.

REGULATION 4: FOOD SERVICE ESTABLISHMENTS

- I. PURPOSE.** The purpose of this regulation is to prevent and eliminate conditions and practices which endanger public health.
- II. AUTHORITY.** Authority for this regulation is provided for in 50-2-116, MCA: under which a local health board may adopt rules for control of communicable diseases for the removal of filth which might affect public health; and to abate nuisances affecting public health and safety.
- III. REGULATIONS ADOPTED.** All food service establishments located in Missoula County shall comply with the Administrative Rules of Montana, as authorized by MCA Title 50 Chapter 50 concerning Food Service Establishments.
- IV. LICENSE REQUIRED.**
- (A) It is unlawful for any person to operate a food service establishment in Missoula County without a valid license from the Department of Public Health and Human Services.
- (B) When a food service establishment changes owners, licenses are not transferable. Owners shall notify the department when they permanently close their food service establishment.
- (C) New owners shall not commence operations until all current health standards have been met and the necessary inspections and licenses obtained.
- (D) License must be posted in a conspicuous place in the food service establishment.
- V. HANDLING RESTRICTED.**
- Except when washing fruits and vegetables, food employees shall not contact exposed, ready-to-eat food with their bare hands and shall use suitable utensils such as tissues, spatulas, tongs or single-use gloves.
- The Department may grant an exemption to the above rule if a plan is submitted and approved by the Department.
- The written plan must include, at least, the following:
- (A) Provision for minimal hand food contact.
- (B) A written policy requiring hand washing before beginning work or food preparation and after:
- (1) Touching any soiled object or surface, soiled clothing, etc.
 - (2) Handling dirty dishes and before handling clean dishes or engaging in food preparation.
 - (3) Touching or scratching any area of the body (ears, mouth, nose, hair, etc.).
 - (4) Using a handkerchief or tissue
 - (5) Using the restroom
 - (6) Handling raw food-particularly meat and poultry.
 - (7) Cleaning, taking out the garbage, or putting away supplies.
 - (8) Smoking, eating or drinking.
 - (9) Returning to the kitchen from any other area.

- (C) A program to train staff and monitor and evaluate compliance with the hand washing policy.
- (D) Provision for a hand sink equipped with soap and paper towels in dispensers and fingernail brushes in the food preparation area.
- (E) Prohibition of the use of clothing and aprons for wiping soiled hands.
- (F) Requirement for food handlers to keep fingernails trimmed and clean and hands free of jewelry.

If the department observes noncompliance with the approved plan, the exemption from the "handling restricted" requirement may be revoked.

VI. CERTIFICATE FOR HOME BAKED ITEMS. The Department will issue a certificate to allow the sale of baked goods and preserves prepared in home kitchens for fund-raising events of not-for-profit organizations that serve food to the public for less than 14 days in a calendar year as specified in MCA 50-50-103. To qualify for a certificate, the following conditions must be met:

- (A) Vendors register with the health department as required by law, and;
- (B) Events are no more than three (3) days long, and;
- (C) Vendors maintain a list of home bakers and items they donate to the event, and;
- (D) Vendors allow no participation of persons with any communicable disease transmissible by food, and;
- (E) Vendors distribute handouts provided by the health department to all home bakers before food preparation and to all on-site food handlers before they sell goods, and;
- (F) Vendors prohibit direct hand to food contact to ready-to-eat foods, and;
- (G) Vendors limit the type of homemade food sold or offered to the following:

Candies	Cookies	Cakes	Cupcakes	Breads	Preserves
Fruit pies	Popcorn	Coffee	Tea	Juices	Pop

VII. INSPECTIONS.

- (A) The Department shall make investigations and inspections of food service establishments as required by MCA 50-50-300.
- (B) The Department shall charge a fee established by the Board for violations of the rule which are not corrected or persist after two visits to the establishment within 365 days from the date of the original inspection. Failure to pay the fee is a violation of this Code.
- (C) Food service establishments which fail to correct two or more high-risk critical violations on a complete inspection report shall be notified that if two or more of the same high-risk critical violations remain on the follow-up inspection to be conducted within 10 working days, it shall be closed to the public and a closure notice placed at each customer entrance. For the purposes of this regulation high-risk critical violations are violations of the following type:
 - (1) Time-temperature: Perishable and potentially hazardous foods (PHFs) held at safe temperatures; raw animal foods cooked to required temperatures; PHFs cooled as required; PHFs reheated for hot holding as required; proper destruction of parasites by freezing; proper thawing procedures.
 - (2) Personal hygiene: Ill food employees restricted; food employees wash hands when required; food employees prevent contamination of food by eliminating bare hand contact with ready-to-eat foods except as specified in section V; food employees prevent contamination through eating, drinking, and tobacco use.

(3) Cross-contamination: Packaged and unpackaged food protected from cross-contamination; tableware, kitchenware and food contact surfaces of equipment and utensils washed, rinsed, and sanitized as required.

(4) Water/sewage: Adequate and safe water supply; proper sewage disposal

VIII. CLOSURE OF FOOD SERVICE ESTABLISHMENTS.

(A) When a follow-up inspection on a food service establishment yields two or more of the same high-risk critical violations that were noted on a previous inspection on a follow-up inspection, a Notice of Violation and Order to Close shall be accompanied by the inspection form and delivered to the operator or person in charge:

(1) The closure order shall become effective upon delivery of the notice, and no new customers shall be served food or drink.

(2) When a food service establishment is closed, the Department shall require the police, sheriff, or inspecting sanitarian to post a notice of closure at customer entrances.

(3) No person except under the direction of the department shall remove or alter this notice.

(4) No person shall operate a restaurant which has been closed.

(B) When a food service establishment has been closed for failure to correct two or more of the same high-risk critical violations that were noted on a previous inspection, it may be reopened after 24 hours if:

(1) The operator submits a written plan of correction, specifying the corrections to be made and time limits for their completion; and

(2) The plan of correction is approved by the Department; and

(3) A complete inspection after the food service establishment has been closed produces no uncorrected critical violations; and

(4) The closed sign previously posted is removed by the Department.

(5) A food service establishment may be opened earlier than 24 hours following a voluntary meeting attended by the restaurant operator or person in charge, the Division Director or designee and the inspecting sanitarian, at which the provision of subsections (1) through (5) are demonstrated to be met.

(C) If a critical violation which creates an imminent or present danger to Public Health is not corrected immediately or an approved alternative procedure is not initiated immediately by the operator, the restaurant shall be closed.

(D) When a food service establishment has been closed because a critical violation which creates an imminent or present danger to Public Health has not been corrected, it may be reopened after 24 hours if:

(1) An inspection by the inspecting sanitarian confirms that the critical violation(s) has been corrected; and

(2) The closure sign previously posted is removed.

(3) A restaurant may be opened earlier than 24 hours following a voluntary meeting attended by the food service operator or person in charge, the department or designee and the inspecting sanitarian, at which provisions of subsection (1) through (3) of this section are demonstrated to be met.

IX. EDUCATION

(A) Voluntary Certification.

(1) Food service workers completing food safety training sponsored by the department or another approved program shall be eligible for a safe food handler certification.

(2) Safe food handler certification shall expire three years from the date of training.

(B) Requirement for training.

(1) The food service operator or person in charge shall ensure that at least one employee completes a food safety training program approved by the department within 6 months of the following:

(a) Whenever a food service establishment has been closed in accordance with subsection VIII;

(b) Whenever a reinspection fee must be charged in accordance with subsection VII (B); or

(c) Whenever notified by the Department that the food service establishment has a history of noncompliance with these rules as determined by having two or more high-risk critical violations noted on each of their past three inspection reports.

X. EXEMPLARY FOOD SERVICE PROGRAM. The department shall establish a program to offer special certification and recognition to food service establishments meeting criteria established by the department which shall include but not be limited to the following:

(A) No uncorrected critical violations and;

(B) Establishing a smoke-free establishment, and;

(C) Having on site at all times at least one employee who has completed a safe food handling program approved by the department, and;

(D) Conducting self-inspections based on Hazard Analysis Critical Control Points principles at least once each quarter. Keeping self-inspection reports on file for review by the health inspection official, and;

(E) Establishing a training program for all employees and especially new employees to assure basic safe food handling practices are known and practiced.

XI. PLAN REVIEW.

(A) Whenever a food service establishment, including those in conjunction with a school or public accommodation, is constructed or remodeled and whenever an existing structure is converted to use as a licensed establishment, properly prepared plans and specifications for such construction, remodeling or conversion shall be submitted to the Department for review and approval before construction, remodeling or conversion is begun.

(B) A fee as established by the Board shall be charged for plan review.

(C) Failure to comply with plan review requirements is a violation of this Code and may result in the Health Officer's refusal to validate the state food license.

XII. TEMPERATURE REQUIREMENTS FOR PORK, GROUND MEAT & INJECTED MEAT

Ground meats, ground fish and injected meat shall be cooked to internal temperatures specified in ARM 37.110.207 (4) and may not be served in a raw or partially cooked form upon consumer request.

XIII. CONSUMER ADVISORY REQUIREMENTS FOR RAW AND UNDERCOOKED FOODS OF ANIMAL ORIGIN

If a licensed establishment serves raw or undercooked ready-to-eat foods of animal origin not addressed in Section XII (or not otherwise prohibited by this code), and they have not been otherwise processed to eliminate pathogens, the establishment must inform consumers, in writing, of the significantly increased risk certain vulnerable consumers may have by eating such foods in raw or undercooked form. The licensed establishment can use brochures, deli case or menu advisories, label statements, table tents, placards or other effective written means to inform consumers.

