



Missoula City-County Health Department

ENVIRONMENTAL HEALTH

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MISSOULA CITY-COUNTY HEALTH CODE

AMENDED: September 20, 2018

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HEALTH CODE ADMINISTRATIVE REGULATIONS

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Effective 9/20/2018

REGULATION	ADOPTION OR AMENDMENT DATE	EFFECTIVE DATE (if different)	COMMENTS
Regulation 1	1966		Wastewater regulations first adopted.
Regulation 1	May 14, 1976		
Regulation 1	July 09, 1980		
Regulation 1	August 25, 1983		
Regulation 1	March 21 1985		
Regulation 1	February 19, 1987		
Regulation 1	May 19, 1988		
Regulation 1	August 15, 1991		
Regulation 1	May 21, 1992		
Regulation 1	October 21, 1993		
Admin Section, Regulations 1, 2, 3, & 4	July 21, 1994	August 15, 1994	Health Code first created.
Regulations 1, 3 & 4	March 21, 1996	March 22, 1996	
	March 25, 1999		
	June 21, 2001		
Regulation 1 & 4	May 20, 2004		
Regulation 1	February 15, 2007		
Regulation 4	April 19, 2007		
Regulation 4	June 12, 2008		
Admin Section, Regulations 1 & 5	October 15, 2009		Well Permitting first adopted
Regulation 1	May 19, 2011	June 1, 2011	
Regulation 1	April 19, 2012	May 1, 2012	
Regulation 6	May 17, 2012	September 1, 2012	Drop In Daycare first adopted
Admin Section, Regulation 5	October 17, 2013		
Regulation 7	May 15, 2014		Rabies Control first adopted
Regulation 4	October 15, 2015	November 1, 2015	
Regulation 1	November 19, 2015	December 1, 2015	
Regulation 7	January 21, 2016		
Admin Section, Regulation 2	June 21, 2016	July 1, 2016	
Regulation 8	August 17, 2017	September 1, 2017	Trailer court/campgrounds first adopted
Regulation 1	September 20, 2018		

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Administrative Section

Amended 6/21/2016, Effective 7/1/2016

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1. 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.

2. 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
- (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.

3. 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 provide for in Section 3(E), or within 10 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 3(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 with the Notice of Violation and Order to Take Corrective Action. A request for administrative review does not stay the order.

- (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 or more than \$200 per offense. Each day of violation constitutes a separate offense.
- (C) Other Remedies. Action under this part shall not bar enforcement of the 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 10 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 the 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 Office 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 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 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 appeal process is exhausted.

4. 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.

5. 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 an activity requiring a permit by this Code without a valid permit issued by the Department.
- (B) Permit Application and Fees. The Department may not issue a permit, registration or conduct field 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.

6. 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 the 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) The variance is necessary to address extraordinary conditions that the applicant could not have reasonably prevented;
 - (2) Compliance with the requirement from which the variance is requested would result in undue hardship to the applicant;
 - (3) No alternatives that comply with the requirements are reasonably feasible; and
 - (4) The variance requested is not more than the minimum needed to address the extraordinary conditions.
 - (5) 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 in 6(E)(1)-(4) above, that granting the variance will not:
 - (a) contaminate any actual or potential drinking water supply;
 - (b) cause a public health hazard as a result of access to insects, rodents, or other possible carriers of disease to humans;
 - (c) cause a public health hazard by being accessible to persons or animals;
 - (d) violate any law or regulation governing water pollution or wastewater treatment and disposal except for the rule that the variance is requested from;
 - (e) pollute or contaminate state waters in violation of 75-5-605 MCA;
 - (f) degrade state waters unless authorized pursuant to 75-5-303 MCA; or
 - (g) cause a nuisance due to odor, unsightly appearance or other aesthetic consideration.
- (F) Restrictions on a 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 a 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) The Department shall have 10 working days to determine if an applicant has adequately addressed criteria in Section 6 (E)(1-3) and 6 (H)(1-7).
- (3) If the Department determines that an application has not addressed Section 6 (E)(1-3) and 6 (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 6 (E)(1-3) and 6 (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 parties 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 the variance is requested.
- (4) Detailed and accurate description of the proposed project or circumstance under consideration.
- (5) Written explanation addressing each criteria under section 6(E)(1) and (2).
- (6) A list of names and addresses 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 a 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.

7. 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 portion of this Code which shall remain in effect; and to this end, the provisions of this rule are hereby declared to be severable.

8. 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 is allowed.

9. 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

Amended 09/20/2018, Effective 09/20/2018

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1. PURPOSE. The purpose of this regulation is to protect public health and environmental quality from risks associated with improper disposal of wastewater within Missoula County.

2. AUTHORITY. Authority for this regulation is provided for in 50-2-116 MCA which requires local boards of health to adopt necessary regulations that are not less stringent than state standards for the control and disposal of wastewater from private and public buildings and facilities.

3. ADOPTION BY REFERENCE.

(A) For the purposes of this regulation, the following documents are incorporated by reference.

- (1) Department of Environmental Quality Circular 4, "Montana Standards for Subsurface Wastewater Treatment Systems," 2013 edition, except for Section 1.1.4 "Deviations".
- (2) Missoula City-County Alternative Systems Manual, 2015 edition.

(B) If there is a discrepancy between the above referenced documents and this regulation, the most stringent regulation shall be applied.

4. DEFINITIONS.

(A) The following definitions apply to this regulation:

- (1) Absorption area: that area determined by multiplying the length and width of the bottom area of the disposal trench.
- (2) Absorption system: any part of a wastewater treatment and disposal system that discharges wastewater by design onto or into the ground.
- (3) Absorption trench: excavations less than or equal to three (3) feet in width where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground.
- (4) Adequate secondary treatment: secondary treatment that is similar to or better than the treatment provided by a drainfield meeting all requirements of Section 10(B) and (C). Absorption beds qualify when minimum separations are met and there is not enough room for a drainfield. Seepage pits qualify 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 or alternative treatment systems. Adequate secondary treatment in the floodplain is an elevated sand mound or a system that incorporates advanced secondary treatment.
- (5) Advanced secondary treatment: a system designed to lower BOD and TSS to 7 day averages of 40mg/L & 45mg/L or 30 day averages of 25mg/L & 30mg/L respectively, and when necessary, also lower fecal coliform levels in wastewater effluent.
- (6) Alternative system: a wastewater treatment and disposal system approved by the Department to be used in lieu of a conventional system.
- (7) Approved site evaluator: a person approved by the Department to conduct site evaluations.
- (8) 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.
- (9) Bedroom: any room that is or may be used for sleeping. An unfinished basement is considered an additional bedroom. SEE APPENDIX "F".
- (10) Camping: the temporary placement of tents or cabins, or the parking of trailers or vehicles for the purpose of sleeping. A travel trailer or RV that has skirting installed or has been connected to either electrical or sewage services in a permanent manner is not considered camping.
- (11) Certified installers: installers of wastewater treatment and disposal systems who have passed an annual examination to ensure sufficient knowledge of the sewer regulation.
- (12) Cesspool: a seepage pit without a septic tank to pre-treat the wastewater.
- (13) Community wastewater treatment and disposal system: a public wastewater treatment and disposal system which serves a non-transient population characterized by residential development.
- (14) Construction Season: March 1st through November 30th.
- (15) Containment Vault: a tank that is limited to containing accidental spills. A tank that receives wastewater from a fixture is not a containment vault.

- (16) 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.
- (17) Conventional secondary treatment: treatment after a septic tank that consists of a drainfield, and includes systems that use infiltration chambers, gravity distribution, or pressure distribution.
- (18) DEQ: The Montana Department of Environmental Quality.
- (19) DEQ 4: The Montana Department of Environmental Quality regulatory document entitled “Montana Standards for Subsurface Wastewater Treatment Systems, 2013 Edition.”
- (20) 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.
- (21) Distribution Box: a receptacle that receives septic tank effluent and distributes it equally into two (2) or more header pipes leading to the absorption area.
- (22) 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.
- (23) Drain rock: the rock or coarse aggregate used in an absorption system. Drain rock does not include gravels of shale, sandstone, or limestone.
- (24) Drainageway: a course or channel along which stormwater moves in draining an area.
- (25) Dwelling or residence: one or more structures or portion thereof, which is intended, designed, or used for human occupancy and provides independent living facilities including provisions for sleeping, cooking, and sanitation.
- (26) Enlargement (of structure): an increase in the volume, or cubic feet, of a structure.
- (27) Equal Distribution: uniform distribution of septic effluent throughout an absorption system. Gravity systems with no more than ten (10) foot difference in lateral length or pressure distribution systems meet the definition of equal distribution for the purposes of this regulation.
- (28) Escarpment: any slope greater than 50 percent which extends vertically six (6) feet or more as measured from toe to top.
- (29) Experimental System: a wastewater treatment and disposal system, which is neither conventional nor alternative, which needs to be evaluated using rigorous scientific methods.
- (30) Failed Wastewater Treatment and Disposal System: a system in which the absorption system fails to accept waste at the rate of application, that no longer provides the treatment and/or disposal for which it was intended, that has a septic tank that suffers structural failure, or that violates Section 5(A) of this regulation.
- (31) 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 (100) years, including all land area designated by the Federal Emergency Management Agency as being in the 100-year floodplain on the Flood Insurance Rate Maps.
- (32) Flood-prone Areas: areas where information indicates that the land is subject to flooding in a one hundred (100)-year flood event but not included on Flood Insurance Rate Maps.
- (33) Floor Drain: a drain in the floor to accept non-toilet wastewater that collects on the floor.

- (34) Gray Water: wastewater such as that which is discharged from kitchens, laundry, etc. Toilet waste is not considered gray water.
- (35) Groundwater Table: the surface of the zone of water saturation of a geologic formation. The surface of a perched water table is included in this definition.
- (36) High Seasonal Groundwater: the depth from the natural ground surface to the 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 surface of a perched water table.
- (37) High-Strength Waste: wastewater that has BOD5 greater than 300 mg/L, TSS greater than 150 mg/L, or fats, oils, and grease greater than 25 mg/L.
- (38) Holding tank: a watertight receptacle that receives wastewater for retention and does not, as part of its normal operation, dispose of or treat the wastewater.
- (39) Impervious layer: layer of material that has a percolation rate slower than 240 minutes per inch.
- (40) Increased Use: the enlargement or change in use of a structure that would potentially increase the effluent flow to the wastewater treatment and disposal system from the structure in excess of approved limits. 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.
- (41) Individual Wastewater Treatment and Disposal System: a wastewater treatment and disposal system that serves one (1) living unit or commercial unit. The term does not include a public wastewater treatment and disposal system.
- (42) Leaching Chambers: plastic (often polyolefin) chambers with an open bottom, structurally designed to carry the earth loading. The Department considers leaching chambers to be conventional systems.
- (43) Limiting layer: bedrock, an impervious layer, or seasonally high groundwater.
- (44) Living unit: the area in a dwelling or residence that is, or is designed to be, occupied by a household. For example, a duplex is considered two living units.
- (45) Lot: synonymous with "tract" or "parcel."
- (46) Mixing Zone: an area established in a permit or by a non-degradation analysis where water quality standards may be exceeded, subject to conditions imposed by the Montana Department of Environmental Quality and consistent with rules adopted by the Montana Board of Environmental Review.
- (47) Mobile Home: a transportable structure constructed without a permanent foundation.
- (48) Multi-User Wastewater Treatment and Disposal System: A wastewater treatment and disposal system that serves, or is intended to serve, more than two living or commercial units, but which is not a public wastewater treatment and disposal system. In estimating the population that will be served by a proposed residential system, the Department shall multiply the number of living units times 2.5 people per living unit.
- (49) MWTPSA: Missoula Wastewater Treatment Plant Service Area.
- (50) Natural Soil: soil that has developed through natural processes, and where no fill material has been added.

- (51) 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.
- (52) Non-contact cooling water: Water used for heat exchange to reduce temperature that has not come into direct contact with any waste product, raw material, intermediate or finished product.
- (53) Other components: include the unsealed portions of intermittent and recirculating sand filters, package plants and evapotranspiration systems.
- (54) Parcel: a portion of land that can be identified by legal description independent of any other portion of land.
- (55) Percolation Test: a standardized test used to determine soil permeability. This test is described in Appendix A of DEQ 4.
- (56) 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.
- (57) Primary Treatment: treatment provided in a septic tank containing one or more chambers.
- (58) Public Wastewater Treatment and Disposal System: a wastewater treatment and disposal system that serves 15 or more families or 25 or more persons daily for any 60 days or more in a calendar year. In estimating the population that will be served by a proposed residential system, the Department shall multiply the number of living units times 2.5 people per living unit, so that 10 or more proposed residential connections will be considered a public system.
- (59) 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.
- (60) Public Sewer: a government owned and operated wastewater treatment work that:
 - (a) serves a community;
 - (b) is supported by full time staff and ordinances requiring connection permits and inspections by the utility; and
 - (c) consists of a community-wide collection system, a treatment plant, and a method of disposal that is subject to a DEQ discharge permit.
- (61) Replacement System: a wastewater treatment and disposal system that is installed to replace an existing system.
- (62) Running Water: A water supply that is capable of providing a continuous source of flow. Fresh water storage tanks and cisterns may qualify despite inherent limitations on water quantity.
- (63) Scarify: to break up and loosen the surface of the soil.
- (64) Sealed component: a component of wastewater treatment and disposal system that is sealed including a sewer line, sewer main, septic tank, grease trap, dosing tank, pumping chamber, holding tank, or sealed pit privy.
- (65) Sealed pit privy: an enclosed receptacle designed to receive non-water carried toilet wastes into a watertight vault for temporary storage.
- (66) Secondary Treatment: a biological wastewater treatment process occurring after solid/liquid separation in a septic tank or equivalent.
- (67) 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.

- (68) 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.
- (69) Shared Wastewater Treatment and Disposal System: a wastewater treatment and disposal system that serves, or is intended to serve, two living units, two commercial units, or a combination of one living unit and one commercial unit. This term does not include a public wastewater treatment and disposal system.
- (70) Significant alteration: when a structure has suffered fifty (50) percent or greater destruction and is being replaced or restored. The destruction can be intentional or unintentional, resulting from things like fire, flood, or remodeling. Replacement of a mobile home with a permanent structure is considered significant alteration. Replacement of a single wide mobile home with another single wide mobile home or replacement of a double wide mobile home with another double wide mobile home with the same number of bedrooms is not significant alteration.
- (71) Single family dwelling or residence: a dwelling or residence designed to be occupied by not more than one (1) family or other group of people living in common.
- (72) Site Evaluation: an on-premises evaluation to determine if a site is suitable for the installation of a subsurface wastewater treatment and disposal system.
- (73) Slope: the rate that a ground surface declines expressed as percent of grade.
- (74) Soil Profile: a description of the soil strata using the USDA soil classification system.
- (75) Soil Texture: the amount of sand, silt or clay, measured separately in a soil mixture. (For individual definitions, see Appendix A)
- (76) Squirt Height: the height water reaches in a field test to evaluate uniform distribution in a pressure distribution system.
- (77) Steep slope: An incline with a grade of 35% or greater, and an incline with a grade between 25% and 35% for which the requirements of Section 10(B)(1)(b) of this regulation have not been satisfied.
- (78) STEP: Septic Tank Effluent Pump
- (79) STEP Septic Tank: a septic tank designed to accept pumping equipment to pump effluent into a public sewer system which meets the design criteria established by the City of Missoula Public Works division.
- (80) Structure: that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, including but not limited to: dwelling units, mobile homes, sleeping quarters, business establishments, grandstands, amphitheaters, and warehouses.
- (81) Subdivision: 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 or re-write of a previous subdivision approval and any condominium or area, regardless of size, that provides permanent multiple spaces for recreational camping vehicles or mobile homes.
- (82) Surface water: any water on the earth's surface including, but not limited to streams, lakes, ponds, reservoirs, irrigation drainage systems or other water on the earth's surface. Water bodies that are part of an approved sewage treatment system and intermittent water bodies that are part of a storm drainage system are not considered surface water.

- (83) System: a Wastewater Treatment and Disposal System.
- (84) Uniform Plumbing Code: a model code developed by the International Association of Plumbing and Mechanical Officials to govern the installation and inspection of plumbing systems.
- (85) Unsealed Pit Privy: a facility designed to receive non-water carried toilet wastes into a pit excavated into natural soil.
- (86) Useable acreage: the total area of a lot minus flood plain or flood prone area.
- (87) Waste segregation: a system for the dry disposal of toilet waste by a method such as composting, chemical, dehydrating, or incinerator treatment, with a separate disposal method for gray water.
- (88) 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, establishment, vehicle, or container. Gray water and non-liquid carried toilet waste are considered wastewater. Non-contact cooling water is not wastewater.
- (89) Wastewater Treatment and Disposal System: a system that receives wastewater for purposes of treatment, storage, or disposal including, but not limited to, pit privies, holding tanks, subsurface absorption systems, waterless toilets, and alternative and experimental systems. A containment vault is not a wastewater treatment and disposal system.
- (90) Zone of Saturation: that area beneath the ground in which all open spaces are filled with groundwater.

5. GENERAL.

(A) Prohibited activities and exceptions.

- (1) No person may install, modify, repair, replace, 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 in effect at the time of installation;
 - (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;
 - (g) cause a nuisance due to odor, unsightly appearance or other aesthetic consideration; or
 - (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, repair, alteration, or increased use to a system without primary and secondary treatment is prohibited unless permitted in accordance with these regulations.
- (3) A person may not discharge wastewater onto the ground unless it does not cause a public nuisance and meets one of the exceptions provided below:
 - (a) wastewater discharged into an approved surface application wastewater treatment and disposal system;
 - (b) wastewater discharged onto a DEQ approved disposal site by licensed pumps;
 - (c) wastewater discharged from a floor drain meeting the requirements of Section 14(B);
 - (d) wastewater discharged from a swimming pool, or spa;
 - (e) gray water discharged from a dry structure without running water or without plumbing extended into or out of the structure; or
 - (f) de minimis gray water discharged from camping. This does not include wastewater from an RV or any other plumbed fixture.

- (4) Unless an Underground Injection Control (UIC) permit is obtained from the U.S. Environmental Protection Agency pursuant to 40 CFR 144, a person may not install or use any sump, dry well, or wastewater treatment and disposal system for disposal of wastewater 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 the floodplain unless the system was installed according to the regulations effective at the time of installation. No person may increase use to a septic system in the floodplain.
- (6) No person may use a septic system that does not have a valid permit issued by the Department if one was required at the time of construction.
- (7) No person may dispose of high-strength waste into a wastewater absorption system.

(B) System required.

- (1) A structure that is, or is designed to be, occupied by people must have approved toilet facilities within the structure or have uninterrupted access to approved toilet facilities within 200 feet of the structure.
- (2) A structure with running water or with plumbing extending into or out of the structure may not be occupied unless it is connected to public sewer or an approved wastewater treatment and disposal system.

(C) Connection to public system.

- (1) All new and replacement sewage disposal facilities must comply with the Uniform Plumbing Code requiring connection to publicly owned sewage treatment plants.
- (2) No person owning real property with a structure that generates wastewater may install, modify, or replace a wastewater treatment and disposal system except for a gray water irrigation system when public sewer is available. Public sewer is available when a main:
 - (a) abuts or serves the property, and is within 200 feet of the structure;
 - (b) is within 200 feet of any part of the subsurface disposal system; or,
 - (c) is within 200 feet of the property line and meets all of the following:
 - (i) the owner or managing entity of the public collection and treatment system approves the connection;
 - (ii) the necessary easements are available;
 - (iii) the cost to connect is less than three times the cost of installing an on-site wastewater treatment and disposal system; and
 - (iv) it is physically practical to connect.
- (3) If a structure on a parcel is connected to public sewer, all new structures generating wastewater on that parcel must be connected to public sewer if the owner or managing entity of the public sewer approves the connection.
- (4) Existing wastewater treatment and disposal systems may remain in service until:
 - (a) ordered disconnected by the Health Board or other jurisdiction;
 - (b) the system fails as defined in Section 4 of this regulation;
 - (c) connection to public sewer is required; or,
 - (d) connection to public sewer is required per City of Missoula Ordinance Title 13.
- (5) This Section (C) does not apply when the entity owning the public system refuses to allow connection or if the system has been permitted pursuant to Section 15 (Experimental Systems) of this regulation.

(D) Circumvention.

- (1) A person may not knowingly make false statements, representations, or certifications in, or omit information from, or knowingly alter, conceal, or fail to file or maintain any notice, application, record, report, permit, plan or other document required to be filed or maintained in order to evade these regulations.
- (2) A person may not divide a property or properties in order to evade these regulations. Examples include but are not limited to phased or piecemeal development.

6. PERMITS.

(A) Permit Required.

- (1) No person may install, modify, 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 activities and systems described in (A)(2) and (A)(3).
- (2) The following activities do not require a permit from the Department:
 - (a) Maintenance activities including, but not limited to, effluent filter cleaning, replacement of effluent pump(s) with an equivalent pump, removal of blockages not requiring substantial excavation of the drainfield, and pumping the septic tank.
 - (b) Investigative activities to determine location of systems, dimensions of systems, or to determine the cause of failure. A certified installer, property owner, or an authorized agent must contact the Department prior to any excavating of the absorption area.
 - (c) Surface application of wastewater from swimming pools or spas.
 - (d) Disposal of de minimis wastewater generated from camping. This does not include wastewater from RVs or any other plumbed fixture.
 - (e) Discharge of gray water from a dry structure without running water or without plumbing extended into or out of the structure.
- (3) The following systems do not require a permit from the Department:
 - (a) Sumps receiving wastewater from only water softeners, swimming pools, or spas.
 - (b) Floor drains meeting the requirement of Section 14(B) of this rule.

(B) General Requirements for Permits.

- (1) Parcels must be recorded with the County Clerk and Recorder before a permit may be issued by the Department.
- (2) Permits must be issued in the name of the parcel's owner, but may be picked up and executed by an authorized agent.
- (3) The Department shall issue a permit following the submittal of all required fees, a complete and accurate permit application, and other necessary information demonstrating compliance with all applicable regulations. If more information is needed in order to process an application, the department shall notify the applicant.
- (4) The Department may place any other conditions on a permit, which will facilitate compliance with the provisions of this regulation or subdivision approval.
- (5) The Department may require enforceable, binding agreements which reflect representations of use made at the time of permitting. The Department may require agreements under this section to be filed at the Clerk and Recorder's office.
- (6) A permit may not 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.
- (7) Notice of denial. Written notice that a permit has been denied must be given to the applicant. The notice must list deficiencies and reasons for the denial.
- (8) Unapproved changes. Unapproved changes in plans, specifications, or stated use after a permit has been issued or any falsification or significant error in information submitted by an applicant invalidates the permit.

(C) Applications.

- (1) A complete application for a permit must be submitted on forms provided by the Department, be accompanied by the application fee, and include the following information:
 - (a) Name and address of applicant and owner;
 - (b) A complete legal description and physical address of the property where the wastewater treatment and disposal system is or will be located;
 - (c) A scaled site plan, showing all property boundaries, no larger than eleven (11) inches by seventeen (17) inches illustrating that the proposed site meets the minimum requirements in Sections 5(A) and 10 of this regulation;
 - (d) Floor plans of any structure to be served on paper no larger than eleven (11) inches by seventeen (17);
 - (e) A plan and relevant design specifications of the proposed wastewater treatment and disposal system; and,
 - (f) Other relevant information as required by the Department to substantiate that the proposed installation, modification, repair, replacement, or increased use complies with this regulation and applicable DEQ rules.

- (2) Applications for new or increased use must also include:
 - (a) an acceptable site evaluation as described in Section 9 or DEQ Certificate of Subdivision Approval; and,
 - (b) evidence that non-degradation requirements of ARM 17.30, Subchapters 5 & 7 have been satisfactorily addressed.
- (D) Expiration of permits and applications.
 - (1) A permit expires if the system is not installed, inspected, and approved by the Department within two (2) years of issuance.
 - (2) If a permit is not issued, an application expires one year after its submittal.
- (E) Permits are subject to the regulations in effect at the time of permit issuance.
- (F) Construction without permit. The Department shall charge a fee three (3) times the permit and application fees when the installation, repair, modification, replacement, or increased use of a system starts prior to a valid permit being issued.
- (G) Permits for Temporary Repairs or Increased Use.
 - (1) The Department may issue a temporary repair permit for a failed seepage pit, cesspool, or drainfield in areas that 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 a currently existing system. This practice is commonly called re-rocking.
 - (2) The Department may issue a temporary permit for increased use or for the enlargement of a structure without requiring an upgrade to an existing seepage pit, cesspool, or drainfield 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 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) The Department shall charge a minimal administrative fee as established by the Board for a temporary repair or increased use permit. The Department is not required to inspect such repairs. Inspections must be performed by licensed installers and submitted to the Department.
 - (a) Prior to the issuance of a temporary repair permit, the owner of the property must execute any contracts, petitions, or agreements required by the utility, the Department, or other entity for the creation of SIDs or RSIDs and must meet other conditions which the municipality, the Department, or utility may require. The homeowner shall 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.
 - (4) A temporary repair or increased use permit satisfies the requirements of Section 16, which establishes requirements for replacement systems.
 - (5) Applicants for temporary permits may instead apply for a normal replacement permit, using the established fees and requirements of the Department.
 - (6) The granting of a temporary permit for repair or increased use does not guarantee a life expectancy or operation of the system and if the system fails prior to availability of public sewer, further repairs or upgrades to the system may be required by the Department.

7. INSTALLER CERTIFICATION.

- (A) General.
 - (1) Installation, modification, replacement, or repair of a wastewater treatment and disposal system that requires a permit in accordance with Section 6 must be supervised by a person who has passed an examination administered by the Department to ensure they have sufficient knowledge and training to complete the work in compliance with this regulation.
 - (2) A certified installer must install a system according to all conditions on the permit and all applicable regulations.
 - (3) A certified installer must be on site at all times during installation.
 - (4) A certified installer must have evidence of certification at the installation site available for inspection by the Department and a copy of the appropriate permit.

- (5) The Department may not approve a system if a certified installer is not present during the installation. The Department may approve the system if a certified installer completes the system or the uncertified installer takes and passes the required certification exam(s) and the system meets all requirements.

(B) Certification and Renewal.

- (1) An installer is certified for the calendar year in which the exam was taken and passed. Certification expires annually on December 31st.
- (2) Applications for certification and certification renewal must be in writing on forms provided by the Department and must include the name, address and phone number of the applicant and the name of the business that the applicant is representing.
- (3) Applications must be accompanied by an application fee determined by the Board to defray the costs for training and exams.
- (4) Certified installers must pass an annual exam for re-certification. These exams must be submitted to the Department with the application for re-certification.

(C) Revocation of Certification.

- (1) The Department may revoke certification from an individual or from an 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) A single occurrence of failing to correct deficiencies noted on the inspection form.
 - (d) Repeated mistakes within a two (2) year period in installing a system in accordance with this regulation or failure to submit self-inspection forms in a timely manner. The Department must have issued a Notice of Violation within a two (2) year period prior to revoking an installer's certification for repeated installation mistakes.
- (2) Revocation of certification may extend for up to one (1) year.
- (3) When revoking a certification, the Department shall provide the installer with a written explanation of the reasons for the revocation in the form of a Notice of Violation.

8. INSPECTION & FINAL APPROVAL.

- (A) All systems must receive final approval from the Department for a permit to remain valid.
- (B) Wastewater treatment and disposal systems require an 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.
- (C) When there is no certified installer on site during an inspection the Department may 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.
- (D) When final approval is withheld, a written notice of deficiencies and required corrective action must be given to the certified installer or property owner. The certified installer or property owner must notify the Department upon correction of all deficiencies. The Department shall confirm the deficiencies have been corrected prior to granting final approval. If reinspection is required the Department shall charge a re-inspection fee established by the Board.
- (E) When final approval is granted by the Department, but a deficiency requiring correction exists, the Certified Installer must correct the deficiency. The Department may require that the Certified Installer provide evidence that the deficiency has been corrected.
- (F) The applicant or installer must notify the Department not less than one business day prior to a system being ready for a final inspection.
- (G) Certified installers, after receiving permission from the Department, may 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) business day of the requested inspection time. The installer

must submit a completed inspection of the system, including a drawing and location of the disposal system, to the Department within two (2) business days after receiving permission to self-inspect.

- (H) When a signed copy of the 'as built' plans for an engineered system is required by DEQ 4, Appendix D, the owner or authorized agent must submit the plans as described in DEQ 4 to the Department within 90 business days following the final inspection.
- (I) Acceptance of a permit by the applicant confers upon the Department the authority to access the installation site at reasonable times to inspect or to collect samples. The Department may also inspect existing systems that have been subject to complaint(s), create health hazard(s), or have become public nuisances.
- (J) Deviations from the approved plans, which do not violate the regulation, may be approved by the Department. Approved deviations must be noted on the inspection form.

9. SITE EVALUATIONS.

- (A) A site evaluation must be conducted by an approved site evaluator who has passed an examination administered by the Department to demonstrate knowledge of soils and site characteristics and how they relate to the design and function of wastewater treatment and disposal systems. The following persons may be approved site evaluators:
 - (1) Professional Engineers specializing in civil, environmental, sanitary, or agricultural engineering;
 - (2) Persons possessing a B.S. degree in geology, hydrogeology, or soils science;
 - (3) Registered Sanitarians with sufficient soils course work or specialized soils training; or,
 - (4) Other persons with equivalent expertise or experience, as determined by the Department.
- (B) A person taking the test to become an approved site evaluator must pay a fee as determined by the Board.
- (C) A site evaluation must 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 proposed water supplies, proximity to existing systems, proximity to surface water, floodplain and flood prone areas, escarpments, and area available for the system and its designated replacement area.
- (D) Soil conditions. Where the Department determines adequate soils information is not available, soil conditions must be obtained by digging two (2) pits, 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.
- (E) The U.S. Department of Agriculture's "Soils Classification System" must be used to describe and determine soil texture. (see DEQ 4 Appendix B). The following factors must be included in any soils evaluation:
 - (1) Thickness of layers or horizons of soil profile.
 - (2) Texture and structure of horizons.
 - (3) General color, and color variation (mottling).
 - (4) Depth to water (if observed) or a statement that groundwater depth exceeds six feet throughout the entire year based on evidence from pits, borings, or other physical substantiation.
 - (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.
 - (7) The site of the soil testing must be clearly identified by placing a perforated pipe to a depth of nine (9) feet in the soil profile hole.
- (F) The Department may require as many soil profile holes be dug in the area of the proposed absorption system as the Department determines is necessary to describe and evaluate the soils of the site.
- (G) A 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.

- (H) When a site evaluation is required, the evaluation may be performed by an approved site evaluator or the applicant may request that the Department perform the site evaluation.
- (1) If a site evaluation is not conducted by the Department, 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.
 - (2) The Department may refuse to accept site evaluations from persons who have a documented history of supplying inaccurate site evaluations or incomplete information as required.
- (I) Percolation Tests and Exceptions.
- (1) A percolation test is required in accordance with Table 1.
 - (2) If a potential impervious layer is present less than six (6) feet below ground level, percolation tests must be conducted in this layer unless other testing (e.g. hydrometer, permeameter, or other approved hydraulic conductivity test) is provided that substantiate the layer is not impervious.
 - (3) Three percolation tests must be conducted, when required, in accordance with DEQ 4, Appendix A on absorption system sites. Test holes must be evenly spaced throughout the area of the proposed absorption site.
 - (4) Percolation tests must be conducted by an Approved Site Evaluator.

TABLE 1

Soil Type	Percolation Testing Required?
Any extremely gravelly, cobbly, or bouldery soil	YES, Unless sand-lining and pressure distribution is provided
Coarse sand Sand Loamy sand	YES, Unless sand-lining and pressure distribution is provided
Medium sand Fine sandy loam Fine sand Very fine sand Sandy loam Loam Non-compacted silt loam	NO
Compacted silt loam Sandy clay loam Clay loam Silty clay loam Sandy clay Silty clay Silt Clay	YES

10. LOCATION AND DESIGN OF WASTEWATER TREATMENT AND DISPOSAL SYSTEMS.**(A) General.**

- (1) All systems must be located and designed in accordance with DEQ 4 unless a more specific or stringent requirement is included in this Code.
- (2) Applicants proposing a new wastewater treatment and disposal system, or increased use of a system must designate a full sized separate replacement area that meets all the criteria for the initial drainfield or absorption system without any sizing reductions.
- (3) The Department may require that both the primary and replacement drainfield areas be identified by staking prior to construction.
- (4) All individual wastewater systems and designated replacement areas being reviewed as part of a Sanitation in Subdivision application must be located on the same lot as the dwelling or business served. This provision does not apply to:
 - (a) wastewater systems or replacement areas proposed on lots created on or before December 31, 2009; or,
 - (b) wastewater systems or replacement areas proposed on lots created as part of any Sanitation in Subdivision application submitted to the Department by December 31, 2009; or,
 - (c) wastewater systems or replacement areas proposed on lots created as part of any subdivisions with preliminary plat approvals from the County Commissioners or City Council by December 31, 2009; or,
 - (d) wastewater systems and replacement areas located off of the lot prior to application for subdivision.
- (5) A structure, movable or immovable, may not be located over, or moved onto, any part of the system. Vehicles may not be driven over the system after installation, except those portions properly designed to accept traffic loads. The drainfield or other absorption system must be located and protected in a manner that prevents vehicles from passing over or parking on top of the system. This area must be kept free of all obstructions, including pavement, which will prevent air from penetrating the soil.
- (6) Fill may not be used to overcome minimum vertical or horizontal separation distances in Sections 10(B) and (C), except for sealed components.

(B) Prohibited locations.

- (1) Steep slopes.
 - (a) No system or any portion of a system may be located on a slope that exceeds 35%.
 - (b) Systems may not be located on slopes between 15% and 35% unless a registered professional engineer or a person qualified to evaluate and identify soil in accordance with the Natural Resource Conservation Service standards submits adequate evidence that conditions are such that there will be no visible outflow of effluent down slope from the installation of the system.
 - (c) Systems must meet minimum setback distances from steep slopes in accordance with Table 2.
- (2) Floodplain or flood-prone areas.
 - (a) Absorption systems may not be located within 100 feet of a floodplain or flood-prone area.
 - (b) When property within the designated FEMA floodplain can be shown to be above base floodplain elevation, an official action from FEMA is required to remove the area from the floodplain before a permit may be issued by the Department. If the property is within shaded Zone X floodplain, written approval from the Floodplain Administrator is sufficient.
 - (c) A parcel containing Zone A approximate floodplain must have the base flood elevation determined by a licensed professional engineer through hydrologic and hydraulic analysis, or another method approved by the Floodplain Administrator before the Department may:
 - (i) approve a subdivision or,
 - (ii) issue a septic permit on a DEQ-reviewed parcel that was created after August 15, 1983.
- (3) Waterways. A subsurface treatment and disposal system may not be located within a drainage way or within a natural or manmade intermittent watercourse.
- (4) Groundwater. Groundwater depth at any time of less than six (6) feet from the natural ground surface precludes the use of conventional subsurface wastewater treatment and disposal systems. There must be a minimum separation of at least four (4) feet of natural soil between the bottom of the drainfield and the maximum high groundwater elevation.
 - (a) The Department may require one (1) year of groundwater monitoring conducted by the Department to delineate the highest groundwater level.
 - (b) If the groundwater is within ten (10) feet of the ground surface, or if there is any reason to believe

that the groundwater will be within ten 10 feet of the natural ground surface during any time of the year, groundwater monitoring is required.

- (c) The applicant must provide groundwater test holes and piping to a depth of at least nine (9) feet within the boundary of the proposed drainfield to determine the high groundwater during its peak occurrence. If shallow groundwater or an impervious layer is encountered during excavation of the test holes at a depth less than nine (9) feet, the piping may be placed at that depth.
 - (d) 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 percent below the historical average.
 - (e) 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. Morphology data may only be substituted if groundwater monitoring was conducted and precipitation or snowpack for the monitoring period is more than 20 percent below the historical average per Section 10(B)(3)(d). The Department may charge a fee to be determined by the Board for review of morphology data.
- (5) Bedrock and impervious layers. Four (4) feet of natural soil must be present between the bottom of the absorption system and bedrock or an impervious layer throughout the proposed drainfield site and replacement area.

(C) Minimum horizontal setbacks.

Minimum horizontal setbacks are shown in Table 2, with clarifying statements shown in 1-8 below.

TABLE 2
Minimum Horizontal Setback Distances in Feet

<u>FROM:</u>	<u>TO:</u>		
	<u>Sealed components</u>	<u>Other components</u>	<u>Absorption systems</u>
Public or multi-user wells/springs	100	100	100
Other wells	50	50	100
Property Boundaries	10	10	10
Foundation Walls	10	10	10
Suction lines	50	50	100
Cisterns	25	25	50
Irrigation Ditches (8)	50	50	100
Roadcuts, escarpments (2)	10	10	25
Floodplain or flood prone area (3)(4)(5)	-	100	100
Steep slopes (1)(2)	10	10	25
Subsurface drains	10	10	10
Water Lines(6)	10	10	10
Drainfields/sand mounds	10	10	-
Surface water, springs	50	50	100

- (1) Sewer lines and sewer mains may be located in roadways and on steep slopes if the lines and mains are safeguarded against damage.
- (2) The minimum horizontal setback from a slope or escarpment applies to the slope down gradient of the absorption system.
- (3) Sealed transport lines may be located within the flood prone/floodplain area.
- (4) If the floodplain has not been designated and its level relative to a wastewater system is in question, the applicant must submit evidence adequate to establish the location of the floodplain.
- (5) Sealed components of a wastewater system located in a 100-year floodplain or area of high groundwater must be designed and constructed to prevent surface and ground water inundation. Pump lines must be pressure tested prior to use and must have a pressure rating of at least two (2) 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.

(6) Separation of Water and Sewer

- (a) Horizontal separation of at least ten (10) feet is required between sewer and water mains, unless the sewer main must cross the water line. The distance shall be measured from the closest 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.
- (7) The Department may require greater horizontal separation distances than those specified in Table 2 if it determines that site conditions or water quality non-degradation requirements indicate a need for the greater distance.
- (8) Exceptions for Irrigation Ditches.
- (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. The setback distances may be reduced to a minimum of 10 feet based on a case by case evaluation of engineered plans for piping submitted to the department.
 - (b) If the top of 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.

(D) Maximum land application rates.

- (1) Wastewater application into the soil may not exceed 700 gallons/useable acre/day for any system or group of systems.
 - (a) Total area for the purpose of calculating the maximum land application rate may include lots, interior parks, and public right of ways within the subdivision, minus floodplain or flood-prone area.
 - (b) All parcels included within a proposed project may be considered to determine compliance with this section.
 - (c) For the purpose of calculating application rate limits each individual single family dwelling unit is considered to have a discharge of 350 gallons per day. The application rate for multi-family units will be calculated using the flows shown in Table 4.
 - (d) Flow rates for industrial and non-residential establishments must be as determined by design in accordance with DEQ 4, Chapter 3.
- (2) Exceptions:
 - (a) Existing lots not being reviewed for subdivision to be used for single family dwelling(s) or multi-family dwellings with 4 or fewer dwelling units do not have to meet the requirements of 10(D)(1), but must demonstrate adequate room for both a drainfield and full replacement area and meet all other requirements of these regulations.
 - (b) If a Level II wastewater treatment system is used and nitrate is projected to be 5 mg/l or less at the end of the mixing zone, wastewater application may increase to 1,400 gallons/useable acres/day.
 - (c) If a DEQ groundwater discharge permit restricts and requires monitoring of the nitrate level in the effluent, wastewater application may increase based on the following formula:

$(50 \text{ mg/l} \div x \text{ mg/l}) \times 700 \text{ gallons/useable acre/day}$, where x is the discharge permit nitrate limit in mg/l

11. PRIMARY TREATMENT REQUIREMENTS.

- (A) All new and replacement wastewater treatment and disposal systems must provide a primary treatment device prior to disposal in an absorption system.
- (B) The primary treatment device must consist of a septic tank that conforms to the design and construction requirements in DEQ 4.
- (C) Septic tanks must be leak tested in accordance with DEQ 4 and as required by this section.
 - (1) A tank that is, or may be, in groundwater must be leak tested in place, except an individual or shared tank with a design flow of less than 700 gallons per day may submit a certificate from the tank manufacturer stating that the tank was leak tested before transport to the site.
 - (2) The Department may require a tank to be leak tested following installation if there is evidence that the tank or seals have been damaged and may no longer be water tight.

- (D) Septic tanks must be located where they are readily accessible for inspection and maintenance. Nothing may be constructed or installed over a septic or dosing tank that would prevent the tank access openings from being readily accessible.
- (E) Septic tanks must be sized in accordance with DEQ-4, Chapter 5.
- (F) The pipe between the structure and the septic tank may not have a single bend of more than 45°.
- (G) Access and inspection ports must be provided as required in DEQ 4, and must extend to the ground surface.
- (H) All access ports 22 inches or larger in diameter must be equipped with a safety pan or basket device.
- (I) Covers on all access and inspection ports must remain in place and be secured per manufacturer's specifications unless the tank or filter is being serviced.
- (J) The septic tank must be set on undisturbed ground or properly bedded with sand to prevent settling of the tank. The tank must be installed level.
- (K) Septic tank outlets must include an effluent filter with an opening no larger than 1/8 inch or another approved device such as a screened pump vault.

12. CONVENTIONAL SECONDARY TREATMENT.

(A) Drainfield wastewater flow rates.

- (1) Design wastewater flow for residential use shall be as follows:
 - (a) A living unit on an individual wastewater treatment and disposal system must be sized using the design flow in Table 3;
 - (b) If 2 or more living units use a common absorption system the wastewater treatment and disposal system must be sized using the design flow in Table 4;
 - (c) When 10 or more living units use a common absorption system, the design flow may be reduced to 250 gpd per living unit. The Department may determine that a larger per-living-unit average design flow is necessary for a given project.
 - (d) Design flow is based on individual living units, not collective number of bedrooms.
 - (e) The Department will use the guidelines established in Appendix F to determine if a room is to be considered a bedroom for determining minimum design flow rates.

TABLE 3
Minimum Design Flow Rates for Residential Individual Systems

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

<u>TABLE 4</u> <u>Minimum Design Flow Rates for Residential Shared and Multi-user Systems</u>			
<u>First Living Unit</u>		<u>Subsequent Living Units</u>	
1 bedroom	300 gpd	1 bedroom	150 gpd
2 bedrooms	300 gpd	2 bedrooms	225 gpd
3 bedrooms	300 gpd	3 bedrooms	300 gpd
4 bedrooms	350 gpd	4 bedrooms	350 gpd
5 bedrooms	400 gpd	5 bedrooms	400 gpd
Each additional bedroom-	add 50 gpd	Each additional bedroom-	add 50 gpd

- (2) Wastewater flow rates for non-residential, industrial, recreational, and commercial establishments are determined by:
- (a) DEQ 4, Chapter 3; 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 are determined using Table 5.
- (2) The most conservative of soils profile report or percolation rate will be used to select applicable square footage.
- (3) The following formula must be used to determine the size in lineal feet of the drainfield. Example calculations can be found in Appendix A.

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

TABLE 5

Texture	Est. Perc rate (min/in)	App. Rate (gpd/ft²)
Gravelly to extremely gravelly sands, extremely gravelly loamy sands, coarse sands and coarser soils	< 3	0.8
Loamy sand, coarse & gravelly sands & gravelly loamy sands from above that perc 3 – 6 mpi	3 - < 6	0.8
Medium sand, sandy loam	6 - <10	0.6
Fine sandy loam, fine sand, loam	10 - <16	0.5
Very fine sand, Sandy clay loam, silt loam	16 - <31	0.4
Clay loam, silty clay loam	31 - <51	0.3
Sandy clay	51 - <121	0.2
Clays, silts, silty clays	121 - ≤240	0.15
Any soils that perc >240 minutes per inch (this is considered an impervious layer, and a system that relies on absorption is not permitted)	>240	Not Permitted

(C) Pressure Distribution.

- (1) Pressure distribution and sand lining in accordance with DEQ 4 is required if the percolation rate is less than three (3) minutes per inch.
- (2) Pressure distribution is required for the following:
 - (a) If the soil is coarse or loamy sand and there is less than six (6) feet between the bottom of the absorption trench and a limiting layer.
 - (b) If more than 1000 square feet of absorption area is needed prior to the application of any reductions in sizing.
 - (c) If any portion of the absorption system lies on a slope greater than 25 percent.
 - (d) If an effluent pump is part of the system design.
 - (e) Shallow Drainfields, Elevated Sand Mounds, Absorption Beds, and Deep Absorption Trench systems.
 - (f) Replacement systems that cannot meet all separations in Section 10(B) & (C) of this regulation.
 - (g) Replacement drainfields installed in fill.
 - (h) Trenches greater than 24 inches wide when leaching chambers are used.
- (3) Pressure distribution may also be required in other alternative or experimental systems.

(D) Drainfield construction details.

- (1) Drainfield construction details must conform to the standards found in Table 6 and below:
 - (a) Drain rock around drainfield pipes must be clean, with no more than 2 percent passing the No. 8 sieve.
 - (b) Drain rock must be covered with a minimum of two (2) layers of untreated building paper, synthetic drainage fabric or other approved material before backfill. Straw may not be used in place of building paper or drainage fabric.
 - (c) For gravity fed systems, the pipe connecting the septic tank and the drainfield must 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.
 - (d) Pipe used in gravity flow drainfields shall be perforated PVC pipe at least four (4) inches in diameter.
 - (e) Header pipes shall consist of solid class 200 or Schedule 40 PVC pipe.
 - (f) The ends of drainfield laterals must be marked with a metal location marker.
 - (g) Perforations in drainfield pipe shall be placed at five (5) and seven (7) o'clock.
 - (h) Perforated pipe connecting the ends of the drainfield laterals will not be included when calculating absorption area sizing.
 - (i) 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.
 - (j) Equal distribution of septic tank effluent throughout the secondary treatment system is required.
 - (k) Minor leveling is allowed in accordance with DEQ 4.
- (2) Distribution Boxes. When gravity-fed drainfield laterals are installed at different elevations, a dosing distribution box is required, and:
 - (a) The total length of perforated pipe of each connection to a distribution box may not vary by more than 10 feet;
 - (b) The bottom of all outlets of the distribution box must be level, and the bottom of the inlet must be at least one (1) inch above the outlets;
 - (c) The distribution box must be adequately bedded to prevent settling;
 - (d) The location of the distribution box must be marked by a metal location marker to facilitate locating the distribution box for maintenance and inspection;
 - (e) At least five (5) feet of solid pipe must extend from a distribution box; and
 - (f) The certified installer must test the distribution box at the time of inspection by filling it with water to ensure equal distribution.

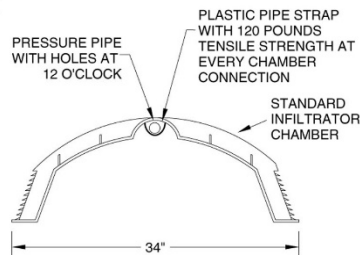
TABLE 6

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

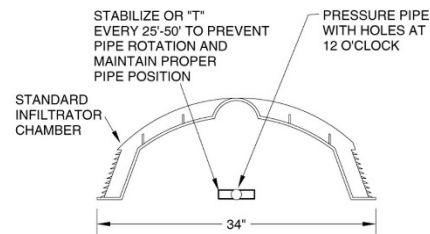
- (3) Leaching Chambers. Figure 1 shows a typical cross section of a leaching chamber installed with pressure distribution.

**FIGURE 1
CUTAWAY OF A TYPICAL LEACHING CHAMBER SYSTEM**

**METHOD A
TOP PLACEMENT**



**METHOD B
BOTTOM PLACEMENT**



- (a) Leaching chambers may be used, and must be installed in accordance with DEQ 4.
 - (b) The required absorption system size may be reduced by 25 percent if using leaching chambers. Systems using leaching chambers must maintain a replacement area large enough to accommodate a system without chambers.
 - (c) Leaching chambers must have at least 12 inches of cover and be compacted by foot compression along the sides of the chamber to provide support for the chambers.
 - (d) In clay soils, the space between the louvers of chamber systems and the trench sidewall must be filled with loam or sandy soil.
 - (e) For installations with pressure distribution, the following requirements apply:
 - (i) For installations with pipe hung in the top of the chamber (see Figure 1) the pipes must be secured with plastic strap with a minimum 120 pounds of tensile strength.
 - (ii) For installations with pipe placed directly on the trench bottom (see Figure 1) stabilizing T's must be installed every 25 to 50 feet to prevent pipe rotation and maintain orifice position. Stabilizing T's are only required when the lateral is more than 50 feet long.
 - (iii) Orifices must be placed at the 12 o'clock position, except orifices at each end of the lateral, and one orifice every 25 feet along the lateral must be faced down and have an orifice shield placed under them to allow for drainage of the pipe.
 - (iv) Access for pipe maintenance and flushing and a metal pipe cap or other metal location marker must be provided at the end of each lateral.
- (E) Pressure Distribution Secondary Treatment.
- (1) When pressure distribution is used, a three (3) foot trench width with four (4) foot separation between trench edges is allowed.
 - (2) A pump or siphon may be used to provide pressure distribution. A typical layout for a pressure distribution system is depicted in Figure 2.
 - (3) The distribution system must be designed by an engineer or someone experienced in the design of pressure distribution systems to ensure equal distribution and minimum squirt height throughout the drainfield.
 - (4) Dosing tanks must have access ports sufficiently large to maintain the tank and pumps, and must be vented. Pumps, valves and other apparatus, which require maintenance, must 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.
 - (5) The dose volume must be equal to the drained volume of the discharge pipe and manifold plus a volume between five (5) and ten (10) times the distribution pipe volume. If a programmable timer is used, the minimum dose size may be equal to two (2) times the distribution pipe volume.

- (6) Dosing pumps and siphons used for pressure distribution systems must be selected to provide a minimum of five (5) feet of head for orifices 5/32 inch or smaller, and 2.3 feet of head for orifices 3/16" or larger.
- (7) All lateral and manifold piping shall be Schedule 40 or stronger PVC pipe. The pipe must have a single row of perforations 1/8 inch diameter or larger in a straight line perpendicular to the ground surface. Maximum perforation spacing is five (5) feet. An equivalent design that assures uniform distribution and minimum squirt height may be provided with the approval of the reviewing authority.
- (8) A hydraulic analysis demonstrating uniform distribution and minimum required squirt height must be provided. The analysis must show no greater than ten (10) percent variation in distribution of dose across the entire drainfield.
- (9) Distribution pipes of pressure-distributed drainfields must have capped inspection risers that terminate no more than six (6) inches below ground surface. Inspection risers must be installed with a long-sweep elbow or single 45° bend. A metal location marker must be provided for each inspection riser.
- (10) Pressure distribution systems and controls must be field tested to demonstrate uniform flow distribution prior to approval of the system. The system must be tested by pressurizing it with water before covering the distribution pipe with gravel. Holes must be facing up for this test. The elevation of the spray from each hole must be a minimum of five (5) feet for orifices 5/32 inch or smaller, and 2.3 feet for orifices 3/16" or larger and maintain a maximum flow variance of 10 percent.
- (11) 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) The reserve volume must be equal to at least 25 percent of the daily flow.
 - (c) 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.
 - (d) Risers for pump access must be a minimum of 18 inch 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.
 - (e) Pump vaults must be installed to allow for venting back through the septic tank. A vent with an activated carbon filter is recommended and is required if an odor nuisance is created.
- (12) Pumps must comply with the following requirements:
 - (a) Pumps used for pressure distribution systems must meet the specifications determined by the pressure distribution design criteria.
 - (b) Pumping head must be within the manufacturer's recommended operating range for that pump. 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.
 - (c) Pumps must be designed and approved for intended use.
 - (d) The effluent must be screened through a 1/8 inch filter before it enters the pump chamber.
 - (e) 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.
 - (f) 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.
 - (g) Every new or replacement system requiring a pump must have a properly functioning audible and visible high water alarm installed in the pump chamber with a manual silencing switch located in or near the building served by the system. An electrical safety switch must 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.
- (13) Transport pipes must comply with the following requirements:
 - (a) All pressure transport pipe and fittings must meet or exceed ASTM Specification D-2241. Polyvinyl chloride (PVC) transport pipes must be at least Schedule 40 or Class 200 PVC. Polyethylene(PE) transport pipe of one (1) inch or less must have a minimum pressure rating of 200 pounds per square inch (psi). For diameters greater than one (1) 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 (2) 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 24 inches. This requirement includes any portion of a pressurized line that is shallower than 60 inches. Transport lines designed to flow back after each dose must be buried at least two (2) 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.
- (F) Siphons must comply with the following requirements:
- (1) The specifications for the siphon including elevation difference between the tank and drainfield, and slope profile of the site must be submitted to the Department for review and approval for use in the specific application proposed.
 - (2) Siphons must use a minimum four (4) inch diameter external vent line which vents back to the dosing chamber.
 - (3) Siphons must be constructed of corrosion-resistant materials and installed according to manufacturer's recommendation.
 - (4) Effluent screens or filters with an outlet no larger than 1/8 inch must be installed to protect the siphon snifter tube from plugging.
 - (5) The owner of a system that uses a siphon is responsible for ensuring the ongoing proper operation of the siphon.
 - (6) All systems using siphons must be field tested prior to approval of the system. Pressure distribution systems using siphons must use orifices at least 5/32 inches in diameter and be tested by pressurizing the system with water before covering the distribution pipe. The squirt height must be a minimum of five (5) feet and maintain a flow variance of 10 percent or less.
 - (7) Systems using a siphon should have a dose counter installed to check for continued function of the siphon.

**FIGURE 2
PRESSURE DISTRIBUTION NETWORK**

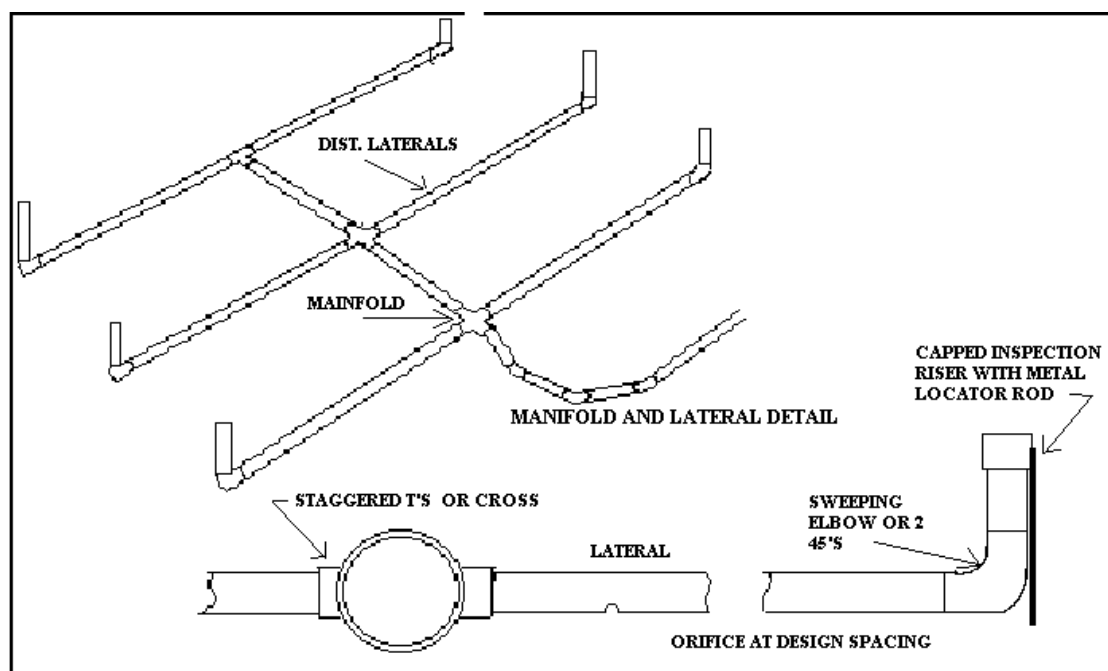
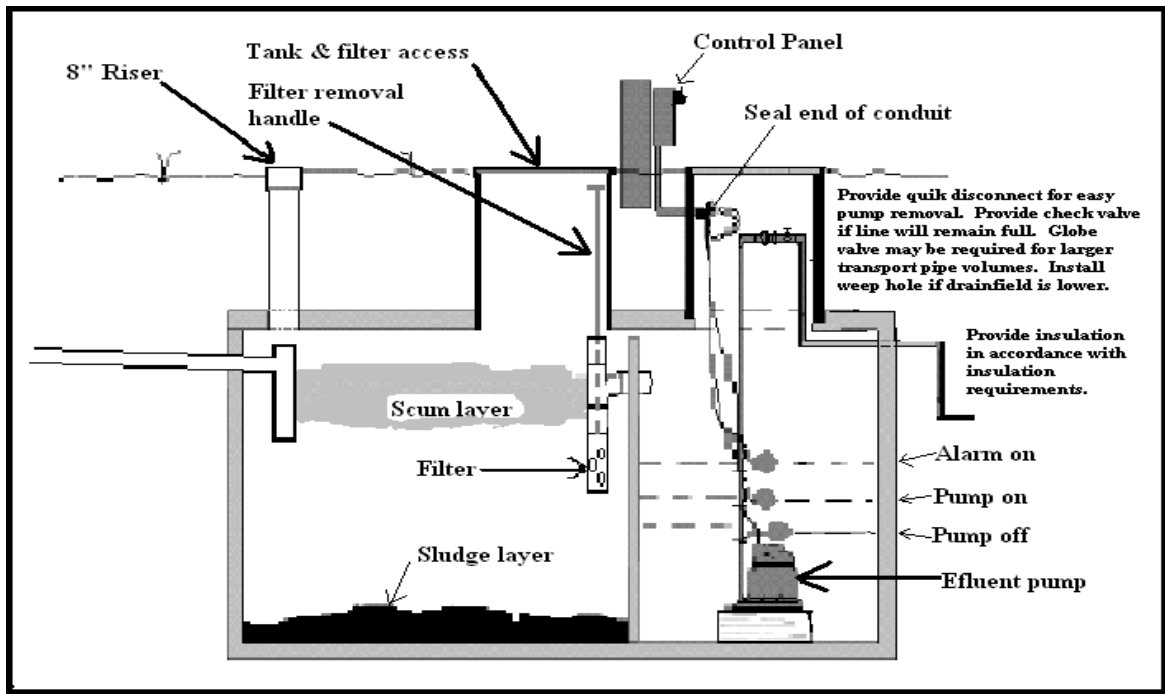


FIGURE 3
COMBINATION SEPTIC TANK / PUMP VAULT



13. ALTERNATIVE TREATMENT SYSTEMS.

- (A) Alternative wastewater systems may be approved by the Department to be used in lieu of conventional systems. Alternative treatment systems must meet the requirements prescribed in the Missoula City-County Alternative Systems Manual.
- (B) The applicant shall provide substantial scientific field testing information concerning a particular system design for systems not in the Alternative Systems Manual before the system may be approved as an alternative. The information must indicate that the system will perform for the purpose for which it is designed over a period of years with proper maintenance.
- (C) Unless the Alternative Systems Manual provides otherwise, all rules pertaining to conventional drainfields and septic tanks apply to alternative systems.
- (D) Alternative systems may require additional inspections during and after installation and an additional inspection fee may be charged for each inspection. The Department must provide a written report of each inspection to the system owner listing deficiencies of the system and corrections needed for the system.
- (E) Use of an alternative system may preclude future divisions of the property pursuant to DEQ requirements. The applicant and future owners assume responsibility for any restrictions, liabilities or encumbrances that are caused by the installation and use of an alternative system.
- (F) All alternative system designs, with the exception of pit privies, must provide for replacement areas equivalent to those required for conventional systems in the event of system failure.

- (G) The Department may place any restrictions or requirements on the design, installation and operation of an alternative system that it deems necessary. 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 allowed access to the property to verify that such restrictions or requirements are implemented. 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.
- (H) Design criteria for the alternative systems approved for use by the Department are available at the Environmental Health Division Office and on the Department's website.

14. HOLDING TANKS, FLOOR DRAINS, CHEMICAL TOILETS, AND CAMPING.

- (A) Holding tanks are not allowed.
- (B) Floor Drains.
- (1) Floor drains may be used in areas used for parking or storing vehicles, equipment, or components that are associated with an internal combustion engine under the following conditions:
 - (a) The structure may not house a business that washes, works on, repairs or rebuilds vehicles, equipment or components that are associated with an internal combustion engine;
 - (b) Floor drains may only be used to convey snow melt and rainwater from a structure;
 - (c) No deleterious substances may be disposed of in the floor drain;
 - (d) The floor drain may not accept wastewater from a plumbed fixture; and,
 - (e) The drain line extending from the floor drain:
 - (i) may not cause wastewater to travel onto neighboring property;
 - (ii) must dispose of the wastewater on the same parcel as the structure is located;
 - (iii) must dispose of the wastewater at least 10 feet from property lines and at least 100 feet from wells and surface water;
 - (iv) must dispose of the wastewater above ground onto pervious soil;
 - (v) may not discharge into a sump or injection well; and,
 - (vi) must dispose of the wastewater in a location that can be easily located and routinely observed by the structure's occupants.
- (C) 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 may not be used to serve as a permanent sewer system for structures, except chemical toilets may be used as the approved toilet facilities for picnic shelters in parks owned or operated by the city or county.
- (D) Camping. The Department may require the submittal of a waste disposal plan meeting the requirements of these regulations when a tent, RV, camper, or other temporary structure is placed for the purpose of camping in one area for 30 or more days outside of a licensed campground or RV park.

15. EXPERIMENTAL SYSTEMS.

- (A) A wastewater treatment and disposal system not specifically allowed under this regulation may receive a permit as an experimental system. Experimental permits are intended for the primary purpose of conducting an experiment, and may not substitute for a variance from this regulation.
- (B) Experimental systems may only be permitted under the following conditions:
- (1) The applicant must provide adequate information to the Department that ensures the system will effectively treat wastewater in a manner that will prevent groundwater contamination and will meet all of the requirements in Section 5(A) at all times. Failure to meet the requirements of Section 5(A) or any permit conditions at any time shall invalidate the permit and be grounds to order cessation of use of the system and buildings that the system serves.
 - (2) The application must include a complete description of the scientific goals of the project and criteria used to evaluate the performance of the system. The evaluation process and requirements must be detailed in a contract or other written agreement between the evaluating entity and system owner, if different.

- (3) The experiment must be conducted by a scientific, educational, governmental, or engineering organization.
- (4) The applicant must provide any funding necessary for adequate design, installation, monitoring, and maintenance.
- (5) The system must be designed by a Professional Engineer, sanitarian or other professional acceptable to the Department.
- (C) A permit to construct an experimental system is not transferable from person to person.
- (D) The Department may refuse to issue a permit for an experimental system for any reason.
- (E) The Department may limit the number of experimental permits issued in a year.
- (F) The Department may place any requirements or restriction it deems necessary on a permit for an experimental system.
- (G) All provisions of Health Department regulations apply to experimental systems except those specifically exempted by the permit.
- (H) Applicants must provide for inspections to be made by persons approved by the Department. A performance and evaluation report must be submitted annually to the Department for the duration of the experiment.
- (I) There must be the potential to connect to public sewer, or an adequate replacement area for a conventional wastewater treatment and disposal system without sizing reductions must be designated and preserved if the experimental system is connected to an occupied structure.
- (J) Systems required to connect to a publicly owned sewage treatment plant under Section 5(C) of this regulation, but not connected as a provision of an experimental permit may be required to connect once the experiment ends or the permit is no longer valid.
- (K) Any person who sells a property containing an experimental system must disclose all permit, monitoring and maintenance requirements to the buyer. In the case of a transfer of ownership of the property, the designated experimenter must remain the same.
- (L) An experimental system may be re-classified by the Department as an alternative system after submission of a final performance report demonstrating sufficient evidence has been collected to show that the system meets the performance and evaluation criteria of the permit and functions satisfactorily over time.
- (M) By March 1st of the calendar year the permit holder of an experimental permit must pay an annual review fee as established by the Board.

16. REPLACEMENT SYSTEMS.

- (A) A person may not operate a wastewater treatment and disposal system that has failed, as defined in Section 4 of this regulation. Failed systems must be replaced and meet the following requirements:
 - (1) Replacement systems must be designed and constructed to allow the best treatment practical and must meet all separation distances whenever possible.
 - (a) A drainfield is required when there is adequate room;
 - (b) If room is unavailable for a drainfield, an absorption bed is required;
 - (c) If room is unavailable for either a drainfield or absorption bed, a seepage pit may be allowed where groundwater is a minimum of 25 feet below the bottom of the proposed seepage pit.
 - (2) If a replacement system will not meet minimum separations in Sections 10(B) & (C), a pressure distribution system is required.
 - (3) Replacement systems will be sized based on the previously approved number of bedrooms or flow limitations unless the increased use requirements of Section 17 are met.

- (B) Seepage pits may be permitted under the following conditions for replacement systems regardless of the area available in areas that are expected to receive public sewer service within five (5) years, as determined by the Department. Seepage Pits permitted under this section must also comply with the Alternative Systems Manual, Section 21.
- (1) Seepage pit replacement permits will expire 180 days after public sewer becomes available to the property as described in Section 5(C);
 - (2) The property owner must execute a deed restriction waiving the right to protest an SID or RSID for the installation of public sewer; and,
 - (3) Upon expiration of a permit issued under this section, all structures served by the permitted wastewater treatment and disposal system must be connected to public sewer.
- (C) A wastewater treatment and disposal system originally approved for use with 1,000 gallons septic tank capacity and legally installed before May 20, 2004 may replace the absorption area without increasing septic tank capacity if serving four (4) or less bedrooms. If the tank has not been pumped of its contents within the 12 months preceding permit issuance, it must be pumped prior to final inspection.
- (D) Soil profiles and percolation tests may be required to determine proper sizing of replacement systems.
- (E) Replacement of systems in floodplain.
- (1) A system in a floodplain or flood-prone area that was legally installed must be replaced with an elevated sand mound or a system that incorporates advanced secondary treatment. The bottom of the trench or drainfield must be above floodplain elevation, or the system must include advanced secondary treatment before wastewater is discharged into the soil.
 - (2) Replacement sealed 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.
- (F) Drainfields in Fill.
- (1) Drainfields may only be installed in fill for the replacement of failing systems or as part of an alternative system approved by the Department.
 - (2) Drainfields in fill must be designed, constructed, and located in accordance with DEQ 4.
 - (3) Minor leveling is allowed for replacement systems in accordance with DEQ 4.
 - (4) Fill may not be considered natural soil.
 - (5) Fill may not be used to overcome minimum separation requirements in Section 10(B) and (C) of this regulation.

17. EXISTING USE, INCREASED USE, AND CHANGES TO STRUCTURES OR PARCEL BOUNDARIES.

- (A) Existing use and connection to existing systems.
- (1) The continued use or maintenance of a properly functioning existing wastewater treatment system legally installed according to regulations and standards in effect at the time of construction is allowed unless the system causes a violation of Section 5(A) of this regulation or is ordered disconnected by the Health Board or other jurisdiction. Such a system may not be enlarged, repaired, subject to increased use, or altered in any manner unless the alteration(s) bring the system into compliance with current regulations.
 - (2) 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 without a written septic determination issued by the Department verifying that the system meets the requirements of Section 5(A) of this regulation; has primary and secondary treatment; and meets the separation requirements in Section 10(B) & (C) of this regulation.
- (B) Increased use, new use, and altering parcel lines.
- (1) 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 6(G).

- (2) A properly functioning system originally permitted for three (3) bedrooms with a 1,000 gallon septic tank legally installed before May 20, 2004 may increase use to four (4) bedrooms without increasing septic tank capacity. The tank must be pumped of its contents prior to final approval, unless evidence is provided that it has been pumped of its contents within the twelve months preceding permit issuance. The drainfield may have to be modified to accept the increased use.
- (3) To increase use to an existing system in the MWTPSA, a person must file a waiver of protest as described in Section 20(A)(1) of this rule.
- (4) Adding new or increased use or structures to a parcel, or changing parcel boundaries, may not encroach upon or eliminate replacement areas for existing use.
- (5) 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 5(A) of this regulation. Substandard systems must be upgraded to meet Section 5(A), provide primary and secondary treatment, meet all separation requirements in Section 10(B) & (C), and reserve a full replacement area that meets current requirements of this regulation.

(C) Significant Alteration and Enlargement of Structure.

- (1) The following conditions apply to enlargement and significant alteration of structures:
 - (a) No person may begin construction until the Department issues either a septic permit or a written determination that no septic permit is needed for the proposed project;
 - (b) No person may build over any portion of a system except the pipe from the structure to the septic tank;
 - (c) An adequate replacement area must be preserved that is at least equivalent to what was available before the proposed enlargement or significant alteration;
 - (d) The system must provide primary and adequate secondary treatment;
 - (e) The system must meet Section 5(A)(1) of this regulation; and,
 - (f) If public sewer is available as described in Section 5(C), the applicant shall connect to public sewer.

(D) Septic Determinations.

- (1) A complete 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 name 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 existing and proposed buildings, wells, septic systems, replacement areas, surface water and floodplains or flood prone areas on or within 100 feet of the property
 - (f) Detailed floor plans, on paper no larger than 11" x 17", showing the existing floor plan and the floor plan of 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
 - (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.

18. SAFETY AND ABANDONMENT OF WASTEWATER SYSTEMS.

- (A) When a wastewater treatment and disposal system is replaced, or will no longer be used, the system shall be considered abandoned and any further use of the system for any purpose is prohibited.
- (B) When a septic tank, seepage pit, or cesspool is abandoned it must be:
 - (1) located;
 - (2) pumped entirely of its contents by a licensed septage hauler; and,

- (3) properly abandoned in one of the following ways:
 - (a) filled with sand, gravel, or other suitable material;
 - (b) broken into pieces with the resultant hole being filled with suitable material; or
 - (c) removed, with the resultant hole being filled with suitable material.

19. MULTI-USER OR PUBLIC SYSTEMS.

- (A) Plans for public and multi-user wastewater treatment and disposal systems must be approved by DEQ and permitted by the Department.
- (B) Applicants for a multi-user or public wastewater treatment and disposal system shall submit a maintenance and operation plan to the Department in accordance with DEQ 4, designating who is responsible for maintenance and operation of the system. Maintenance and operation must be carried out according to the approved plans.
- (C) All portions of the multi-user or public system, except for on-lot service lines and individual tanks, must be installed before the system may be used. In the case of a phased subdivision, the treatment system installed must be adequate to serve a particular phase before the system is put into use.
- (D) An individual connection to a multi-user or public system requires a permit before installation. The connection must have final approval by the Department prior to use. An individual connection to a community system must also be inspected by the certified operator or the design engineer for the system.
- (E) A multi-user or public wastewater treatment and disposal 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.

20. 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 apply to all land within the Missoula Wastewater Treatment Plant Service Area depicted on the map in Appendix D:
 - (1) The Department may not issue a permit for an increased use, a new wastewater treatment and disposal system, or a replacement seepage pit 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.

"I/We, the undersigned, hereby certify that I/we are the owners of the real property located at (legal description) which is 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 by the current and future owners of the property 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) must connect to public sewer within 180 days after public sewer mains are installed and available to the property.

This waiver runs 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 must refer to and incorporate this waiver."

- The filing of a deed restriction is not required if previously filed for the same parcel, or where similar language has been shown on an approved and filed subdivision plat or certificate of survey.
- (2) Owners of property encumbered by a deed restriction must connect to sewer as established in the deed restriction.
 - (3) A new division of land, including any subdivision as defined in Section 4 within the MWTPSA must exhibit language consistent with Section 20(A)(1) of this regulation on the face of the recorded plat or on a Certificate of Survey. Language approved by the City and County Attorney is available at the Department.
 - (4) Any person installing a new or replacement septic tank in an area of the MWTPSA designated for STEP (shown in Appendix D) must install a STEP septic tank with manway.
 - (5) A Multi-user or community wastewater treatment and disposal system serving five or more connections in the MWTPSA must be designed and located to allow a single, common future connection point to public sewer, and must conform to the design criteria established by the City of Missoula Public Works Department. The design, installation and inspection of all mains, service lines to public sewer, STEP tanks, and related appurtenances must be approved by the City of Missoula Public Works Department in accordance with its design criteria for sewers. As-built plans for all multi-user, community, or dry laid systems must be submitted to the City of Missoula Public Works Department and the Department by the applicant within 90 days of installation.
 - (6) A new subdivision-within the MWTPSA must provide easements as necessary to facilitate the connection of all parcels requiring facilities to public sewer service when sewer mains become available.
 - (7) If a property in the MWTPSA is part of a proposed subdivision containing five (5) or more lots of less than two (2) acres per lot in all phases, the developer must provide a multi-user or community wastewater treatment and disposal system converging at one common point that may be easily connected to public sewer when sewer mains are available to service the property.
 - (8) A properly designed, installed and inspected dry laid pressure or gravity main connecting the lots with appropriate easements may be used in place of a multi-user or community system as required above in areas where the subdivision contains no more than fourteen 14 lots in all phases approved after September 21st, 1994 when the City Engineer makes the following written findings provided to the Department:
 - (a) That the design of the dry-laid system meets City Public Works criteria for design of sewers; and,
 - (b) that a dry laid main is preferable in a given instance to a community or multi-family septic system for eventual connection to public sewer because:
 - (i) the dry laid system will be less expensive for future homeowners to connect to public sewer; or
 - (ii) because site characteristics make it infeasible to connect a community or multi family system to public sewer in the future.
 - (9) When the subdivision includes perpetually dedicated common areas and wildlands or an area reserved from development by deed restriction until public sewer becomes available, the Department will divide the area of such dedicated land by the number of lots and add the result to each lot area to determine applicability of Section 20(A)(7).
- (B) Rattlesnake Valley Special Management Area. The following restrictions apply to wastewater treatment and disposal systems in the portion of the Rattlesnake Creek Drainage above the Mountain Water intake dam classified as A-closed by DEQ (see Appendix E).
- (1) A wastewater treatment and disposal system serving one (1) 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 all other requirements are met.
 - (2) Except for a boundary line relocation, the Department may not issue a permit or approve a Certificate of Subdivision Approval for subsurface disposal of wastewater for a new division or subdivision of land inside the special management area.
 - (3) 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 effective at removing pathogens.
- (C) 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 may 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) All parcels without existing plat approvals may only install one single family system if all other requirements of this regulation are met.
 - (3) 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.
 - (4) Wells must 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.
 - (5) The Department may not approve further subdivisions which create lots that generate wastewater or require wastewater facilities in the area until the cause of water contamination is discovered and the problem corrected.
- (D) Seeley Lake Special Management Area. The following restrictions apply to land located in the NW quarter of T16 R15 Section 2, the East half of T16 R15 S03, and the South half of T17 R15 S35 (see Appendix G).
- (1) New or increased use may not be approved unless the Department determines that it will not cause or contribute to a violation of the nitrate standard established in 76-5-605, MCA.
 - (2) The Department will evaluate septic permit applications on a case by case basis, using the best information available including, but not limited to, nitrate sample results and existing studies on groundwater flow direction. The Department may require an applicant to supply additional information to substantiate that groundwater will be protected.
 - (3) Provided there has been no unapproved increased use, replacement systems will be allowed in this area.
- (E) Non-designated Areas of Concern.
The Department may impose restrictions or conditions on new, increased use or replacement wastewater treatment and disposal permits in areas where the activities may cause or contribute to the violation of water quality standards established in Title 75, Chapter 5, MCA.

Appendix A: Sample Calculations of Absorption System Sizing

The following general examples illustrate how conventional absorption system sizing is typically calculated. Note: There are sizing/design requirements not specifically addressed in these examples. These examples are provided for illustrative purposes only.

Example 1: An applicant proposes a drainfield downhill of a new 4-bedroom home in “gravelly silt loam” soils. The system may use gravity distribution (if topography allows). Sizing of the absorption system is calculated as follows:

$$\frac{350 \text{ gallons per day design flow}}{.4 \text{ application rate X 2 foot trench width}} = \begin{matrix} 438 \text{ LINEAL FEET WITHOUT CHAMBERS} \\ \text{OR} \\ 328 \text{ LINEAL FEET WITH CHAMBERS (25\% sizing reduction)} \end{matrix}$$

Example #2: An applicant proposes a drainfield downhill of a new 3-bedroom home in “very-gravelly sandy clay” soils. Percolation testing shows a perc rate averaging 30 minutes per inch at the proposed drainfield site. In this example, the absorption area would be sized based on the soil type of “sandy clay” because this is the more conservative value. The system must use pressure distribution because the absorption area will be greater than 1,000 square feet. Sizing of this absorption system is calculated as follows:

$$\frac{300 \text{ gallons per day design flow}}{.2 \text{ application rate X 3 foot trench width}} = \begin{matrix} 500 \text{ LINEAL FEET WITHOUT CHAMBERS} \\ \text{OR} \\ 375 \text{ LINEAL FEET WITH CHAMBERS (25\% sizing reduction)} \end{matrix}$$

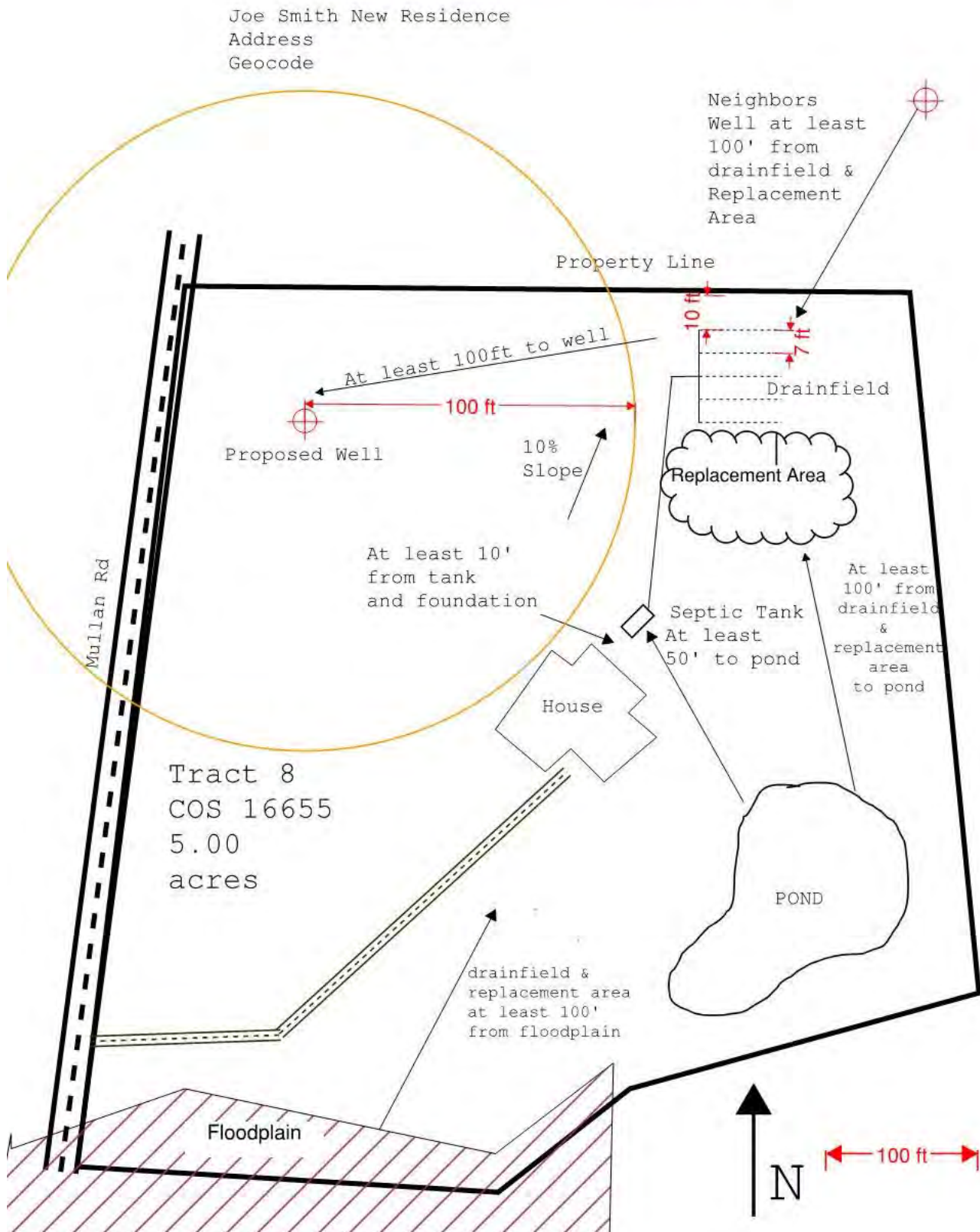
Example #3: An applicant proposes a drainfield downhill of a new 5-bedroom home in “extremely-gravelly sandy loam” soils. Unless percolation testing shows that the soil perc rates are slower than 3 minutes per inch, the trenches must be lined with medium sand and use pressure distribution because the soil is extremely gravelly. Sizing of this absorption system is calculated as follows:

$$\frac{400 \text{ gallons per day design flow}}{.6 \text{ application rate X 3 foot trench width}} = \begin{matrix} 222 \text{ LINEAL FEET WITHOUT CHAMBERS} \\ \text{OR} \\ 167 \text{ LINEAL FEET WITH CHAMBERS (25\% sizing reduction)} \end{matrix}$$

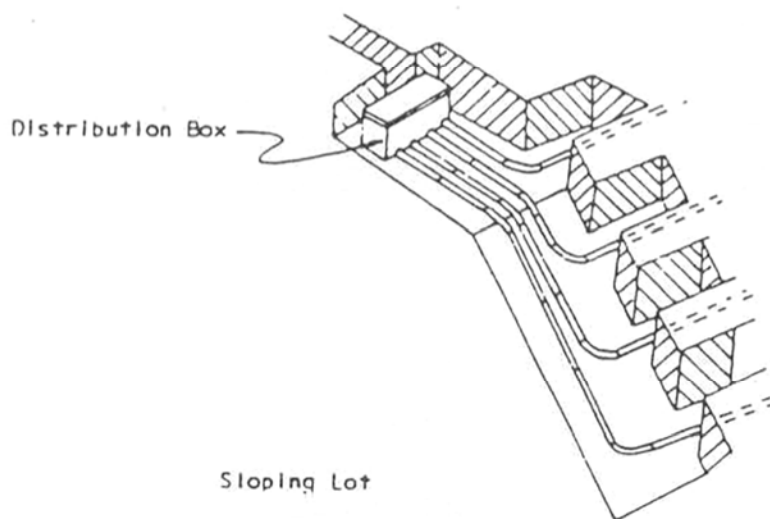
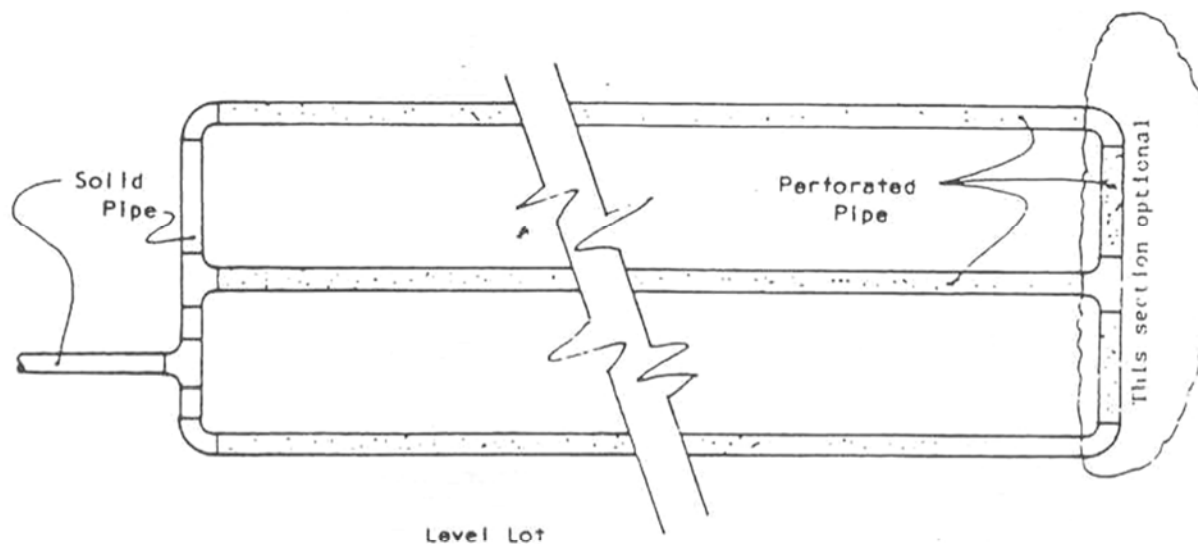
Example #4: An applicant proposes a drainfield downhill of a new 3-bedroom home in “gravelly sandy clay loam” soils. Percolation testing shows a perc rate averaging 50 minutes per inch at the proposed drainfield site. In this example, the absorption area would be sized based on the percolation rates because this is the more conservative value. The system may use gravity distribution (if topography allows) because the absorption area is not more than 1,000 square feet. Sizing of this absorption system is calculated as follows:

$$\frac{300 \text{ gallons per day design flow}}{.3 \text{ application rate X 2 foot trench width}} = \begin{matrix} 500 \text{ LINEAL FEET WITHOUT CHAMBERS} \\ \text{OR} \\ 375 \text{ LINEAL FEET WITH CHAMBERS (25\% sizing reduction)} \end{matrix}$$

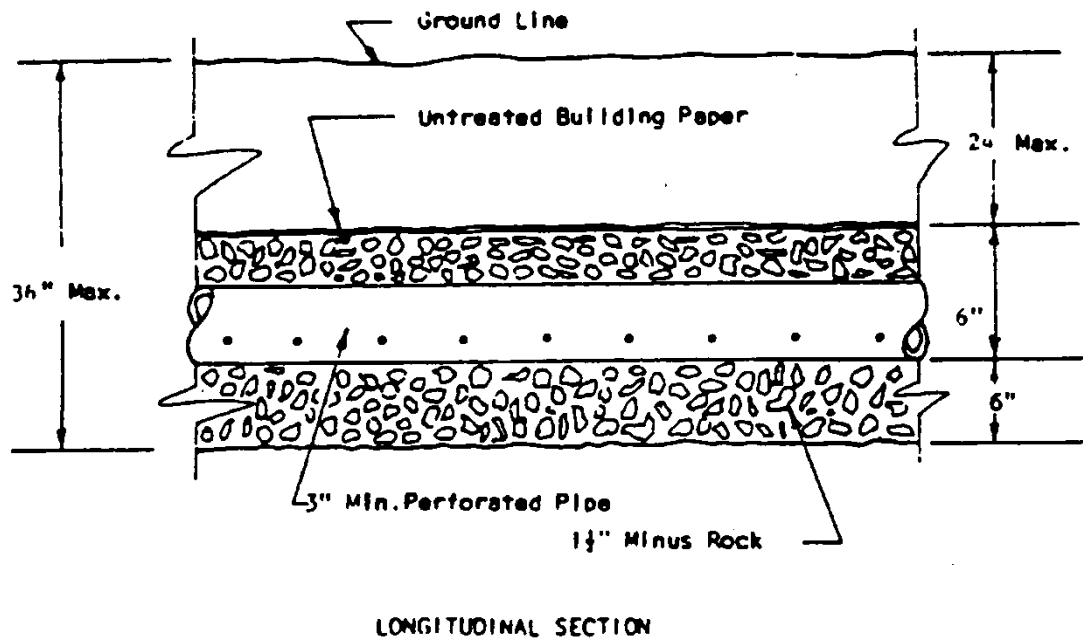
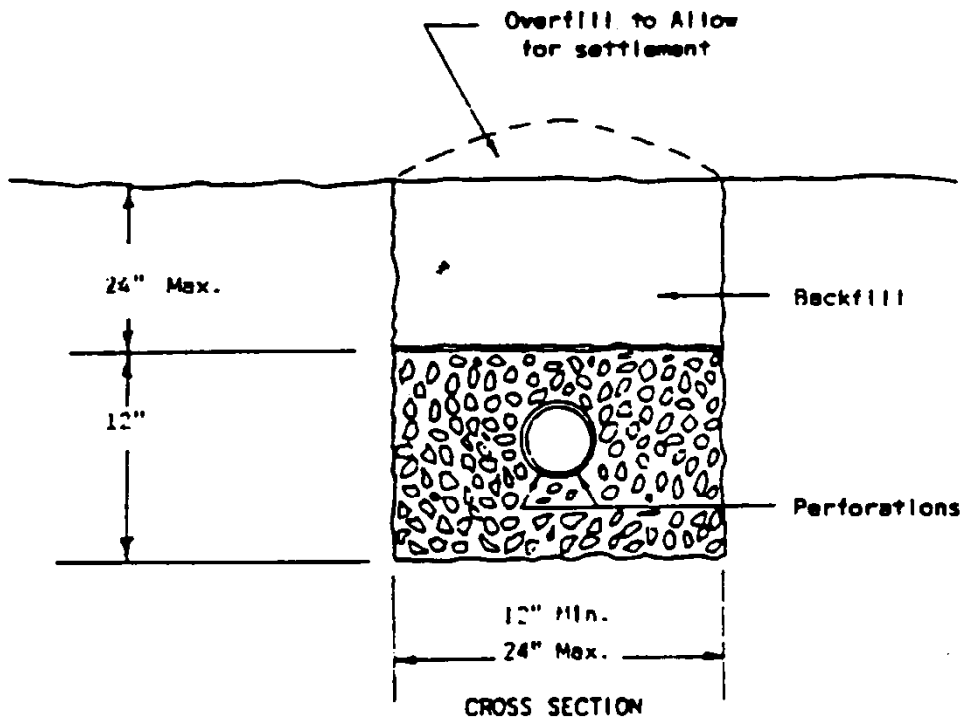
Appendix B Absorption System Construction Detail
Minimum Separation Distances Illustration



Appendix B Absorption system Construction Detail (continued)
Disposal Field Layout

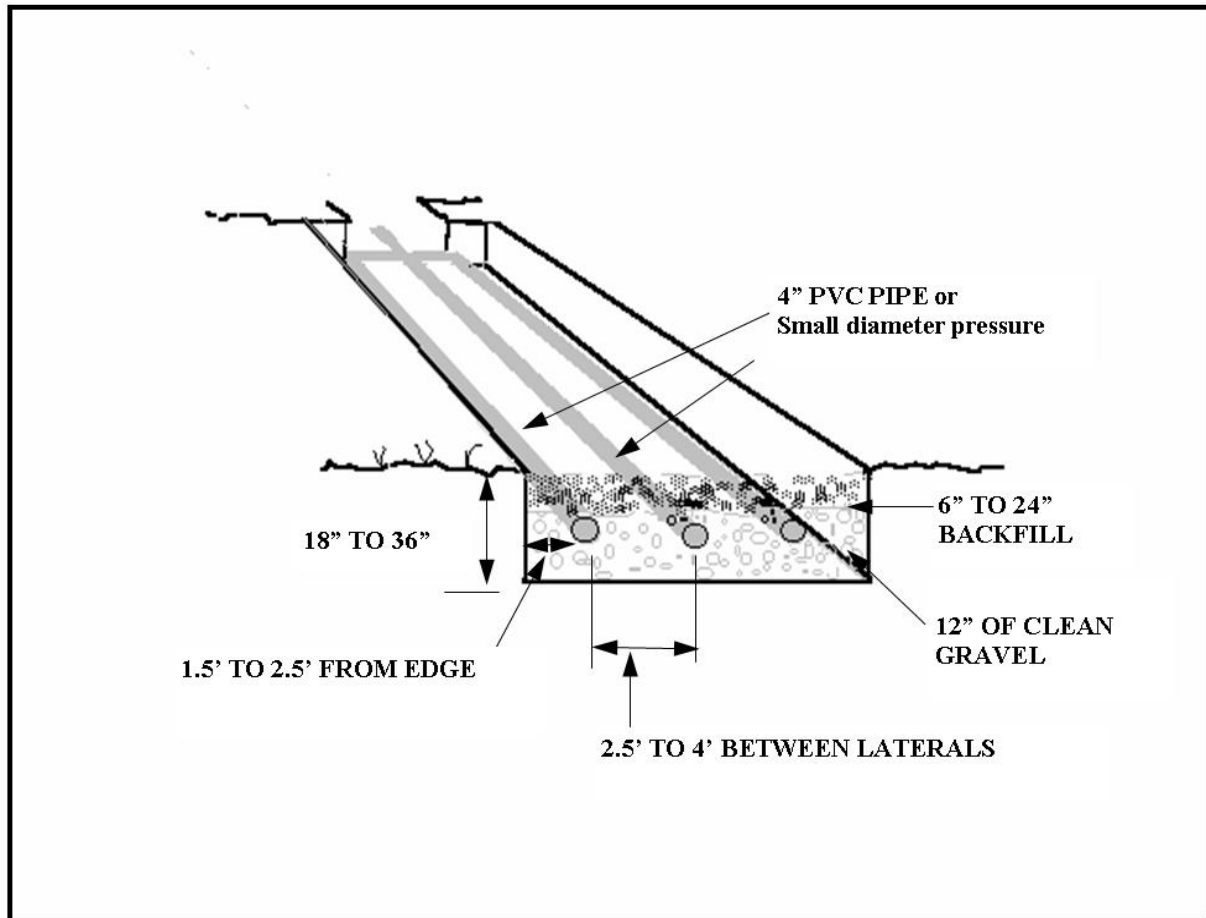


Appendix B Absorption system Construction Detail (continued)
Absorption trench Detail



Appendix B Absorption system Construction Detail (continued)

ABSORPTION BED



Appendix C: Dosing Distribution Box Operation Detail

Dosing Distribution Box

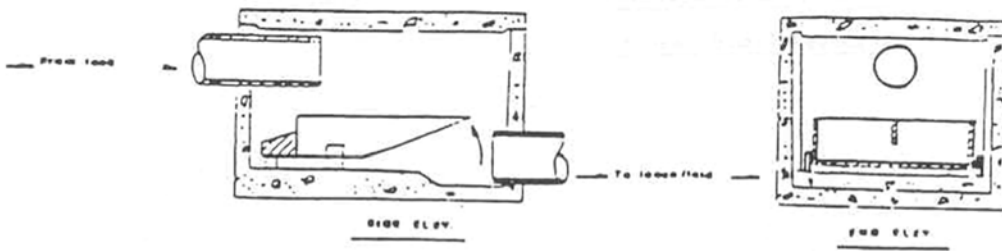


FIG. 1 From tank reservoir.

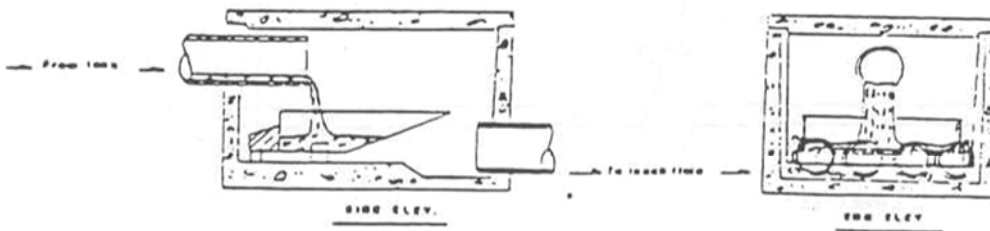


FIG. 2 "DIPPER" approximately fullness of 1.3 gallons.

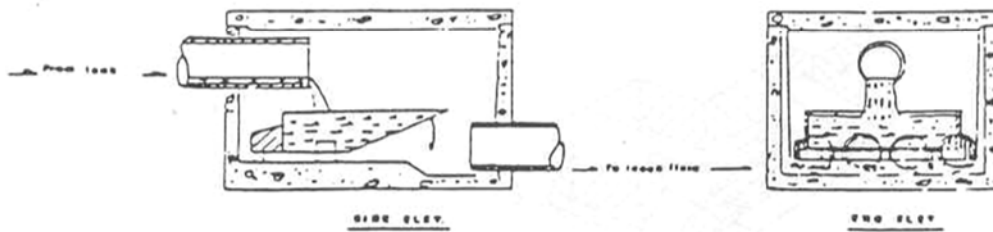
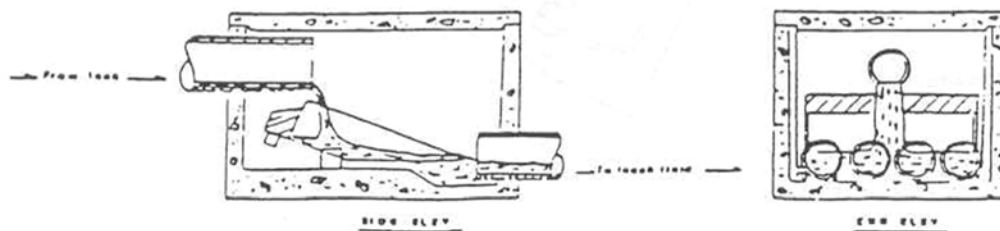
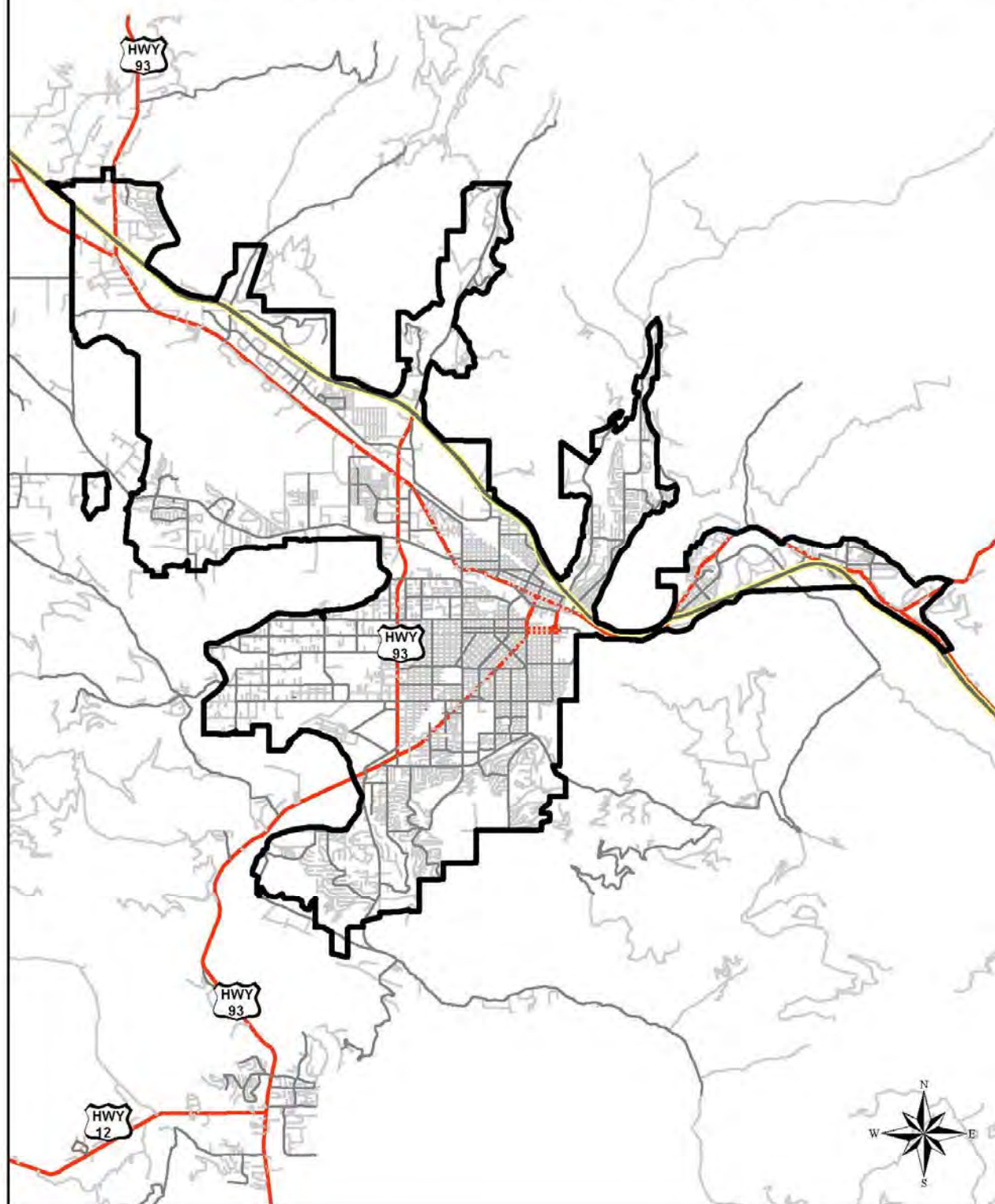


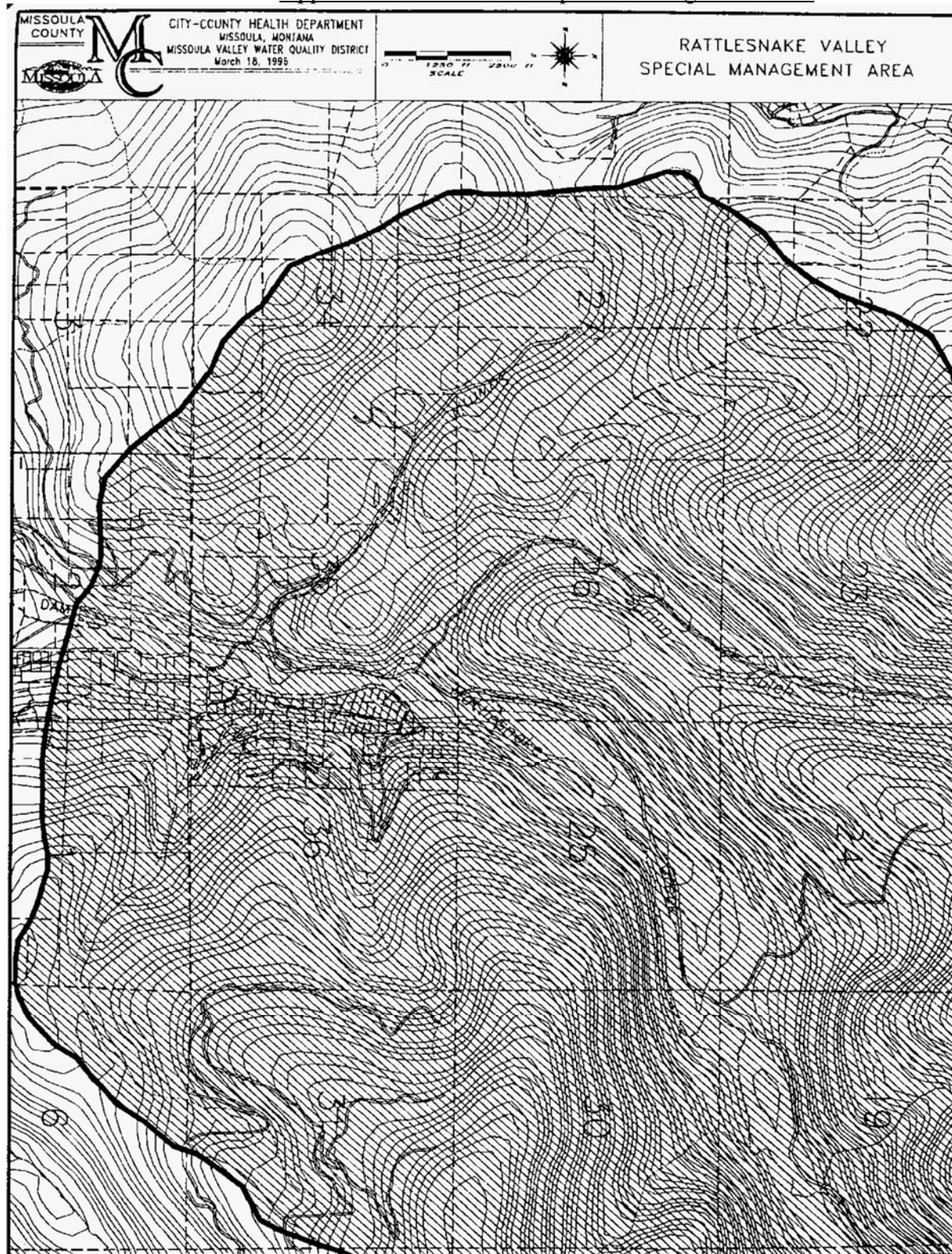
FIG. 3 "DIPPER" drops forward, discharging 1.3 gallons in 1.2 seconds into the outlet line



Appendix D Missoula Wastewater Treatment Plant Service Area



Appendix E: Rattlesnake Special Management Area



Appendix F

Identifying Bedrooms to Determine Wastewater Design Flows

The following guidelines will be used by the Department to determine how many rooms in a house are to be counted as bedrooms for sizing a wastewater treatment and disposal system.

Current room use

A room that has been or is currently being used as a sleeping room, even if not constructed to the current building code standards, will be counted as a bedroom. The Department can make exceptions to this requirement if the use is temporary (e.g., weekend house guests sleeping on a pull out couch in the living room or den.)

Unfinished basements

If the basement will be unfinished at the time of permitting, it will be counted as one additional bedroom. If the basement is later finished, a permit for increased use will be required if the basement is proposed to have more bedrooms than allowed by the current septic permit.

Possible room use

A room that is not used for sleeping currently, but may be used for sleeping in the future, will be considered a bedroom under the following circumstances:

- It's labeled as a bedroom on the floor plans; or
- It has a minimum floor area of 70 square feet with a window or door to the outside (regardless of whether the egress is legal by building department standards) and it has the expected degree of privacy typical of a bedroom; or
- It's an open loft area that has at least 70 square feet of floor space, and no other rooms access off of it.
- It's a room with downward-tapering ceilings with at least 70 square feet, not counting any areas where the ceiling is less than 5' tall.

A room that is not used for sleeping or labeled a bedroom will not be counted a bedroom under the following circumstances:

- It is obviously a kitchen, bathroom, living room, dining room, laundry room, storage room (with no windows or with ceilings less than 5' tall), utility room or family room
- It has an arched doorway that lacks a door, half walls, or other architectural features that limit privacy or use as a bedroom (such as sloped floors in a home theater).
- It has no egress or source of light to the outside.
- It's used as a passage to other rooms, stairs, or bathrooms unless this is the only sleeping area in the dwelling
- It's not finished living space, such as a storage shed, potting shed, greenhouse or shop.

Buildings not connected to water or septic

A separate building without plumbing or running water may be considered as one or more additional bedrooms to a structure with plumbing or running water. Examples include a bunk house or artist studio.

Appendix F(continued)

Quick Reference Table

The table below is intended to be used as a reference by the Department, when determining whether a room (that's not currently being used for sleeping) should be counted as a bedroom for the purpose of septic system sizing. The department will make a decision based on all available information and a single item (whether an obstacle or support) might not disqualify a room from being counted as a bedroom.

Obstacles to Bedroom Designation	Support for Bedroom Designation
The room is obviously a kitchen, bathroom, living room, dining room, laundry room, storage room (without windows) or family room.	Legal Egress
Large Entryway, no door, half walls, or other features that limit privacy.	Has a Closet
Low Ceilings	Area greater than 70 sf
No source of ventilation or lighting from outside	Currently used as a bedroom
Rooms that are used as a passage to other uses	Defined as bedroom by Assessor or building plans
Open Lofts that lead to other rooms	Rooms Adjacent to Bathroom
Media rooms with sloped floors	On second level and not bathroom
Room with mechanical facilities or laundry plumbing connections	Rooms in accessory buildings without plumbing
Room in separate building that is not finished living space, such as a storage shed or greenhouse	

NOTES:

Expected Privacy: This term is difficult to define. The maximum level of privacy a room could offer is if it has four walls and a closable door. However, the absence of one of those components does not necessarily limit the expected privacy to a degree in which the room could not be reasonably used as a bedroom. For instance, an expanded entryway such as a wide archway with no door *can* remove a room's ability to offer privacy, but that archway must be located in such a way that the room becomes open to the adjacent portion of the home. Conversely, the same door-less entryway could exist, but could be positioned so that you enter the room and then turn 90 degrees to continue further into the room. Picture a public restroom that has been designed so that there are no doors in the entry. While entering, one makes a series of turns that create a degree of expected privacy. This is why the department looks closely at the details of interior layouts when determining the level of expected privacy, and each case is a little bit different.

Lofts: Lofts do not have four walls, but are elevated above the rest of the living space. More often than not, a bed can be tucked away so that it is not visible to those in the living room or kitchen. In addition, the vast majority of lofts we have come across are used as sleeping space. This is especially true in recreational cabins where, although seasonal, use is generally high for short periods and sleeping space is generally limited. All that said, a loft will not be counted as a bedroom if there is a clear reason that it would be unlikely to be used for sleeping. Examples include a loft that serves as an entryway into another room or rooms, or one that has less than 70 square feet.

Limitation/Disclaimer: This definition of "bedroom" is only applicable when estimating wastewater flow from a dwelling. It cannot be used to determine the adequacy or safety of a room for sleeping purposes. For adequacy and safety requirements, please contact the applicable Building Department.

Appendix G: Seeley Lake Special Management Area



REGULATION 2
LARGE GROUP FUNCTION PUBLIC HEALTH PERMITS
Adopted 6/21/2016, Effective 7/1/2016

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- 1. Purpose.** The purpose of this regulation is to establish public health standards for the management of large groups to protect public and environmental health and safety. Such standards are designed to help ensure safe food preparation and handling, and adequate provision of toilet facilities, potable water, waste disposal, and medical services. The regulation also clarifies that it is the applicant's responsibility to coordinate with and notify agencies involved in traffic control, parking, law enforcement and fire protection.
- 2. Authority.** Authority for this regulation is provided for in 50-2-116, MCA; under which a local health board must identify, assess, prevent and ameliorate conditions of public health importance through inspections and abatement of nuisances, and protect the public from conditions of public health importance by ensuring the removal of filth or other contaminants that might cause disease or adversely affect public health. A local board of health may adopt rules for the control of communicable diseases, for the removal of filth which might affect public health, and to implement public health laws.
- 3. Definitions.** In addition to the definitions in the Administrative Section of the Code, the following definitions apply for the purpose of this regulation.
 - (A) "Event" means the same as "Large Group Function."
 - (B) " Large Group Function" means an event that has or is expected to have one thousand (1,000) or more persons simultaneously gathered in a common area, both public and private, for three hours or more. Large Group Function does not include a gathering at a place such as a theater, auditorium, or stadium where permanent potable water and toilet facilities are available, and normal operational procedures are in place to adequately serve the expected number of attendees.
 - (C) "Multiple Day Event" means a celebration or event that takes place over 2 or more consecutive days.
 - (D) "Recurring Event" means a celebration or event that takes place on non-consecutive days or occurs more than once in a single year. Examples include a food and music series that repeats every Wednesday through the summer or a concert series that takes place on several dates throughout the year.

(E) “Working Day” means Monday through Friday, exclusive of holidays observed by county government.

4. Application for Large Group Function Public Health Permit.

(A) Application deadline. An applicant shall submit a complete application and fees to the Department at least 5 working days before the date of the large group function. Applications will not be accepted less than 5 working days before the event.

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

- (1) Name, address, and phone number of the person organizing the large group function; or if other than a natural person, the name, address, and phone number of a responsible officer.
- (2) The purpose, dates, and hours of the large group function.
- (3) The location of the event, including the legal address and legal description of the parcel(s).
- (4) A site plan showing the parcel(s) boundaries and the layout of the large group function, including where food service, potable water, toilet facilities, solid waste facilities, camping and first aid will be located, the means of entry and exit, and areas for parking.
- (5) The estimated maximum number of people who will be simultaneously gathered for three hours or more at the large group function.
- (6) Evidence that the proposal will meet the minimum standards of Section 6 of this rule.
- (7) Written permission from the landowner to have a large group function on the property.

(C) Application fees. A fee established by the Board must be paid when the application is submitted to the Department. Application fees are non-refundable. The fee may be based on one or more of the following: expected attendance, length of the event, and on how many working days exist between the start of the event and when the application is submitted to the Department.

(D) Review by Department. The Department shall determine if an application is complete and whether the proposal meets this regulation within 10 working days after receipt of an application, or at least one working day before the event, whichever occurs first.

5. Permits.

(A) Permit Required

- (1) A person may not conduct a large group function without a valid permit from the Department.
- (2) The Department may charge three times the highest applicable permit fee when a large group function is conducted without a valid permit.
- (3) The Department may revoke a permit if there are unapproved changes in plans or facilities after the permit has been issued, or there is falsification or significant error in information submitted by an applicant.
- (4) Failure to obtain a permit or to adhere to this regulation or the conditions of the permit may result in enforcement action in accordance with Section 3 of the Administrative Section of this Code.

(B) Permit Requirements

- (1) Before the Department may issue a permit, the applicant must demonstrate that adequate provisions have been made for toilet facilities, solid waste disposal, food and beverage service, water supply, camping, outdoor burning and first aid.
- (2) The applicant must have written permission from the property owner or owner’s agent to hold the large group function on the property.

- (3) The Department may place conditions on the permit which address issues of public health importance or that help ensure the protection of public health and safety during the large group function.
- (4) The applicant must ensure that the permit conditions are complied with during the large group function.
- (5) The applicant is responsible for consulting with applicable law enforcement agencies, fire departments, and medical service providers on issues such as traffic safety, security, emergency response and potential fire dangers.
- (6) The large group function permit does not relieve the applicant of complying with all other applicable laws and regulations, including but not limited to laws and rules regarding public nuisance, noise, alcohol service, fire and traffic safety.

6. Minimum Standards.

(A) Handwashing and Toilet Facilities.

- (1) Organizers shall provide at least one hand wash station for every 5 toilets and at least one toilet for each 200 people expected to attend. If alcohol will be served or the layout of the event requires it, the Department may require additional toilet facilities.
- (2) During the event:
 - (a) Permanent bathrooms must be kept clean and stocked with toilet paper;
 - (b) If hand wash sinks are available, they must be stocked with soap and sanitary means of drying hands; and
 - (c) Chemical toilets must be kept stocked with toilet paper and serviced as often as needed to maintain sanitary conditions.

(B) Solid Waste Disposal

- (1) Organizers shall provide adequate solid waste capacity to meet the requirements of Regulation 3 of the Missoula City-County Health Code.
- (2) During the event: trash cans must be located in convenient locations throughout the event site, and be emptied often enough so that they do not overflow;
- (3) If storage or service is inadequate, the organizer must make arrangements to obtain more capacity or service.
- (4) After the event, solid waste must be stored in covered containers.
- (5) Solid waste must be disposed of in a licensed landfill within 72 hours of the end of the event.

(C) Food Service

- (1) Organizers may not allow a person to provide food to the public at an event if the person is not licensed, permitted or registered, and is required to be by Title 50, Chapter 50 MCA.
- (2) A food service must comply with Regulation 4 of the Missoula City-County Health Code.

(D) Potable Water

- (1) A food service must use potable water as required by ARM 37.110.260, 5-101.11.
- (2) Water provided or made available at the event must be from a public water supply, commercially bottled water or from a private well meeting the requirements of (3).
- (3) A non-public water supply proposed to serve the event must be tested for total coliform and *E. coli* by a certified lab, and be shown to not be contaminated, before the Department may issue a permit. The water test must have been analyzed within the 6 months previous to the application and within 12 months previous to the event.

(E) First Aid and Medical Services

- (1) First Aid must be available to treat minor injuries and to help an injured person until emergency transport is available.
- (2) First aid shall include, at a minimum, at least one CPR certified person and a first aid kit that meets or exceeds requirements of the Class A kit in the American National Standards Institute (ANSI) Standard Z308.1-2015.
- (3) Organizers must have a plan for responding to medical emergencies during the event. The plan must take into account:
 - (a) the types and numbers of injuries likely to be associated with the event;
 - (b) how long it will take emergency responders to get to the large group function; and
 - (c) how easily emergency responders will be able to get to the injured person.
- (4) Organizers must have a vomit and diarrhea clean-up plan and are responsible for cleaning up vomit and diarrhea.

(F) Outdoor Burning

- (1) Organizers must ensure that outdoor burning complies with the Missoula City-County Air Pollution Control Program regulations.

(G) Camping

- (1) If organizers offer temporary camping outside established campgrounds, there must be adequate and convenient bathroom facilities, solid waste disposal, and potable water to serve the campers.
 - (a) There must be toilet facilities within 300 feet of any campsite.
 - (b) One or more potable water stations must be available to the campers. Potable water must meet the requirements of Section 6(D)(2) and (3).
 - (c) Solid waste containers must be located within 400 feet of any campsite, and must be large enough, or emptied often enough to ensure that all garbage is stored in containers.

7. Inspections

- (A) The Department may conduct inspections before the event begins and during the event to evaluate compliance with permit conditions and this regulation.

REGULATION 3: SOLID WASTE MANAGEMENT

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1. 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.

2. 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.

3. 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.

4. 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 judgement 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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
Adopted October 15, 2015

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1. Purpose. The purpose of this regulation is to prevent and eliminate conditions and practices which endanger public health.

2. Authority. Authority for this regulation is provided for in 50-2-116, MCA: under which a local health board may adopt rules that do not conflict with those adopted by the state for the control of communicable diseases; for the removal of filth which might affect public health; and to implement public health laws.

3. Regulations Incorporated by Reference.

(A) A retail food establishment or temporary food service located in Missoula County shall comply with the Administrative Rules of Montana, Title 37, Chapter 110, Subchapter 2, as authorized by the Montana Code Annotated, Title 50 Chapter 50 concerning Food Service Establishments.

(B) A wholesale food establishment shall comply with the Administrative Rules of Montana, Title 37, Chapter 110, Subchapters 1 and 3, as authorized by Montana Code Annotated, Title 50, Chapter 57 concerning Wholesale Food Establishments.

(C) A cottage food operation shall comply with the Administrative Rules of Montana, Title 37, Chapter 110, Subchapter 5.

4. Definitions.

(A) “Commissary” means “servicing area” as defined in ARM 37.110.260(1)(a), (1-201.10).

(B) “Establishment” means either a retail food establishment as defined in 50-50-102(21), MCA, or a wholesale food establishment as defined in 50-57-102(4), MCA.

(C) “High-Risk Violation” means a risk factor or intervention violation identified in ARM Title 37, Chapter 110, Subchapter 2, or similar violation for wholesale food establishments in any of the following categories:

- (1) Time-Temperature Controls
- (2) Personal Hygiene and Employee Health Controls
- (3) Controlling Hands as a Vehicle of Contamination: Handling and Hand Washing
- (4) Cross-Contamination Prevention
- (5) Cleaning and Sanitizing
- (6) Safe Sources
- (7) Water/Sewage
- (8) Demonstration of Knowledge

(D) “License” means a document issued by the Montana Department of Public Health and Human services that authorizes a person to operate an establishment.

(E) “Multiple Day Event” means a celebration or event that takes place over 2 or more consecutive days.

(F) “Private, religious, fraternal, youth, patriotic, or civic organization” means a not-for-profit group that serves food to promote the public good or raise money for a charitable purpose.

(G) “Recurring Event” means a celebration or event that takes place on non-consecutive days or occurs more than once in a single year. Examples include a food and music series that repeats every Wednesday through the summer or a concert series that takes place on several dates throughout the year.

(H) “Self-Contained” means a mobile food establishment as defined in 50-50-102 (13), MCA that meets the following conditions:

- (1) Has its own power supply;
- (2) Has all equipment and sinks mounted in a fixed configuration in/on the mobile food establishment; and,
- (3) Travels and operates as one unit.

(I) “Self-Sufficient” means a self-contained mobile food establishment that does not have to rely on a commissary to support the menu.

(J) “Temporary Food Service” means a food operation as defined in 50-50-102(22), MCA, or a non-profit temporary food establishment as outlined in 50-50-102(21)(c)(xiii).

5. General Requirements.

(A) A person may not operate an establishment in Missoula County without a valid license as required in 50-50-201, MCA, or 50-57-201, MCA.

(B) A person may not operate a cottage food operation in Missoula County without a valid registration as required in 50-50-117, MCA.

(C) A person may not operate a temporary food service in Missoula County without a valid permit as required in 50-50-201, MCA.

(D) When an establishment, temporary food service, or cottage food operation changes owners, a license, permit or registration is not transferable. Owners shall notify the department when they permanently close their operation.

(E) New owners may not operate until the establishment, temporary food service, or cottage food operation:

- (1) Meets all current, applicable health standards or a schedule of compliance has been approved by the Department;
- (2) Has completed a change of ownership review, including any necessary pre-opening inspections; and
- (3) Has a valid license, permit, or registration.

(F) A catering endorsement cannot be used to serve food directly to the public when there is no catering contract with a specific party or when a separate food service license or endorsement is required.

(G) A private, religious, fraternal, youth, patriotic, or civic organization that serves food for no more than four days in a 12 month period does not need to get a license, permit, or cottage food registration providing:

- (1) The organization notifies the Department with sufficient information to establish that the organization qualifies for this exemption;
- (2) The organization notifies the Department in advance of their menu, setup, and dates of operation, and receives food safety guidance; and,
- (3) They serve at an event where the organization is the only food vendor.

(H) Non-profit temporary food services may serve cottage foods without registration providing they follow the cottage food rules in ARM Title 37, Chapter 110, Subchapter 5.

6. Handling Restricted.

(A) Bare hand contact with ready-to-eat foods is prohibited unless a plan is submitted to the Department as outlined in ARM 37.110.260(1)(c), (3-301.11) and a glove exemption is issued.

(B) A glove exemption is valid for two years. Before a glove exemption may be renewed, information must be submitted to the Department showing that the establishment still meets the requirements of this rule.

(C) Department may revoke a glove exemption if it observes non-compliance.

7. Temporary Food Services.

(A) The Department shall issue a temporary food service permit following the submittal of fees, a complete application and an approved plan review demonstrating compliance with applicable regulations.

(B) Permit Types

- (1) The Department may issue a temporary food service permit in one of three categories:
 - (a) Single Day Event permit,
 - (b) Multiple Day Event permit, or
 - (c) Recurring Event permit.
- (2) A multiple day event is limited to 21 consecutive days at a fixed location.

- (3) A recurring event is limited to a total of 45 days with a fixed menu. The location may change if the event takes place in more than one location within the county.
- (4) The following conditions apply to a recurring event:
 - (a) At least 10 days before the first date of the recurring event, the coordinator shall submit to the Department a list of dates that the event will take place and a list of vendors who will be at the event. Additional dates may be approved after the recurring event begins if submitted to the Department at least 30 days before the date to be added.
 - (b) The coordinator or the coordinator's representative must be available during each event to respond immediately to problems affecting food service;
 - (c) At least 5 working days before each event date, the coordinator shall submit a list of any new participating food vendors to the Department;
 - (d) The coordinator must ensure that a temporary food service has an approved temporary food service permit before it operates at the recurring event.
- (5) Event Series. A series of events put on by a single organization may qualify as a recurring event for the purpose of permitting if a single coordinator will oversee the entire series.

(C) General

- (1) A person may not create an event or celebration in order to circumvent the requirements of the state and local food regulations. The Department has the sole discretion to determine whether an event or celebration qualifies under this regulation.
- (2) If an event or celebration is longer than the limitations listed in (B), a person operating a temporary food service shall designate which days he or she will operate before the Department may approve the permit.
- (3) A person may not obtain more than one temporary food service permit for a single event in order to operate longer than allowed in (B).
- (4) If a single entity has more than one temporary food service location at a single event, each location must be permitted, except as provided in 50-50-201 MCA.
- (5) A temporary food service permit is valid in the calendar year issued. If an event spans more than one calendar year, a separate permit is needed to operate in each year.
- (6) Changes to the approved menu(s), setup, or location may require additional plan review, and if extensive, a new permit.
- (7) A temporary food service that operates without a permit may be charged a plan review fee and two times the cost of permitting fees. Failure to pay these fees is a violation of this code and the Department may withhold approval for future permits until the fees are paid.

(D) Menu and Operational Requirements

- (1) A temporary food service's menu must be simple and onsite food preparation must be limited to *quick cook-and-serve* and *simple assemble-and-serve*;
- (2) All other food preparation must be done in an approved commissary;
- (3) During transport and at the event, food must be held and dispensed in such a way as to prevent contamination and equipment and utensils must be clean, sanitized, food-grade and in good repair; and,
- (4) Appropriate hot holding and refrigeration equipment must be used to keep the food in allowable temperature ranges unless time is being used as a control. Mechanical refrigeration may be required for raw animal products.
- (5) Reheating at the event site is allowed only if appropriate equipment designed for rapid reheating is used.

(E) Booth Requirements

- (1) A temporary food service may operate from a booth without sides if there is minimal risk from pests or inclement weather, and food can be secured from tampering and protected from contamination.
- (2) If the booth will be left up overnight:
 - (a) The booth must include walls;
 - (b) All food contact surfaces must be cleaned and sanitized before beginning operation and after ending operation each day; and
 - (c) Food must be secured and stored in such a way as to prevent contamination, tampering or rodent/pest infestation.

8. Mobile Food Establishment

- (A) A mobile food establishment must be self-contained. Separate tables for cash boxes, point of sale systems, customer dining, or other functions not related to food service, prep or storage, may be used without additional permitting.
- (B) If a mobile food establishment is not self-sufficient, the operator shall use a licensed commissary for preparation and storage.
- (C) A mobile food establishment must have permanently mounted water and wastewater tanks unless it is designed as a pushcart or otherwise approved by the department.
- (D) A mobile food establishment operator shall maintain a servicing log that documents where and when they obtain fresh water and dispose of wastewater.
- (E) A mobile food establishment that alters its menu or setup so that it is no longer self-contained must obtain a temporary food service permit.
- (F) A mobile food establishment operating in Missoula County must meet all applicable local codes to operate.

9. Reinspection Fees

The Department shall charge a fee established by the Board for violations of the rule which are not corrected or persist after two inspections to the establishment within 365 days from the date of the original inspection. Failure to pay the fee is a violation of this Code.

10. Closure

- (A) The Department may close an establishment, a temporary food service, or a cottage food operation under the following conditions:
 - (1) If a foodborne illness outbreak is likely associated with an establishment, a temporary food service, or a cottage food operation and the Health Officer deems that closure is necessary to protect public health and/or correct the circumstances contributing to the outbreak;
 - (2) If a high-risk violation which creates an imminent or present danger to public health is not corrected immediately to the satisfaction of the Department;
 - (3) When a follow-up inspection of an establishment or temporary food service yields two or more of the same high-risk violations noted on a previous inspection and the establishment has been notified closure may be a consequence of noncompliance as described in (C); or
 - (4) When an establishment operates without a valid license, a temporary food service operates without a valid permit, or a cottage food operation operates without valid registration.

(B) No person may operate an establishment, a temporary food service, or a cottage food operation which has been closed by the Department.

(C) Before the Department closes an establishment or a temporary food service based on repeat high-risk violations, the Department shall notify the establishment or temporary food service in writing that it may be closed to the public and a closure notice placed at each customer entrance if two or more of the same high-risk violations remain on the follow-up inspection to be conducted within 10 working days.

(D) When the Department closes an establishment, temporary food service, or cottage food operation for any reason:

- (1) The Department must deliver a written explanation of the reasons for closure and a copy of any pertinent inspection forms to the operator or person in charge;
- (2) The closure order is effective upon delivery of the notice, and no new customers may be served food or drink. The Department may require the operator to notify any current customers of the closure;
- (3) A conspicuous notice of closure must be posted at each customer entrance of an establishment or temporary food service by a police officer, sheriff, or sanitarian; however, a notice of closure does not need to be posted at the entrance of a cottage food operation.
- (4) No person, except under the direction of the Department, may remove or alter the notice of closure.

(E) When an establishment, temporary food service, or cottage food operation has been closed, 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;
- (2) The Department approves the plan of correction;
- (3) The Department inspects the establishment, temporary food service, or cottage food operation and determines that the approved plan of correction is being followed; and,
- (4) The notice of closure previously posted is removed by, or under the direction of, the Department.

(F) An establishment, temporary food service, or cottage food operation may be opened earlier than 24 hours following a voluntary meeting attended by the operator or person in charge, the Division Director or designee and the inspecting sanitarian, at which the provisions of subsection (E) are demonstrated to be met.

(G) Once an establishment re-opens:

- (1) The Department shall conduct additional inspections as necessary to evaluate whether the plan of correction is being followed and whether any high-risk violations exist;
- (2) The Department may require an operator to modify a plan of correction;
- (3) An establishment may be closed again by the Department if:
 - (a) any conditions in (A) exist; or
 - (b) the plan of correction is not being followed.

11. Required Certification and Food Safety Training

(A) Certified Food Protection Manager

- (1) An establishment or temporary food service that is required to have a Certified Food Protection Manager as per ARM 37.110.260(1)(b), (2-102.12) must have one certified person dedicated to its location, except as provided by (3).

(2) Certified Food Protection Manager certificates must be posted or maintained accessible onsite.

(3) The Department may approve one certified food protection manager for multiple facilities if the operator submits a written plan that explains how one Certified Food Protection Manager can provide adequate food safety leadership onsite at each location.

(4) The Department may revoke approval for one Certified Food Protection Manager for multiple facilities if training, operational, or compliance issues arise. The operator shall provide a Certified Food Protection Manager for each location within 45 days of the written notice revoking the approval.

(B) Additional Required Training. In addition to the required Certified Food Protection Manager, an operator or person in charge shall complete a food safety training program approved by the Department within six months of the following:

(1) Whenever an establishment, temporary food service, or cottage food operation has been closed in accordance with subsection 10.

(2) Whenever a reinspection fee must be charged in accordance with subsection 9; or,

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

12. Plan Review

(A) A person owning an establishment, including one in conjunction with a school or public accommodation, shall submit properly prepared plans and specifications to the Department for review and approval before construction, remodeling or conversion of an existing structure begins or before making significant changes to a menu.

(B) The Department may require a plan review at change of ownership.

(C) An operator of a temporary food service shall submit plan review materials and a plan review fee to the Department. A temporary food service may not begin operation until the Department approves the plans.

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

(E) Failure to comply with plan review or cottage food registration requirements is a violation of this Code and may result in the Health Officer's refusal to validate the license, or to issue a permit or registration.

13. Wild Mushrooms.

(A) A licensee must demonstrate competency in wild mushroom identification by completing a wild mushroom identification course or accredited coursework in mycology, or by providing other documentation of competency approved by the department.

(B) The department may waive the requirement to use a commissary for storing, drying and processing wild mushrooms.

(C) Wild mushrooms must be stored in a clean and protected area.

(D) Packaged wild mushrooms must comply with labeling laws.

14. Circumvention.

(A) A person may not knowingly make false statements, representations, or certifications in, or omit information from, or knowingly alter, conceal, or fail to file or maintain any notice, application, record, report, permit, plan or other document required to be filed or maintained in order to evade these regulations.

(B) A person may not create contracts, alter facilities or operations, install equipment outside of facility, or operate in a manner which evades these or other applicable regulations.

Regulation 5

Water Well Protection

Amended 10/17/13

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1. General.

- (A) Purpose. The purpose of this regulation is to protect the quality and potability of water for public water supplies and domestic uses by tracking and verifying the location of new wells and to ensure compliance with 50-2-116 MCA, the Missoula City-County Health Code Regulation 1, ARM 36.21.638, ARM 17.36.323, and the Missoula Municipal Code, Section 13.26.090.

2. Definitions.

- (A) Absorption System: a secondary treatment system including conventional drainfields, alternative systems, and experimental systems used for subsurface disposal of pre-treated waste effluent.
- (B) Community Water System: any public water supply system which serves at least ten service connections used by year round residents or regularly serves at least 25 year round residents.
- (C) Contaminant: a biological, chemical, physical, or radiological constituent in water that is or may become injurious to public health, safety, welfare, or to the environment.
- (D) Department: the Missoula City-County Health Department.
- (E) DEQ: the Department of Environmental Quality
- (F) Groundwater: the water in the zone of saturation that fills all pore spaces of the subsurface geologic material.
- (G) Potable Water: water that is free of coliform bacteria and contaminants in concentrations that may cause disease or harmful physiological effects, is safe for human consumption and meets the State drinking water standards set forth in 75-6-201 MCA and ARM 17.30.100.
- (H) Public Water Supply: a system for the provision of water for human consumption from any community well or other water supply that is designed to serve or serves 25 or more persons daily at least 60 days out of the calendar year or has at least 15 service connections.
- (I) Well Isolation Zone: the area within a 100-foot radius of a well.

(J) Wells: an excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed and includes any related system(s) of pumps, pipes, controls, reservoirs, or mechanical devices used for the purpose(s) of: location, diversion, artificial recharge, acquisition of groundwater or for any other similar purpose.

(1) “Well” includes but is not limited to:

- (a) Extraction well: a well used to extract water for treatment and other processes.
- (b) Heat exchange well: a well used for extracting or injecting groundwater for heating or air conditioning purposes.
- (c) Industrial well: a well that is used to supply water for industrial purposes, fire protection, or similar nonpotable uses.
- (d) Irrigation well: a well that is used to provide water for plants, livestock, or other agricultural purposes.
- (e) Test well: a well that is used to obtain information on groundwater quantity, suitability as a drinking water source, or aquifer characteristics for the purpose of designing or operating a water supply well.
- (f) Water supply well: a well that is used to provide potable water for drinking or domestic purposes.

(2) “Well” for the purpose of this regulation does not include:

- (a) A monitoring well used solely to detect the presence of a contaminant in groundwater or soil, or monitor groundwater levels.
- (b) An oil or gas well constructed under the jurisdiction of DEQ, except a well that is converted to use as a well covered by this regulation;
- (c) A well used solely for the purpose of:
 - i. Dewatering during construction
 - ii. Stabilizing hillsides or earth embankments
- (d) The following excavations:
 - i. A hole or excavation for an absorption system soil evaluation test,
 - ii. A drill hole for seismic exploration where the drillhole is less than twenty-five (25) feet in depth,
 - iii. A geotechnical exploratory boring.

3. Permit Required

- (A) A person may not construct a well within Missoula County without first obtaining a permit from the Department.
- (B) Application for a permit must be made by the property owner(s) or his/her authorized representative on forms provided by the Department. The application must include:
 - (1) Name and address of the owner and applicant if different, and a complete legal description and address of the property on which construction of the well is proposed.
 - (2) Either of the following:
 - (a) A lot layout approved by DEQ as part of a Certificate of Subdivision Approval, showing the proposed building location and any deviations or changes to the approved layout; or
 - (b) A site plan showing the location of:
 - a. The proposed well;
 - b. Existing and proposed sewage facilities;
 - c. Existing and proposed buildings;
 - d. Property lines and easements;
 - e. Any floodplain or surface water within 100’ of proposed well location;

- f. Any applicable non-degradation mixing zones; and
 - g. Any applicable well isolation zones.
- (3) The intended use of the well. Applications for non-drinking water wells must include the diameter of the well.
- (4) The appropriate fee established by the Board.
- (5) If applicable, written and recorded authorization allowing a well isolation zone to cross onto neighboring private property.
- (C) The Department may issue a permit for a well after all the requirements of this section have been met.
- (D) A permit expires if the well for which the permit was issued is not installed, inspected and approved by the Department within one year after issuance.
- (E) A permit may be extended one time by the Department for one year if:
 - (1) The permit holder requests an extension from the Department prior to the expiration of the permit; and
 - (2) The requirements of the permit and this regulation are met; and
 - (3) Any differences in permit application fees are paid in full.
- (F) If a well is constructed in the approved location and fails to produce adequate water:
 - (1) The driller must notify the Department; and
 - (2) A new site plan must be submitted showing both well locations unless proof that the original well has been abandoned is submitted to the Department; and
 - (3) A new permit and fees may be required.
- (G) The Department shall charge a fee three times the permit application fee when the construction of a well starts prior to a valid permit being issued. This provision shall become effective 90 days following the effective date of this regulation.

4. Siting Requirements

- (A) A person may not construct a well where the location of that well would cause a violation of:
 - (1) An approved Certificate of Subdivision Approval;
 - (2) An approved location for a sewage treatment or disposal system;
 - (3) The requirements of Regulation 1.
- (B) The property owner has the ultimate responsibility to determine the location of the well prior to construction. The owner or driller may request a site inspection by the Department prior to drilling to confirm that the proposed well location meets the requirements of this rule. The Department may charge a fee to be determined by the Board to cover the cost of an additional site inspection.
- (C) If a parcel has a Certificate of Subdivision Approval, all wells must be constructed in the locations shown on the approved site plan. If there is no Certificate of Subdivision Approval for the parcel, the location of the well(s) must conform to the minimum setback requirements shown in Table 1. In addition, wells should remain 100 feet from surface water and 10 feet from any floodplain.
- (D) Wells that cannot meet the requirements of Table 1 must be sited and constructed to provide the most setback distances practicable. Wells that cannot meet the minimum setback requirements in ARM 36.21.638 must receive approval from the Montana Board of Water Well Contractors pursuant to ARM 36.21.680 before a permit may be issued.

Table 1.

Well Use	Absorption Systems	Septic Tanks & Other Components*	Sealed Sewer Lines
Residential Drinking Water	100	50	10
Community or Public Water Supply	100	100	100
Extraction	100	50	10
Heat Exchange	100	50	10
Industrial	100	50	10
Irrigation	100	50	10
Testing	100	50	10

*Other Components include sewer lines without water tight connections, grease traps, dosing tanks, pumping chambers, intermittent and recirculating filters, package plants and evapotranspiration systems.

- (E) A proposed well isolation zone may not extend onto adjacent private property without written and recorded authorization from the adjacent property owner. This provision does not apply to proposed wells on parcels created before October 1, 2013 or on parcels created as part of a Sanitation in Subdivision application submitted to the Department before October 1, 2013.

5. Inspections

- (A) Prior to being used, all wells require a final inspection of the well location by the Department unless specific permission has been granted by the Department.
- (B) When final approval is withheld, a written notice of deficiencies and required corrective action must be provided to the applicant within ten (10) business days of the inspection. The applicant or licensed well driller must notify the Department upon correction of any and all deficiencies. A reinspection must be made to confirm the deficiencies have been corrected and the system is in compliance with the regulations.
- (C) The applicant or licensed well driller must notify the Department that a well is ready for inspection within two (2) business days of completion of the well.
- (D) The applicant or licensed well driller need not be present during the inspection.
- (E) A site inspection may be required by the Department or requested by the applicant before construction of the well commences to verify the location of the well meets the requirements of this regulation. A fee established by the Board may be required for a site inspection conducted prior to construction of a well.
- (F) Acceptance of the permit by the applicant confers upon the Department the authority to access the well construction site at reasonable times for the purpose of making examinations and investigations to determine compliance with these Regulations.

REGULATION 6: DROP-IN CHILDCARE FACILITIES

Adoption Date: May 17, 2012

Effective Date: September 1, 2012

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1. Purpose. The purpose of this regulation is to prevent and eliminate conditions and practices which endanger public health in unlicensed drop-in childcare facilities.

2. 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 or conditions of public health importance.

3. Regulations Incorporated by Reference.

All drop-in childcare facilities located in Missoula County shall comply with Administrative Rules of Montana, Title 37, Chapter 110, Subchapter 2 as authorized by MCA Title 50, Chapter 50, concerning Food Service Establishments with a few exceptions listed in this rule.

4. Definitions.

(A) “Critical violation” means a high-risk violation in any of the following categories that can adversely affect public health, or does not sufficiently prevent the spread of communicable disease:

(1) Health: exclusion or isolation of ill children and staff; onsite CPR/First Aid certified staff; proper medication administration and storage; immunized children and staff; handling and cleaning of laundry; sufficiently stocked first aid kit.

(2) Sanitation: cleaning and sanitizing of toys, surfaces, and facility; safe food service; adequate hand washing; approved diapering procedure or area.

(3) Water/Wastewater: adequate and safe water supply; proper sewage disposal.

- (B) “Drop-in Childcare” means a facility that meets all of the following criteria:
 - (1) It is not licensed or registered by the state.
 - (2) It offers unscheduled care where the parent/guardian is not on the same premises.
 - (3) It has the primary function of providing care to children.

(C) “Premises” means the child care facility and the property immediately adjacent to it.

5. State Licensing or Certification by Missoula City-County Health Department Required.

- (A) Drop-in childcare facilities shall do one of the following by September 1, 2012:
 - (1) License through Department of Public Health and Human Services Quality Assurance Division and operate in compliance with Administrative Rules of Montana, Title 37, Chapter 95, Subchapter 1100; or,
 - (2) Contact the Missoula City-County Health Department for a certification inspection as an unlicensed drop-in childcare facility.
- (B) Drop-in childcare facilities that choose not to license must have a certification inspection annually by Missoula City-County Health Department.
- (C) The drop-in childcare facility shall pay the fee allowed by MCA 52-2-735 (5) per inspection.
- (D) If the Department determines that the drop-in childcare facility meets the requirements in this regulation, and the facility has paid all fees, a certificate shall be issued to the facility good through the end of the following calendar year.
- (E) The drop-in childcare facility shall post the certificate in a location visible to the public.

6. Water, Wastewater, and Solid Waste Disposal.

- (A) A drop-in childcare facility shall provide an adequate supply of potable water.
 - (1) The water system must be either:
 - (a) A public water supply approved by the department of environmental quality.
 - (b) A non-public system approved by the Department.
 - (2) A public water supply must be operated in accordance with Administrative Rules of Montana Title 17, Chapter 38, Subchapters 1 and 2.
 - (3) A non-public system must
 - (a) Test for total coliform and fecal coliform before opening, and every January and July. Results must be negative for total coliform and fecal coliform.
 - (b) Test for nitrate before opening, and every three years. Nitrate levels may not exceed 10mg/L.

- (4) All water testing records must be kept onsite and made available for review.
- (B) A drop-in childcare facility shall provide an adequate wastewater disposal system.
 - (1) The system must be either:
 - (a) A public system approved by the department of environmental quality.
 - (b) A non-public system approved by the Department.
 - (2) The sewerage system must comply with Regulation 1 of this code.
- (C) A drop-in childcare facility shall provide adequate solid waste disposal in compliance with Regulation 3 of this code.

7. Health.

- (A) A drop-in childcare facility shall safeguard children's health against infectious disease by:
 - (1) Obtaining information from the parent/guardian that includes:
 - (a) Contact information for the child's health care provider;
 - (b) Allergen information;
 - (c) A general health statement that says that the child is in relatively good health and has been free from communicable diseases and the symptoms listed in (2) for at least 24 hours prior to drop off.
 - (d) Emergency contact information for parent/guardians.
 - (e) Proof of immunization.
 - (2) Excluding children from the facility if they have the following symptoms upon arrival, during attendance, or in the 24 hours prior to arrival as indicated in the general health statement from the parent/guardian:
 - (a) A fever greater than 101F;
 - (b) Vomiting;
 - (c) Diarrhea;
 - (d) A bacterial infection such as strep throat, scarlet fever, impetigo, conjunctivitis, or a skin infection unless on antibiotics for 24 hours prior.
 - (e) Chickenpox with active sores;
 - (f) Jaundice; or
 - (g) Uncontrollable coughs and sneezes, difficulty breathing, stiff neck, poor food or fluid intake, or other signs of severe or contagious illness.
 - (3) Only admitting children immunized appropriately for their age as per ARM 37.95.140 unless a medical exemption signed by a physician is supplied.
 - (4) Health and contact information must be reviewed and kept current.
 - (5) The drop-in childcare must maintain a register for at least a year containing the following:
 - (i) The child's name;
 - (ii) The parent/guardian's name;

- (iii) The parent/guardian's phone number; and
- (iv) The parent/guardian's mailing address.

(B) If children develop symptoms of illness while at the facility, they must be isolated in an area other than the kitchen and the parent/guardian immediately contacted to come retrieve their child.

(C) Only medications supplied by the parent/guardian with written consent may be administered by drop-in childcare staff. Medications must be in their original packaging, labeled with the child's name, and have instructions for administration stored with the medication. Medications must be securely stored where children cannot access them.

(D) At least one staff member onsite must be certified in First Aid and CPR. Documentation of this certification must be onsite.

(E) Emergency numbers must be posted by the phone:

- (1) Poison Control;
- (2) Fire;
- (3) Police;
- (4) 911 or local hospitals.

(F) Staff health must be ensured by:

- (1) Excluding staff with symptoms listed in (A)(2) above;
- (2) Having records onsite that demonstrate staff members have current tetanus and MMR vaccinations.

(G) A first aid kit must be maintained on site and contain the following at minimum:

- (1) Sterile bandages;
- (2) A cold pack;
- (3) Scissors;
- (4) Tape and band-aids;
- (5) Tweezers; and
- (6) Disposable gloves.
- (7) Poison control number posted with the kit.

(H) 35 square feet of indoor play space must be provided per child not including the kitchen, bathroom, or storage areas.

8. Food Safety.

(A) Drop-in childcare facilities shall follow the Montana Administrative Rules for food service adopted by reference, with the exceptions noted in (B) below, as well as Regulation IV of the Missoula City-County Health Code for food service establishments.

(B) The following residential equipment may be used in place of commercial equipment if they meet the listed criteria:

- (1) Refrigerators able to hold 41F or lower;

- (2) Freezers able keep food frozen;
- (3) Dishwashers able to provide a sanitizing cycle capable of reducing pathogens by 99.9% through an uninterrupted heated dry cycle, heated rinse cycle, or chemical sanitizing cycle with 50-100ppm chlorine.
- (4) Cooking and heating equipment able to achieve required food temperatures and comply with building codes.

(C) A designated hand sink separate from that used for the bathrooms, bathing, and diapering is required.

(D) A three-compartment sink or dishwasher is not required if a two-compartment sink is available with an extra bin large enough to sanitize dishes that are washed manually.

9. Cleaning and Sanitizing.

(A) Bathrooms must be cleaned daily with a germicidal cleaner.

(B) All general surfaces such as tables and chairs must be sanitized daily with 50-100ppm chlorine or other chemical approved by the Department.

(C) All toys, play surfaces, and manipulatives must be sanitized at least once weekly with ¼ cup bleach to 1 gallon of water, be rinsed and then air dried. If these items are mouthed, they must be pulled from use and sanitized as described before they can be used again.

(D) If nap mats are available, they must be cleanable and non-absorbent and sanitized after each use with ¼ cup bleach to 1 gallon of water.

(E) If any blankets, pillows, or other bedding items are used onsite, they must be washed after use by one child and before use by another child. If they are washed onsite, they must be laundered in a machine able to reach a 140F initial wash temperature and tumbled dry in a heated cycle, or sent out to a professional laundry service.

(F) Surfaces in the childcare facility must be cleanable and in good repair. Areas that are subject to high-moisture or constant cleaning must be non-absorbent and able to hold up under normal use and required cleaning.

10. Diapering and Infant Care.

(A) If cribs are used, they must be cleaned and sanitized after use by one child and before use by another child, and the sheets and blankets changed.

(B) An approved diapering procedure must be followed.

(1) Gloves must be used.

(2) Diapers must be appropriately discarded in a diaper pail, a covered receptacle with a plastic lining that is inaccessible to children or wrapped in plastic bag taken directly outside to the dumpster.

(3) Hands must be adequately washed at a designated hand sink that is not used for food service. It must be stocked with soap, paper towels, and hot and cold running water.

(4) The diapering station must be sanitized after each use with $\frac{1}{4}$ cup bleach to a gallon of water.

(C) The diapering station must be cleanable and non-absorbent, and not pose a safety risk to the child.

11. Inspections.

(A) A drop-in childcare facility must allow the Department and any other regulatory agencies access during reasonable hours to assess compliance with this rule.

(B) The Department shall inspect drop-in childcare facility centers at least once per year.

12. Closure.

(A) The Department may close a drop-in childcare facility under the following conditions:

(1) If an outbreak is likely associated with the facility and the Health Officer deems that closure is necessary to protect public health and/or correct the circumstances contributing to the outbreak;

(2) If a violation which creates an imminent or present danger to public health is not corrected immediately to the satisfaction of the Department;

(3) When a follow-up inspection yields two or more of the same critical violations noted on a previous inspection, and the establishment has been notified closure may be a consequence of noncompliance as described in (B);

(4) When the drop-in childcare facility has not been inspected for compliance prior to operating, or denies the Department access to do so; or,

(5) When the drop-in childcare facility has not obtained a state license or a valid certificate from the Department.

(B) Before the Department closes a drop-in childcare facility for repeat critical violations, the Department shall notify the operator in writing that it may be closed to the public and a closure notice placed at each customer entrance if compliance is not met at the a follow-up inspection to be conducted within 10 working days.

(C) When the Department closes a facility for any reason:

(1) The Department must deliver a written explanation of the reasons for closure and a copy of any pertinent inspection forms to the operator or person in charge.

- (2) The closure order is effective upon delivery of the notice, and no new children may be admitted. The Department may require the operator to notify parent/guardians of children currently in care to come get them.
 - (3) A conspicuous notice of closure must be posted at each customer entrance by the Department.
 - (4) No person, except under the direction of the Department, may remove or alter the notice of closure.
- (D) When a drop-in childcare facility has been closed, 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 Department approves the plan of correction; and
 - (3) The Department inspects the establishment and makes a determination that the approved plan of correction is being followed; and
 - (4) The notice of closure previously posted is removed by, or under the direction of, the Department.

Regulation 7

Rabies Control

Amended 1/21/2016

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1. **Purpose.** The purpose of this regulation is to protect the public health, safety and welfare of the people and animals of Missoula County and to control and prevent the spread of rabies.
2. **Authority.** Sections 50-2-116(1)(f) and (g), MCA, require local boards of health to identify, assess, prevent and ameliorate conditions of public health importance and to protect the public from the introduction of and spread of communicable disease. Section 50-2-115(2), MCA, authorizes local boards of health to adopt regulations that do not conflict with regulations adopted by the Department of Public Health and Human Services for the control of communicable disease. Rabies or rabies exposure is identified as a reportable communicable disease pursuant to ARM 37.11.203.
3. **Incorporation by Reference.** In adopting this regulation, the Board finds that the rabies prevention and management recommendations set forth in the National Association of State Public Health Veterinarians, Inc., “2011 Compendium of Animal Rabies Prevention and Control” and in an official report of the American Public Health Association entitled “Control of Communicable Diseases Manual” provide an accepted scientific basis for regulations to prevent the spread of rabies. Therefore, the Board adopts and incorporates by reference the following publications, except where otherwise provided herein:
 - (A) “2011 Compendium of Animal Rabies Prevention and Control,” authored by the National Association of State Public Health Veterinarians. A copy of the Compendium can be found on the Environmental Health Department website.

- (B) The “Control of Communicable Diseases Manual, An Official Report of the American Public Health Association” (19th edition, 2008) which lists and specifies control measures for rabies. A copy of this document may be obtained from the American Public Health Association, 800 I Street NW, Washington, DC, 20001.

4. Definitions.

- (A) Animal: Any member of the order Mammalia, all of which are capable of being infected with and transmitting rabies.
- (B) Animal Control Officer: Person designated by the Local Health Officer to enforce the provisions of this Regulation.
- (C) Animal Control Shelter: The Missoula City-County Animal Control Shelter.
- (D) Animal Shelter: A public facility that is maintained by a government entity or a private facility providing contractual services to a government entity for the purpose of impounding or harboring animals.
- (E) Animal Welfare Organization: A facility used to house or contain dogs, cats or other domestic animals and owned, operated or maintained by an incorporated humane society or animal welfare society for the prevention of cruelty to animals or other recognized 501(c)(3) non-profit organization devoted to the welfare, protection and humane treatment of such animals.
- (F) Bite: Wound made by biting where the skin has been penetrated by an animal’s teeth.
- (G) Cat: Any domestic feline animal (*Felis catus*).
- (H) Compendium: The 2011 Compendium of Animal Rabies Prevention and Control.
- (I) Department: The Missoula City-County Health Department and Missoula City-County Animal Control.
- (J) Dog: Any domestic canine animal (*Canis familiaris*).
- (K) Ferret: Any domestic ferret animal (*Mustela putorius furo*).
- (L) Local Health Officer: The local health officer appointed by the Missoula City-County Board of Health in accordance with §50-2-116(1)(a), MCA, or his or her designee.
- (M) Isolation: Confinement of an animal exposed or potentially exposed to rabies.
- (N) Owner: A person having the right of property or custody of an animal or who keeps or harbors an animal or knowingly permits an animal to remain on or about any premises occupied by that person. This term shall not apply to veterinarians or kennel operators who have temporary custody, for a period of less than 60 days, of animals owned by others.
- (O) Quarantine: The strict confinement of an animal in a manner that precludes any direct contact with other animals or persons other than the owner or caretaker.

- (P) Rabies Immunization: The inoculation of an animal with an anti-rabies vaccine administered by a licensed veterinarian or an employee of a licensed veterinarian under the supervision of the employing veterinarian as required by §37-18-104, MCA, in compliance with the standards of the “Compendium of Animal Rabies Prevention and Control.”
- (Q) Vaccinate and Revaccinate: “Vaccinate” has the same meaning as “Rabies Immunization.”
- (R) Vaccine: An anti-rabies vaccine in compliance with the standards set forth in the Compendium of Animal Rabies Prevention and Control.
- (S) State Veterinarian: A veterinarian employed by the Montana Department of Livestock, Animal Health Division.

5. Local Health Officer, Sheriff and Animal Control Officers.

- (A) The Local Health Officer or his or her designees or other such persons as may be authorized by the Board of Health are responsible for enforcing this regulation and are hereby vested with the power and authority to enforce it.
- (B) As provided in §7-32-2121, MCA, the Sheriff shall perform the duties of a humane officer within Missoula County with reference to the protection of animals.
- (C) As provided in §50-2-120, MCA, the Local Health Officer may request a sheriff or other peace officer to assist the Local Health Officer in carrying out the provisions of this regulation.
- (D) As provided in §50-2-122, MCA, it is unlawful to hinder a Local Health Officer in the performance of duties or to violate a quarantine regulation.
- (E) Persons designated to enforce this regulation shall bear identification issued by the Local Health Officer and shall present such identification to any person requesting it.
- (F) In carrying out the duties under this regulation, Animal Control Officers shall:
 - (1) Keep and maintain adequate records of all animals impounded and of all actions taken in the course of their duties;
 - (2) Seize and impound any animal as described as provided in Section 10 of this regulation.
 - (3) Where this regulation requires euthanization of an animal, it shall be accomplished in a humane manner;
 - (4) Document investigations conducted pursuant to this regulation and appear and testify in any administrative or judicial proceedings related to the investigation.
- (G) Every owner or occupant of property shall give a Local Health Officer or authorized representative access to property at reasonable times upon request for the purpose of making such inspections as are necessary to determine compliance with this regulation.

6. Rabies Vaccination Requirements – Dogs, Cats Ferrets.

- (A) Initial Vaccination:
 - (1) Missoula County, the Owner of every dog, cat, or ferret 3 months of age or older shall have the animal vaccinated before the animal is 4 months old and thereafter in

accordance with the Compendium. An animal receiving its initial vaccination is not considered effectively vaccinated for 28 days.

- (2) Unvaccinated dogs, cats, or ferrets more than 3 months of age that are acquired or moved into Missoula County must be vaccinated within 30 days of purchase or arrival unless there is documented evidence of current vaccination.
 - (3) The Owner is responsible for assuring that his or her dog, cat, or ferret wears a collar or harness with identification and a durable tag indicating a current rabies vaccination and the valid year(s) of the vaccination securely attached. Dogs will be deemed to be in compliance with this requirement if they are wearing a current license tag issued by the Department.
- (B) Revaccination: The Owner of every dog, cat, or ferret shall have the animal revaccinated prior to the end of the 12th month after initial vaccination. Thereafter, the interval between revaccinations should conform to the recommendations contained in the Compendium except that for dogs, only those vaccines that are approved for a tri-annual booster shall be given.
- (C) Vaccination Exemption: If, after an animal receives one initial and one booster rabies vaccination, a licensed veterinarian determines that an additional vaccination would endanger the animal's life due to disease or other medical considerations, the animal may be exempted from the requirement for revaccination while the condition exists. The licensed veterinarian must complete and submit to the Department an Exemption From Rabies Vaccination document on a form approved by the Department. After receipt of such form, the Department shall issue a Rabies Vaccination Exemption Certificate, copies of which shall be provided to the veterinarian and the Owner of the exempted animal. If an exempted animal bites another animal or person and the Department seeks to determine the immune status of the biting exempted animal, immune status testing must be provided at the expense of the Owner. If an exempted animal bites it must be revaccinated after the quarantine period is over.
- (D) The safety and efficacy of rabies vaccination for wildlife and hybrids have not been established and no rabies vaccinations are licensed for these animals. Hybrids and wildlife animals will be treated as unvaccinated animals.

7. Vaccination for Rabies Prior to Transfer of Animal Ownership.

- (A) It is unlawful for any person to sell, adopt out, or give away any dog, cat, ferret over 3 months of age unless, such animal has been vaccinated against rabies by a licensed veterinarian.
- (B) Licensed veterinarian clinics, the Animal Control Shelter, Animal Shelters and Animal Welfare Organizations incorporated and operated under section 501(c)(3) of the Internal Revenue Code are not required to vaccinate an animal in their care, but may not sell, adopt out or give away an unvaccinated animal. As an alternative to vaccination at the time of sale, adoption or gift of the animal, licensed veterinarian clinics, the Animal Control Shelter, Animal Shelters and Animal Welfare Organizations may sell a rabies certificate to the person acquiring the unvaccinated animal for presentation to a licensed veterinarian. The licensed veterinarian may redeem the rabies certificate for costs of administration of the vaccination from the shelter issuing the certificate. The issuer of the rabies certificate must verify that the animal has been vaccinated within 30 days of sale, adoption or gift, and promptly notify Animal Control if the vaccination has not been verified.

8. Rabies Vaccination of Transient or Show Dogs, Cats, or Ferrets. Owners of dogs, cats, or ferrets who are temporarily visiting Missoula County with their dogs, cats, or ferrets or who are exhibiting a dog, cat, or ferret in competition must carry with them and be prepared, upon demand of a legal authority, to present a current certificate of rabies vaccination for each dog, cat, or ferret.

9. Reporting Bites and Suspect Rabies.

- (A) It shall be the duty of every law enforcement officer working in Missoula County, 9-1-1 personnel, and all healthcare providers serving the citizens of Missoula County to ensure that the Department is notified when animal bite victims are treated or when animal bite incidents are reported.
- (B) Any person having knowledge of any animal or person having been bitten by a dog, cat, ferret or other animal potentially exposed to rabies shall report the facts immediately to the Department.
- (C) Any person having knowledge of an animal known to have or suspected of having rabies shall report the facts immediately to the Department and the State Veterinarian.
- (D) Any person having knowledge, ownership, or control of an animal that has bitten or is suspected of biting a person or other animal shall, upon request by the Department, provide the facts and disclose any required or relevant information concerning the bite event or the animal.

10. Investigations and Management of Rabies Exposure.

- (A) The Local Health Officer must apply control measures outlined in the Control of Communicable Diseases Manual for confirmed or suspected exposures to a human by a species susceptible to rabies infection.
- (B) The local health officer must investigate each report of possible rabies exposure and gather, at a minimum, information about the circumstances of the possible rabies exposure; nature of the exposure; name, age, and address of the exposed individual; vaccination status of the animal in question; treatment of the exposed person; and eventual outcome for both animal and person involved.
- (C) As soon as possible after investigating a report of possible rabies exposure, the local health officer must inform the exposed person or the individual responsible for the exposed person if that person is a minor whether or not treatment is recommended to prevent rabies and provide a referral to a health care provider.
- (D) Whenever the circumstances involve a dog, cat, or ferret, the local health officer must either:
 - (1) Authorize impoundment of the animal for observation for signs of illness during a ten-day quarantine period at an Animal Shelter, veterinary facility, or other adequate facility approved by the Department, and ensure that any illness in the animal during the confinement or before release is evaluated by a veterinarian for signs suggestive of rabies; or
 - (2) If the symptoms observed are consistent with rabies, order the animal euthanized and the head sent to the Department of Livestock's diagnostic laboratory at Bozeman for rabies analysis. The local health officer may also order an animal euthanized

subsequent to isolation, and the brain analyzed.

- (E) After the quarantine period is over, the animal must be vaccinated prior to release.
- (F) If a biting animal dies during the quarantine period for any reason whatsoever, the Animal Control Officer shall have the head of the animal sent to a diagnostics laboratory for rabies testing.
- (G) If a biting animal has a current rabies vaccination, the Local Health Officer may permit the Owner to confine the animal at home in strict Quarantine for 10 days, subject to a determination by the Local Health Officer that that the Owner is cooperative, responsible, has the facilities to confine the animal in Quarantine isolation and will permit observation of the confined animal by the Department upon request. Permission for home confinement may be revoked by the Local Health Officer at any time during the confinement period.
- (H) Any dog, cat or ferret who has salivary contact with or is bitten or scratched by a bat or other wild mammal known to be a potential rabies virus carrier, will be regarded as having been exposed to rabies unless determined otherwise by diagnostic testing of the biting animal.
 - (1) If exposed to a rabid animal, unvaccinated dogs, cats or ferrets must be immediately destroyed. If the Owner is unwilling to have such animal destroyed, the unvaccinated animal must be placed in strict quarantine for six (6) months, at the Owner's expense, in a secure place designated by the Local Health Officer and vaccinated before release.
 - (2) If exposed to a rabid animal, a vaccinated dog, cat or ferret shall be immediately revaccinated, leashed and/or confined to the Owner's property for ninety (90) days. The unvaccinated animal shall be ordered to be euthanized by the Local Health Officer if the Owner does not comply with the provisions of this section.

11. Impoundment.

- (A) Animals which are subject to impoundment under this regulation include but are not limited to:
 - (1) Any animal kept or maintained contrary to the provisions of the Missoula County Animal Ordinance;
 - (2) Any dog running at large without a collar and tag;
 - (3) A sick animal;
 - (4) An abandoned or stray animal;
 - (5) An animal subject to a bite investigation;
 - (6) An animal to be held for quarantine or isolation;
 - (7) An animal subject to home confinement as provided in 6(C).
 - (8) Wild animals as provided in 12.
- (B) It is unlawful for any person to refuse or neglect to surrender any animal subject to impoundment. At the direction of the Local Health Officer, any Animal Control Officer shall seize and impound such animal at the Owner's expense.
- (C) All animals impounded under this regulation shall be quarantined under the supervision of a licensed veterinarian or Animal Control staff at the Animal Control Shelter for the period required. The cost of impoundment shall be the responsibility of the Owner.

- (D) Animals impounded under this regulation shall be released to the Owner at the end of the quarantine period, as determined by the Local Health Officer. The Owner shall be required to pay any impoundment costs, including veterinarian evaluation or treatment and vaccination, prior to release of the animal. If an impounded animal is not claimed by its Owner and fees and costs paid, within 96 hours of the end of the quarantine or investigation period, the Owner forfeits all right, title and interest thereto to Missoula County and the animal is subject to adoption in accordance with Missoula City-County Animal Control Ordinance.

12. Wild Animals.

- (A) If a wild animal, whether unlawfully or lawfully in the possession of a person, has bitten or otherwise exposed a person to the possibility of contracting rabies, the animal may be impounded by the Local Health Officer and either quarantined or destroyed and the animal's brain may be tested for rabies.
- (B) A lawfully possessed wild animal that is quarantined and found not to be rabid must be returned to its Owner.

Regulation 8

Trailer Courts and Campgrounds

Adopted 8/17/17, Effective 9/1/17

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1. Purpose. The purpose of this regulation is to prevent and eliminate conditions and practices which endanger public health in trailer courts and campgrounds.

2. Authority. Authority for this regulation is provided for in 50-2-116, MCA, under which a local health board may adopt regulations that do not conflict with those adopted by the state for the control of communicable diseases; for the removal of filth which might affect public health; to implement public health laws; and to adopt fees to administer regulations for the control and disposal of sewage from private and public buildings.

3. Montana Code Annotated and Rules Incorporated by Reference. A trailer court or campground in Missoula County shall comply with Montana Code Annotated, Title 50, Chapter 52 and the Administrative Rules of Montana Title 37, Chapter 111, Subchapter 2.

4. Definitions. The definitions set forth in MCA 50-52-101 apply to this regulation.

5. Reinspection Fees. If violations of the Administrative Rules of Montana, Title 37, Chapter 111, Subchapter 2 persist or are uncorrected after two inspections of the trailer court or campground, and the Department requires a third or subsequent inspection to evaluate compliance with the rules, the Department shall charge a reinspection fee established by the Board for each reinspection. Failure to pay the fee is a violation of this Code.