

**A REGULATION GOVERNING THE ONSITE TREATMENT OF
WASTEWATER IN JEFFERSON COUNTY**

EFFECTIVE JULY 14, 2020

A REGULATORY GOVERNING THE GRATE TREATMENT OF WASTEWATER IN JEFFERSON COUNTY

PROJECT YEAR IN 2001

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SECTION 1

Title

- 1.1 This shall be known and cited as: A REGULATION GOVERNING THE ON-SITE TREATMENT OF WASTEWATER IN JEFFERSON COUNTY.

SECTION 2

Intent

- 2.1 These rules and regulations are necessary for the protection of public health of the people of Jefferson County.
- 2.2 The control of environmental pollution and communicable disease is established by regulating the location, application, design, and construction of on-site wastewater treatment systems and by regulating the disposal of sewage in Jefferson County.
- 2.3 The Permit itself establishes the minimum sizes and distances adopted in Jefferson County. The County does not design on-site wastewater treatment systems nor do the requirements set forth in a Permit guarantee the proper operation of any system.

SECTION 3

Authority and Scope of Regulation

- 3.1 These Regulations are promulgated by the Jefferson County Health Board under the authority of Title 50, Chapter 2, Section 116, Paragraph (1) (i), MCA.
- 3.2 As provided in Title 50, Chapter 2, Section 116, Paragraph (2)(j), MCA, fees may be set for the administration of this program.
- 3.3 These rules and regulations apply to all areas of Jefferson County. Any property not served by municipal sewer in which there is human occupancy shall be equipped with wastewater facilities approved by the Jefferson County Environmental Health Department.
- 3.4 These rules and regulations apply to any person intending to repair, install, installing, responsible for installation or alteration of new or existing on-site wastewater treatment systems including load increases and connection to abandoned systems.
- 3.5 It is illegal to construct, alter, extend, or utilize on-site wastewater treatment or disposal system that will:

- 3.5.1 Contaminate any drinking water supply;
 - 3.5.2 Cause a public health hazard as a result of access to insects, rodents, or other possible carriers of disease to humans;
 - 3.5.3 Cause a public health hazard by being accessible to persons or animals;
 - 3.5.4 Violate any law or regulation governing water pollution or wastewater treatment and disposal, including the rules contained in this sub-chapter;
 - 3.5.5 Pollute or contaminate state waters, in violation of 75-5-605, MCA; or
 - 3.5.6 Degrade state waters unless authorized pursuant to 75-5-303, MCA; or
 - 3.5.7 Cause a nuisance due to odor, unsightly appearance or other aesthetic consideration.
- 3.6 No person may install an on-site wastewater treatment system, perform alterations or make load increases to an existing system without a valid permit.
- 3.7 No person may make connection to or use an abandoned system without:
- 3.7.1 Showing that the system meets current standards; or
 - 3.7.2 That the system has a valid permit from the Department; or
 - 3.7.3 Is able to obtain a permit to meet current regulations prior to use.
- 3.8 It shall be unlawful to occupy or allow to be occupied - any dwelling unit, commercial structure, recreational development, or other structure without such structure being connected to:
- 3.8.1 An on-site wastewater system approved under an earlier ordinance or resolution of Jefferson County; or
 - 3.8.2 An on-site wastewater treatment system installed prior to the enactment of any Jefferson County ordinance governing the same; or
 - 3.8.3 An on-site wastewater treatment system approved through a variance granted by the Board; or
 - 3.8.4 A public sewer system approved by the Montana Department of Environmental Quality.
- 3.9 No person shall commence construction of any building which requires connection to a sewage system for which a valid permit has not been issued.
- 3.10 The permit system established through this Regulation governs only the installation and operation of wastewater treatment systems. This permit is not to be construed as a building permit or any other permit that may be required by other agencies or offices to erect a structure in Jefferson County.
- 3.11 The permit establishes the minimum criteria for the wastewater treatment standards adopted in Jefferson County. The county does not design the wastewater treatment systems. The requirements set forth in the permit do not in any way bind or obligate the county to guarantee the operation of any system.

- 3.12 The Jefferson County Environmental Health Department may require the applicant, through the permitting process, to verify compliance or the ability to comply with other agencies', districts', or other governmental entities' bylaws, ordinances, zoning laws, rules, or regulations, when deemed pertinent by the Department, to protect the applicants' interest.

SECTION 4 Malfunctioning System

- 4.1 It shall be unlawful and constitute a violation of these regulations to own, operate or use a malfunctioning or failing onsite wastewater treatment system.
- 4.2 Upon discovery of the existence of a malfunctioning system, the Department shall give written notice of the violation to the owner and/or occupant of the premises.
- 4.2.1 The owner and/or occupant shall be required to stop the flow of sewage within 48 hours of receipt of the Notice of Violation; and
- 4.2.2 The owner and/or occupant may be required to remove and dispose of any contaminated soil in a safe and sanitary manner as approved by the Department; and
- 4.2.3 The owner and/or occupant shall be responsible for repairing or replacing the malfunctioning system in accordance with all provisions of these Regulations within thirty (30) days of receipt of a Notice of Violation.

SECTION 5 Effective Date, Repealer, and Severability

- 5.1 All provisions established under this Regulation shall become effective as of July 14, 2020
- 5.2 Repealer - Conflicting of Ordinances, Effect of Partial Invalidity: In any case where a provision of this regulation is found to be in conflict with a provision of any zoning, building, fire, safety or health regulation of Jefferson County existing on the effective date of this regulation, the provision which, in the judgment of the Board of Health or authorized agent, establishes the higher standard for the protection of the health and safety of the people, shall prevail. These regulations supersede all prior regulations or amendments thereof established by the Jefferson County Health Board pertaining to Onsite Wastewater Treatment Systems.

SECTION 6 Definitions

- 6.1 "Absorption Bed" shall mean an Absorption System that consists of excavation greater than three (3) feet in width, where the distribution system is laid for the purpose of distributing pretreated waste effluent into the ground (DEQ 4)
- 6.2 "Absorption System" or "Drainfield" means any secondary treatment system including absorption trenches, elevated sand mounds, and evapotranspiration absorption (ETA) system used for the subsurface disposal of pretreated waste effluent (DEQ 4)
- 6.3 "Alteration" shall mean physically changing a Sewage treatment system by lengthening, shortening, widening, building structures over or changing the flow into a system by changing or adding Dwelling units or adding to the living capacity of a Dwelling unit. This shall not be construed to mean changing Dwellings in a campground or a trailer court currently licensed by the Montana Department of Public Health and Human Services (DPHHS).
- 6.4 "Applicant" shall mean any person, institution, public or private corporation, partnership, or other entity that submits an application for a permit to install, construct, repair, replace, or alter a wastewater treatment system.
- 6.5 "Approved" shall mean official consent given in writing, or verbally in the case of an emergency, by the Board of Health and/or Health Officer, the Jefferson County Environmental Health Department or the Board of Health's designated representative.
- 6.6 "ARM" means Administrative Rules of Montana.
- 6.7 "Alter" shall mean physically changing a wastewater treatment system by adding to or subtracting from said system, increasing the flow into a system above said system's design flow, or hooking into an abandoned system. Increasing flow shall include adding bedrooms to a residence.
- 6.8 "Bedrock" shall mean material that cannot be readily excavated by hand tools, or material that does not allow water to pass through or that has insufficient quantities of fines to provide for the adequate treatment and disposal of Wastewater (DEQ 4).
- 6.9 "Bedroom" means any room that is or may be used for sleeping. An unfinished basement is considered an additional bedroom (DEQ 4).
- 6.10 "Board" or "BOH" shall mean the Jefferson County Board of Health, as formed in

accordance with 50-2-104 MCA.

- 6.11 "Certificate of Subdivision Plat Approval" shall mean the statement produced by the Montana Department of Environmental Quality approving a reviewed parcel for structures requiring a water supply and sewer.
- 6.12 "Cleanout" means access to a sewer line, extending from the sewer line to the ground surface or inside the foundation, used for access to clean a sewer line (DEQ 4).
- 6.13 "Community, Municipal, or Public Treatment System" shall mean Sewage systems owned or operated by city, town, municipal corporation, county, or state, or other ownership, approved by the State Department of Environmental Quality (DEQ), consisting of a collection system and necessary trunk lines, pumping facilities, and means of final treatment and disposal, and under Permit from the DEQ (See ARM 17.38.101 et. seq.).
- 6.14 "Composting toilet" means a system consisting of a compartment or a vault that contains or will receive composting materials sufficient to reduce human waste by aerobic decomposition.
- 6.15 "Department" shall mean the Jefferson County Environmental Health Department, working as representative of the Jefferson County Health Officer and County Health Board.
- 6.16 "DEQ" or "MDEQ" shall mean the Montana Department of Environmental Quality.
- 6.17 "DEQ 2" shall mean the circular published by DEQ entitled "Design Standards for Wastewater Facilities" 1999 edition, or most current edition.
- 6.18 "DEQ 4" shall mean the circular published by DEQ entitled "Montana Standards for Subsurface Wastewater Treatment Systems" 2013 edition, or most current edition.
- 6.19 "DEQ 17" shall mean the circular published by DEQ entitled "Montana Standards for Cisterns (Water Storage Tanks) for Individual Non-Public Systems" 2002 Edition, or most current edition.
- 6.20 "Design Flow" shall mean the estimated volume in U.S. gallons of wastewater to enter a proposed system. Design flow is used to determine system size and design.
- 6.21 "Distribution Box" shall mean a watertight receptacle that receives Septic Tank effluent and distributes it equally into two or more pipes leading to the absorption area.(DEQ 4)

- 6.22 "Dosed system" means any system that utilizes a pump, siphon, or actuated valves to deliver treated effluent to a subsurface absorption area.
- 6.23 "Drainrock" shall mean the rock or coarse aggregate used in an Absorption System, sand filter or seepage pit. Drainrock must be washed, be a maximum of 2.5 inches in diameter and larger than the orifice size unless shielding is provided to protect the orifice, and contain no more than 2 percent passing No. 8 sieve. The material must be of sufficient competency to resist slaking or dissolution. Gravels of shale, sandstone, or limestone may degrade and may not be used (DEQ 4).
- 6.24 "Dwelling or Residence" means any structure, building, or portion thereof, which is intended or designed for human occupancy and is supplied with water by a piped water system.
- 6.25 "Effluent" means partially treated wastewater from a primary, advanced, or other treatment facility. (DEQ 4)
- 6.26 "Effluent filter" means an effluent treatment device installed on the outlet of a septic tank designed to prevent the passage of suspended matter larger than 1/8 inch in size. (DEQ 4)
- 6.27 "Experimental Alternative System" means a Wastewater treatment system for which specific design standards are not provided in MDEQ Circular DEQ 4 or DEQ 2 (See also DEQ 4, Chapter 8.6)
- 6.28 "Fill" shall mean soil materials that have been displaced from their original location.
- 6.29 "Floodplain" shall mean the area adjoining the watercourse or drainwater which would be covered by the floodwater of a flood of 100-year frequency, except for sheetflood areas that receive less than one (1) foot of water per occurrence and are considered "Zone B" by the Federal Emergency Management Agency. The floodplain consists of the floodway and the flood fringe, as defined in ARM 36.15.101.
- 6.30 "Flow" shall mean the actual volume in U.S. gallons of wastewater entering a system per day.
- 6.31 "Grey Water" means wastewater that is collected separately from a sewage flow and that does not contain industrial chemicals, hazardous wastes, or wastewater from toilets. (DEQ 4)
- 6.32 "Health Officer" shall mean the legally established authority as designated by the

Jefferson County Health Board per 50-2-116 (1)(a) MCA.

- 6.33 "High Groundwater" shall mean the vertical distance from the natural ground surface to the upper surface of groundwater as observed as a free water surface in an unlined hole during the time of year when the groundwater is the highest.
- 6.34 "Holding Tank" means a watertight receptacle that receives wastewater for retention and does not, as part of its normal operation, dispose of or treat the wastewater. (DEQ 4)
- 6.35 "Individual Wastewater Treatment System" means a wastewater system that serves one living unit or commercial unit. The term does not include a public sewage system as defined in 75-6-102, MCA. (DEQ 4)
- 6.36 "Licensed Installer" shall mean an individual that holds a current license, issued by the Department, to construct, repair, replace, or alter a wastewater treatment system under the terms of this Regulation.
- 6.37 "Limiting Layer" means bedrock, an impervious layer, or seasonally high ground water. (DEQ 4)
- 6.38 "Living unit" means the area under one roof that can be used for one residential unit and which has facilities for sleeping, cooking, and sanitation. A duplex is considered two living units. (DEQ 4)
- 6.39 "Malfunctioning or Failing Sewage Treatment System" shall mean any sewage treatment system not properly performing in accordance with its design.
- 6.40 "Monitoring Wells" shall mean a ten (10) foot piece of four (4) inch perforated PVC pipe installed vertically in a hole excavated to eight (8) feet. The excavation shall be backfilled around the pipe and slightly mounded to excluded surface runoff.
- 6.41 "Multi-User Wastewater Treatment System" means a non-public wastewater system that serves, or is intended to serve, more than two living or commercial units, but which is not a public sewage system as defined in 75-6-102, MCA. The total number of people served may not exceed 24. In estimating the population that will be served by a proposed residential system, the reviewing authority shall multiply the number of living units times 2.5 people per living unit. (DEQ 4)
- 6.42 "Natural soil" means soil that has developed in place through natural processes and to which no fill material has been added. (DEQ 4)
- 6.43 "Nuisance" shall mean anything which is indecent or offensive to the senses.

- 6.44 "Owner" shall mean the person who is shown to be the legal title holder of land onto which an Onsite Wastewater Treatment System has been or is to be placed.
- 6.45 "Percolation Test" means a standardized test used to assess the infiltration rate of soils performed in accordance with DEQ Circular 4, Appendix A
- 6.46 "Permit" shall mean a written authorization issued by the Department allowing construction, repair, replacement, or alteration of a wastewater treatment system under this Regulation.
- 6.47 "Primary Treatment" means a treatment system, such as a septic tank, that provides retention time to settle the solids in raw wastewater and that retains scum within the system (DEQ 4).
- 6.48 "Public Wastewater System" means a system for collection, transportation, treatment, or disposal of wastewater that serves fifteen (15) or more families or twenty-five (25) or more persons daily for any sixty (60) days or more in a calendar year. In estimating the population that will be served by a proposed residential system, the reviewing authority 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. (DEQ 4) Public sewage disposal systems shall be reviewed and approved by the Montana Department of Environmental Quality.
- 6.49 "Repair" shall mean repairing or replacing any component of a wastewater treatment system due to a physical failure of that component. The Department shall determine if the repair is so minor as to not require a permit. The Department may require any component to be upgraded during the repair if said component is likely to fail or cause failure.
- 6.50 "Seasonally High Groundwater" means the depth from the natural ground surface to the upper surface of the zone of saturation, as measured in an unlined hole or perforated observation well during the time of the year when the water table is the highest. The term also means the upper surface of a perched water table. (DEQ 4)
- 6.51 "Secondary Treatment" shall mean the process by which the effluent is further treated to remove biological contaminants and reduce nutrient levels. This is typically done with an absorption system.
- 6.52 "Septic Tank" means a wastewater 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. (DEQ 4)

- 6.53 "Sewage" is synonymous with "wastewater" for purposes of these regulations.
- 6.54 "Shared Wastewater System" means a wastewater 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. The term does not include a public sewage system as defined in 75-6-102, MCA. (DEQ 4)
- 6.55 "Slope" shall mean the quotient of the vertical rise divided by the horizontal run and is expressed as a percentage.
- 6.56 "Soil Profile" means a detailed description of the soil strata to a depth of at least eight (8) feet. The description shall be expressed using the U.S. Department of Agriculture's Soil Classification System. The description of the soil shall be provided by a person competent in soil analysis.
- 6.57 "Surface Water" shall mean any body of water or watercourse, including lakes, ponds, rivers, creeks, streams, irrigation ditches, seeps, and swamps.
- 6.58 "Wastewater" means water-carried waste including, but not limited to, household, commercial, or industrial wastes, chemicals, human excreta, or animal and vegetable matter in suspension or solution. (DEQ 4)
- 6.59 "Wastewater Treatment System or Wastewater Disposal System" means a system that receives wastewater for purposes of treatment, storage, or disposal. The term includes all disposal methods described in these regulations.

SECTION 7

Adopted by Reference

- 7.1 As provided by 50-2-116(1)(I), MCA, the Jefferson County Board of Health hereby adopts by reference ARM Title 17, Chapter 36, Subchapters 1-8, Subdivision Rules and Title 17, Chapter 36, Subchapter 9, Onsite Subsurface Wastewater Treatment and MDEQ Circular DEQ 4 (most current edition) as part of the Jefferson County Onsite Wastewater Treatment Regulations. Copies of the MCA's, ARM's and Circulars can be obtained from the Environmental Health Office or online at: <http://www.deq.mt.gov/wqinfo/Circulars.mcp>. In addition, portions of the Uniform Plumbing Code as adopted by Montana, which correlates to the Onsite Wastewater Regulations, are adopted by reference.

SECTION 8

Application for Permits

- 8.1 It shall be unlawful for any person to construct a new wastewater treatment system or to repair, replace, or alter an existing system within Jefferson County

unless that person holds a valid permit.

8.2 Application for permits shall be made to the Department. Permits shall be issued upon compliance by the applicant with the provisions of this Regulation. Application for permits shall be made in writing on forms supplied by the Department, shall be signed by the applicant, and shall include, but not be limited to, the following:

8.2.1 Name and address of applicant;

8.2.2 Legal description (Section, Township, Range), subdivision (phase, block, lot) if applicable and a copy of the authorized address assignment from the Jefferson County Rural Addressing Coordinator of the property for which the permit is being applied for;

8.2.3 Parcel size;

8.2.4 The number, location, type and size of structures, both existing and proposed, to be connected to the system:

- a. Number of bedrooms to be served by the system for residences; or
- b. Estimated volume of wastewater produced and how this volume was determined for non-residences.

8.2.5 A site plan showing the following:

- a. shape and size of the parcel;
- b. proximity to all water supplies, open bodies of water and floodplain;
- c. design of the wastewater treatment system;
- d. area for 100% replacement absorption system;
- e. location of any drainage ways, if present;
- f. location of house site, driveways, out-buildings, etc.; and
- g. north point.

8.2.6 Name of installer installing the wastewater treatment system;

8.2.7 A permit fee as established by the Jefferson County Board of Health; and

8.2.8 To protect the applicants interest, proof of compliance or the ability to comply with other agencies', districts', or other governmental entities' bylaws, ordinances, zoning laws, rules or regulations, when deemed pertinent by the Department, to protect the applicant's interest.

8.3 If the property proposed for the wastewater treatment system construction, repair, replacement, or alteration has not been reviewed and does not have a Certificate of Subdivision Plat approval, the Department may require the following additional information to determine the suitability of the property for the wastewater treatment system construction, repair, replacement, or alteration before a permit is issued:

8.3.1 A soil profile description from a pit excavated to a minimum depth of eight (8) feet. The following factors must be included in any soils evaluation:

- a. Thickness of layers or horizons of the soil profile;
- b. Texture (USDA Soils Classification System) and structure of

- horizons;
- c. General color and color variation (mottling);
- d. Depth to water, if observed;
- e. Depth to bedrock or other limiting layer (perc rate >60 min./inch), if observed;
- f. Other prominent features that would have a bearing on a site's compatibility for use as a sewage treatment site (i.e. stoniness, root depth, etc.); and
- g. The location of the soil pit on the site plan.

8.3.2 The depth to the seasonal high groundwater table. Explain how this determination was made and why it is thought to be representative of the seasonal high level. For a marginal site, monitoring wells shall be installed by the applicant and monitored through the high groundwater period. Monitoring shall be performed by a person approved by the Department or by the Department itself. A report from a qualified professional such as soil scientist, hydro geologist, Registered Sanitarian, or an engineer with knowledge of soils may be substituted for actual monitoring if the professional can confidently estimate the seasonal high level.

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

8.3.4 Type and percent of land slope across the proposed absorption system. Describe the type of slope (concave, or plane) for the proposed primary and replacement drainfield locations. Determine the percent (vertical rise/horizontal run) and direction of the slope.

8.3.5 Evaluation of the potential for flooding or accumulation of surface water.

8.3.6 Distance from 100-year flood plain.

SECTION 9

Review of Application

9.1 The completed application form shall be returned to the Department with ALL required information and fees.

9.2 The Department shall review the application for completeness and to determine compliance with the site requirements as set forth in this Regulation.

9.2.1 The Department shall respond within ten (10) working days from the date the completed application was filed.

9.2.2 The Department shall respond within thirty (30) working days for multi-user wastewater treatment systems, public subsurface wastewater treatment systems. or those systems requiring engineering review.

9.3 Any permit or approval granted under these regulations which is based upon or is granted in reliance upon any misrepresentation, or failure to make a material fact or circumstances known or should have been known, by the applicant or his agent, shall be void.

9.4 Response from the Department shall be in the form of a valid permit for an approved application or a written denial detailing the deficiencies of an unapproved application.

SECTION 10

Issuance of Permits

10.1 A permit to construct, repair, replace, or alter a wastewater treatment system shall be issued by the Department upon finding an application complete and in compliance with the site requirements set forth in this Regulation.

10.2 The Department may place specific conditions on the permit to facilitate compliance with any provision of this Regulation.

10.3 Unapproved changes in plans or specifications after the permit has been issued or any falsification or significant error in data or information submitted by an applicant shall invalidate the permit.

10.4 Construction, repair, replacement, or alteration of a wastewater treatment system may begin upon issuance of a permit for the specified construction, repair, replacement, or alteration.

10.5 If a wastewater treatment system for which a permit has been issued has not been installed, inspected and approved within twelve (12) months for an individual system or twenty-four (24) months for multi-user systems after issuance of the permit, the permit shall be voided by the Department.

10.6 A permit may be extended for an additional twelve (12) months if the Department is notified of the request for the continuation prior to the expiration of continuation.

10.7 There will be no reimbursement of fees received for the issuance of a permit if said permit is voided or invalidated.

10.8 All information submitted with the application becomes property of the Department and will not be returned.

SECTION 11
Denial of Permits

- 11.1 The Department may disapprove an application for the construction, repair, replacement or alteration of a wastewater treatment system if the Department determines that:
- 11.1.1 The proposed wastewater treatment system will not comply with the requirements or specifications of the Regulation; or
 - 11.1.2 The applicant has failed to supply all the data necessary to make a determination as to whether or not the proposed wastewater treatment system complies with the requirements or specifications of this Regulation and has failed to provide such information within thirty (30) days after a written notice for such additional information has been made by the Department; or
 - 11.1.3 The applicant has failed to pay the required fees and has failed to make such payment within thirty (30) days after notice of nonpayment has been mailed to the applicant by the Department.
- 11.2 If a parcel of land is presently being reviewed under the Sanitation in Subdivision Act, no permit can be issued for any structure on that parcel of land until the review of said subdivision is completed and the subdivision approved. If the subdivision is reviewed and disapproved and the owner proposes building a structure on a portion of the property that can comply with this Regulation and it does not conflict with any provision of the disapproval, application for a sewage treatment system permit can be made as outlined in Section 7.
- 11.3 A permit may be denied if it is found that such installation is in conflict with the requirements of the Sanitation in Subdivisions Act or its regulations, or if such installation is intended as a means of avoiding the requirements of the Sanitation in Subdivision Act or its regulations.
- 11.4 A permit may be denied if it is found that any provision of a Certificate of Subdivision Plat Approval has been violated or there is departure from any criteria set forth in the approved plans and specifications of said subdivision.
- 11.5 Permit fees submitted by the applicant shall be returned to the applicant with the denial notice. All information submitted with the application becomes property of the Department and will not be returned.
- 11.6 Any denial of a Permit shall be made with detailed reasons for such a denial and should the Applicant request a variance from any provision of these regulations that may have caused or resulted in the denial, the variance request shall be made in writing and submitted to the

SECTION 12
Variances and Appeals

- 12.1 An applicant or any affected person may request a variance from any particular requirement of this Regulation by filing a petition with the Jefferson County Board of Health. The petition shall contain the following information:
- 12.1.1 Evidence that the system that would be allowed by the variance is unlikely to cause pollution of state waters;
 - 12.1.2 Evidence that the granting of the variance will protect the quality and potability of water for public water supplies and domestic uses, and will protect the quality of water for other beneficial uses.
 - 12.1.3 Evidence that the granting of the variance will not adversely affect public health, safety, and welfare;
 - 12.1.4 A summary explanation of the project or development and the reason a variance is being sought; and
 - 12.1.5 Evidence that the existing conditions and circumstances which prevent the installation of a wastewater treatment system which would meet all the requirements of the Regulation did not result from the actions of the applicant or the affected person.
- 12.2 The appeal will be presented at the next regularly scheduled meeting of the Board provided that such request is received ten (10) days prior to the scheduled meeting date. At this meeting, the appellant may appear in person, be represented by another person, or may appeal to the Board in writing. The Board shall respond to the appellant in writing stating its decision and the reasons therefore within thirty (30) days after hearing and/or reviewing the appeal. The decision shall be to grant, grant with conditions, or deny the variance.
- 12.3 Appeal: The Jefferson County Board of Health's decision on the variance may be appealed to the Montana Department of Environmental Quality pursuant to ARM17.36.924.

SECTION 13
Inspections of Wastewater Treatment Systems

- 13.1 All wastewater treatment systems governed by these Regulations shall be inspected by the Department prior to backfilling all or any portion of said system unless specific permission has been granted by the Department.
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- 13.2 The applicant or installer shall request an inspection from the Department not

less than twenty-four (24) working hours prior to completion. Inspections shall be conducted by the Department during normal working hours within ten (10) business days following notification.

- 13.3 The issuance of a permit to construct, repair, replace, or alter a wastewater treatment system establishes landowner consent which allows the Department to enter the property for the purpose of making inspections to determine compliance with this Regulation and the specifications of the permit.
- 13.4 If, upon final inspection of the wastewater treatment system, the Department finds the system in compliance with the plans and specifications filed with the permit and this Regulation, the Department shall issue final approval for the completed system.
- 13.5 Final approval for engineered systems will be issued after the design engineer furnishes an as-built drawing of the system and written certification that the system was installed in accordance with the approved design.
- 13.6 If, upon final inspection of the wastewater treatment system, the Department finds the system deviates significantly from the plans and specifications filed with the permit or is not in full compliance with this Regulation, the Department shall withhold final approval. The Department shall notify the applicant or owner immediately of the deficiencies and require that corrective action be taken. The deficiencies shall be corrected within fifteen (15) days of notification, unless a longer compliance schedule is approved by the Department.
- 13.7 A reinspection shall be made upon the request of the applicant or installer, as specified in this Section, to ensure the deficiencies have been corrected and the system is in compliance with the plans filed with the permit and this Regulation.
- 13.8 Inspections of wastewater treatment systems by the Department, as required by this Regulation, are performed strictly for the purpose of determining compliance with this Regulation. Inspections are not conducted for the purpose of analyzing or insuring workmanship. Final approval of a wastewater treatment system shall not be construed as a guarantee to the life expectancy or operation of the system.

SECTION 14

Operation of Wastewater Treatment Systems

- 14.1 The property owner shall be responsible for the proper operation, maintenance and cleaning of the system and/or abatement of any nuisance arising from its failure.
- 14.2 The Department may require the owner of a wastewater treatment system to

maintain and submit records of inspection, maintenance, cleaning, and testing performed on the system to the Department.

- 14.3 It shall be unlawful for any person utilizing a wastewater treatment system to dispose of hazardous chemicals such as, but not limited to, gasoline, oil, paint, paint thinner, antifreeze, pesticides, solvents, and oven cleaners into the systems.
- 14.4 The Department is hereby empowered and authorized to enter upon private property for the purpose of inspecting a wastewater treatment system or to determine compliance with this Regulation. The owner or occupant of the property having a wastewater treatment system shall give the Department free access to the property for such inspection, including the taking of effluent samples. This Section does not however, authorize the Department to enter any private residence without otherwise complying with the law.

SECTION 15 Installer Licensure

- 15.1 A person may be certified as an on-site wastewater treatment system installer in Jefferson County provided the procedures outlined in these Regulations are adhered to.
- 15.2 Certificates will be granted by the Jefferson County Health Department when the following requirements are met:
 - 15.2.1 A completed application has been submitted to the Jefferson County Environmental Health Department;
 - 15.2.2 A filing fee of \$100.00 has been paid;
 - 15.2.3 The applicant has attended a training workshop approved by the Department; and
 - 15.2.4 The applicant passes a required examination with a score of 70% or higher.
- 15.3 Current certification with another county in the State of Montana will be accepted if proof licensure/certification is in good standing and is acceptable to the Department. The applicant must also comply with sections 14.2.1, and 14.2.3
- 15.4 Applicants eligible for reciprocity must submit a filing fee of \$25.00.
- 15.5 Applicants must comply with all other general provisions outlined in this Regulation.
- 15.6 Certificates shall expire December 31st of each year.

- 15.7 Certificate renewal will be granted upon receipt of the renewal fee of \$25.00 by February 1st of the following year.
- 15.8 Failure to renew the certificate will require a new filing fee and re-examination.
- 15.9 Renewal notices will be sent to each certified installer prior to the expiration date.
- 15.10 Certificates are not transferable.
- 15.11 A certified installer shall be placed on probation upon receiving a written notice of violation from the Jefferson County Environmental Health Department for violation of any one or more of the following:
 - 15.11.1 A septic system is installed, altered or extended without a valid Jefferson County permit;
 - 15.11.2 The Department is not notified for final inspection;
 - 15.11.3 The certified installer offers false information with regard to a system installation or location;
 - 15.11.4 The certified installer installs the system in violation of the Jefferson County On-Site Wastewater Treatment System regulation;
 - 15.11.5 The certified installer deviates from the submitted plans on the system application without prior Health Department approval; or
 - 15.11.6 The certified installer fails to submit required installation forms as required by the Department.
- 15.12 A certificate shall be revoked based on three (3) violations after the installer has been notified by certified mail with return receipt requested, and regular mail, as to the intent of, and basis for, the Department's revocation of said certificate, and provided a period of ten (10) days to make a written request for a hearing before the Jefferson County Board of Health.
- 15.13 Any person having a certificate revoked may request and shall be granted a hearing before the Jefferson County Board of Health. The appeal shall be presented at the next regularly scheduled meeting of the Board provided that such a request is received ten (10) days prior to the scheduled meeting date. At this meeting, the appellant may appear in person, be represented by another person, or may appeal to the Board in writing. The Board shall respond to the appellant in writing stating its decision and the reasons therefore within thirty (30) days after hearing and/or reviewing the appeal.
- 15.14 A certificate may be denied if:
 - 15.14.1 An applicant fails to comply with certification procedures outlined in the General Provisions for Certification Installers;
 - 15.14.2 An applicant fails to comply with the Jefferson County On-Site

- 15.14.3 Wastewater Treatment System Regulations; Certificate application is made within twelve (12) months after having a certificate revoked; or
- 15.14.4 A certificate has been revoked on two (2) or more occasions.
- 15.15 A certification card shall be issued to each certified installer by the Department.
- 15.16 The Department may require Certified Installers to attend workshops to update them of regulations changes and advancing technology pertaining to on-site wastewater treatment systems.
- 15.17 Certified installers shall notify the Department twenty-four (24) hours prior to completion of any installation. Notification shall be made during normal Department working hours, excluding weekends and holidays.
- 15.18 At the discretion of the Department, completion of the system may be allowed without an inspection.
- 15.19 Systems incomplete at the time of inspection by the Department may be subject to a reinspection at the convenience of the Department.
- 15.20 Certified installers shall complete and submit a Certified Installer's Report form within ten (10) days of the installation. Failure to submit these forms may lead to certificate probation.

SECTION 16

Enforcement Provisions

- 16.1 Cease and Desist Order - The Department may issue a written order to any person or persons to cease and desist from the use of any system which is found by the Department not to be functioning in compliance with this Regulation. The order shall require that the owner or occupant bring the system into compliance or eliminate the violation within a reasonable period of time not to exceed thirty (30) days, or thereafter cease and desist from the use of the system. Service of such notice shall be by certified mail, return receipt requested, and shall be considered complete on receipt by the Department of the return receipt. The Department shall give the person or persons to whom the order is directed an opportunity for a hearing before the Health Officer within forty-eight (48) hours of the order. Following said hearing, the Health Officer shall affirm, modify, or revoke the Cease and Desist Order.
- 16.2 If a person refuses or neglects to comply with a written order of a state or local health officer within a reasonable time specified in the order, the state or local health officer may cause the order to be complied with and initiate an action to recover any expenses incurred from the person who refused or neglected to

comply with the order. The action to recover expenses shall be brought in the name of the city or county (50-2-123, MCA).

16.3 Penalties for violations as authorized under Title 50, Chapter 2, Section 124, shall include the following:

16.3.1 A person who does not comply with the rules adopted by a local board is guilty of a misdemeanor. On conviction, he shall be fined not less than ten (10) dollars or more than two hundred (200) dollars.

16.3.2 Except as provided in 15.3.1, a person who violates the provisions of this chapter or rules adopted by the department under the provisions of this chapter is guilty of a misdemeanor. On conviction, he shall be fined not less than ten (10) dollars or more than five hundred (500) dollars, imprisoned for not more than ninety (90) days, or both.

16.3.3 Each day of the violation constitutes a separate offense.

16.3.4 Fines, except justice court fines, shall be paid to the county treasurer of the county in which the violation occurs.

16.4 It is unlawful to hinder a local health officer, or his authorized representative, in the performance of his duties, or to remove or deface any placard or notice posted by the health officer or his authorized representative. (50-2-122, MCA)

SECTION 17

Severability and Conflicts

17.1 Conflict of Ordinances, Effect on Partial Invalidity: In any case where a provision of this Regulation is found to be in conflict with a provision of any zoning, building, fire, safety or health ordinance, regulation or code of Jefferson County, or any other municipality with Jefferson County, existing on the effective date of this regulation, the provision which, in the opinion of the Department, established the highest standard for the protection of the health and safety of the people, shall prevail.

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

SECTION 18
Minimum Requirements for Wastewater Treatment Systems

18.1 General

- 18.1.1 Wastewater treatment systems shall not violate the requirements of Section 3.5.
- 18.1.2 The wastewater treatment system shall consist of a sewer line from a point two (2) feet outside the foundation wall to the primary treatment device (septic tank) and a sewer line from the primary treatment device (septic tank) to the secondary treatment system (absorption system).
- 18.1.3 The wastewater treatment system shall be designed to accept domestic wastes including grey water. Water from roof drains, groundwater, surface runoff, sump pumps, etc., shall not be discharged into a wastewater treatment system and should be purposely diverted away.
- 18.1.4 On-Site wastewater treatment systems must be designed and constructed in accordance with the applicable requirements, as described in ARM 16.17.1.

18.2 Location

- 18.2.1 Location of wastewater treatment systems shall be based on the size and shape of the lot, soil types, slope of the land, depth to groundwater, depth to bedrock or other limiting layer, proximity to existing and future water supplies, proximity to existing wastewater treatment systems, proximity to surface water and floodplain, and replacement area.
- 18.2.2 The components of any wastewater treatment system shall be located so as to comply with the minimum separation requirements in accordance with ARM 17.36.918 as shown in the following table:

TABLE 1
SETBACK DISTANCES
(in feet)

From	To Sealed components (1) and other components (2)	To Absorption systems (3)
Public or multiple-user drinking water wells/springs	100	100
Individual and shared drinking water supply wells	50	100
Other wells (4)	50	100
Suction lines	50	100
Cisterns	25	50
Roadcuts, escarpments	10 (5)	25
Slopes > 35 percent (6)	10 (5)	25
Property boundaries (7)	10	10
Subsurface drains	10	10
Water mains (8)	10	10
Drainfields/sand mounds (3)	10	-
Foundation walls	10	10
Surface water, springs	50	100
Floodplains	--Sealed components - no setbacks (1) Other components - 100 (2)	100

(1) Sealed components include holding tanks, sealed pit privies, and the components addressed in Department Circular DEQ-4, Chapters 4 and 5. Holding tanks and sealed pit privies must be located at least ten feet outside the floodplain or any openings must be at least two feet above the floodplain elevation.

(2) Other components include the components addressed in Department Circular DEQ-4, Chapter 7.

(3) Absorption systems include the systems addressed in Department Circular DEQ-4, Chapters 6 and 8 subject to the limitations in ARM 17.36.916.

(4) Other wells include, but are not limited to, irrigation and stock watering, but do not include observation wells as addressed in Department Circular DEQ-4.

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

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

(7) Easements may be used to satisfy the setback to property boundaries.

(8) Sewer mains that cross water mains must be laid with a minimum vertical separation distance of 18 inches between the mains.

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

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

(4) Sealed components of wastewater treatment systems, if located within a 100-year floodplain, must be designed and constructed to prevent surface water and ground water inundation, and pump lines must be pressure tested prior to use. Pipes must have a pressure rating of at least two times the operating pressure or pump shutoff pressure, whichever is greater. Pipes must be tested at 1 ½ times the operating pressure or pump shutoff pressure, whichever is greater, or must be tested as specified by the manufacturer.

(5) The setbacks in this rule are not applicable to gray water irrigation systems that meet the requirements of ARM 17.36.919.

- 18.2.3 No component of any wastewater treatment system shall be located under driveways, parking areas, or other areas subject to vehicular traffic except those portions of the system designed to accommodate the above conditions.
- 18.2.4 Absorption systems shall not be constructed in soils rated as having severe or very severe limitations for absorption systems by the Soil Conservation Service (SCS) unless that limitation can be overcome or is not present as shown by site evaluation.
- 18.2.5 Absorption systems shall not be located in swales or depressions where runoff may flow or accumulate.
- 18.2.6 Absorption systems shall not be constructed in fill.
- 18.2.7 No structure shall be located over any part of the wastewater treatment system unless the structure is designed to accommodate operation and maintenance of the system.
- 18.2.8 To facilitate maintenance of pumps, siphons, and filters, access ports must be extended to the finished ground surface and be secured to prevent child access.
- 18.2.9 If an easement has been requested to install a septic system on adjacent property, there must be proof of a filed, legal easement supplied to the department prior to issuing of the septic permit.
- 18.2.10 A replacement area or plan must be provided for each new or expanded wastewater treatment system, must be in compliance with these regulations, must be designated on the parcel and the uses restricted accordingly.

SECTION 19
Replacement Systems

- 19.1 A replacement system is a wastewater treatment system proposed to replace a failed, failing, or contaminating system.
- 19.2 Replacement systems shall be designed and constructed to allow the best treatment practical and must meet all separation distances whenever possible. Absorption fields will be considered first for all situations.
- 19.3 Replacement systems which can not meet all the requirements of this Regulation will be considered if it can be shown that it can meet the requirements found in Section 3.5 of this Regulation.
- 19.4 A vertical separation of forty-eight (48) inches from the bottom of the absorption system and high groundwater, bedrock, or other limiting layer is required.
- 19.5 The Department may require that any component of the wastewater treatment system be upgraded if said component may fail or cause failure.

- 19.6 Soil profiles and percolation tests may be required to determine proper sizing of replacement systems.

SECTION 20

Increased Use, Changes of Use, and Enlargement of Structures

- 20.1 No person may increase the number of bedrooms to an existing structure or operate an existing system that has increased wastewater use unless the system meets all current requirements of these regulations or the Board of Health has approved a variance.
- 20.2 There must be adequate physical room on the property to install a septic system to accommodate the number of bedrooms that will be present after the proposed construction. There must be adequate room to reserve an area the same size for replacement of the system in the future.
- 20.3 No person may connect to a wastewater treatment and disposal system when the system has been unused or disconnected from any residence or structure for more than one (1) year unless there is adequate information to determine that the system is functioning and is of adequate size to accommodate the existing or proposed structure.
- 20.4 On properties requiring Onsite Wastewater Treatment Systems, no person may begin construction on a structure enlargement until the Department issues either a septic permit or a determination that no septic permit is needed for the proposed project.

SECTION 21

Public Sewer Availability

- 21.1 If a DEQ approved public collection and treatment system is readily available within a distance of 200 feet of the property line for connecting to a new source of wastewater, or as a replacement for a failed system, and the owner or managing entity of the public collection and treatment system approves the connection, wastewater must be discharged to the public system unless considered "not readily available" or "economically impractical" See ARM 17.36.914(6)

APPENDIX A - PERCOLATION TEST PROCEDURE

Properly conducted percolation tests may be needed to determine absorption system site suitability and to size the absorption system. If needed, percolation tests must be conducted within the boundary of the proposed absorption system. The percolation test must be completed by a qualified site evaluator approved by the reviewing authority. Some system designs may dictate different test procedures than those outlined below. Please see applicable chapters for further requirements.

Procedures outlined in ASTM D5093-02, Field Measurement of Infiltration Rate Using a Double-Ring Infiltrometer with a Sealed-Inner Ring, may be required in addition to those listed below.

Test Hole Preparation

1. Dig or bore holes 6 to 10 inches in diameter with vertical sides. The depth of the holes must be at the approximate depth of the proposed absorption trenches, typically 24 inches below ground. If the hole is larger than 6 to 8 inches, place a piece of 4-inch diameter, perforated pipe inside the hole, and fill the space between the pipe and the walls of the hole with drain rock. It is recommended that a sketch or photograph of the hole be provided to the reviewing authority.
2. Roughen or scratch the bottoms and sides of the holes to provide natural unsmoothed surfaces. Remove loose material. Place about 2 inches of 3/4-inch washed gravel in the bottom of holes to prevent scouring during water addition.
3. Establish a reference point for measurements in or above each hole.

Soaking

1. Fill holes with clear water to a level of at least 12 inches above the gravel.
2. If the soil is coarser than sandy clay loam and the first 12 inches of water seeps away in 60 minutes or less, add 12 inches of water a second time. If the second filling seeps away in 60 minutes or less, the percolation test should be run immediately in accordance with the sandy soil test. If both the first and second fillings have percolation rates faster than 3 mpi, the test may be stopped.
3. If either the soil is sandy clay loam or finer, or the first 12 inches or the second 12 inches does not seep away in 60 minutes, the percolation test must be run in accordance with the test for other soils. In these other soils, maintain at least 12 inches of water in the hole for at least 4 hours to presoak the hole.

Sandy Soils Test (percolation rate of 10 mpi or faster)

This test is applicable to sandy soils only (percolation rate of 10 mpi or faster). Add water to provide a depth of 6 inches above gravel. Measure water level drop at least four times, in equally spaced intervals, in a 1-hour time period. Measure to

nearest 1/4 inch. Refill to 6-inch depth after each measurement. Do not exceed 6-inch depth of water. Use final water-level drop to calculate rate.

Other Soils Test (percolation rate slower than 10 mpi)

This test is applicable to other soils (percolation rate slower than 10 mpi). Remove loose material on top of gravel. Add water to provide a depth of 6 inches above gravel. Measure water levels for a minimum of 1 hour. A minimum of 4 measurements must be taken. The test must continue until 2 successive readings yield percolation rates that do not vary by more than 15 percent, or until measurements have been taken for 4 hours. Do not exceed 6-inch depth of water. Use final water-level drop to calculate rate.

Records

Record the following information on the attached form and include as part of the application:

- Date(s) of test(s)
- Location, diameter, and depth of each test hole,
- Time of day that each soak period began and ended
- Time of day for beginning and end of each water-level drop interval
- Each water-level drop measurement.
- Calculated percolation rate
- Name and signature of person performing test
- Name of owner or project name.

Rate Calculation

Percolation Rate = Time interval in minutes/water-level drop in inches.

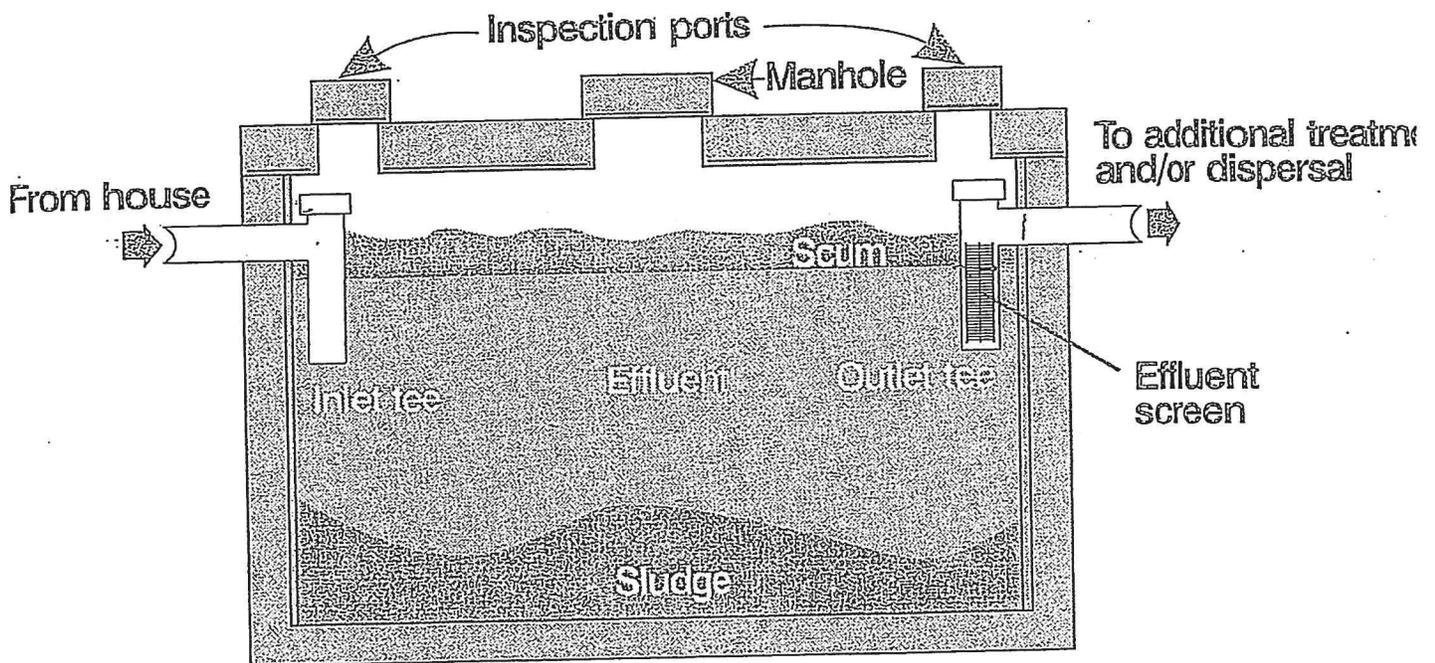
APPENDIX B

Schedule of fees

Fees for On-Site Wastewater Treatment System Installation and Review.

A. System installed by Certified Installer	\$ 125.00
B. System installed by non-certified installer	\$ 200.00
C. Tank replacement only	\$ 25.00
D. Site evaluation	\$ 100.00

APPENDIX C
Typical Septic Tank Design

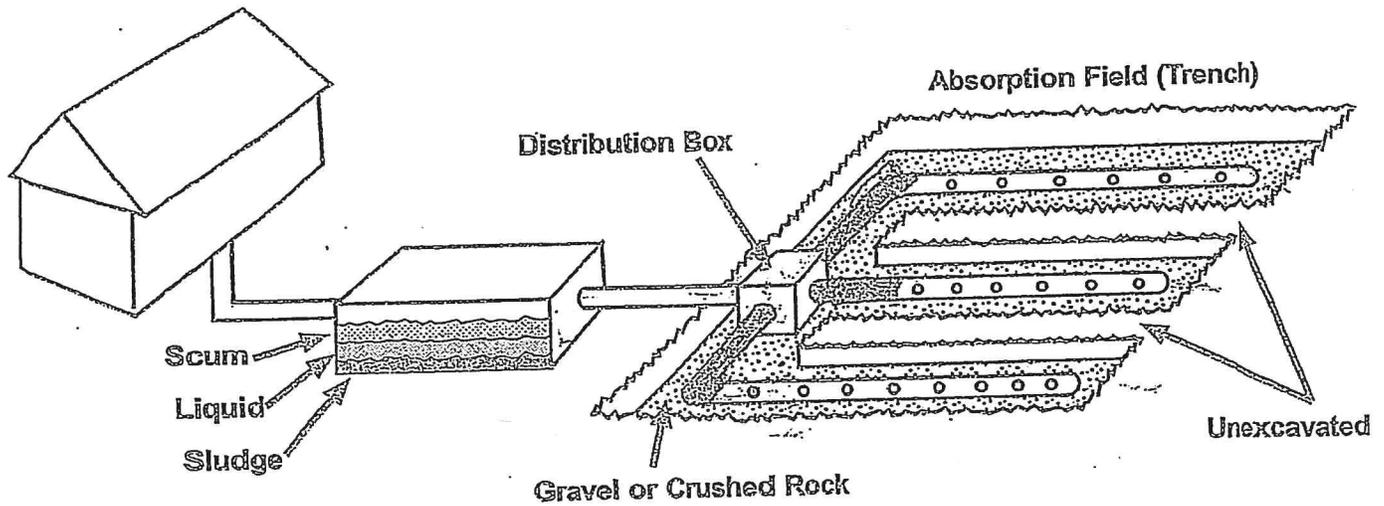


Source: NSFC, 2000.

APPENDIX D
Drawings

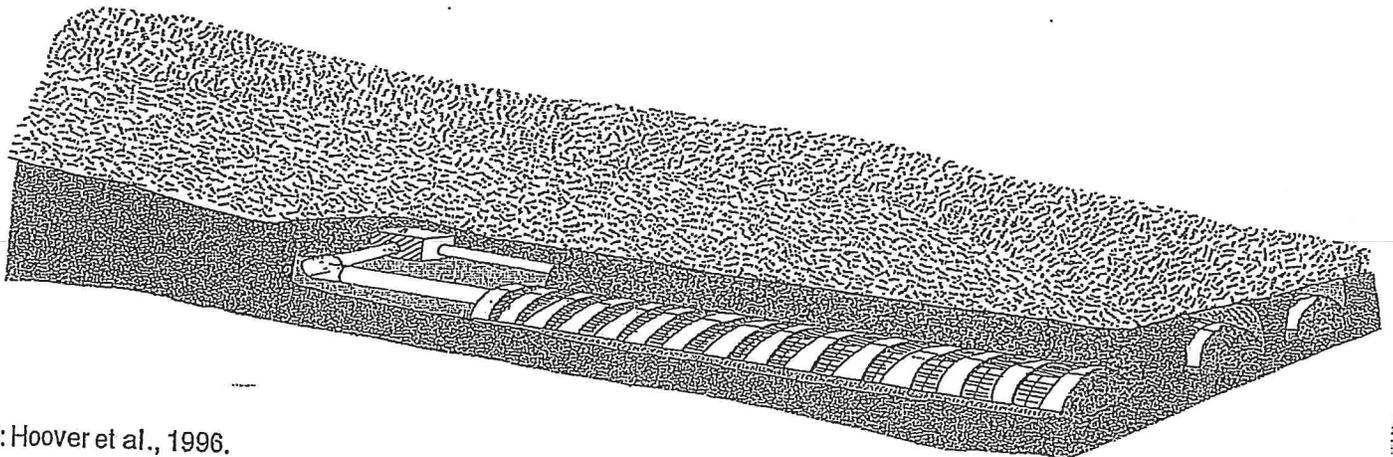
D1.....Conventional Septic System Layout
D2.....Placement of leaching chambers in typical application
D3.....Site layout illustrating replacement area
D4.....Cross section of typical trench
D5.....Site layout illustrating minimum setback distances

D1..Conventional Septic System Layout



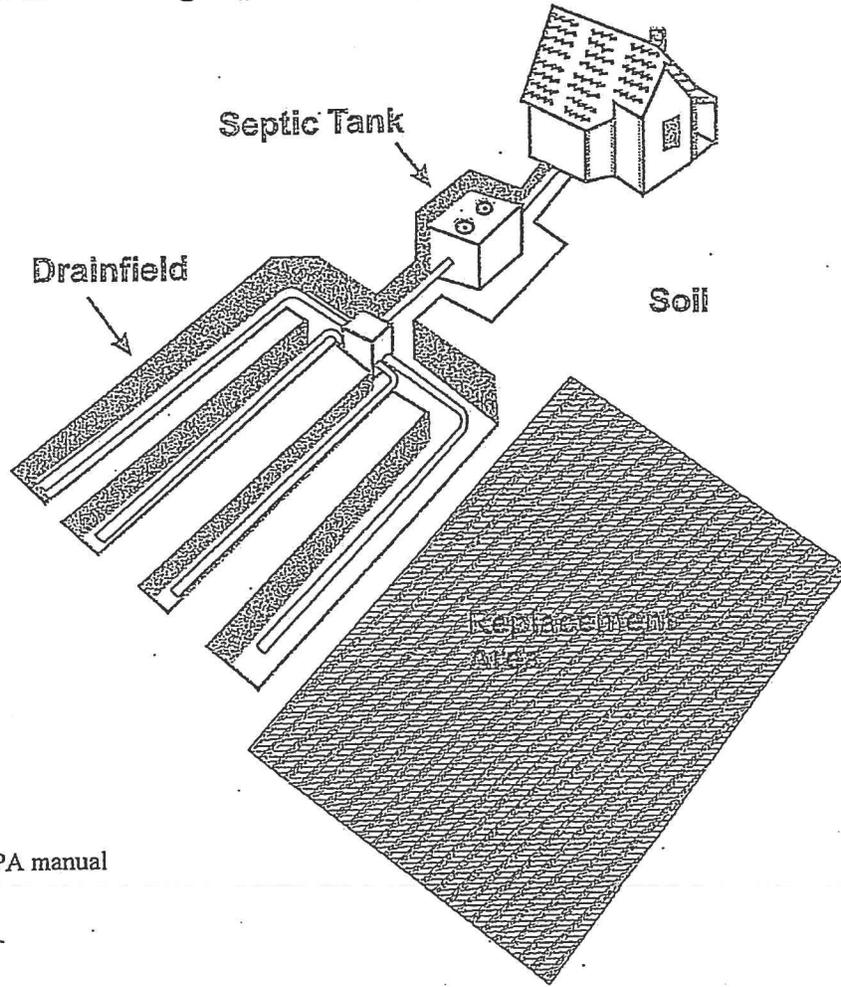
Source: EPA manual

D2..Placement of leaching chambers in typical application

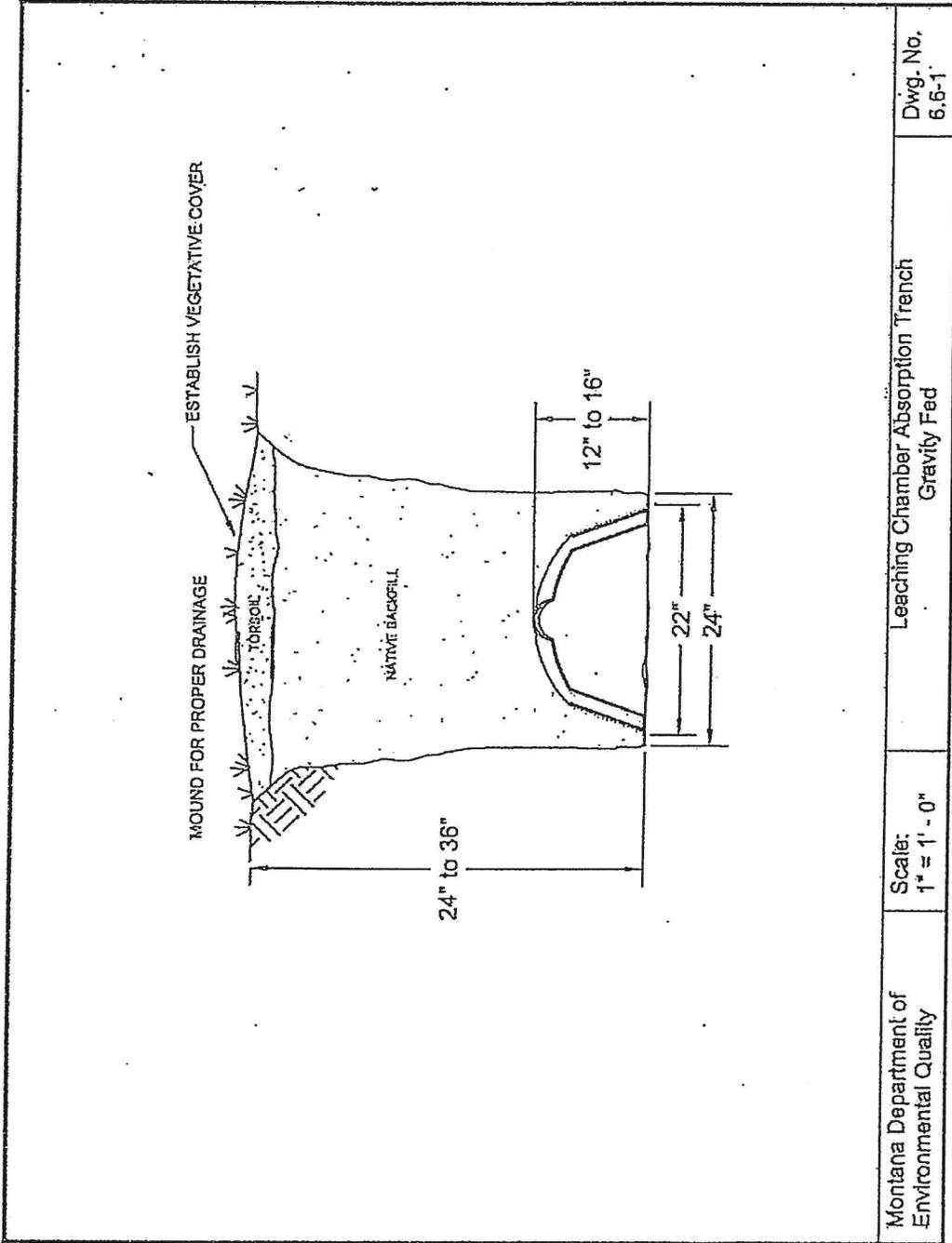


Source: Hoover et al., 1996.

D3..Site layout illustrating replacement area

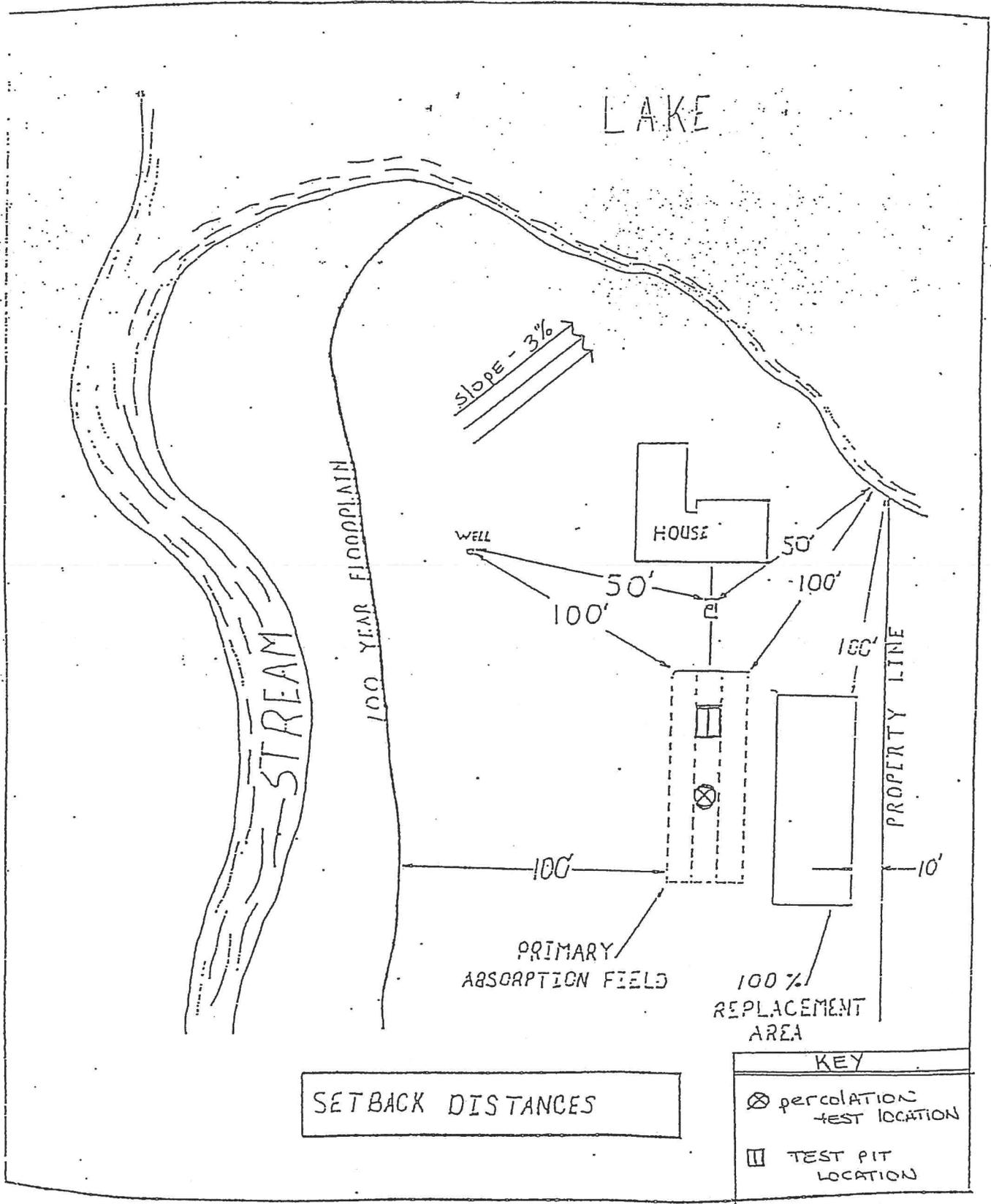


Source: EPA manual



Montana Department of Environmental Quality	Scale: 1" = 1' - 0"	Leaching Chamber Absorption Trench Gravity Fed	Dwg. No. 6.6-1
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D5..Site layout illustrating minimum setback distances



SETBACK DISTANCES

KEY	
⊗	percolation test location
⊞	TEST PIT LOCATION