

GILPIN COUNTY ONSITE WASTEWATER
TREATMENT SYSTEM
REGULATIONS



ADOPTED BY THE GILPIN COUNTY BOARD OF HEALTH
July 10, 2018

TABLE OF CONTENTS

SECTION 1 – TITLE AND AUTHORITY

- 1.0 Title and Authority

SECTION 2 – SCOPE AND PURPOSE

- 2 Declaration
- 2.1 Purpose
- 2.2 Jurisdiction
- 2.3 Prohibition of OWTS Where Public Sewer Service is Available and Feasible.
- 2.4 Severability

SECTION 3 – INCORPORATION OF REGULATION 43

- 3. Included By Reference
- 3.1 Local Options

SECTION 4 – ADDITIONAL DEFINITIONS NOT IN REGULATION 43

SECTION 5 – PERMITS, FEES, AND REVIEW

- 5.0. Site and System Identification
- 5.1. Permits [43.4(B)]
- 5.2. Easements
- 5.3. Final Permit Approval
- 5.4. Repair Permits
- 5.5. Fees
- 5.6. Disclaimer
- 5.7. Board of Health Review and Procedures [43.4(B)(9)]

SECTION 6 – INSPECTIONS [43.4(E)]

- 6.0. Septic Tank
- 6.1. Soil Treatment Area and Related Components [43.4(F)(3)]
- 6.2. Inspection Requirements

SECTION 7 – PROHIBITIONS ON OWTS IN UNSUITABLE AREAS [43.4(J)]

- 7.0. Public Hearing Required
- 7.1. Notice

SECTION 8 – LICENSING

- 8.0. General Requirements for Systems Contractors [43.4(K)(1)]
- 8.1. Requirements for Owner-Installers
- 8.2. General Requirements for Systems Cleaners [43.4(k)(3)]

SECTION 9 – VARIANCES [43.4(N)]

- 9.0. Variances Allowed
- 9.1. Variance Procedure
- 9.2. Variances from the Requirements of Regulation 43 for Repair Permits

SECTION 10 – TRANSFER OF TITLE INSPECTIONS [43.4(L)]

- 10.0. Covered Transactions
- 10.1. Use Permit
- 10.2. Transfer of Title Inspection Requirements (Included in Section 11.1)

SECTION 11 – PERMITS FOR CONTINUED USE OF AN ONSITE WASTEWATER TREATMENT SYSTEM [43.4(M)]

- 11.0. Use Permits
- 11.1. Operating Permits

SECTION 12 – SPECIAL SOIL TYPES REQUIRING DIFFERENT PERCOLATION TEST PROCEDURE [43.4(D)(4)(e)(6)]

- 12.0. Department Authority.

SECTION 13 – REQUIREMENT FOR SOIL PROFILE TEST PITS OR PERCOLATION HOLES TO REMAIN OPEN INSPECTIONS [43.4(E)]

- 13.0. Percolation Hole and Profile Test Pit Marking

SECTION 14 – OVERSIGHT PROGRAM OF INSPECTIONS, MAINTENANCE, RECORDINGKEEPING, AND ENFORCEMENT OF HIGHER LEVEL TREATMENT SYSTEMS [43.14(D)]

- 14.0. Administration and Enforcement by Gilpin Public Health Department.
- 14.1. Operating Permit Required Higher Level Treatment Systems with Higher Level Treatment Unit
- 14.2. Monitoring, Sampling and Reporting Requirements
- 14.3. Items Necessary for Enforcement

SECTION 15 – ADDITIONAL LOCAL REQUIREMENTS

- 15.0. Conceptual Approvals
- 15.1. More Stringent Separation Requirements
- 15.2. Vaults
- 15.3. More Stringent Maintenance Requirements for Higher Level Treatment Systems

APPENDIX A – ALLOWABLE LOCAL OPTIONS

TITLE AND AUTHORITY	Section 1
----------------------------	----------------------

1. **Title and Authority.** These requirements will be known as the “Gilpin County On-site Wastewater Treatment Systems Regulations.” or OWTS Regulations. These requirements have been adopted by the Board of County Commissioners for the County of Gilpin, acting as a Board of Health pursuant to and under authority contained in the On-site Wastewater Treatment System Act, 25-10-101, et seq. C.R.S. and has designated the Gilpin County Public Health Department to implement these OWTS Regulations on behalf of the Board of Health. The Board of Health may designate any other or additional department, agency or entity to implement these OWTS Regulations without the need for amending these Regulations.

SCOPE AND PURPOSE	Section 2
--------------------------	---------------------

2. **Declaration.** This regulation applies to On-site Wastewater Treatment Systems (OWTS) as defined in section 25-10-103(12), C.R.S.

2.1 **Purpose.** The purpose of these OWTS Regulations is to establish the minimum standards for the location, design, construction, performance, installation, alteration and use of OWTS with a design capacity less than or equal to 2,000 gallons per day within Gilpin County.

2.2 **Jurisdiction.** These OWTS Regulations apply to all OWTS in the unincorporated areas of the county and over all municipal corporations within the territorial limits of *Gilpin County*.

2.3 **Prohibition of OWTS Where Public Sewer Service is Available and Feasible.** An OWTS permit must not be issued to any person when the subject property is located within a municipality or special district that provides public sewer service, except where such sewer service to the property is not feasible in the determination of the municipality or special district, or the permit is otherwise authorized by the municipality or special district [43.4(B)(11)].

2.4 **Severability.** Should any section, clause, or provision of these Regulations be declared by a court of competent jurisdiction to be invalid, such decision will not affect the validity of these Regulations as a whole, or any part thereof other than the part declared to be invalid.

INCORPORATION OF REGULATION 43 AND OTHER STANDARDS AND REQUIREMENTS	Section 3
--	---------------------

3. **Included By Reference.** The requirements of the Colorado Water Quality Control Commission’s “On-site Wastewater Treatment System Regulation, Regulation 43, 5 CCR 1002-43, Effective date, April 30, 2018”, are made a part of Gilpin County’s OWTS Regulations and will apply except where identified as an option of the local public health agency or where Gilpin County’s OWTS Regulations are more stringent than Regulation 43, 5 CCR 1002-43, and included in these OWTS Regulations. All aspects of an On-site Wastewater Treatment System including, but not limited to, permits, design, performance, location, construction, alteration, inspection, maintenance and use must be as provided in Regulation 43 and any additional requirements contained in these OWTS Regulations.

3.1 **Local Options.** Allowable local options identified in Regulation 43 and the designated decisions for these OWTS Regulations are identified in the attached “**Appendix A**” to these OWTS Regulations for Gilpin County. Appendix A is made a part of these OWTS Regulations.

ADDITIONAL DEFINITIONS NOT IN REGULATION 43	Section 4
--	----------------------

- 4.1. "County Public Health Department" or "Department" means the Gilpin County Public Health Department and its employees and any other or additional department, agency, or entity designated by the Gilpin County Board of Health.
- 4.2. "Covered transaction" means the transfer, sale, conveyance or change in ownership of any real property served by an onsite wastewater treatment system, excluding the following:
- A. change in ownership solely to include or exclude a spouse or children;
 - B. transfer subject to life estate;
 - C. transfer to effect foreclosure or forfeiture of real property, (does not include the subsequent sale of the foreclosed property after being titled to the foreclosing entity);
 - D. transfer by redemption from a tax sale (does not include the subsequent sale of the property after being titled to the redeeming entity);
 - E. transfer creating or ending joint ownership if at least one person is an original owner of the property and / or his or her spouse or children;
 - F. transfer of property containing premises that have been demolished or are otherwise uninhabitable;
 - G. transfer for the vacation or granting of a public right of way;
 - H. transfer from a person to a trust or to themselves as trustee(s) of a trust estate;
 - I. properties with onsite wastewater treatment systems that have never been used; and
 - J. new homes that have not yet been occupied.

PERMITS, FEES, AND BOARD OF HEALTH REVIEW AND ADMINISTRATIVE PROCEDURES	Section 5
--	----------------------

- 5.0. **Site and System Identification.** Before applying for an OWTS permit, the owner or applicant shall ensure the following:
- A. The site shall be marked at the primary road access by a sign not less than two feet square showing the property address;
 - B. The corners of the proposed soil treatment area shall be marked by stakes with an exposed height of not less than two feet. The stake shall be marked by stakes that it represents the location of the soil treatment area along with the lot or parcel number; and
 - C. If the on-site well has not been drilled, the well location or minimum will setback shall

be marked by a stake with an exposed height of not less than two feet. The stake shall be marked to show that it represents the location of the well along with the lot or parcel number.

5.1. Permits [43.4(B)]

- A. **Permit Required.** Prior to installing, altering expanding or repairing an OWTS, the applicant must obtain a permit from the Gilpin County Public Health Department.
- B. **Permit Application.** The permit application must include information identified in section 43.4(B)(3) of Regulation 43, including the following minimum requirements:
 - i. Applicant name and contact information;
 - ii. Owner name and contact information;
 - iii. Property address;
 - iv. Property legal description;
 - v. Type of permit and use of structure to be served by the system;
 - vi. Report from Site and Soil Evaluation prepared by a professional engineer;
 - vii. System design with a legible, accurate site plan no larger than 11 x 17 inches which shows pertinent physical features on subject property, and on adjacent properties, as noted in Tables 19-1 and 19-2; and
 - viii. Other information, data, plans, specifications and tests as required by Department.
- C. **Undesirable Soil Condition Evidence.** When specific evidence suggests undesirable soil conditions exist, additional hydrological, geological, engineering or other information may be required to be submitted by the applicant. This requirement shall not prejudice the right of the Department to develop its own information from its own source at its own expense.
- D. **Minimum Building Site Size Requirements.** Gilpin has no minimum lot size on which an OWTS may be installed. However, all installations shall comply with applicable separations as prescribed in Table 7-1 of Regulation 43 and, to the extent more stringent, Gilpin County's separation requirements in Section 15 of these Regulations.
- E. **Access to Site.** For the purpose of inspecting and enforcing applicable regulations and the terms and conditions of any permit issued and investigating and responding to complaints, the Department is authorized to enter upon private property at reasonable times and upon reasonable notice for the purpose of determining whether or not an operating OWTS is functioning in compliance with the OWTS Act and these Regulations and the terms and conditions of any permit issued, and to inspect and conduct tests in evaluating any permit application. The owner or occupant of every property having an OWTS shall permit the Department access to the property to make inspections, conduct required tests, take samples, and monitor compliance.
- F. **Preliminary Site Investigation.** After receiving a permit application, the Applicant's design

engineer shall prepare a report for review by the health officer presenting the design engineer's preliminary site investigation consisting of:

- i. An inspection of the property;
- ii. An assessment of the general topographical, hydrologic and geologic conditions of the property and surrounding area; and
- iii. An assessment of the suitability of the proposed OWTS.

- G. **Dangerous Subsurface Soil Conditions.** When specific evidence indicates that subsurface conditions exist that may endanger State Waters, the health officer may require the applicant to submit additional hydrological, geological or engineering information.
- H. **Expiration.** An OWTS permit expires one year after the date of issuance if construction has not commenced. After expiration, a new application must be required to begin construction.
- I. **Changes in Plans or Specifications.** Any change in plans or specifications for the OWTS after the permit has been issued shall be submitted to the health officer for review and approval; otherwise the permit will become invalid. Any change in plans or specifications of the OWTS after the permit has been issued invalidates the permit unless the permittee receives written approval from the Gilpin County Public Health Department. After a permit is invalidated, a new application and subsequent permit is required to begin construction.
- K. **Product Development Permit.** Application for a product development permit may be approved by the Gilpin County Public Health Department consistent with requirements of section 43.4(l) of Regulation 43.
- L. **Encroachments.** Allegations regarding encroachment of system components onto adjacent properties shall be supported by a survey or similar documentation provided by the owner of that property showing the extent of the encroachment and shall be made prior to the final approval of the system. Allegations made after final approval has been given shall be considered to be civil matters between the parties involved.
- M. **Engineer Certification of Installations.**
- i. The design engineer shall certify that the system was constructed in accordance with the permitted design. The certification shall include, but not be limited to:
 - a. Suitability of in situ, imported or reconditioned site materials to provide adequate treatment of the effluent;
 - b. Verification of location of water table;
 - c. Proper installation and operation of any pumps, siphons, or other mechanical or electrical appurtenances, if applicable;
 - d. Completed manufacturer's startup checklist for higher level treatment units, if applicable;
 - e. Proper installation of sampling and / or monitoring equipment, if applicable;
 - f. Suitability of blasting in conformance with the submitted blasting plan, if

- applicable;
- g. Name of Systems Contractor who installed the system;
 - h. Name and qualifications of service provider, if applicable; and
 - i. Any other information required by the Department.
- iv. The engineer shall provide a scaled drawing showing in the OWTS as installed, including its location from known and findable points, dimensions, depths, sizes, manufacturers' names and models, as available and other information relative to location and maintaining the OWTS components.
 - v. Failure to provide the required certifications shall result in denial of the final approval of the system.
 - vi. If the design engineer is deceased, no longer a practicing engineer, or otherwise unable to provide such certifications, a third party engineer may certify that the permitted OWTS is installed according to the approved plans.

5.2. Easements

- A. If geologic or topographic constraints limit the installation of an OWTS on a building site, components of the proposed system may be located on contiguous properties in such a manner that conforms to these Regulations.
- B. In support of the above, an easement agreement shall be prepared and submitted for approval by the health officer prior to the issuance of a permit and shall include the following:
 - i. A survey from a professional land surveyor establishing the perimeter of the easement such that a minimum setback of at least 10 feet shall be maintained from all system components to be located in the easement;
 - ii. written provisions for the installation of and perpetual maintenance, repair and use of the OWTS components located within the easement; and
 - iii. Any other information required by the health officer.
 - iv. Upon approval by the health officer, the agreement shall be executed by the owners of the dominant and servient estates subject to the easement agreement and recorded with the Gilpin County Clerk and Recorder after final approval of the system installation.
 - v. For the purposes of these Regulations, easements do not affect the size of buildingsites.

5.3. Final Permit Approval. Final approval of the permit by the local public health agency must include, but is not limited to:

- A. Receipt of letter from the engineer certifying construction of the OWTS as per the approved design plan, if the OWTS was engineer designed;

B. Receipt of a record drawing which includes a scale drawing showing all components of the OWTS including their location from known and findable points, dimensions, depths, sizes, manufacturers' names and models as available, and other information relative to locating and maintaining the OWTS components;

C. Final inspection prior to backfilling the OWTS by the Department confirming that it was installed according to the permit requirements and regulations or variances to the regulations, however, if the OWTS was not engineered, the Department may also require Applicant provide a written report or affidavit by the design engineer or other professional engineer experienced in OWTS to certify that installation was completed in accordance with applicable requirements which shall be used by the Department in its final inspection; and

D. Identification of system contractor.

5.4. Repair Permits.

A. Repair permits must identify a reasonable period of time in which the owner must make repairs prior to expiration of the permit. At the end of that period, the Department shall inspect the system to ensure it is functioning properly.

B. The owner or occupant of a property on which an OWTS is not in compliance must obtain a repair permit from the local public health agency. The applicant must apply for a repair permit within two business days after receiving notice from the local public health agency that the system is not functioning in compliance with the OWTS Act or applicable regulations, or otherwise constitutes a nuisance or a hazard to public health or water quality.

C. Designs for repairs to OWTS or any replacement parts shall comply with all requirements of the Regulations in effect at the time of the issuance of the permit, including capacity and configuration of septic tanks as set forth in Regulation 43, except that designs that cannot meet the minimum setback requirements in Regulation 43 or Section 15 of these Regulations may apply to the Board of Health for a variance from those requirements as set forth in Section 9, unless the Regulations then in effect prohibit this; and

D. Concurrently with the issuance of a repair permit, the Department may issue an emergency use permit authorizing continued use of a malfunctioning system on an emergency basis for a period not to exceed the period stated in the repair permit. Such an emergency use permit may be extended, for good cause shown, in the event repairs may not be completed in the period stated in the repair permit through no fault of the owner or occupant and only if the owner or occupant will continue to make repairs to the system.

5.5. Fees

- A. Fees as established by the Board of Health shall accompany an OWTS permit application. The fees are in accordance with Regulation 43.4(B)(4) and (5) and C.R.S §25-10-107. Fees may be revised from time to time at the discretion of the Board of Health. The Gilpin County Board of Health may approve waivers of fees at their discretion in accordance with policies that may be set by the Board.
- B. **Surcharge [43.4(B)(5)].** A surcharge of \$23.00 will be collected for each permit issued by the Gilpin County Public Health Department of that fee, the Gilpin County Public Health Department will retain three dollars to cover administrative costs and twenty dollars must be transmitted to the Colorado Dept. of Public Health and Environment for use in funding its OWTS program.

5.6. Disclaimer. The issuance of any permit under these Regulations does not constitute a guarantee, warranty or representation by the Board of Health, the health officer, or the Department that the permitted OWTS will operate properly or that the system will not fail. The issuance of any permit and specifications of terms and conditions therein shall not constitute assumption of liability, nor create a presumption that the Department or its employees may be liable for the failure or malfunctioning of any system. Permit issuance shall not constitute a certification that the system, the equipment used in the system, or any component used for system operation will ensure continuous compliance with the provisions of these Regulations or the OWTS Act, or any terms and conditions of a permit. The Department is entitled to rely on representations of the Applicant and design engineer and any other person or engineer providing information to the Department pursuant to these Regulations.

5.7. Board of Health Review and Procedures [43.4(B)(9)]

- A. Systems listed below shall be reviewed by the Board of Health at a public hearing for which public notice or notice must be sent via certified mail, with a minimum 20-day reply time from the date of mailing, to all adjacent property owners.
 - i. Systems discharging effluent into State Waters;
 - ii. Systems discharging effluent onto ground surface;
 - iii. Systems utilizing new technology devices, if the engineering design provides for the timely installation of backup system of acceptable design if the new technology device fails;
 - iv. Proposals to install OWTS on more than one legally platted lot or building site; and
 - v. Any other type of OWTS for which the health officer is not specifically authorized to issue permit.
- B. Factors that shall be considered in the review of these systems are limited to compliance with these Regulations and any formally adopted policies of the Board of Health.
- C. When specific evidence suggests that limiting or unfavorable site conditions may exist, the health officer may require the applicant to submit additional geologic, hydrologic or engineering data prior to review by the Board of Health.

- D. If the health officer determines that the proposed system does not comply with these Regulations, the health officer shall deny the application and provide written notice to the applicant via first class mail.
- E. Denial shall become final upon the expiration of time for filing an appeal under this Section or when the final action is taken upon an appeal, whichever is later.
- F. Any person whose application has been denied by the health officer may submit a written request to the Board of Health to review the health officer's denial within 60 days of receipt of the notice of denial. The request shall state the facts upon which the applicant bases their request for review, the reasons entitling them to relief, and the specific relief or outcome they seek. The applicant shall bear the burden of supplying the local Board of Health with sufficient evidence to document that the denied system shall be constructed and used in such a manner that will result in no greater risk than that associated with compliance with the requirements of these Regulations, comply with the declaration and intent of these Regulations, and comply with all applicable state and local regulations and required terms and conditions in any permit.
- G. At the next meeting of the Board of Health following the submission of a written request for review, the Board of Health shall either deny the request or schedule a hearing to consider the request. Hearing review shall be conducted pursuant to the requirements of C.R.S §24-4-105.
- H. Hearing Procedures. Public hearings conducted pursuant to this section shall provide an opportunity for all interested persons to present relevant testimony or evidence in accordance with policies adopted by the Board of Health. At the conclusion of such hearing the Board of Health may deny or approve the application upon such terms and conditions it deems advisable, or table or continue the application pending additional information it deems necessary to render a decision.
- I. Appeal of Board Decisions. An applicant need not file a request for reconsideration prior to seeking judicial review of the Board of Health's decision under the provisions of C.R.S. §25-1-513. However, in the event a request for reconsideration is received in a timely manner, the period for seeking judicial review shall terminate 90 days from the Board of Health's final decision on the request for reconsideration.

INSPECTIONS [43.4(E)]	Section 6
------------------------------	---------------------

6.1. *Septic Tank [43.9(B)(3)(c)].* The applicant must provide sufficient prior notice to and coordinate with the Department so the local public health agency or its designee can conduct a field inspection of the septic tank before backfilling.

6.2. *Soil Treatment Area and Related Components [43.4(F)(3)].* The applicant must provide sufficient prior notice to and coordinate with the Department so the local public health agency or its designee can conduct a final field inspection of the soil treatment area and all related components of the OWTS before backfilling.

6.3. *Inspection Requirements*

- A. The owner shall assure reasonable and safe access for the inspection of any excavation required in the installation of the permitted system. For the purpose of these Regulations, a ladder is not considered reasonable and safe access.
- B. If during the installation of the system an inspection reveals any significant departure from the design of the permitted system or change in the proposed water supply, or if any aspect of the system fails to comply with these Regulations, the health officer shall provide the owner with written notice of the deficiencies.
- C. If upon final inspection the health officer finds the system is installed in accordance with these Regulations and the permit conditions, the health officer shall approve the completed system.
- D. No OWTS shall be approved for use without a final inspection by the health officer.
- E. Under certain circumstances and upon prior approval by the health officer, the design engineer may perform inspections on behalf of the health officer, provided that those inspections are documented and reported to the Department prior to the final inspection and approval of the system pursuant to Sections 5.3.C. and 6.3.D.

PROHIBITIONS ON OWTS IN UNSUITABLE AREAS [43.4(J)]	Section 7
---	---------------------

- 7. **Public Hearing.** The Board of Health may conduct a public hearing to consider a prohibition on the issuance of on-site wastewater treatment system permits for defined areas in which the local Board of Health determines that construction and use of additional OWTS may constitute a hazard to public health or water quality.
- 7.1. **Notice.** The hearing may be conducted after mailing a written notice to all affected property owners as shown in the records of the County Assessor and publishing a legal notice in a newspaper of general circulation at least 10 days prior to the hearing.

LICENSING	Section 8
------------------	---------------------

- 8. **General Requirements for Systems Contractors [43.4(K)(1)].**
 - A. Any person engaged in the business of installing, constructing or renovating OWTS shall hold a valid Systems Contractor license issued by the Department. Employees of a licensed Systems Contractor need not be individually licensed.
 - B. An applicant for a Systems Contractor license shall be required to pass a test that demonstrates knowledge of these Regulations. The license shall be valid only as long as the person passing the test remains in the employ of the Systems Contractor. Licensed contractors shall be required to take and pass the test and meet any other Gilpin County requirements for renewal of their license each calendar year.

- C. The initial license period shall be one year and renewals shall coincide with the calendar year. A license that lapses because of failure to renew, revocation or suspension shall be subject to the fee established for a new license upon re-application. If the date of re-application is more than six months from the date the license expired, the applicant shall also be required to comply with Section 8.0.B.
- D. Systems Contractors shall:
 - i. Verify that a permit to install on OWTS has been issued prior to commencing excavation and maintain a copy of the permit and the engineering design and specifications at the site of the installation;
 - ii. Post the permit inspection card on the building site in a conspicuous and accessible location. Approval or denial of inspections shall be recorded on this card. Inspections may not be conducted by the health officer if this card is not posted on the building site.
 - iii. Verify that there have been no changes in the site conditions under which the permit was used prior to commencing construction. If any condition on the permit, the supporting engineering or otherwise provided for in these Regulation cannot be met, the Systems Contractor shall notify the health officer before proceeding with installation;
 - iv. Perform all the work in compliance with these Regulations and with the conditions specified on the permit and supporting engineering design; and
 - v. Suspend work and notify the health officer should there be any change in site conditions after construction begins that would prevent the installation of the system in accordance with the permit conditions or otherwise provided for in the Regulation. Construction may resume only after authorized by the health officer.
- E. The Board of Health may revoke or suspend a Systems Contractor license for failure to comply with these Regulations. Revocation or suspension shall take place only after a hearing before the Board of Health. The license holder shall be given no less than 10 days' notice of the hearing and may be represented at the hearing by legal counsel.
- F. The Board of Health may lift the suspension or revocation after a hearing at which it is determined that the Systems Contractor has corrected or rectified the conditions that caused the suspension or revocation.

8.1. **Requirements for Owner-Installers.**

- A. The owner of property for which an OWTS permit has been issued may install that system without holding a Systems Contractor license provided that the owner has demonstrated their knowledge of these Regulations and OWTS requirements to the satisfaction of the health officer, including without limitation, passing the System Contractor test required in Section 8.0.B. and has signed the Owner-Installer Affidavit.
- B. Owner-installers shall be responsible for complying with all applicable requirements of these Regulations, including, but not limited to, assuring that all required inspections

are scheduled with, and performed by the design engineer and the health officer and all required professional design engineer certifications and other requirements in Section 5.1 through 5.3 are met.

- C. No portion of the work for an owner-installed system shall be subcontracted to any other person who will be financially compensated for that work unless that person is a Systems Contractor.
- D. An owner-installer shall install no more than one OWTS per year.

8.2. General Requirements for Systems Cleaners [43.4(K)(3)].

- A. Any person engaged in the business of cleaning or pumping of septic tanks, vaults, holding tanks or other components of an OWTS, or transporting sewage to a disposal site shall hold a valid Systems Cleaner license issued by the Department. Employees of a Systems Cleaner need not be individually licensed.
- B. The health officer may require the applicant to demonstrate their knowledge of these Regulations prior to the issuance or renewal of a Systems Cleaner license
- C. The initial license period shall be one year and renewals shall coincide with the calendar year. A license that lapses because of failure to renew, revocation or suspension, shall be subject to the fee established for a new license upon re-application.
- D. Pumping Requirements.
 - A. Systems Cleaners shall:
 - i. Remove the liquid, sludge and scum from all compartments of the tank, leaving no more than three inches of sewage sludge in the bottom of the tank;
 - ii. Inspect the tees, baffles, aerator unit, pumps, alarms, filters, siphons and other internal or external components of the tank(s) being pumped and notify the property owner if any of these components are damaged or missing;
 - iii. Inspect and clean any filters or other devices which require routine maintenance and cleaning, if necessary;
 - iv. Replace all lids and secure the components to prevent unauthorized entry;
 - v. Provide the property owner with an inspection report regarding the condition of the tank and any observable deficiencies;
 - vi. Report in writing leaking septic tanks to the owner and the Gilpin County Health Agency;
 - vii. Maintain their equipment so that no spills will occur during pumping or transportation and that their employees are not subjected to health hazards from exposure to the sewage;
 - viii. Dispose of collected sewage only at sites approved by the Department; and
 - ix. Maintain records of the date and address for each septic tank pumped and the date and disposal site for all collected sewage. The health officer may require a Systems Cleaner to provide documentation regarding their disposal methods and practices.
 - E. The Board of Health may revoke or suspend a Systems Cleaner license for failure to comply with these Regulations. Revocation or suspension shall take place only after a hearing before the Board of Health. The license holder shall be given no less than 10

- days' notice of the hearing and may be represented at the hearing by legal counsel.
- F. The Board of Health may lift the suspension or revocation after a hearing at which it is determined that the Systems Cleaner has corrected or rectified the conditions that caused the suspension or revocation.

VARIANCES [43.4(N)]	Section 9
----------------------------	----------------------

9. *Variances Allowed*

- A. The Board of Health may approve a variance from a requirement of this Regulation. Variances cannot be granted by staff.
- B. With the exception of those items - Repair Permits noted in Section 9.2 below, variances from any requirement of these regulations may be granted only for items that are more stringent than, or not addressed by Regulation 43.
- C. Approval of a variance must be based upon evidence presented by the applicant, or their designee, showing that the variance:
- i. Would not be more injurious to the public health, water quality, or the environment; and
 - ii. Would prevent a substantial hardship to the applicant.
- D. Variances shall not be granted:
- i. Variances must not be granted under the items identified in section 43.4(N)(5) of Regulation 43;
 - ii. Where the property can accommodate a conforming OWTS;
 - iii. To mitigate an error in construction involving any element of property improvements;
 - iv. If it reduces the separation to ground water or bedrock based on the level of treatment as provided for in Table 17-2;
 - v. If it reduces the horizontal setback from a well, unless it also meets the variance requirements of the Board of Examiners of Water Well Construction and Pump Installation Contractors;
 - vi. Solely for economic gain;
 - vii. From horizontal setback from a well, unless it also meets the variance requirements of the Board of Examiners of Water Well Construction and Pump installation Contractors;
 - ix. For the installation of a higher level treatment system based on sizing or separation reductions without the Department having a maintenance and

- oversight program as defined in section 43.14.D; and
- x. if it will result in a setback reduction to an offsite physical feature that does not conform to the minimum setbacks defined in Tables 19-1 and 19-2 of this regulation without the board of health considering any concerns of the owner of property containing said feature. Property lines are considered offsite features. The property owner containing said feature must be notified of the time and date of the hearing.

9.1. Variance Procedure.

- A. Variance requests must include all items identified in section 43.4(N)(2)(d).
- B. The applicant has the burden of proof to demonstrate that the variance is justified and will pose no greater risk to public health and the environment than would a system meeting these Regulations. The Board of Health must determine if this item has been addressed prior to granting a variance.
- C. The Board of Health has the authority to impose site-specific requirements and conditions on any variance granted.
- D. Variance requests shall be accompanied by the following:
 - i. A site-specific request identifying the specific criteria from which a variance is being requested;
 - ii. Technical justification by a professional engineer or professional geologist, which indicates the specific conditions which exist and/or the measures which will be taken that support a finding that the variance will result in no greater risk than that associated with compliance with the requirements of the regulation. Examples of conditions which exist, or measures which might be taken, include but are not limited to the following: evidence of a natural or manmade physical barrier to the movement of effluent to or toward the feature from which the variance is requested; placement of a manmade physical barrier to the movement of effluent to or toward the feature from which the variance is requested; soil replacement with sand filter media to reduce the infiltration rate of the effluent such that the travel time of the effluent from the absorption field to the physical feature is no less than the travel time through the native soils at the prescribed setback and Treatment Level 2;
 - iii. A discussion of alternatives considered in lieu of the requested variance;
 - iv. Technical documentation for selected alternative, which may include a testing program, which confirms that the variance does not increase the risk to public health and to the environment; and
 - v. A statement of the hardship that creates the necessity for the variance.
- E. The applicant has the burden of proof to demonstrate that the variance is justified and will pose no greater risk to public health and the environment than would a

system meeting these Regulations.

- F. The Board of Health has the authority to impose site-specific requirements and conditions on any variance granted.
- G. Factors that shall be considered in the review of these systems are limited to compliance with these Regulations and any formally adopted policies of the Board of Health. However, when specific evidence suggests that limiting or unfavorable site conditions may exist, the health officer may require the applicant submit additional geologic, hydrologic or engineering data prior to review by the Board of Health.
- H. Outcome of the Variance Proceeding. The applicant shall be notified in writing of the Board of Health’s decision regarding the request for a variance. The notice of a denial of a variance shall include those reasons which form the basis for the denial. The notice of an approval of a variance shall include any conditions of the approval.
- I. The variance, and any conditions thereof, shall be recorded on the deed to the property and any expenses associated with that recording shall be the responsibility of the party obtaining the variance.
- J. Any request for variance shall be subject to a public hearing for which public notice must be sent via certified mail, with a minimum 20-day reply time from the date of mailing, to all adjacent landowners.

9.2. Variance from the Requirements of Regulation 43 for Repair Permits

- A. The Board of Health will consider requests for variances for repairs to existing systems that cannot meet the minimum setback requirements in Table 7-1 of Regulation 43 or the more stringent setback requirements in Section 15 of these Regulations.
- B. The components of the repaired system shall be no closer to features requiring setbacks than the components of the existing system.

TRANSFER OF TITLE INSPECTIONS [43.4(L)]	Section 10
--	-----------------------

10. **Covered Transactions.** The following requirements apply to “covered transactions” as that term is defined in Section 4.1 and to the extent more stringent, the Requirements of Regulation 43, 5 CCR 1002-43 apply as well.

10.1. **Use Permit.** Prior to a covered transaction involving a dwelling or other structure served by an

OWTS, the property owner shall obtain a use permit for that system unless exempted or waived as set forth Section 10.

10.2. **Transfer of Title Inspection Requirements.** Transfer of title inspections for covered transactions shall be in accordance with the requirements of Section 11.

PERMIT FOR CONTINUED USE OF AN ONSITE WASTEWATER TREATMENT SYSTEM [43.4(M)]	Section 11
--	-----------------------

11.0. **Use Permits**

- A. Applicability.
 - i. Prior to a covered transaction involving a dwelling or other structure served by an OWTS, the property owner shall obtain a use permit for that system unless exempted or waived as set forth in this section.
 - ii. Owners of limited-occupancy dwellings not served by a water carriage sewer system shall obtain a use permit to allow continued limited occupancy of the dwelling.
 - iii. If the OWTS for residential properties was installed and approved by the health officer less than five years from the date of property closing or application for the building permit, a use permit shall not be required. If any component of the system is more than five years old, a use permit shall be required for the entire system.
 - iv. Properties with systems that were installed but never connected to a dwelling or structure do not require the issuance of a use permit prior to sale or transfer.
- B. Applications for transfer of title and inspection reports must be made on forms furnished or approved by the local public health agency. Inspectors must be certified by National Association of Wastewater Technicians or an equivalent program approved by the local public health agency. Inspectors for higher level treatment systems must have training relevant to the specific system or certification by the equipment manufacturer. The applications must include, as appropriate:
 - i. Owner's name and contact information;
 - ii. Physical address of property;
 - iii. Legal description of property;
 - iv. Name of Inspector, Inspector's NAWT or other applicable certification number;
 - v. Date and time of the inspection(s);

- vi. A septic tank inspection report completed within the previous 12 months, including a septic tank pumping receipt, when applicable, based on the inspection report;
 - vii. An inspection report completed within the previous 12 months for any mechanical components such as pumps, alarms or higher level treatment systems; and
 - viii. An inspection report completed within the previous 12 months providing a detailed report noting the condition of the soil treatment area.
- C. Application and reports shall be made on forms furnished by the Department and shall include, as appropriate:
- i. A septic tank pumping and inspection report from a licensed Systems Cleaner dated not more than 12 months prior to the date of the use permit application;
 - ii. An inspection report dated not more than 30 days from the date of application if the system contains any mechanical components such as an aeration or secondary treatment system;
 - iii. A copy of the current O&M contract or operating permit, as applicable, and
 - iv. Any other information required by the health officer.
- D. All components that are found to be in a state of malfunction must be noted and disclosed within the inspection report.
- E. Unless a use permit is issued, application shall become void six months from date of application.
- F. Minimum Criteria for Approval of a Use Permit. In addition to the requirements of Regulation 43, the existing OWTS shall meet, at a minimum, the following criteria and conditions:
- i. A primary (and secondary, if applicable) treatment unit such as a water-tight, concrete or synthetic septic tank, sealed vault or holding tank, composting or incineration toilet or aeration tank is present and in good working order, provided with suitable lids and all internal devices and appurtenances such as tees, filters and baffles that were originally provided with the tank;
 - ii. All sewer lines and pipes are open, undamaged and free-flowing;
 - iii. Alarms or other mechanical devices necessary for the operation of the system are present and in good working order;

- iv. An absorption bed, trench, dry or leaching well, evaporation system or other means of subsurface wastewater treatment, is present and in good working order;
- v. There is a current operating permit or O&M contract, as applicable, for systems utilizing mechanical components for wastewater treatment;
- vi. There are no unapproved wastewater discharges from the dwelling or structure such as washing machine drain lines, etc.;
- vii. The system has not been significantly altered from its original design and configuration as documented in Department records; and
- viii. Any deficiencies noted in the inspection reports have been corrected.
- ix. Items noted in the inspection report that do not comply with the following criteria and conditions must be corrected along with necessary permits and inspections prior to the issuance of a final acceptance document:
 - a. All tanks must be structurally sound and in good working order and provided with safe and secure lids;
 - b. All internal devices and appurtenances such as tees, effluent screens and baffles that were originally provided with the tank or added later must be intact and in working order;
 - c. Alarms, control devices, and components necessary for the operation of the system are present and in good working order;
 - d. A soil treatment area, or other means of subsurface wastewater treatment, must be present and not in a state of failure;
 - e. There are no unapproved wastewater discharges from the system or structure; and
 - f. Any items meeting the conditions of a “Failure” as defined in this regulation have been corrected to the acceptance of the local public health agency.

G. Issuance of an Acceptance Document. When the criteria set forth above have been met, the local public health agency must issue an acceptance document, using terminology adopted by the local public health agency, setting forth the terms and conditions of approval, including, as appropriate:

- i. Statement of the size, type and capacity of the system and a record drawing, either from the local public health agency records (verified by the inspector) or from the inspection reports;

- ii. Evidence of past system failures as shown in local public health agency records;
 - iii. Circumstances or factors that may have affected the ability of the inspector to evaluate the system;
 - iv. Whether the system meets the permitting requirements of the local public health agency; and
 - v. Other information the local public health agency may require.
- H. The acceptance document will remain valid until the date of real estate closing or for a maximum period of twelve months, whichever comes first.
- I. For limited occupancy dwellings, the owner shall submit a Limited Use Occupancy Dwelling Agreement signed by the purchaser of the property setting forth the terms of continued occupancy. The Department shall record this form with the Gilpin County Clerk and Recorder.
- J. Issuance of a Use Permit. When the conditions in Section 10.2 have been met, the Health Officer shall issue the use permit, setting forth the terms and conditions of approval, including, as appropriate:
- K. The existence of any permits in Department files;
- L. The use permit shall remain valid until the date of the real estate closing or for a period of six months, whichever comes first. Once the real estate closing has been completed the Use Permit need not be renewed.
- M. Waiver of a Use Permit. If it is determined that an OWTS does not meet any of the requirements in Section 10.2, the requirement for a use permit may be waived, provided that the purchaser has executed a written agreement with the health officer agreeing to upgrade, repair or replace those non-compliant components within 90 days of occupying the dwelling or structure, or, has obtained a tap to allow connection to a sanitation district sewer line and agrees to complete the connection and abandon the non-compliant OWTS within 90 days of occupying the structure. If conditions, such as frozen ground or lack of access limit the ability of the purchaser to complete all necessary repairs within 90 days, the health officer may authorize an extension
- N. Renewal of a Use Permit. Provided it has not expired, a use permit may be renewed one time for a period of six months upon completion of the appropriate form and payment of the required fee.
- O. Revocation of a Use Permit. The health officer may revoke a use permit based upon a determination that the OWTS is no longer functioning in accordance with these Regulations or that false or misleading material statements were made on the application or inspection reports.
- P. Penalties. Failure to obtain a use permit for a covered transaction as provided for these Regulations shall subject the seller or purchaser who failed to obtain the permit to a penalty assessed under the provisions of §25-10-113, C.R.S.

11.1. **Operating Permits [43.4(D)(4)(e)(6)]**

A. Applicability.

- i. An operating permit shall be required for any system that includes a higher level treatment unit as defined by these Regulations.
- ii. An operating permit shall be maintained and renewed until the system is either abandoned or the Department authorizes the decommissioning or removal of the higher level treatment unit.
- iii. The Department shall not authorize the removal of a higher level treatment unit unless the OWTS would conform to the requirements for TL1 systems, including minimum distance setbacks set forth in Table 7-1 of Regulation 43 or as applicable Section 15 of these Regulations and vertical separation from the STA infiltrative surface to any limiting condition as set forth in Regulation 43.
- iv. The Board of Health shall adopt fees and policies for the administration of operating permits.

B. Minimum Application Requirements

- i. Application for an operating permit shall include:
 - a. Owner name and contact information;
 - b. Property address;
 - c. Type of higher level treatment system;
 - d. Level of treatment to be provided;
 - e. Name of service provider;
 - f. Copy of operation and maintenance service contract of at least one year duration; and
 - g. Fees as determined by the Board of Health.

C. Operating Permit Requirements. An operating permit shall specify the following for each higher level treatment component that requires routine maintenance, including:

- i. Type, make and model of the component(s) requiring maintenance;
- ii. Name and qualifications of the service provider;
- iii. Length of service contract;
- iv. Required service intervals per Section 11.3.C;
- v. Reporting requirements; and
- vi. Sampling requirements, if applicable.

D. Inspection and Maintenance Requirements

- i. For proprietary systems, inspection and maintenance of the system shall be performed in accordance with the manufacturer's recommendations. For proprietary systems where manufacturer recommendations are unavailable, inspection and maintenance shall be performed in accordance with 11.3.B.
- ii. For public domain systems, inspection and maintenance shall be as determined

by the design engineer or the following requirements, whichever is more stringent. Not all requirements will apply to all types of higher level treatment systems.

- iii. Tanks shall be inspected to assure that they are structurally sound and that all components such as lids, baffles, tees, vents, etc. are present and in good condition. The scum and sludge level in the tanks shall be measured and tanks shall be pumped if the scum or sludge depth exceeds 18 inches or is less than four inches from the bottom of the treatment unit. The liquid level in the tank should not be lower than the outlet invert.
- iv. Effluent filters shall be inspected and cleaned at an appropriate interval to assure proper function.
- v. Each motor and pump and all appurtenances shall be inspected to assure that they are operating properly.
- vi. Internal electrical connections shall be inspected to assure that they are not damaged or otherwise subject to corrosion or damage that could cause a failure or electrical short circuit.
- vii. The control panel and its appurtenances shall be inspected to assure that all components such as timers, event recorders or counters, audible and visual alarms, auto-dialers, etc. are functioning properly. Batteries shall be checked and replaced as needed.
- viii. Components intended to agitate or introduce air into the wastewater such as impellers, air jets, bubblers, air diffusers; aspirators, paddles, etc. shall be inspected to assure that they are functioning properly and are free from lint, hair and other debris. Blowers or compressors shall be inspected to assure they are operating properly and that vents are clear and air filters are cleaned or replaced. If so equipped, the ammeter or voltage regulator shall be checked to verify that the motor is not drawing excess current.
- ix. All components such as media filters, sand filters, suspended growth media, etc. shall be inspected to verify that there is no damage, excess sludge buildup, clogging, filter bridging, etc. and that spray or dispersal nozzles are free from debris and functioning properly.
- x. The STA shall be inspected to verify that no wastewater is being discharged onto the surface of the ground and that it is not being impacted by erosion, excess or improper vegetation, or compaction.
- xi. The service provider shall also note any unusual or abnormal conditions such as excessive or strong odors, noise, improper wastewater color and odor, etc. that may indicate an operational problem with the system.
- xii. Upon completion of the service inspection the service provider shall close and secure all inspection or access ports, reset the control panel and restore the system for normal operation.
- xiii. At a minimum, maintenance shall take place every six months for higher level treatment systems with mechanical parts or every 12 months for higher level treatment systems with no mechanical parts such as mounded and single-pass sand filters, unless otherwise specified by the manufacturer. The

Department may amend the operating permit to reduce or increase the maintenance frequency based on information contained in the required inspection reports, but only within the requirements of Regulation 43.14.D.4.b.3.

- E. **Renewal of an Operating Permit.** Upon expiration of an operating permit the owner shall submit an application to renew the permit.
- F. **Penalties.** A Department may assess penalties for non-renewal of an operating permit or non-compliance with the terms the permit as provided for in Section 6.2 of these Regulations.
- G. **Service Provider Requirements**
 - i. A service provider shall, at a minimum:
 - a. Perform inspection, maintenance and sampling as set forth in the operating permit;
 - b. Provide a copy of their inspection report and sampling results to the owner;
 - c. Report the findings of their inspection and sample test results, if required, in a manner acceptable to the Department;
 - d. Report any additional alarm conditions or service calls to the Department; and
 - e. Notify the Department within seven days if an O&M contract is terminated prior to the original termination date as set forth on the operating permit.

<i>SPECIAL SOIL TYPES REQUIRING DIFFERENT PERCOLATION TEST PROCEDURE [43.4(D)(4)(e)(6)]</i>	Section 12
--	----------------------

- 12. The Department may identify soil types in its area, for which it shall require different procedures such as extra presoaking to obtain a valid percolation rate.

REQUIREMENT FOR SOIL PROFILE TEST PITS OR PERCOLATION HOLES TO REMAIN OPEN INSPECTIONS [43.4(E)]	Section 13
---	----------------------

- 13. Percolation Hole and Profile Test Pit Marking. The engineer or technician conducting the percolation tests shall, upon completion of the tests, flag or otherwise mark each hole to allow easy location by others. Percolation holes and profile test pits shall remain open until after evaluation by the Department unless otherwise approved. Excavations shall be suitably barricaded to prevent access by unauthorized persons

OVERSIGHT PROGRAM OF INSPECTIONS, MAINTENANCE, RECORDKEEPING, AND ENFORCEMENT OF HIGHER LEVEL TREATMENT SYSTEMS [43.14(D)]	Section 14
---	----------------------

- 14. The Gilpin County Board of Health has designated the Gilpin County Public Health Department to administer this oversight program. However, the enforcement of the requirements of this regulation will remain with the Gilpin County Board of Health.
- 14.1. This oversight program is set forth in Section 11.1 and requires an operating permit for any system that includes “higher level treatment” as defined in Regulation 43.
- 14.2. Monitoring, sampling, reporting requirements and enforcement shall be in accordance with Section 11.1 and Reg. 43.14(D).
- 14.3. The Items necessary for enforcement or recordkeeping
 - A. Requirements for legal documents attached to deed; as required
 - B. Owner and contact information;
 - C. Address and legal description of property;
 - D. Location of OWTS specifying location of septic tank, higher level treatment system, soil treatment area and other components;
 - E. Description of OWTS installed;
 - F. Level of treatment to be provided;
 - G. Copy of current contract with a service provider;
 - H. Inspection and maintenance performed:
 - i. Dates system was inspected and/or maintained;
 - ii. Name and contact information of inspector and/or maintenance provider;
 - iii. Condition of system at inspection; and
 - iv. Maintenance tasks performed;
 - v. Permits, if required by the local public health agency for the work performed; and
 - vi. Condition of system at completion of any maintenance activity.

ADDITIONAL LOCAL REQUIREMENTS	Section 15
--------------------------------------	----------------------

15.0. Conceptual Approvals.

- A. The Board of Health may issue conceptual approvals for the installation of OWTS for lots or parcels that are in the process of being subdivided or merged, parcels for which separate legal descriptions and/or addresses have not yet been established.
- B. In support of such a request, the applicant shall submit all information and documentation required in Section 4.1 and 4.2 or as otherwise required by the Board of Health in their review of the application. C. Conceptual approvals shall be valid until the subdivision process is completed, the subdivision process is suspended or for a period of not more than five years.
- C. The health officer shall not issue a permit based upon conceptual approval by the Board of Health until the property has been legally subdivided and the applicant has complied with all conditions imposed in that conceptual approval, the requirements of the onsite wastewater treatment system regulations and any Board of Health policies in effect at the time application is made for the permit.

15.1. Gilpin County Minimum Horizontal and Vertical Distances in Feet Between Components of an Onsite Wastewater Treatment Systems – Soil Treatment Area Installed after November 15, 1973 and Water, Physical and Health Impact Features that Are More Stringent than Regulation 43.7.

- A. 200 Foot Horizontal Distance between Spring, Well, Suction Line, Potable Water Supply Cistern and STA Trench, STA Bed, Unlined Sand Filter, Sub-surface Dispersal System, Seepage Pit. Except for systems with effluent that meets TL3N, add eight feet additional distance for each 100 gallons per day of design flows between 1,000 and 2,000 gallons per day, unless it can be demonstrated by a professional engineer or geologist by a hydrologic analysis or the use of a barrier, consisting of a minimum of 30 mil PVC line or equivalent, that contamination will be minimized.

i. Requirements for Distance Reductions Involving Well.

- a. the following terms and definitions shall apply:

(1) "Affected well" means a water well that will be located less than 200 feet, but more than 100 feet from any STA, existing or proposed, that receives TL1 or TL2 effluent.

(2) "Annular space" means the void between the outside of the well casing and the walls of the well bore hole.

(3) "Grout" means any material, approved by the State Board of

Examiners of Water Well Construction and Pump Installation Contractors, that is used to form a permanent impermeable seal in the annulus between the casing and the borehole wall or between two strings of casing, or that is used in plugging, sealing, and abandoning boreholes or wells.

b. General Requirements

- i. A site-specific surface and subsurface geological report is required in support of a request for a minimum separation between wells and STA receiving TL1 or TL2 effluent that is less than 200 feet but more than 100 feet.
- ii. A minimum of one excavation test pit that meets the requirements of Section 12.5 is required within or immediately adjacent to the proposed STA. All excavations shall remain open for inspection by the health officer unless previously arranged and shall be suitable protected to prevent unauthorized entry. Excavations are not required when the reduction is for an off-site, existing STA.

c. Reduction Based on Suitable Soil Conditions

- i. If the onsite investigation documents the presence of eight feet of suitable soil as defined by Regulation 43, a distance separation of not less than 100 feet between wells and STA receiving TL1 or TL2 effluent shall be permitted.
- ii. Blasting to install the system shall not be permitted.

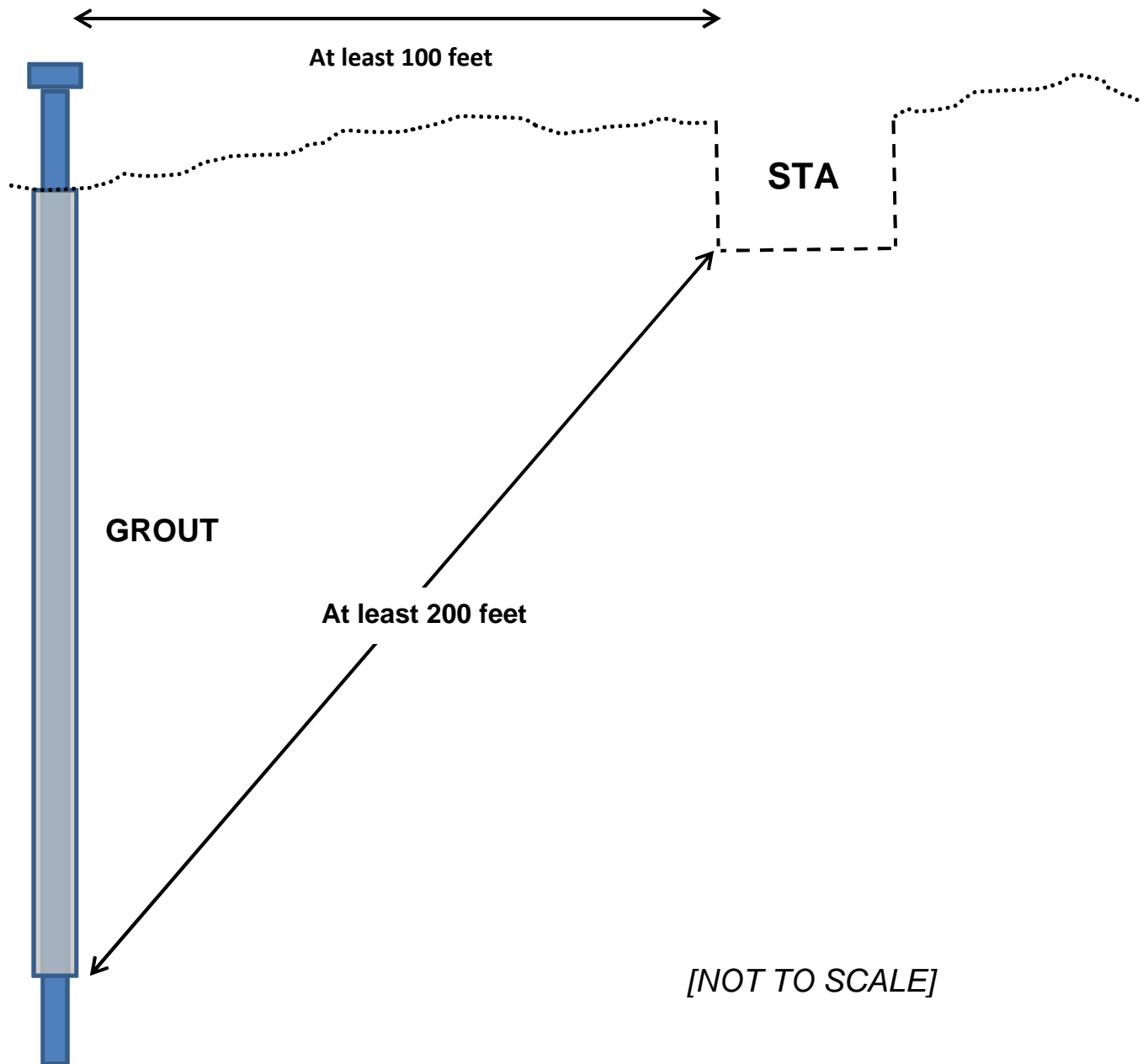
d. Reduction Based on Impermeable Bedrock Conditions

- i. If the onsite investigation documents the presence of less than eight feet of suitable soil as defined in Regulations, but the soil layer is underlain by impermeable, un-fractured bedrock with no visible conduits for effluent flow, a distance separation of not less than 100 feet between wells and STA receiving TL1 or TL2 effluent shall be permitted.
- ii. Blasting to install the system shall not be permitted.

e. Reduction Based on Well Grouting.

- i. If the onsite investigation fails to document any of the soil or geological conditions, a minimum separation distance between a well and STA receiving TL1 or TL2 effluent of not less than 100 feet shall be permitted provided that an impervious grout is placed within the annular space of the affected well sufficient to maintain a 200 foot diagonal separation distance between the bottom of the grout and the STA as shown in Figure 1.

Figure 19-1 – Determination of 200-Foot Minimum Separation Distance Between Deep-Grouted Well and STA.



BOTTOM OF WELL CASING

- ii. In support of such a request, the design engineer shall:
 - (1) provide a scaled drawing showing the depth to which the grouting shall extend to assure the required 200 foot diagonal separation, including relative positions of wells and STA and accounting for the topographic slope;
 - (2) specify the type of grouting materials to be used;
 - (3) specify the manner in which the grout will be introduced into the annular space; and
 - (4) determine the volume of the grout required to fill the annular space.
- iii. The health officer may require the design engineer to certify that the grouting has been done in accordance with their proposal.
- iv. Such a reduction will not be allowed where a higher level treatment system can be installed to meet the required minimum setback. However, if the onsite well must be grouted to allow a distance of less than 200 feet to an off-site system, this method may also be used in support of a request for a reduced setback to the onsite well.

f. Written Report Requirements

- i. A written report in support of the proposed distance reduction shall be prepared by, or under the supervision of, a professional geologist or professional engineer and submitted to the Department at the time of application for a permit to install anOWTS.
- ii. The report shall detail all site-specific surface and subsurface geologic information and relate such information to regional geology and hydrology. This information shall include, at a minimum:
 - (1) a description of the thickness and characteristics of surficial deposits; and
 - (2) a scaled geologic log of the highest wall of the open excavation, showing surficial and bedrock units, weathering zones, and fracture or joint sets.

- g. **Other Methods for Allowing Distance Reductions.** The Board may consider the use of other methods for determining the suitability of distance reductions as a variance from the requirements of these Regulations.

- B. 10 Foot Horizontal Distance between Potable Water Supply Line and Building Sewer or Effluent Lines.
- C. 20 Foot Horizontal Distance Between Structure without a Basement, Crawl Space, or Footing Drains and STA Trench, STA Bed, Unlined Sand Filter, Sub-surface Dispersal System, Seepage Pit.

- D. 15 Foot Horizontal Distance Between Structure without a Basement, Crawl Space, or Footing Drains and Lined Sand Filter.
- E. 25 Foot Horizontal Distance Between Portable Water Supply Line and System Not Relying on STA for Dispersal.
- F. 25 Foot Horizontal Distance Between Subsurface Drain, Intermittent Irrigation Lateral, Drywell, Stormwater Structure and System Not Relying on STA for Dispersal.
- G. 15 Foot Horizontal Distance Between Dry Gulch, Cut Bank, Fill Area (from Crest) and System Not Relying on STA for Dispersal.
- H. All requests for distance setback modifications shall be analyzed and approved by the Department and be in complete compliance with the variance procedures of these Regulations. Acceptable methods of analyzing horizontal separation distances with higher treatment levels include but are not limited to:
 - i. analyzing the intended uses of impacted surface and/or ground waters;
 - ii. contacting adjacent property owners for potential conflicts with property line encroachments; and
 - iii. analyzing potential impacts that system locations may have on building foundations and other potentially affected features.
- I. Reductions in separation distances with higher level treatment shall include provisions for operation and maintenance for the life of the system, as described in Sections 11.1 and 14.

15.2. Vaults

- A. Vaults for full time use in new construction are prohibited where a property can accommodate an OWTS with a soil treatment area.
- B. Vaults for full time use may be permitted when a failing OWTS cannot be replaced.
- C. Vaults may be permitted for limited use occupancy on a property which cannot accommodate an OWTS with soil treatment area.
- D. Vaults may be permitted if the facility is on land where the installation of an OWTS with soil treatment area is not permitted.
- E. Vaults may be permitted for systems where some of the wastewater flows are separated, such as toilet wastes only, into a vault. The portion not retained in the vault shall be treated in an adequately-sized OWTS.
- F. Vaults for non-residential use shall have a minimum 500 gallon effective volume or be capable of holding a minimum of the two-day design wastewater flow, whichever is larger.
- G. Vaults for residential use shall have a minimum 1,000 gallon effective volume or be

capable of holding a minimum of the two-day design wastewater flow, whichever is larger.

- H. Vaults shall have a visual or an audible signal device or both, indicating filling to a maximum of 75 percent capacity, to indicate when pumping is necessary.
 - I. Vaults shall meet the strength and watertightness requirements for septic tanks and shall meet the same installation and construction standards that apply to septic tanks, except that the vault shall contain a single compartment and no effluent outlet shall be provided.
 - J. Prefabricated fiberglass, fiberglass-reinforced polyester, and plastic tanks may be used as vaults, if the tank manufacturer provides testing criteria certifying them for this use.
 - K. Vaults shall be located in an area that is readily accessible for routine pumping during all seasons of the year as documented by a letter from a Systems Cleaner.
 - L. The owner of a system that includes a vault shall obtain and maintain a contract with a Systems Cleaner for the routine pumping of the vault. The owner shall maintain copies of all pumping receipts for a period of three years and shall furnish copies to the Department upon request.
- 15.3.** Maintenance Schedule for Higher Level Treatment Systems More Stringent than Regulation 43.14.D.4.b.3. See Section 11.1.D.xiii of these Regulations.

APPENDIX A – See attached.

Appendix A to OWTS Regulations for Gilpin County

Local Public Health Agency:	Gilpin County Board of Health Gilpin County Department of Health
------------------------------------	---

CROSSWALK				
ITEM	REQUIREMENTS See Check Box for Decision Chosen.		Citation Reg #43	Citation Local Reg
Occupancy – Residential	Bedrooms 1 through 3: 2 people per bedroom All additional Bedrooms: 1 person per bedroom	<input checked="" type="checkbox"/>	43.6.A.2e	
	All bedrooms: 2 persons per bedroom	<input type="checkbox"/>	43.6.A.2.f	
How the number of bedrooms in a home will be defined for flow requirements	Bedrooms: flow estimates will be determined from the number of bedrooms originally finished.	<input type="checkbox"/>		
	If unfinished area is present in house, system must also be sized for 1 or 2 more bedrooms based on an assumption that 150 square feet of unfinished space can be converted into a bedroom, if the space can meet applicable code requirements for a bedroom.	<input checked="" type="checkbox"/>	43.6.A.2.h	
Effluent Screen	May be used (<i>owner's option</i>)	<input type="checkbox"/>	43.9.J.1	
	Required in all new septic tanks	<input checked="" type="checkbox"/>	43.9.J.1	
Length of Distribution Laterals (e.g., trenches or beds)	Limit the length of distribution lines to a maximum of 100 feet.	<input type="checkbox"/>	43.10.E.2.c	
	100 feet maximum for gravity fed from one end, and up to 150 feet if pressure dosed or effluent applied at center of lateral or chamber	<input checked="" type="checkbox"/>	43.10.E.2.b & c	
Inspection ports at initial (front) end of distribution line (e.g., lateral or chamber)	Not required	<input type="checkbox"/>		
	Required	<input checked="" type="checkbox"/>	43.10.F.6.d	
Vault Privies – new	Allow new vault privies	<input checked="" type="checkbox"/>	43.12.D.1.a	
	Prohibit new vault privies	<input type="checkbox"/>	43.12.D.1.a	
Vault Privies - existing	Allow continued use of existing vault privies	<input checked="" type="checkbox"/>	43.12.D.1.b	
	Require abandonment of existing vault privies	<input type="checkbox"/>	43.12.D.1.b	
Pit Privies - new	Allow new pit privies	<input type="checkbox"/>	43.12.D.2.c	
	Prohibit new pit privies	<input checked="" type="checkbox"/>	43.12.D.2.a	
Pit Privies - existing	Allow continued use of existing pit privies	<input type="checkbox"/>	43.12.D.2.c	
	Require abandonment of existing pit privies	<input checked="" type="checkbox"/>	43.12.D.2.b	
Slit trenches	Allow slit trenches	<input type="checkbox"/>	43.12.F	
	Prohibit slit trenches	<input checked="" type="checkbox"/>	43.12.F	
Reductions in STA size or separation distances for higher level treatment systems; OWTS O/M and LPHA oversight required	Allow reductions for higher level treatment.	<input checked="" type="checkbox"/>	43.14.D.2	
	Reductions for higher level treatment not allowed	<input type="checkbox"/>	43.14.D.3	
Transfer of Title inspections	Inspection of OWTS required prior to transfer of title	<input checked="" type="checkbox"/>	43.4.L.1	

	Inspection of OWTS NOT required	<input type="checkbox"/>	43.4.L.1	
--	---------------------------------	--------------------------	----------	--