



Custer County
On-Site Waste Water Treatment System
(O.W.T.S.)
Regulations

Approved: June 14, 2018

Custer County Colorado

ON-SITE WASTEWATER TREATMENT SYSTEM REGULATIONS

1. Title and Authority

These requirements will be known as the Custer County On-site Wastewater Treatment Systems Regulations.”

These requirements have been adopted by the Custer County Board of Commissioners, that are acting as the local 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 Planning and Zoning Department to implement these regulations on behalf of the Board of Health.

2. Scope and Purpose

A. Declaration

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

B. Purpose

1. The purpose of the Ordinance 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.

C. Jurisdiction

1. These regulations apply to all OWTS in the unincorporated areas of the county and over all municipal corporations within the territorial limits of Custer County but not over the territory of any municipal corporation that maintains its own public health agency.

D. Prohibition of OWTS Where Public Sewer Service is Available and Feasible

1. An OWTS permit must not be issued to any person when the subject property is located within a municipality that provides public sewer service, except where such sewer service to the property is not feasible in the determination of the municipality or the permit is otherwise authorized by the municipality.. [43.4(B)(11)]Written notice is required from the sanitation district stating that they do not service the property. A application has to be accompanied by written approval from the sanitary sewer provider for the installation of an OWTS.

E. Severability

1. 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.

3. Incorporation of Regulation 43

A. Included By Reference

1. The requirements of the Colorado Water Quality Control Commission’s “On-site Wastewater Treatment System Regulation, Regulation 43, 5 CCR 1002-43, Effective date, June, 30, 2017”, are made a part of these regulations and will apply except where identified as an option of the local public health agency or where these regulations are more stringent than Regulation 43, 5 CCR 1002-43, and included in these 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 regulations.

2. Allowable local options identified in Regulation 43 and the designated decisions for these regulations are identified in the attached "Appendix A to OWTS Regulations for Custer County. Appendix A is made a part of these regulations.

B. Excluded

1. Reductions in soil treatment area size or separation distances, and wide beds with higher level treatment units are not allowed under these regulations. All designs must be based on TL-1 parameters as defined in Regulation 43. Area or separation distance reductions and wider beds for higher level treatment can only be allowed in the future if these Regulations are amended to include a program of oversight for inspection and maintenance of higher level treatment units, and this amendment is accepted by the Division.

4. Permits and Fees

A. Permits [43.4(B)]

1. Prior to installing, altering, expanding or repairing an OWTS, the applicant must obtain a permit from Custer County Planning and Zoning Department.
2. The permit application must include information identified in section 43.4(B)(3) of Regulation 43.
3. 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.
4. 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 Custer County Sanitarian or the Board of County Commissioners acting as the Board of Health.. After a permit is invalidated, a new application and subsequent permit is required to begin construction.
5. Repair permits must identify a reasonable time period in which the owner must make repairs prior to expiration of the permit.

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

1. When an application is denied by Custer County Sanitarian, an applicant may request review by the Board of County Commissioner acting as the Board of Health. A request for review must be made within 60 days after denial of an application. The applicant must 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 the regulation, comply with the declaration and intent of this regulation, and comply with all applicable state and local regulations and required terms and conditions in any permit.

C. Fees [43.4(B)(4)]

1. Permit fees and fees for other services and tests associated with OWTS will be set by the Board of County Commissioner, in conformance with section 43.4(B)(4) and (5) of Regulation 43 and 25- 10-107, C.R.S.
2. Waiver of fees [43.4(B)(4)(c)] may be applied for by volunteer organizations and must be approved by the Custer County Commissioners, acting as the Board of Health.

5. Inspections [43.4(E)]

A. Septic Tank [43.9(B)(3)(c)]

1. The applicant must notify the local public health agency or its designee 48 hours prior to completion so the local public health agency or its designee can conduct a field inspection of the septic tank, soil treatment area and all related components before backfilling.

B. Re-Inspections

1. If the OWTS fails any inspection stage, a re-inspection must be initiated by the installing contractor or homeowner after the deficiency has been corrected. A fee for the re-inspection will be collected by the Planning and Zoning Office.

6. Installation Requirements

- A. Sanitation Requirement: The owner of any structure and/or property where people live, work or congregate shall insure that there are adequate and convenient sanitary facilities. Sewage disposal systems must be maintained in good working order. Under no condition shall sewage or effluents be permitted to be discharged upon the surface of the ground or into waters of the state, unless the sewage or effluent meets the water quality standards of the Colorado Water Quality Control Commission.
- B. Reliability: O.W.T.S. shall be designed and constructed such that each component shall function correctly when installed and operated under normal operating conditions and not be adversely affected by erosion, vibration, shock, climatic conditions, and usual household chemical usage. Design shall prevent the creation of nuisances and public health hazards, and shall provide for efficient operation and maintenance. Over dug areas shall be properly compacted.
- C. Pipe Requirements:
 1. All lines used in O.W.T.S. shall be constructed of compatible pipe, bonding agent and fittings.
 2. The minimum standard of all building sewer and effluent lines shall be, for a gravity distribution system, 4 inch ID schedule 40 or equivalent size type PVC.
 3. All piping shall be at least four (4) inches in diameter and properly bedded prior to back-fill, unless otherwise specified in an engineer system
 4. No Sanitary Tees are allowed to be used in constructing the baffles or manifold system.
 5. Piping under a drivable surface must be sleeved.
- D. Dimensions of the plot plan must be verifiable on site during the inspection process.
- E. Any tree whose drip-line extends over the soil treatment area must be removed.
- F. All components of an O.W.T.S. must be ten (10) feet from property lines.

7. Component Requirements**A. Building Sewer requirements:**

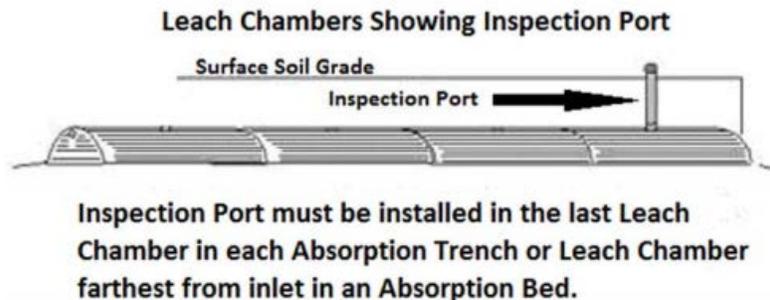
1. The grade of the building sewer will be a minimum of 2% (that is, ¼ inch drop per foot). The ten (10) feet immediately preceding the septic tank must be 2% or ¼ inch per foot.
2. The ten (10) feet of pipe preceding the tank must be a continuous stick and not contain any connections.
3. Bends in the building sewer shall be limited to forty-five (45) degrees or less. Long sweep ninety (90) degrees can be used or double 45 degree fittings in a long sweep configuration.
4. A double clean-out shall be installed in all building sewer lines. The first clean-out shall be within five (5) feet of the structure including decks. Subsequent clean-outs will be spaced no more than a hundred (100) feet thereafter.

B. Septic tank requirements:

1. The minimum size for a septic tank shall be one thousand (1000) gallons for three (3) or less bedrooms and shall increase 250 gallons for every additional bedroom.
2. Tanks, including risers and lids, must be constructed and installed so as to withstand earth and hydrostatic pressures when full or empty.
3. Installation of a septic tank will be no closer than ten (10) feet from the structure and ten (10) feet from the soil treatment area.
4. All septic tanks and tank designs must be pre-approved by the CDPHE.
5. Contractor must provide a record drawing site plan of the underground elements of the finished O.W.T.S. to the homeowner and Custer County Planning and Zoning upon completion.
6. Where pipes enter or exit the tank, seals shall be watertight.
7. All septic tanks are required to have risers over each access manhole. A secondary plug, cap, cover or screen shall be provided below the riser cover to prevent tank entry.
8. When backfilling, the septic tank risers shall extend to or above final grade.
9. All piping shall use colored primer before gluing.

C. Effluent line requirements:

1. The first ten (10) feet of gravity flow effluent line out of the septic tank shall be not less than 3% (3/8 inch per foot), well bedded and supported. The remainder of the effluent line shall be not less than 2% (1/4 inch per foot).
2. All chambers will be installed per manufactures recommendations using a minimum of four (4) screws on each end plate. The screws shall be placed in such a manner as to hold the top and the bottom of the end plates in place.
3. All pipes entering or exiting a chamber must be secured with at least two (2) screws.
4. All effluent points of distribution must be level and have equal distribution.
5. Each run will be one hundred (100) feet maximum for gravity fed at one end and up to one hundred fifty (150) feet if pressure dosed or effluent applied at center of lateral or chamber.
6. The final grade shall be such that any surface water drainage will be directed away from the soil treatment area.
7. Maximum width for a bed system shall be twelve (12) feet.
8. An inspection port accessible from ground surface must be installed. Inspection ports shall be installed at the distal end of the last leaching chamber in a bed or in the last leaching chamber in every line or in the last pipe of a rock and pipe system. Ports will be installed so as to maintain a separation of at least 2 inches from the bottom of an absorption trench or otherwise allow the free infiltration of sewage effluent. See example below.



8. Engineer Design Requirements

- A. The system must be designed by a Colorado Licensed Professional Engineer in accordance with all requirements of Section 43.10.B of Regulation 43, if any of the following conditions exist:
1. For soil types 3A, 4, 4A, 5, R-O, R-1 and R-2, as specified in Tables 10-1 and 10-1A of this regulation.
 2. The percolation rate is outside the range of 5-60 minutes per inch drop of water.
 3. Ground slope exceeds 30% through any portion of the proposed system.
 4. The distance from the surface of the ground to bedrock is less than eight (8) feet at proposed soil treatment area. The distance to the highest level of groundwater is less than eight (8) feet from the surface at the proposed soil treatment area.
 5. The onsite OWTS is intended to provide service for one or more individual dwelling unit.
 6. Multiple systems or their components are located closer than five hundred (500) feet apart on the same property.
 7. The lot size is less than one (1) acre.
 8. The system proposed is other than a standard septic system or approved alternative.
 9. The soil treatment area is on imported material.
 10. It is a system intended for commercial use.
 11. A failed engineered system is being repaired.
 12. A pressure distribution system.
 13. A business, commercial, industrial, institutional, or multi-family.

9. Licensing

A. Licensed Septic Contractors [43.4(K)(1)]

1. Septic Contractor Licensing Requirements
 - a. No person, shall install, engage in the installation of, or repair an OWTS unless he holds a valid Septic Contractor License. Employees of a validly licensed Systems Contractor shall not be required to be licensed. The initial fee for a Septic Contractor License may be charged in accordance with policies established by the Custer County Board of Commissioners. An annual renewal

fee may be charged in accordance with policies.

Application for a Septic Contractor whose license has been revoked may not be considered for at least one year after revocation

2. Standard of performance required of holders of Systems Contractor Licenses.
 - a. Application for Systems Contractor's Licenses or renewals shall be made upon forms supplied by the Department.
 - b. Prior to the issuance or renewal of a license the Health Officer may require the applicant to demonstrate adequate knowledge of these regulations.
 - c. Installation, renovation or repair of any OWTS shall be in compliance with these regulations and with the conditions set out in the installation permit.
 - d. Notice of a requested inspection shall be given by the license holder not less than 48 hours before the inspection is to be made.
 - e. If this department cannot complete the evaluation of a septic site, due to the site not being properly prepared, an additional fee of \$100.00 will be charged for each additional trip.
3. Revocation of a Systems Contractor License
 - a. A license may be revoked for failure to comply with these regulations or for other good cause shown above. Revocation shall take place only after a hearing before the Health Officer. The license holder shall be given not less than 10 days' notice of the hearing and may be represented at the hearing by counsel. 25-10- 109, C.R.S.
 - b. Written notice of revocation, particularizing the violations shall be served upon the holder of the Systems Contractor License. Service of notice as required by the Colorado Rules of Civil Procedure, or by registered or certified mail, return receipt requested, deliverable to addressee only.
4. The Health Officer shall, from time to time, set qualification standards for licensed Systems Contractors.

B. Systems Cleaners [43.4(K)(3)]

1. System Cleaners Licensing requirements
 - a. No person shall engage in the cleaning of an OWTS or the transportation of sewage to a disposal site unless he holds a valid Systems Cleaner License. Employees of a validly licensed Systems Cleaner shall not be required to be licensed. The initial fee for a Systems Cleaner License shall be charged in accordance with policies established by the Custer County Commissioners. Licenses shall expire on December 31 of each year and an annual renewal fee in accordance with policies established by the Board of Health shall be charged. A license which lapses because of failure to renew or is revoked shall be subject to the fee established for new license upon application. Application for a Systems Cleaner whose license has been revoked may not be considered for at least one year after revocation.
2. Standard of Performance for Systems Cleaners
 - a. A license holder, when cleaning a septic tank or aeration plant, shall remove the liquid, sludge and scum, leaving no more than 3 inches depth of sewage.
 - b. A license holder shall maintain his equipment so as to insure that no spillage of sewage will occur during transportation, and that his employees are not subjected to undue health hazards.
 - c. The license holder shall dispose of the sewage at a municipal sewage treatment plant or other sites approved by the Board of Health, and shall comply with all other applicable codes and ordinances. Disposal by land application is permitted provided it is done in compliance with the Department regulation for disposal of Domestic Septage.
 - d. Prior to the issuance or renewal of a license, the Health Officer may require the applicant to demonstrate adequate knowledge of these regulations.
 - e. The license holder should report any OWTS failure to the Planning and Zoning office.

3. Revocation of a Systems Cleaner License
 - a. A license may be revoked for failure to comply with these regulations or for other good cause shown above. Revocation shall take place only after a hearing before the Health Officer. The license holder shall be given not less than 10 days' notice of the hearing and may be represented at the hearing by counsel. 25-10- 109, C.R.S.
 - b. Written notice of revocation, particularizing the violations shall be served upon the holder of the Systems Cleaner License. Service of notice as required by the Colorado Rules of Civil Procedure, or by registered or certified mail, return receipt requested, deliverable to addressee only.

10. Variances [43.4(N)]

A. Variances Allowed

1. The Board of County Commissioners, acting as the Board of Health, may approve a variance from a requirement of this Regulation. Variances cannot be granted by staff.
2. Approval of a variance must be based upon evidence presented by the applicant, or their designee, showing that the variance: would not be injurious to public health and that the regulations would cause undue hardship to the applicant. The burden of proof is upon the applicant to show the variance will not injure adjacent properties, will not conflict with the purposes of these regulations, and will not adversely affect the health of any person.
3. Variances must not be granted under the items identified in section 43.4(N)(5) of Regulation 43.

B. Variance Procedure

1. Variance requests must be provided within 60 days after denial of an application by Custer County Sanitarian.
2. Variance requests must include all items identified in section 43.4(N)(2)(d) of Regulation 43.
3. The Board of Custer County Commissioners, acting as the Board of Health, has the authority to impose site-specific requirements and conditions on any variance granted.
4. 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. Variances Requiring Public Hearings

1. A Public Hearing must be held for all variance requests. The hearing shall be the subject of a Public Notice or notice shall be sent via certified mail, with a minimum 20-day reply time from the date of mailing, to all adjacent property owners. The public hearing will be held within 45 days from the date of receipt of the variance request.

11. Permit for the Continued Use of an On-site Wastewater Treatment System [43.4.M]

- A. Concurrently with the issuance of a repair permit, the County Sanitarian or designated representative 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.

12. Additional local requirements, as needed.

- A. 43.9.B.2.d

- 1. Minimum tank size for new installations other than for a single-family residence is 1,000 gallons.
- B. 43.9.K
 - 1. Minimum 500 gallons grease interceptor shall be installed prior to the septic tank on all food preparation facilities like restaurants or cafeterias.
- C. 43.12.C.8
 - 1. A vault, if permitted by the local public health agency, must 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 and requires a letter from a Colorado certified engineer.
- D. 43.12.D.1.c
 - 1. Effective volume of the vault (privy) must be no less than 1,000 gallons and it must be constructed of concrete or plastic. The vaults for privies must meet the structural and water standards of vaults.
- E. 43.9.A.4
 - 1. Custer County shall require a secondary plug, cap, cover or screen be provided below the riser cover to prevent tank entry.
- F. 43.6.A.2.f & Table 6-1
 - 1. All bedrooms: 2 persons per bedroom

# Bedrooms	Occupancy (# of Persons)	Wastewater Flow Per Person (gallons/day)	Design Flow (gallons/day)
2	4	75	300
3	6	75	450
4	8	75	600
5	10	75	750
6	12	75	900

- 13. Enforcement:
Authority to Administer and Enforce Whenever the term Custer County Board of Health, local Health Department, Health Officer or County Sanitarian is used in these regulations, said terms shall also include the Colorado Department of Public Health and Environment or its designated authority for the purpose of administering and enforcing the provisions of these regulations.

Appendix A to OWTS Regulations for Custer County

Attached

Local Public Health Agency: Custer County

D. Decision Points Summary – Local On-site Wastewater Treatment System Regulations

CROSSWALK

ITEM: Options Below are the Same as in 2013 Regulation 43	ALTERNATIVES Select Check Box for Decision Chosen. (Only one selection per item. Decisions must also be identified either within the local regulation or Appendix A to the regulation)	Citation Reg #43	Citation Local Reg	
Licensing Systems Contractors and Systems Cleaners	Neither (<i>Do not license contractors or cleaners</i>)	<input type="checkbox"/>	43.4.K	
	Systems Contractors only are licensed		43.4.K.1	
	Systems Cleaners only are licensed	<input type="checkbox"/>	43.4.K.3	
	Both contractors and cleaners are licensed	<input checked="" type="checkbox"/>	43.4.K.1 and 3	
Variances	Variances Allowed (<i>Must have a variance procedure prescribed within the local regulation.</i>)	<input checked="" type="checkbox"/>	43.4.N.	
	Variances not allowed	<input type="checkbox"/>	43.4.N	
Occupancy – Residential	Bedrooms 1 through 3: 2 people per bedroom All additional Bedrooms: 1 person per bedroom	<input type="checkbox"/>	43.6.A.2e	
	All bedrooms: 2 persons per bedroom	<input checked="" 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 checked="" type="checkbox"/>		
	If unfinished area is present in house, OWTS 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 type="checkbox"/>	43.6.A.2.h	
Effluent Screen	May be used (<i>owner's option</i>)	<input checked="" type="checkbox"/>	43.9.J.1	
	Required in all new septic tanks	<input type="checkbox"/>	43.9.J.1	
Length of distribution laterals (e.g., trenches or beds)	100 feet maximum length for any OWTS system	<input type="checkbox"/>	43.10.E.2.d	
	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 lateral or chamber	Not required	<input checked="" type="checkbox"/>		
	Required	<input 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	

Local Public Health Agency: Custer County

ITEM	ALTERNATIVES Select Check Box for Decision Chosen. (Only one selection per item.)		Citation Reg #43	Citation Local Reg
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 checked="" type="checkbox"/>	43.12.D.2.c	
	Require abandonment of existing pit privies	<input 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	
Optional Programs/Permits				
Reductions in soil treatment area (STA) size or separation distances for higher level treatment systems with mandatory maintenance and oversight	Allow reductions for higher level treatment. <i>(To allow reductions, local regulation must require mandatory inspections and maintenance, and local public health agency program of inspection and maintenance oversight must be in place.)</i>	<input type="checkbox"/>	43.14.D.2	
	Reductions in area and separation distances not allowed for higher level treatment systems.	<input checked="" type="checkbox"/>	43.14.D.3	
Transfer of Title inspections	Required <i>(If transfer of title inspections are required, the criteria that inadequate systems must achieve following repair or replacement must be specified in local regulation.)</i>	<input type="checkbox"/>	43.4.L.1	
	Not required	<input checked="" type="checkbox"/>	43.4.L.1	
Permits for the Continued Use of an OWTS; Define these items on Pg. 4 that are more stringent than Regulation 43.	Used in local regulation <i>(Specify purpose within local regulation.)</i>	<input type="checkbox"/>	43.4.M.1	
	Not used in local regulation	<input checked="" type="checkbox"/>		