# Mesa County Public Health Department in cooperation with Mesa County Community Development Department



## ON-SITE WASTEWATER TREATMENT SYSTEM REGULATIONS

Adopted: June 11, 2024 Effective: July 29, 2024



#### **PREVIOUS AMENDMENTS**

AMENDED: May 23, 2019 EFFECTIVE: July 7, 2019

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### MESA COUNTY ON-SITE WASTEWATER TREATMENT SYSTEM REGULATIONS

#### 1.0 Title and Authority

These requirements will be known as the "Mesa County On-site Wastewater Treatment Systems Regulations" ("Regulations").

These requirements have been adopted by the Mesa County Public Health Board ("Board") pursuant to and under authority contained in the On-site Wastewater Treatment System Act ("Act"), 25-10-101, et seq. Colorado Revised Statutes ("C.R.S.") and the Board has designated Mesa County Community Development Department ("Department") Director or his/her designee ("Director") to implement these Regulations on behalf of the Mesa County Public Health Board.

#### 1.1 Scope and Purpose

#### A. Declaration

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

#### B. Purpose

I. The purpose of these 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 Mesa County, Colorado.

#### C. Jurisdiction

I. These Regulations apply to all OWTS in the unincorporated areas of Mesa County and over all municipal corporations within the territorial limits of Mesa County. These Regulations also apply to any OWTS located within the following districts: Clifton Sanitation District, Mesa County Lower Valley Public Improvement District, Mesa Water and Sanitation District, Southwest Mesa County Rural Services Public Improvement District and the Whitewater Public Improvement District.

Prohibition of OWTS Where Public Sewer Service is Available. An OWTS permit must not be issued to any person when the subject property is located within a special service district, 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.

#### II. 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.

#### 1.2 Incorporation of Regulation 43

#### A. Included By Reference

- I. The requirements of the Colorado Water Quality Control Commission's ("Commission") "On-site Wastewater Treatment System Regulation", Regulation 43 ("Regulation 43"), 5 Code of Colorado Regulations ("C.C.R.") 1002-43, Effective date, June, 30, 2017 and as amended from time to time, are made a part of these Regulations and will apply except where identified as an option of the Board or where these Regulations are more stringent than Regulation 43. Except where these Regulations are more stringent than Regulation 43, for any conflicts between these Regulations and Regulation 43, Regulation 43 will take priority. All aspects of an OWTS 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.
- II. Allowable local options identified in Regulation 43 and the designated decisions for these Regulations are identified in the attached Appendix A of these Regulations.

#### B. Excluded

I. 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 Treatment Level- 1 ("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 any such amendment is accepted by the Colorado Department of Public Health and Environment ("CDPHE") Water Quality Control Division ("Division").

#### 1.3 Permits and Fees

#### A. Permits

- I. Prior to installing, altering, expanding or repairing an OWTS, the applicant must obtain a permit from the Department. Systems must be designed and stamped by a Department approved Colorado licensed PE.
- II. The permit application must include information identified in section 43.4(B)(3) of Regulation 43. In addition, the site plan must include: a site plan to scale, side view from the house to the leach field and OWTS components, easements, and rights-of-way (ROW's). Site plans shall not be an aerial photo.
- III. An OWTS permit expires one (1) year after the date of issuance unless an inspection has been completed and passed. On a case by case basis, a permit renewal may require a new design.
- IV. Any major change in plans or specifications of the OWTS after the permit has been issued must be submitted as a revision and approved prior to installation and inspection.
- V. Repair permits must be completed prior to expiration (180 days). Any repair permit not completed prior to expiration will require a new application and repair design be submitted and approved prior to commencing work.

- VI. Application for a product development permit may be approved by the Department consistent with requirements of section 43.4(I) of Regulation 43.
- VII. Property ownership changes: Permit applications are non-transferable. Active designs may be transferred, but a new application must be completed by the current owner.

#### B. Mesa County Public Health Review

- I. Any applicant whose permit application or whose plans for an OWTS has been denied by the Director, or who requests the waiver of a fee or fees charged in conjunction with any service provided for in these Regulations, may request a review of the application or plans or a waiver of the fee(s) by the Board.
  - a) Written notice of the denial of a permit or plans shall be made to the applicant by personal service or certified mail.
  - b) A request for review by the Board shall be made within sixty (60) days of the date of denial, as established by the date of the USPS postmark, of an application or plans by the Director, or assessment of a fee or fees. Application shall be made on forms provided by the Department.
  - c) The applicant shall bear the burden of supplying the Board with sufficient evidence to document either:
    - the proposed OWTS or plans will be constructed and used, respectively, in such a manner as to comply with these Regulations, and all applicable state and local rules and regulations and required terms and conditions in any permit issued pursuant thereto,
    - ii. or that a hardship exists which would place an undue burden on the applicant.
  - d) Upon finding that the proposed OWTS would be constructed and used, or that said plans would be used, in such a manner as to comply with the these Regulations and all applicable state and local rules and regulations, the Board may allow the issuance of a permit to install an OWTS, or approve such plans, or waive any or all fees levied by the Board.
  - a) Denial shall become final upon the expiration of time for filing a request, or when final action is taken on a request by the Board, whichever is later.
  - b) Such review shall be conducted pursuant to the requirements of Section 24-4-105, C.R.S.
  - c) Requests made to the Board for review of the Director's denial of an application for a permit, denial of plans or waiver of fees shall not require an application fee.

#### C. Fees

I. Permit fees and fees for other services and tests associated with OWTS will be set by the Board, in conformance with sections 43.4(B)(4) and (5) of Regulation 43 and 25-10-107, C.R.S.

#### On-site Wastewater Treatment System Program Fee Schedule

Program/Activity	Fee
OWTS Permit: New/ Repair/ Remediation System	\$550
Component Permit: Examples, but not limited to, Tank Replacement/ Pump/ System Enlargement/ Etc.	\$250
OWTS Privy Permit	\$250
Renewal of expired OWTS Permit-Valid for 1 year*	\$150
Septic Line Only Permit	\$50
Variance	\$150
Clearance- Dependent on Type of Project**	
Clearance for structure with no plumbing	\$25
Clearance for remodel or new structure with plumbing	\$50
Re-inspection/ Re-review (per hour) fee	\$50
OWTS Contractor License-New	\$200
OWTS Contractor License Annual Renewal	\$100
OWTS System Cleaner License- New (per truck)	\$200
OWTS System Cleaner License- Annual Renewal (per truck)	\$100
Sewage Transporting Vehicle, New License (per vehicle)	\$200
Sewage Transporting Vehicle, Annual Renewal (per vehicle)	\$100
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Notes: \* One renewal allowed within one year of original expiration date, no design changes are allowed on renewal submittals

#### D. Surcharge

A surcharge of twenty-three dollars (\$23) will be collected for each permit issued by the Department. Of that fee, the Department will retain three dollars (\$3) to cover administrative costs and twenty dollars (\$20) must be transmitted to the state treasurer.

<sup>\*\*</sup> No clearance for remodel with no change in footprint or additional bedrooms

#### 1.4 Inspections

#### A. Septic Line/ Tank Replacement

The applicant must schedule an inspection via the automated system. The inspection may be scheduled either one or two days in advance. The field inspection must be completed and approved prior to the septic line or tank replacement being covered or concealed in any way. Approval of the completed system shall not be granted without inspection by the Department.

#### B. Rough-In of Soil Treatment Area and Related Components

The applicant must schedule an inspection via the automated system. The inspection may be scheduled either one or two days in advance. The field inspection must be completed and the system approved prior to the soil treatment area and all related components of the OWTS being backfilled. Approval of the completed system shall not be granted without inspection by the Department.

#### C. Pressurized System Rough-In

The applicant must coordinate with the engineer to be onsite for the inspection; then call and schedule an inspection with the Department for the same time. The inspection must be scheduled a minimum of two days in advance. A pressure distribution test (squirt test) must be performed to verify system function at this inspection. The field inspection must be completed and the system approved prior to the soil treatment area and all related components of the OWTS being backfilled. If electrical systems are installed as part of the OWTS system, all aspects of the electrical installation must also be inspected and approved on the septic permit prior to concealment. Approval of the completed system shall not be granted without inspection by the Department.

\*\*If any of the above listed inspections discloses any significant departure from the description or design of the system as stated in the application, drawings or permit approved by the Department, or if any aspect of the system fails to comply with these Regulations, written notice of deficiencies causing the disapproval shall be given to the permittee. A second inspection shall be requested once the deficiencies have been corrected and the system is brought into compliance with these Regulations. Any alternatives to these inspection requirements must be approved by the Department prior to deviation.

#### D. Final Approval

Prior to the Certificate of Occupancy/Final Approval being issued, the Professional Engineer ("P.E") shall certify to the Department that the construction and installation of the system have been completed in accordance with the terms of the permit and these Regulations and shall certify the identification of the system installation contractor. The P.E. shall, after the installation is completed, issue their written certification to the Department within ninety (90) days. In addition to the certification, a set of record drawings ("as-builts") not on an aerial photo and containing the following must also be included:

- Site address
- North arrow
- Replacement Area

- Size of tank, all components and structure to scale
- Scaled drawing indicating the location of the system in relation to permanent structures or features, including the dimensions of a house from triangulation points
- Water line location

If certification has not been received by the Department from the P.E. within ninety (90) days, privileges to design OWTS in Mesa County by the P.E. may be suspended after review by the Director and the Board and a Certificate of Non-Compliance will be filed against the property.

#### 1.5 Prohibition of OWTS in Unsuitable Areas

The Board may conduct a public hearing, after written notice to all affected property owners as shown on the records from the Mesa County Assessor, and publication of notice in a newspaper of general circulation at least ten (10) days prior to the hearing, to consider the prohibition of permits for OWTS in defined areas which contain or are subdivided for a density of more than two (2) dwelling units per acre. The Board may order such prohibition upon findings that the use of additional OWTS in the defined area will constitute a hazard to the public health. In such a hearing, the Board may request affected property owners to submit engineering and geological reports concerning the defined areas and to provide a study of the economic feasibility of constructing OWTS.

- A. No new or expanded OWTS shall be installed in a floodway designated in a 100-year floodplain. For any system repair that may affect the floodway delineation, appropriate procedures shall be followed including revisions of the floodway designation, if necessary. New OWTS and replacement OWTS installed in a 100-year floodplain shall met or exceed the requirements of the National Flood Insurance Program and Mesa County Floodplain Program. Repairs of an existing system shall meet the requirements as feasible. The system, as approved by the Department, shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters.
- B. No OWTS presently in use which does not comply with the provisions of these Regulations regarding the minimum four foot separation between the maximum seasonal level of the groundwater table and the bottom of an absorption system shall be permitted to remain in use.
- C. There shall be no construction of any part of an OWTS in an easement unless otherwise approved by the Director.

#### 1.6 Licensing

#### A. Systems Contractors

- Mesa County has adopted regulations requiring the licensing of Systems Contractors. A
  fee is in place and charged by the Department for the initial licensing of a system
  contractor, and a yearly renewal fee for the license.
- II. No person or entity shall engage in the business of installing, constructing, repairing, or

excavating OWTS within Mesa County without first obtaining a license from the Director. Individual employees of a licensed Systems Contractor entity shall not be required to be licensed. Individuals installing or repairing systems on their own property for their own use are exempt from system contractor licensing requirements and fees. All new applicants for a license, or applicants who have not held a current license for two (2) previous years, shall be required to demonstrate their knowledge of the requirements of these Regulations by satisfactorily passing a written test or by other means acceptable to the Department prior to issuance of a license.

- II. Application for such license shall be made at any time for renewal for such license, annually on or before January 1st, on a form furnished by the Department. Such application shall contain the name of the person or entity making application and shall be include the appropriate license fee as specified below. Licenses shall expire on December 31st of each year. A license which expires because of failure to renew or is revoked by the Board shall be subject to the fee established for a new license upon reapplication. If a license expires and is not renewed within a two (2) year period the applicant will be required to retake the exam.
  - a) The initial fee and renewal fee for a Systems Contractor License shall be established by the Board.
  - b) The Board may revoke the license of a Systems Contractor for violation of the applicable provisions of these Regulations or for the other good cause shown. Revocation shall take place only after a hearing before the Board. The license holder shall be given not less than ten (10) days notice of the hearing and may be represented at the hearing by their counsel.
  - Written notice of the proposed revocation, particularizing the violation, shall be served upon the holder of the license prior to the hearing before the Board. Service of the notices, as required in this Section, shall be provided by personal service or by certified mail to the last known address on file with the Department of the license holder. It is the responsibility of the license holder to have a current address on file with the Department.
  - d) The Board shall from time to time set qualification standards for System Contractors.
  - e) A license which expires as a result of being revoked shall be subject to the fee established for a new license when reapplication is made. A new license may be issued if all deficiencies resulting in the revocation have been corrected.
  - f) Installation, renovation or repair of any OWTS shall be in compliance with these Regulations and with the conditions set forth in the OWTS permit.

#### B. System Cleaners

#### I. License Required

a) No person shall engage in or carry on the business of cleaning and removing sewage from on-site wastewater systems within Mesa County, unless duly licensed as hereinafter provided. Employees of a validly licensed Systems Cleaner shall not be required to be licensed.

- b) Each person engaged in the business of cleaning and removing sewage from on-site wastewater systems shall file an application with the Director. The application shall state the following:
  - nature of the business
  - 2. the post office address of the applicant
  - 3. the address at or from which the business is to be conducted. If the applicant shall operate a branch or other places of business, the application shall so state.
  - 4. the make, model and year of such vehicle
  - 5. the type and capacity of the tank
  - 6. any additional information as the Director may require
- c) A separate application shall be submitted for each vehicle to be licensed.
- d) Application for such license shall be made at any time or for renewal for such license, annually on or before January 1, on a form furnished by the Department. The application shall be accompanied by the appropriate license fee. The initial and renewal fee for a Systems Cleaner License shall be established by the Board. Licenses shall expire on December 31st of each year. A license which lapses because of failure to renew or is revoked shall be subject to the fee established for a new license upon reapplication.
- e) If the Director, after such investigation deemed necessary, is satisfied that the applicant has the qualifications, experience, and equipment to perform the services in a manner not detrimental to public health or the environment, he/ she shall issue a license for the said business.
- f) Prior to the issuance of or renewal of a license, the Director may require the applicant to demonstrate knowledge of section 1.6.B.II of these Regulations.
- g) The license is not transferable from one owner to another. The license may be transferred from one vehicle to another by submitting a new application to the Director. A license fee shall not be required for such an action. In addition to the license, which shall be carried in the vehicle at all times, the company name, phone number, and vehicle license number shall be painted, in a color which contrasts with the color of the vehicle, on both sides of the vehicle in numbers not less than two inches high (2") and one inch (1") in width.
- II. Standards of Performance Required of System Cleaners
  - a) Any tank used for the removal of sewage from any OWTS shall be constructed of steel or other non-porous material, and shall be provided with an access opening on the top thereof, and an outlet at the bottom equipped with a gate valve or other approved valve. The tank must be equipped with a diaphragm pump or other approved non-clogging sewage pump or vacuum system.

- b) Any sewage transporting vehicle or related apparatus used for removing and transporting sewage from on-site wastewater systems shall be maintained and operated in such a manner so as to avoid emission of offensive odors or the spilling or loss of any sewage.
- c) No person shall cause or permit any vehicle, used for pumping and transporting sewage, to stand or remain at or near any public building or residence or upon any street, alley, or other public place for any length of time or in such a manner as to create a nuisance.
- d) Sewage removed from an OWTS shall be disposed of in such a manner so as not to create a nuisance or menace to public health. Unless otherwise authorized by the Director, said sewage shall be disposed of by one of the following methods:
  - 1. Into a municipal sewage disposal system which agrees to accept the waste.
  - At an approved site designated by the Mesa County Board of Commissioners.
  - 3. By any other method that has the written approval of the Department director.
- e) Persons duly licensed to service and clean OWTS shall submit a monthly report of activities to the Department on forms provided by the Department. The information on the reports shall include, but not be limited to, the name of the licensee, license number, name and address of each person receiving services from the licensee, the amounts of sewage pumped, and the location and method of disposal; provided that, the cleaning of chemical toilets of less than 100 gallons capacity need not be reported. Reports must be received by the Department with thirty (30) days of the last day of the preceding month.

#### 1.7 Variances

- A. Variances Requiring Public Hearings
  - I. All variance requests must be heard by the Board. The Board will determine which requests require a public hearing. A variance will not be required for a site requesting to utilize a vault tank.
- B. Variance Procedure
  - I. Appeal for Variance
    - a) Any applicant whose permit application or whose plans for an OWTS has been denied by the Director because they are less stringent than these Regulations may appeal to the Board for a variance from these Regulations under the authority of Section 25-10- 105, (2)(a)(b), C.R.S.

- b) No variance from these Regulations shall be permitted by the Board for any request which is less stringent than the minimum requirements of Regulation 43.
- c) Application shall be made on forms provided by the Department.
  - 1. Variance requests must be accompanied by:
    - Site-specific request identifying the specific criteria from which a variance is being requested;
    - ii. Technical justification by a P.E. 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;
    - iii. A discussion of alternatives considered in lieu of the requested variance;
    - iv. Technical documentation for the 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.
  - 2. The hearing must be the subject of a public notice or notice must be sent via certified mail, with a minimum twenty (20) day reply time from the date of mailing, to all adjacent property owners.
  - 3. The applicant shall bear the burden of supplying the Board with sufficient evidence to document that the proposed OWTS or plans will be constructed or used in such a manner, or that such variance from these Regulations, shall comply with the declaration and intent of these Regulations and the minimum requirements of Regulation 43, and all applicable state and local rules and regulations and required terms and conditions in any permit issued pursuant thereto.
  - 4. The applicant must be notified, in writing, of the Board's decision regarding the request for a variance. The notice of a denial of a variance must include those reasons which form the basis for the denial. The notice of an approval of a variance must include any conditions of the approval. The variance, and any conditions thereof, must be recorded on the deed to the property and any expenses associated with recording is the responsibility of the applicant.
  - 5. Denial shall become final upon the expiration of time for filing an appeal, or when final action is taken on an appeal by the Board, whichever is later.
    - i. Such review shall be conducted pursuant to the requirements of Section 24-4-105, C.R.S.
    - ii. A fee, not to exceed the cost of processing the variance, shall

be charged by the Department to file an appeal for a variance.

- iii. A variance expires one (1) year from the date of approval by the Board.
  - A variance is not transferable from one owner to another except that if all conditions, specifications, locations, plans, building footprints, uses, parcel size and configuration, driveway cuts, utilities and locations, etc. are as originally approved by the Board, the variance may be transferred to a subsequent owner after review by the Board. Expiration of a transferred variance is one (1) year from the date that the variance was first issued for the original plans and specifications on the parcel under consideration.

#### II. Prohibitions on the Granting of Variance Requests

- No variance shall be issued where the property can accommodate a conforming OWTS.
- b) No variance shall be issued to mitigate an error in construction involving any element of property improvements.
- c) No variance shall be allowed solely for economic gain.
- d) No variance shall be issued, if it will result in a setback reduction to an offsite physical feature that does not conform to the minimum setbacks established by Regulation 43 without the written consent of the owner of property containing said feature. Property lines are considered offsite features.
- e) No variance shall be issued if it reduces the separation to ground water or bedrock to less than four (4) feet with a gravity system or three (3) feet with a pressure dosing system.
- f) No variance from the horizontal setback from a well shall be issued unless it also meets the variance requirements of the Board of Examiners of Water Well Construction and Pump Installation Contractors.
- III. Variances for Repair of Failing Systems.
  - a.) When a proposed variance for a system repair or upgrade would result in encroachment on minimum distances to physical features on neighboring properties required by the Division, the hearing procedures in 1.8.B, Requirements for Variance Consideration above must be followed.
  - b.) For the repair of or upgrade to an approved existing system where the existing system does not meet the required separation distances and where the size of the lot precludes adherence to the required distances, a variance to the separation distances may be requested. The repairs or upgrade shall be no closer to features requiring setbacks than the existing facilities. Variances requesting setbacks no closer than existing setbacks do not have to provide technical justification from a P.E. or professional geologist.

- IV. Denial of Permit or Plans; Waiver of Fees
  - a) Any applicant whose permit application or whose plans for an OWTS have been denied by the Director, or who requests the waiver of a fee or fees charged in conjunction with any service provided for in these Regulations, may request a review of the application or plans or a waiver of the fee(s) by the Board.
  - b) Written notice of the denial of a permit or plans shall be made to the applicant by personal service or certified mail.
  - c) A request for review shall be made within thirty (30) days after denial of an application or plans by the Director, or assessment of a fee or fees. Application shall be made on forms provided by the Department.
  - d) The applicant shall bear the burden of supplying the Board with sufficient evidence to document that:
    - said OWTS or plans will be constructed and used, respectively, in such a
      manner as to comply with the declaration and intent of these Regulations,
      and Regulation 43 and all applicable state and local rules and regulations
      and required terms and conditions in any permit issued pursuant thereto,
    - 2. or that a hardship exists which would place an undue burden on the applicant.
  - e) Upon finding that said OWTS would be constructed and used, or that said plans would be used, in such a manner as to comply with the declaration and intent of these Regulations, Regulation 43 and all applicable state and local rules and regulations, the Board may allow the issuance of a permit to install an OWTS, approve such plans, or waive any or all fees levied by the Board.
  - f) Denial shall become final upon the expiration of time for filing a request, or when final action is taken on a request by the Board, whichever is later.
  - g) Such review shall be conducted pursuant to the requirements of Section 24-4-105, C.R.S.
  - h) Requests made to the Board for denial of an application for a permit, denial of plans or waiver of fees shall not require an application fee.

2.0	Table 1- Setbacks for systems and components within Mesa County
Setbac	cks for Systems and Components within Mesa County

#### Table 1- Setbacks for System and Components within Mesa County

#### DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT Water Quality Control Commission

#### REGULATION NO. 43 - ON-SITE WASTEWATER TREATMENT SYSTEM REGULATION, 5 CCR 1002-43

#### Minimum Distances Between Components of an On-site Wastewater Treatment System and Physical Features

	Spring, Well <sup>1</sup> , Suction Line, Potable Water Supply Cistern <sup>4</sup>	Potable Water Supply Line 2	Structure w/Basement, Crawl Space or Footing drains	Structure Without Basement, Crawl Space or Footing Drains	Property Lines, Piped or Lined Irrigation Ditch, Upslope Curtain Drain		Lake, Water Course, Irrigation Ditch, Stream, Wetland	Dry Gulch, Cut Bank, Fill Area (from Crest)	Septic Tank, Higher Level Treatment Unit, Dosing Tank, Vault or Privy
Septic Tank, Higher Level Treatment Unit, Dosing Tank, Vault or Vault Privy	50 <sup>(2)</sup>	10 <sup>(2)</sup>	5	5	10	10	50	10	-
Building Sewer or Effluent Lines	50 <sup>(2)</sup>	5 <sup>(6)</sup>	0	0	10 <sup>(2)</sup>	10 <sup>(2)</sup>	50 <sup>(2)</sup>	10 <sup>(2)</sup>	-
STA Trench, STA Bed, Unlined Sand Filter, Sub-surface Dispersal System, Seepage Pit	100(3)	25 <sup>(2)</sup>	20	10	10	25	50 <sup>(3)</sup>	25	5
Lined Sand Filter	60	10 <sup>(2)</sup>	15	10	10	10	25	10	5
Lined Evapo- transpiration Field or Outside of Berm of Lined Wastewater Pond	60	10 <sup>(2)</sup>	15	15	10	10	25	10	5
Unlined Sand Fitter in Soil With a Percolation Rate Slower than 60 Minutes per Inch, Unlined or Partially Lined Evapotrans- piration System, Outside of Berm of Unlined Wastewater Pond, or System Not Relying on STA for Treatment Other than Aerosol	100	25 <sup>(2)</sup>	15	15	10	25	25	15	10
Slit Trench Latrine, Pit Privy	100	50 <sup>(2)</sup>	25	25	25	25	100	25	N/A
System Not Relying on STA for Dispersal	100(3)	10 <sup>(2)</sup>	125	125 <sup>(5)</sup>	10	0	25 <sup>(3)</sup>	10	10

NOTE: The minimum distances shown above must be maintained between the OWTS components and the features described. Where soil, geological or other conditions warrant, greater distances may be required by the local board of health or by the Water Quality Control Commission pursuant to section 25-8-206, C.R.S. and applicable regulations. For repair or upgrading of existing OWTS where the size of lot precludes adherence to these distances, a repaired OWTS must not be closer to setback features than the existing OWTS, as reviewed and approved by the local public health agency. Components that are not watertight should not existend into areas of the root system of nearby trees.

- (1) Includes potable wells, irrigation wells and monitoring wells set within a potable aquifer and inflitration galleries permitted as wells by the Division of Water Resources.
- (2) Crossings or encroachments may be permitted at the points as noted above provided that the water or wastewater conveyance pipe is encased for the minimum setback distance on each side of the crossing. A length of pipe with a minimum Schedule 40 rating [ASTM Standard D 3034-16 (2016 version)] or sufficient diameter to easily side over and completely encase the conveyance must be used. Rigid end caps of at least Schedule 40 rating [ASTM Standard D 3034-16 (2016 version)] must be glued or secured in a watertight fashion to the ends of the encasement pipe. A hole of sufficient size to accommodate the pipe must be drilled in the lowest section of the rigid cap so that the conveyance pipe rests on the bottom of the encasement pipe. The area in which the pipe passes through the end caps must be sealed with an approved underground sealant compatible with the piping used. Other methods of encasement that provide equal protection are allowed. These methods must be reviewed and approved by the local public health agency.
- (3) Add eight feet additional distance for each 100 galions per day of design flows between 1,000 and 2,000 galions 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 30 mil PVC liner or equivalent, that contamination will be minimized. If effluent meets Treatment Level 30 and the local public health agency has a maintenance oversight program in accordance with section 14.D. of his regulation, the distance addition is not required. Flows greater than 2,000 galions per day must be hydrologically analyzed for flow, velocity, hydrologic head, and other pertinent characteristics as means of estimating process.
- (4) All horizontal setbacks to a potable water supply cistern must be met unless a variance by the Board of Examiners of Water Well Construction and Pump Installation Contractors is granted per section 18.2 of the Water Well Construction Rules, 2 CCR 402-2. Setback requirements which may necessitate a variance are found within section, 10.2 or 11.4 of the Water Well Construction Rules, as applicable. The minimum horizontal setback that may be granted through a variance is to 25 feet.
- (5) If the structure is not used as a habitable unit, the isolation may be reduced by the local board of health to no less than 50 feet.
- (6) Building sewer installations shall meet the design requirements of the Colorado Plumbing Code.

Mesa County OWTS Regulation Revision 7/7/2019

2.1	Appendix A					
Local	Local Regulation Review Submittal Form- "Crosswalk"					

#### 2.2 Appendix B

Regulation 43- On-Site Wastewater Treatment System Regulation, 5 CCR 1002-43

Colorado Department Public Health and Environment, Water Quality Control Commission