

6.29 Pitkin County Graywater Treatment System Regulations

6.29.010 Authority

This regulation is promulgated pursuant to the Colorado Water Quality Control Act (CWQCA) sections 25-8-101 through 25-8-703, C.R.S. In particular, it is promulgated under section 25-8-205(1)(g), C.R.S, and 5 CCR 1002-86, Regulation # 86.

6.29.020 Purpose and Scope

A. Purpose

Graywater is expected to carry human pathogens with various risk levels and pathways that have the potential to be dangerous to public health. Therefore, the purpose of this regulation, as authorized by section 25-8-205(1)(g), is to describe requirements, prohibitions, and standards for the use of graywater for nondrinking water purposes, to encourage the use of graywater, and to protect public health and water quality.

B. Scope

This regulation establishes the allowed users and allowed uses of graywater within Pitkin County; establishes the minimum standards for the location, design, construction, operation, installation, modification of graywater treatment works.

6.29.030 Severability

The provisions of this regulation are severable, and if any provisions or the application of the provisions to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this regulation shall not be affected thereby.

6.29.040 Applicability

- A. All graywater uses and graywater treatment systems must comply with the minimum requirements of this regulation and the Colorado Department of Public Health and Environment, Water Quality Control Commission's Graywater Control Regulation #86.
1. Graywater treatment systems may only be installed and operated within the jurisdiction of Pitkin County
 2. Graywater treatment systems that reuse graywater for outdoor subsurface irrigation which were approved by Pitkin County prior to May 15, 2013 and pursuant to 5 CCR 1002-43, section 43.4(J) or pursuant to 5 CCR 1003-6, section IV.J, and which are in compliance with all requirements imposed by Pitkin County, are deemed to be in compliance with the requirements of this regulation unless or until any modification to the graywater treatment works is made.
 3. A graywater treatment system installed under this regulation, which is later revoked or rescinded must within 365 days:
 - a. Be physically removed or permanently disconnected; or
 - b. Be regulated under another jurisdiction's local graywater control program which assumes authority over the existing graywater treatment systems. The existing graywater treatment system will need to comply with the new local graywater control program, including any required graywater treatment system modifications.

4. In the event that a property with a compliant graywater treatment system is annexed or de-annexed into a jurisdiction separate from Pitkin County, with differing graywater requirements, the property owner must within 365 days:
 - a. Ensure the graywater treatment system is physically removed or permanently disconnected; or
 - b. Ensure the graywater treatment system is incorporated into another local jurisdiction's graywater control program. This includes conforming to the minimum requirements of the new local graywater control program and may include improving or modifying the graywater treatment system.
- B. Graywater use must meet the requirements adopted pursuant to these regulations. Unauthorized graywater use and discharges are prohibited.
- C. This regulation does not apply to: discharges pursuant to a Colorado Discharge Permit System (CDPS) permit, wastewater that has been treated and released to state waters prior to subsequent use, wastewater that has been treated and used at a domestic wastewater treatment works for landscape irrigation or process uses, on-site wastewater treatment works authorized under Colorado Department of Public Health and Environment's Regulation #43, reclaimed wastewater authorized under Regulation #84, water used in an industrial process that is internally recycled, and rainwater harvesting.

6.29.050 Enforcement and Division Oversight

- A. Pitkin County has exclusive enforcement authority regarding compliance with the ordinance.
- B. The Colorado Water Quality Control Division oversees state-wide implementation of this regulation.

6.29.060 Definitions

- (1) "Agronomic rate" means the rate of application of nutrients to plants that is necessary to satisfy the nutritional requirements of the plants.
- (2) "Agricultural irrigation" means irrigation of crops produced for direct human consumption, crops where lactating dairy animals forage, and trees that produce nuts or fruit intended for human consumption. This definition includes household gardens and fruit trees.
- (3) "Closed sewerage system" means either a permitted domestic wastewater treatment works, which includes a permitted and properly functioning OWTS with a design capacity more than 2,000 gpd, or a properly functioning and approved or permitted OWTS with a design capacity of 2,000 gpd or less.
- (4) "Commission" means the Water Quality Control Commission created by section 25-8-201, C.R.S.
- (5) "Component" means a subpart of a graywater treatment works which may include multiple devices.
- (6) "Cross-Connection" means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the public, to flow from any pipe, plumbing fixture, or a customer's water system into a public water system's distribution system or any other part of the public water system through backflow.
- (7) "Department" means Pitkin County Environmental Health Department

- (8) "Design" means the process of selecting and documenting in writing the size, calculations, site specific data, location, equipment specification and configuration of treatment components that match site characteristics and facility use.
- (9) "Design flow" means the estimated volume of graywater per unit of time for which a component or graywater treatment works is designed.
- (10) "Dispersed subsurface irrigation" means a subsurface irrigation system including piping and emitters installed throughout an irrigation area.
- (11) "Division" means the Water Quality Control Division of the Colorado Department of Public Health and Environment.
- (12) "Facility" means any building, structure, or installation, or any combination thereof that uses graywater subject to a local graywater control program, is located on one or more contiguous or adjacent properties, and is owned or operated by the same person or legal entity. Facility is synonymous with the term operation.
- (13) "Floodplain (100-year)" means an area adjacent to a river or other watercourse which is subject to flooding as the result of the occurrence of a one hundred (100) year flood, and is so adverse to past, current or foreseeable construction or land use as to constitute a significant hazard to public or environmental health and safety or to property or is designated by the Federal Emergency Management Agency (FEMA) or National Flood Insurance Program (NFIP). In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodplain elevations.
- (14) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot or as designated by the Federal Emergency Management Agency or National Flood Insurance Program. In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodway elevation and location.
- (15) "Graywater" means that portion of wastewater that, before being treated or combined with other wastewater, is collected from fixtures within residential, commercial, or industrial buildings or institutional facilities for the purpose of being put to beneficial uses. Sources of graywater are limited to discharges from bathroom and laundry room sinks, bathtubs, showers, and laundry machines. Graywater does not include the wastewater from toilets, urinals, kitchen sinks, dishwashers, or nonlaundry utility sinks.
- (16) "Graywater treatment works" means an arrangement of devices and structures used to: (a) collect graywater from within a building or a facility; and (b) treat, neutralize, or stabilize graywater within the same building or facility to the level necessary for its authorized uses; also known as Graywater treatment system
- (17) "Indirect connection" means a waste pipe from a graywater treatment works that does not connect directly with the closed sewerage system, but that discharges into the closed sewerage system through an air break or air gap into a trap, fixture, receptor, or interceptor.
- (18) "Legally responsible party" (1) For a residential property, the legally responsible party is the property owner. (2) For a corporation, the legally responsible party is a responsible corporate officer, either: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary

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systems are established or actions taken to gather complete and accurate information for approval application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (3) For a partnership or sole proprietorship, the legally responsible party is either a general partner or the proprietor, respectively. (4) For a municipality, State, Federal, or other public agency, the legally responsible party is a principal executive officer or ranking elected official, either (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- (19) "Limited local graywater control program" is a local graywater control program limited to existing graywater treatment works and which does not accept new graywater treatmentworks.
- (20) "Local agency" means any local city, city or county, county agency including, but not limited to, a department, local public health agency, or district which is delegated the authority to administer all or a portion of the responsibilities of the local graywater control program.
- (21) "Local graywater control program" is a local ordinance or resolution and, if applicable, rule, including implementation practices, authorized by a city, city and county or county which is in compliance with the minimum requirements of this regulation.
- (22) "Local public health agency" means Pitkin County Environmental Health.
- (23) "Modification" means the alteration or replacement of any component of a graywater treatment works that can affect the quality of the finished water, the rated capacity of a graywater treatment works, the graywater use, alters the treatment process of a graywater treatment works, or compliance with this regulation and the local graywater control program. This definition does not include normal operations and maintenance of a graywater treatmentworks.
- (24) "Mulch" means organic material including but not limited to leaves, prunings, straw, pulled weeds, and wood chips.
- (25) "Mulch basin" means a type of irrigation or treatment field filled with mulch or other approved permeable material of sufficient depth, length, and width to prevent ponding or runoff. A mulch basin may include a basin around a tree, a trough along a row of plants, or other shapes necessary for irrigation.
- (26) "On-site wastewater treatment system" or "OWTS" means an absorption system of any size or flow or a system or facility for treating, neutralizing, stabilizing, or dispersing sewage generated in the vicinity, which system is not a part of or connected to a sewage treatmentworks. Refer to Pitkin County Onsite Wastewater Treatment (OWTS) Regulations 6.28 fir questions pertaining to OWTSs.
- (27) "Percolation test" means a subsurface soil test at the depth of a proposed irrigation area to determine the water absorption capabilityof the soil, the results of which are normally expressed as the rate at which one inch of water is absorbed. The rate is expressed in minutes per inch.
- (28) "Potable water system" means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances, where such system has less than fifteen service connections or regularly serves less than an average of at least 25 individuals daily at least 60 days per year.
- (29) "Professional engineer" means an engineer licensed in accordance with section 12-25-1, C.R.S.
- (30) "Public nuisance" means the unreasonable, unwarranted and/or unlawful use of property, which causes inconvenience or damage to others, including to an individual or to the generalpublic.
- (31) "Public water system" means a system for the provision of water to the public for human

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consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such term does not include any special irrigation district. Such term includes:

- (a) Any collection, treatment, storage, and distribution facilities under control of the supplier of such system and used primarily in connection with such system.
 - (b) Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.
- (32) “Single family” means a detached or attached structure, arranged and designed as a single family residential unit intended to be occupied by not more than one family and that has separate water and sewer services connections from other dwelling units.
- (33) “Site evaluation” means a comprehensive analysis of soil and site conditions for a graywater irrigation area.
- (34) “Soil horizon” means layers in the soil column differentiated by changes in texture, color, redoximorphic features, bedrock, structure, consistence, and any other characteristic that affects water movement.
- (35) “Soil profile test pit” means a trench or other excavation used for access to evaluate the soil horizons for properties influencing effluent movement, bedrock, evidence of seasonal high ground water, and other information to be used in locating and designing a graywater irrigation area.
- (36) “Soil structure” means the naturally occurring combination or arrangement of primary soil particles into secondary units or peds; secondary units are characterized on the basis of shape, size class, and grade (degree of distinctness).
- (37) “Suitable soil” means unsaturated soil in which the movement of water, air, and growth of roots is sustained to support healthy plant life and conserve moisture. Soil criteria for graywater subsurface irrigation are further defined in section 86.12.
- (38) “Subsurface irrigation” means a discharge of graywater into soil a minimum of four inches (4”) and no deeper than twelve inches (12”) below the finished grade.
- (39) “State waters” means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

Table 8-1 Abbreviations and Acronyms

ANSI	American National Standards Institute
BK	Blocky
C.R.S.	Colorado Revised Statutes
CDPS	Colorado Discharge Permit System
FEMA	Federal Emergency Management Agency
gpd	gallons per day
GR	Granular
mg/L	milligrams per Liter
MPI	Minutes Per Inch
NFIP	National Flood Insurance Program
NSF	NSF International, formally known as National Sanitation Foundation
O&M	Operations and Maintenance
OWTS	On-site Wastewater Treatment System(s)

6.29.070 Administration**A. Local Coordination**

Nothing in this regulation shall be deemed to limit the authority of Pitkin County, pursuant to section 29-1-203, C.R.S., to enter into intergovernmental agreements with other local jurisdictions, pertaining to the coordinated adoption and operation of local graywater control program.

B. Permit Types**1. Graywater Treatment System Construction Permit**

a. A graywater treatment system construction permit is required for all new construction, as well as the installation, alteration (including expansion as described in 6.29.070.B.1.b), or replacement of a graywater system. A graywater treatment system construction permit is also required for repair of a graywater treatment system, other than minor repairs to system components (e.g., replacement of a broken or crushed pipe). Requirements for repair shall be determined by the Department.

b. A permit shall be required for the expanded use of a graywater treatment system. The graywater treatment system must be replaced or modified to handle the increased design flow unless it is determined that the existing system is adequately designed and constructed for the higher design flow rate. Expanded use of an existing graywater treatment system includes the addition of bedrooms or rooms that may be used as bedrooms in the future, or the conversion of rooms into bedrooms, or any other modification that may affect water use. The Department will review plans for alteration or remodeling of buildings to determine if it is necessary to expand the graywater treatment system. In no circumstance may a graywater treatment system existing prior to adoption of this Regulation be expanded in violation of this Regulation, or in violation of Colorado Revised Statute §25-8-205.

c. In conjunction with a permit issued for repairs, the Department may authorize use of a malfunctioning graywater treatment system, or an interim vault or vault privy, on an emergency basis (not to exceed the period stated in the permit), *provided that* the Department determines that there is not an immediate threat to public health or the environment.

d. Graywater treatments systems that are for experimental or research purposes are required to obtain a permit for construction, repair, etc. from this department

2. Graywater System Use Permit

a. Prior to the sale of a property served by one or more graywater systems (including any graywater treatment system in existence prior to adoption of this Regulation), the owner(s) of the property shall obtain a Graywater Treatment System Use Permit for each system on the property. This requirement shall be waived if: a) each graywater treatment system on the property received final approval for a graywater treatment system construction permit from the Department within the five year period preceding the date of closing on the real estate transaction, or b) following inspection, a construction permit has been issued by the Department for each noncompliant graywater treatment system on the property and the buyer has agreed, in a writing acceptable to the Department, to assume the applicant's obligations under the permit and to complete the necessary repair/construction within the timeframe dictated by the permit. The existing

graywater treatment system must meet, at a minimum, the following criteria and conditions:

- i. All tanks must be structurally sound and in good working order and provided with suitable lids;
 - ii. 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;
 - iii. Alarms, control devices, and components necessary for the operation of the system are present and in good working order;
 - iv. A subsurface irrigation system, other means of subsurface wastewater treatment, evapotranspiration, or treatment system other than those discharging through a subsurface irrigation system or sand filter is present and in good working order;
 - v. There are no unapproved wastewater discharges from the system; and
 - vi. Any deficiencies noted in the inspection report(s) have been corrected with the necessary permits and inspections.
 - vii. All components and connections related to graywater reuse for toilet flushing are functioning properly and working as designed.
- b. A Graywater Treatment System Use Permit shall also be required prior to issuance of a building permit for a property already served by one or more graywater systems. This requirement shall be waived if each graywater treatment system on the property has received final approval of a graywater treatment system construction permit within the five year period preceding the date of issuance of the building permit.
- c. The Department, in its discretion, may waive the requirement for a graywater treatment system use permit where warranted by a particular fact situation (e.g., a buyer agrees to demolish an existing dwelling and abandon the existing graywater treatment system within a defined period).

3. Operating Permit

- a. Effective on or after July 1, 2018 an operating permit shall be required for any graywater system requiring specified maintenance on a periodic basis to ensure it is continuing to operate per manufacturer specifications.
- b. Graywater treatment systems requiring an operating permit shall include advanced treatment units, Graywater treatment systems serving commercial structures, and other graywater treatment systems with mechanical and/or electrical components which require periodic maintenance.
- c. Graywater treatment systems that are required to have an operating permit are exempt from the use permit process.

C. Permit and Inspection Fees

Fees for permits, inspections and other services provided by the Department shall be charged on an hourly basis at the Department's current hourly charge (at the time of the adoption

it is \$162/hr).

D. Permit Conditions

1. The Department may condition any permit with mandatory site or system specific requirements and prohibitions. In all cases, the Department shall have the right to require that a permitted system be abandoned and served by a wastewater treatment works, if available in the future.
2. The Department may require financial security, in the form of a Performance Deposit, to ensure adequate revegetation of a graywater treatment system site, in accordance with Section 6.28.130, following completion of installation, alteration, or repair of a graywater treatment system. The Performance Deposit amount shall be determined by the Department and may be held for two complete growing seasons following completion of the installation, alteration, or repair, or until the vegetation has been successfully established to the reasonable satisfaction of the Department.
3. The issuance of a permit shall not constitute or create a presumption that the Department or its employees shall or may be liable for the failure of any system, nor act as a certification that the system, the equipment used in the system, or any component thereof, is or will be in compliance with applicable state statutes, regulations and policy directives, the provisions of this Regulation, or any terms and conditions of a permit

E. Expiration and Revocation of Permit

1. Permits for the construction, installation, or alteration of a graywater treatment system shall expire at the end of one year from the date of issuance or if issued in conjunction with a building permit, the permit shall expire at the same time as the building permit. Expired graywater treatment system construction permits may be reactivated at the discretion of the Department for a period of one year, upon payment of the applicable fees. Any modifications to the original permit application will require submission of an application for a new permit and payment of applicable fees.
2. Where a graywater treatment system construction permit is issued for repairs, the permit shall provide a maximum 30-day period within which repairs shall be made, at which time the graywater system shall be inspected by the Department. The Department may extend the permit for up to an additional 180-day period, for good cause shown, in the event that repairs cannot be completed in the required time period through no fault of the applicant.
3. Graywater system use permits shall remain valid until twelve months from the date of issuance.
4. Any permit found to have been issued on the basis of inaccurate, false, or misleading information provided by applicant or its representative(s) may be revoked by the Department with notice to applicant.
5. An Operating permit shall expire every two years.
6. Any change in plans or specifications of the graywater treatment system after the permit has been issued invalidates the permit unless the permittee receives written approval from the local public health agency for such changes.

F. Onsite Location of Permit

Graywater treatment system construction permits and all corresponding design information shall be kept on the job site during the construction, installation, alteration, or repair of any graywater system until final inspection approval has been given by the Department.

G. Denial of Permit

The Department shall deny a permit application for the construction, installation, alteration, use, or repair of a graywater system if: 1) the application fails to comply with any requirement of this Regulation, 2) a wastewater treatment works is available and willing to provide service to the site, 3) the granting of such an application would be in violation of any other applicable statute, rule, or regulation, or 4) the granting of such an application would create or continue a nuisance detrimental to public health and/or the environment. A determination to deny a permit application shall be in writing and shall include the specific reasons for the denial. The written denial shall be mailed, by certified mail, to the applicant at the address on the application. Denial shall be complete upon mailing and does not require actual receipt by the applicant.

H. Appeal

1. The applicant may appeal a denial of a permit application to the Board of County Commissioners by filing a notice of appeal and a brief written statement of the grounds for the appeal with the Department no later than 60 calendar days after the written denial is postmarked. A nonrefundable fee, as established by the Department, shall be paid by each applicant for an appeal. Within 15 business days of receipt of a timely and properly documented notice of appeal, the Department will schedule an appeal meeting (which shall be a public meeting) before the Board of County Commissioners. To the degree possible, appeals will be scheduled for the next regularly scheduled meeting of the Board of County Commissioners with an available time slot.
2. At the meeting on the appeal, the Board of County Commissioners shall review the record of the Department's decision and shall provide the applicant an opportunity to discuss the grounds for the appeal and the basis for the alleged error in the Department's decision. The Board of County Commissioners may also hear from any third party it deems appropriate, at the expense of the applicant. The Board of County Commissioners shall only reverse, modify, or remand a decision on appeal if it finds that there has been a clear and demonstrable error, abuse of discretion, or denial of procedural due process in the application of the facts in the record to the requirements of this Regulation

I. Graywater Treatment System Permit Procedures

The Department web page on the Pitkin County website should be referenced for current permit applications and checklists, fees, policies and guidance documents. The Department will not begin review of a permit application until a complete and fully-executed application has been received, with all required documentation and fees, as specified on the checklist. It is the obligation of the applicant to ensure the sufficiency of the application package and fees prior to submittal.

J. Graywater Construction Permit

1. Permit Application Process

A Graywater treatment system construction permit application form and checklist shall be obtained from the Department or its website, for the activities specified in Section 6.29.070.B.1. The construction permitting process includes submission of a complete and fully executed permit application and all necessary supporting documentation and fees (as specified on the checklist), an initial site inspection, and a final site inspection. Applications shall contain the following minimum information:

- a. Legally Responsible Party/Owner and contact information; and
- b. Property address; and

- c. Property legal description and parcel i.d. number; and
- d. Type of permit, graywater use category, and proposed graywater uses; and
- e. Design flow calculation for the graywater treatment system; and
- f. A list of the fixture(s) that are the source(s) of the graywater; and
- g. A description of all products or components used in the graywater treatment system; and
- h. Report from Site and Soil Evaluation (section 6.29.100.B.1.i); and
- i. Graywater treatment system design with a legible, accurate site plan which shows pertinent physical features on subject property, and on adjacent properties, as noted in Table 12-1; and
- j. Approval from the Pitkin County Building Department and/or a plumbing permit from that Department for the installation of plumbing for graywater use at the site; and
- k. Other information, data, plans, specifications and tests as required by the Department as outlined in 6.29.70.K.3
- l. A letter from the Colorado Division of Water Resources stating the water rights associated with the listed property in the application are appropriate and adequate for the allowance and use of a greywater treatment system.

2. Initial Site Inspection

After the Department has reviewed the graywater treatment system construction permit application package and determined it is complete, the Department shall schedule and perform an inspection. The applicant, or the applicant's authorized representative, shall clearly stake and label the site prior to inspection, including all components of the graywater treatment system, proposed buildings, source of domestic water, and other items that may be requested by the Department. At a minimum, the site inspection shall include a preliminary review regarding the suitability of the site for the proposed graywater treatment system components considering the surrounding land use, the proposed use of the site, soil suitability, depths to bedrock and high groundwater, ground slope, and the ability to meet the setback requirements of the property relative to water courses, wells, wetlands and other pertinent physical and environmental features specified in Section 6.29.100.B.1.g of this Regulation. Initial site inspections may be limited if weather and site conditions do not provide Department staff with safe and easy access for an accurate assessment of the site. The Department may waive the requirement for a site inspection in instances where staff has sufficient familiarity with a site to independently evaluate the application.

3. Additional Tests or Documentation

If the Department determines that there is insufficient information for evaluation of an application, it shall require additional tests or documentation. When specific evidence suggests that undesirable surface, subsurface, or other conditions exist, the Department may require that the applicant submit additional hydrologic, geologic, engineering, or other information, including, but not limited to data, opinions or certifications provided by a PE or qualified geologist. All additional testing and evaluations shall be at the expense of the applicant.

4. Evaluation Criteria

All graywater treatment system construction permit applications will be evaluated based on the

criteria specified in this Regulation. In order for a permit to be issued, the following criteria must be met:

- a. All land use approvals and other relevant permits must be obtained (and recorded, as necessary) prior to issuance of a graywater treatment system construction permit. These may include, but are not limited to, a Pitkin County Community Development-approved site plan delineating the area(s) approved for development. Systems must be sited within designated development envelopes, where required.
- b. An adequate water supply must be demonstrated for potable water systems in accordance with Colorado water law, this Regulation and the requirements of the Pitkin County Land Use Code. An adequate water supply provided by a public water system requires documentation of approval by the CWQCD and must satisfy the requirements of the Primary Drinking Water Regulations. Onsite water supply wells must be drilled prior to approval of a graywater treatment system construction permit application. If a water supply will not be obtained on site, then additional written documentation demonstrating legal access to the alternative water supply (e.g., recorded easements) must be provided
- c. All graywater treatment system designs must adhere to the technical criteria of this Regulation with regard to sizing, location, materials, piping, backfill, and other factors.
- d. Setbacks from reservoirs, lakes, streams, ditches, wells, wetlands, floodplains, riparian zones, and other features specified in Section 6.29.100.B.1.g of this Regulation must be met.
- e. Graywater treatment systems shall be designed, constructed, installed, repaired, replaced and altered in a manner that protects water resources, particularly in environmentally sensitive or vulnerable areas. Where water bodies are subject to Total Maximum Daily Loads (TMDLs), a graywater treatment system shall only be permitted in accordance with load allocations assigned under such TMDLs.
- f. Graywater treatment systems located in easements shall meet all requirements of this Regulation. Activity and development restrictions above the graywater treatment system must be clearly documented and recorded (as necessary).
- g. OWTS system components (tanks, soil treatment area, etc.), wells, springs, other bodies of water, riparian areas, and wetlands within 100 feet of an graywater treatment system soil treatment bed or trench shall be identified on the site plan submitted to the Department in connection with a permit application

5. Final Approval

- a. The licensed systems contractor or property owner (if an authorized self-installation has occurred) shall request a final inspection of the graywater treatment system from the Department and the PE who designed the system prior to backfilling of any excavation related to the system or its components. If a dosing device is installed, one complete cycle of that device must be observed by the PE designing the graywater treatment system and/or the Department. In the event the Department is called for a final inspection of an graywater treatment system and the graywater treatment system is not ready for a final inspection on the date specified, the applicant shall be assessed an additional fee for staff time spent traveling to and from the site, using the Department's hourly rate. This fee must be paid prior to receipt of final system approval.
- b. Following inspection, final grading must be completed and an "as-built" drawing shall be submitted to the Department, including, at a minimum, a site plan showing actual construction details and the actual locations of graywater treatment system components,

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including GPS coordinates. For graywater treatment systems constructed under supervision of a PE, the PE shall also certify in writing to the Department that construction and installation of the system have been completed in accordance with the terms of the engineered design that was submitted to and approved by the Department. "As-built" drawings must be received by the Department within 30 days of final inspection by the Department, unless a longer period of time has been agreed to by the Department, in writing. The Department shall assess an additional permit fee (which must be paid prior to receipt of final system approval) if an "as-built" drawing is not timely received.

c. The system contractor shall be identified prior to final approval

d. Prior to final approval of the graywater treatment system, the applicant shall demonstrate, in writing, that all indoor plumbing and components related to graywater use and subject to a Pitkin County Plumbing Permit from the Pitkin County Building Department have been given final approval by that Department. Where construction of graywater plumbing has not been completed, a written letter from the Pitkin County Building Department stating it is acceptable that Pitkin EH give final approval, is required.

e. If the Department determines that the graywater treatment system has been constructed, installed, altered, repaired, replaced, and/or relocated in accordance with this Regulation and the permit requirements, the Department shall issue final approval for the completed system. If the review and/or inspection discloses any significant departure from the location or design of the graywater treatment system as stated in the application and permit, or if any aspect of the graywater treatment system fails to comply with this Regulation, final approval shall be withheld. Written notice of the deficiency(ies) shall be provided to the applicant. Final approval shall be granted only when a reinspection has occurred and the system has been determined to be in compliance with the requirements stated above. Additional reinspection(s) may be subject to additional fees as outlined in the Pitkin County Environmental Health Fee Ordinance.

f. Any changes to the approved installation that result in conditions that would have prohibited the system from meeting the requirements of this Regulation at the time of final approval (*i.e.*, covering tank access ports in excess of allowable depth, changes to the depth of the subsurface irrigation system(s), removal of inspection ports or vents, inadequate or improper revegetation) will subject the property owner(s) to mandatory upgrades and repairs at such time as a system inspection, complaint investigation, or other site visit reveals such violation of this Regulation.

g. Backfilling and compaction of the subsurface irrigation system shall be accomplished in a manner that does not impair the intended function and performance of the storage/distribution media and soil and distribution laterals, allows for the establishment of vegetative cover, minimizes settlement and maintains proper drainage.

6. Emergency Repairs

a. An application for an graywater treatment system construction permit shall be submitted to the Department by the property owner(s), or an occupant, if the owner(s) cannot be reached, or the legally responsible party within two business days after a malfunctioning system or component becomes evident, or is brought to the attention of the owner(s)/occupant(s) following a system inspection, or after a notice is provided by the Department that the graywater treatment system is not functioning in compliance with this Regulation or otherwise constitutes a nuisance or hazard to public health and/or the environment.

b. In the case of a malfunctioning system, the applicant may request authorization for emergency use of the existing system, or the emergency use of a vault or vault privy, during the repair period.

c. As a condition of issuing a permit for emergency repairs, the Department may require a firm schedule for the repairs and proof of the ability to timely perform the requisite repairs, including but not limited to a contract for such repairs. The Department may also require insurance, bonding, or other provisions be made to ensure mitigation of any damage that may be caused by the emergency use of a malfunctioning or alternative system.

K. Graywater Treatment System Use Permit

1. A Graywater Treatment System Use Permit is required for property transactions resulting in a change in ownership of a property served by a graywater treatment system or requiring a building permit, unless exempted under Section 6.29.070.B.2.b and c. The use permitting process includes submission of a complete and fully executed permit application and fees, together with the following additional information and supporting documentation:

a. The use permit application shall include:

- i. Legally Responsible Party/Owner and contact information; and
- ii. Property address; and
- iii. Property legal description and parcel i.d. number; and
- iv. Name of Inspector;
- v. Date and time of the inspection(s)

b. A site plan showing the existing topography, location of each existing graywater treatment system and each graywater treatment system's relation to buildings, property lines, ditches, water courses, source of domestic water, OWTSs, and other graywater treatment systems and such other information, as may be required pursuant to Section 6.29.100.B.1.g. GPS coordinates documenting existing graywater treatment systems' locations shall also be provided.

c. A written inspection report by a licensed systems inspector or the Department documenting an inspection conducted within the one year period preceding the date of issuance of the use permit providing an assessment of the condition of each existing graywater treatment system and each graywater treatment system's ability to serve the property without adverse impact to public health and the environment, and specifying any repairs, enlargement or other alteration necessary to bring an graywater treatment system into compliance with the requirements of this Regulation.

d. An inspection report completed within the previous 12 months for any mechanical components such as pumps, alarms or treatment systems.

e. A description and layout of each graywater treatment system on the property.

f. In instances where a use permit is being sought in connection with an application for a building permit (e.g. remodel, addition, etc.), the applicant must also submit building plans in order to verify that the size of the existing graywater treatment system(s) will accommodate the new construction and a recorded Pitkin County Community Development-approved site plan delineating the area(s) approved for development to verify that the new construction will not result in site modifications that could adversely affect the functioning of the existing graywater treatment system(s) (e.g., soil compaction, modifications to drainage patterns). In instances where a use permit is being sought in

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connection with a property transaction, current floor plans for the building(s) served by the existing graywater treatment system(s) shall be submitted.

- g. Statement of the size, type and capacity of the system and an as-built drawing, either from Pitkin County records or the inspection reports;
- h. Type of permit, graywater use category, and proposed graywater uses; and
- i. A list of the fixture(s) that are the source(s) of the graywater; and
- j. A description of all products or components used in the graywater treatment system; and
- k. Evidence of past failures as shown in Pitkin County records; and
- l. Circumstances or factors that may have affected the ability of the inspector to evaluate the system.

2. If no repairs, enlargement, or other alterations are required, then an graywater treatment system use permit shall be issued. If construction or repairs are required to bring an graywater treatment system into compliance with this Regulation, then a construction permit application shall be submitted in accordance with Section 6.29.070.K.1.

L. Operating Permit for Graywater Treatment Systems

Effective on or after July 1, 2018 an operating permit shall be required for any graywater treatment system requiring an operator and/or specified maintenance on a periodic basis to ensure it is continuing to operate per manufacturer specifications.

- 1. All graywater treatment system(s) identified in section 6.28.070.B.3 shall be required to have an operating permit to ensure the system is functioning as specified by the manufacturer. The operating permit shall show evidence that the system is under a current maintenance contract and is routinely inspected per manufacturer requirements by a certified maintenance provider.
- 2. A graywater treatment system that requires an operating permit shall be maintained and the permit renewed every two years until the system is either abandoned or the Department authorizes the decommissioning or remodel of the graywater system.
- 3. The Department may revoke an operating permit for non-compliance with the permit conditions or requirements of these Regulations.
- 4. The Department may assess penalties for non-renewal of an operating permit or non-compliance with the terms of the permit.
- 5. The Department shall maintain accessible records that indicate:
 - a. Owner and contact information;
 - b. Address and legal description of property;
 - c. Location of the graywater treatment system specifying location of graywater tank, treatment system, subsurface irrigation system and other components;
 - d. Description of graywater treatment system installed;
 - e. Level of treatment to be provided;

- f. 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;
- g. Condition of system at completion of any maintenance activity.

7. Frequency of inspection and maintenance must be the most frequent of:

- a. Manufacturer recommendations for proprietary systems or design criteria requirements for public domain technology; or
- b. Pitkin County or Division requirements; or
- c. Every six months for higher level treatment systems with mechanical parts; or
- d. Every 12 months for higher level treatment systems with no mechanical parts.

8. Owner responsibilities:

- a. Ensure graywater treatment system is operating, maintained and performing according to the required standards for the designated treatment level;
- b. Maintain an active service contract with a maintenance provider at all times; and
- c. Each time his/her current contract with a maintenance provider is renewed or replaced, send a copy to the local public health agency within 30 days of signing.

6.29.080 Graywater Use Categories

General: The graywater use categories allowed are defined below. A single facility may have multiple graywater treatment works as long as all applicable use and design requirements are satisfied.

A. Category A: Single family, subsurface irrigation Category A graywater use must meet the following:

- 1. Allowed users: Single family.
- 2. Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.
- 3. Allowed uses: Outdoor, subsurface irrigation within the confines of the legal property boundary.
- 4. Design flow: The design flow for a single family graywater treatment works is limited to 400 gallons per day (gpd) or less combined flow for all approved uses.

B. Category B: Non-single family, subsurface irrigation, 2,000 gallons per day (gpd) or less

Category B graywater use must meet the following:

1. Allowed users: Non-single family users.
 2. Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.
 3. Allowed uses: Outdoor, subsurface irrigation within the confines of the legal property boundary.
 4. Design flow: The design flow for a non-single family graywater treatment works is limited to 2,000 gallons per day (gpd) or less for outdoor irrigation for the entire facility.
- C. Category C: Single family, indoor toilet and urinal flushing, subsurface irrigation Category C graywater use must meet the following:
1. Allowed users: Single family.
 2. Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.
 3. Allowed uses: Indoor toilet and urinal flushing and outdoor, subsurface irrigation within the confines of the legal property boundary.
 4. Design flow: The design flow for a single family graywater treatment works is limited to 400 gallons per day (gpd) or less combined flow for all approved uses.
- D. Category D: Non-single family, indoor toilet and urinal flushing, subsurface irrigation Category D graywater use must meet the following:
1. Allowed users: Non-single family users.
 2. Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.
 3. Allowed uses: Indoor toilet and urinal flushing and outdoor, subsurface irrigation within the confines of the legal property boundary.
 4. Design flow: There is no maximum design flow for a non-single family graywater treatment works for indoor toilet and urinal flushing. There is no maximum design flow for the amount of wastewater from the facility that can go to a closed sewerage system. The design flow is limited to 2,000 gallons per day (gpd) or less for outdoor irrigation for the entire facility.

6.29.090 Graywater Treatment Systems – Flow Projections

- A. Flow projections for all graywater treatment systems
1. Graywater treatment systems must be sized appropriately using the following flow projection methods:
 - a. Residential users: Flow to graywater treatment systems must be calculated on the occupancy and the fixtures connected to the graywater treatment system. The calculated graywater flow is the number of occupants multiplied by the estimate graywater flow in terms of gpd/occupant from the attached fixtures.

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- i. The occupancy must be calculated based on a minimum of two (2) occupants for the first bedroom and one (1) occupant for each additional bedroom.
- ii. The estimated graywater flow from each fixture is based on the design flow of the fixture or if the fixture's design flow is unknown then the estimated graywater flow per occupant is with based on the following gallons per day per occupant.
 - (a) Traditional fixtures: 25 gpd/occupant for each shower, bathtub, and wash basin and 15 gpd/occupant for each clothes washer.
 - (b) Water saving fixtures: 20 gpd/occupant for each shower, bathtub, and wash basin and 8 gpd/occupant for each clothes washer.
- b. Non-residential users: Graywater treatment systems must be sized in accordance with fixture or water use records taking into account the number of fixtures attached to the graywater treatment system.

6.29.100 Graywater Treatment Works - Design Criteria

A. Design criteria for all graywater treatment systems

The following minimum design criteria are required for all graywater treatment systems. All graywater treatment systems must:

1. Meet all design requirements of this regulation and meet any additional design requirements of the Colorado Plumbing Code.
2. Each treatment component or combination of multiple components must have a design flow greater than the calculated peak graywater production, if upstream of the storage tank or if no tank is present.
3. Include a diversion valve that directs graywater to either the graywater treatment system or a closed sewerage system. The diversion valve must be:
 - a. Easily operable;
 - b. Clearly labeled;
 - c. Constructed of material that is durable, corrosion resistant, watertight;
 - d. Designed to accommodate the inlet and outlet pipes in a secure and watertight manner; and
 - e. Indirectly connect the bypass line to the closed sewerage system.
4. Not have any piping that allows the treatment process(es) or a storage tank to be bypassed prior to graywater use.
5. Include a tank to collect and store graywater, except for a subsurface irrigation system that discharges to a mulch basin. The storage tank must:
 - a. Be constructed of durable, non-absorbent, water-tight, and corrosion resistant materials;

- b. Be closed and have access openings for inspection and cleaning;
 - c. Be vented:
 - i. for indoor tanks: the tanks must be vented to the atmosphere outside of the house;
 - ii. for outdoor tanks: the storage tank must have a downturned screened vent;
 - d. Have an overflow line:
 - i. with the same or larger diameter line as the influent line;
 - ii. without a shut off valve;
 - iii. that is trapped to prevent the escape of gas vapors from the tank; and
 - iv. that is indirectly connected to the closed sewerage system;
 - e. Have a valved drain line with the same or larger diameter line as the influent line that is indirectly connected to the closed sewerage system;
 - f. Be a minimum of 50 gallons;
 - g. Be placed on a stable foundation;
 - h. If located outdoors, not be exposed to direct sunlight; and
 - i. Have a permanent label that states "CAUTION! NON-POTABLE WATER. DO NOT DRINK."
6. For indoor toilet or urinal flushing systems (Categories C and D) graywater treatment systems must have a backup potable water system connection. For subsurface irrigation systems (Categories A and B) graywater treatment systems may, but are not required to, have a backup potable water system that provides potable irrigation water when graywater is not being produced or is produced in insufficient quantities. A backup potable water system connection must meet the following requirements:
- a. For non-public water system, potable water system connections: uncontrolled cross connections between a potable water system and a graywater treatment system are prohibited. All cross connections must be protected by a reduced pressure principle backflow prevention zone assembly or an approved airgap.
 - b. For public water system, potable water system connections: uncontrolled cross connections between a public water system and a graywater treatment system are prohibited. The graywater treatment system design must protect the public water system from cross connections by meeting the requirements of Regulation #11: Colorado Primary Drinking Water Regulations.
7. Not be used as a factor to reduce the design, capacity or soil treatment area requirements for OWTS or domestic wastewater treatment systems.
8. Have any wastewater from graywater treatment systems (e.g., filter backwash water) be properly contained and disposed into a closed sewerage system or an approved Underground Injection Control (UIC) well.

9. Have all graywater piping clearly distinguished and must be clearly labeled, including pipe identification and flow arrows.
 10. If located in a 100-year floodplain area, meet or exceed the requirements of FEMA and the local emergency agency. The graywater treatment system must be designed to minimize or eliminate infiltration of floodwaters into the system and prevent discharge from the system into the floodwaters.
 11. Not be located in floodways.
 12. Be located within the confines of the legal property boundary and not within an easement;

B. Design criteria for subsurface irrigation systems

1. All subsurface irrigation systems:

The following minimum design criteria are required for all graywater treatment systems being used for subsurface irrigation. All subsurface graywater irrigation systems must:

- a. Have the subsurface irrigation components of the graywater irrigation system installed a minimum of four inches (4") and a maximum of twelve inches (12") below the finished grade.
- b. Have the subsurface irrigation components of the graywater irrigation system installed in suitable soil, as defined in section 629.100.B.1.i.
- c. Have a minimum of twenty-four inches (24") of suitable soil between the subsurface irrigation components of the graywater irrigation system and any restrictive soil layer, bedrock, concrete, or the highest water table. Restrictive soil layers are soil types 4, 4A, and 5 in Table 12-2.
- d. Include controls, such as valves, switches, timers, and other controllers, as appropriate, to ensure the distribution of graywater throughout the entire irrigation zone.
- e. If utilizing emitters, the emitters must be designed to resist root intrusion and be of a design recommended by the manufacturer for the intended graywater flow and use. Minimum spacing between emitters shall be sufficient to deliver graywater at an agronomic rate and to prevent surfacing or runoff.
- f. Have all irrigation supply lines be polyethylene tubing or PVC Class 200 pipe or better and Schedule 40 fittings. All joints shall be pressure tested at 40 psi (276 kPa), and shown to be drip tight for five minutes before burial. Drip feeder lines can be poly or flexible PVC tubing.
- g. Meet the following setback distances in Table 12-1.

Table 12-1: Graywater System Setback Requirements

Minimum Horizontal Distance Required from:	Graywater Storage Tank	Subsurface Irrigation Field
Buildings	5 feet	20 feet
Property line adjoining private property	10 feet	10 feet
Property line adjoining private property with supporting property line survey	1.5 feet	1.5 feet

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Water supply wells	50 feet	100 feet
Streams and lakes	50 feet	100 feet
Seepage pits or cesspools	5 feet	25 feet
OWTS disposal field	5 feet	25 feet
OWTS tank	5 feet	10 feet
Domestic potable water service line	10 feet	20 feet
Public water main	10 feet	10 feet

h. The irrigation field must be located on slopes of less than thirty percent (30%) from horizontal.

i. Protocols for determining the size of the subsurface irrigation area:

The irrigation area must be determined using one of the following protocols.

i) Site evaluation protocol: The following site evaluation must be conducted to determine the appropriate size of the irrigation area for all subsurface irrigation systems, except single family dispersed subsurface irrigation systems (Category A and C dispersed subsurface irrigation systems) that are sized using the irrigation area equation protocol as defined in section 6.29.100(B)(1)(i)(ii).

The site evaluation must include:

(a) Site information, including:

- (1) a site map; and
- (2) location of proposed graywater irrigation area in relation to physical features requiring setbacks in Table 12-1.

(b) Soil investigation to determine long-term acceptance rate of a graywater irrigation area as a design basis. Soil investigation must be completed by either:

- (1) a visual and tactile evaluation of soil profile test pit, or
- (2) a percolation test.

(c) Irrigation rates must not exceed maximum allowable soil loading rates in Table 12-2 based on the finest textured soil in the twenty-four inches (24") of suitable soil beneath the subsurface irrigation components

Table 12-2: Soil Type Description and Maximum Hydraulic Loading Rate

Soil Type	USDA Soil Texture	USDA Structure – Shape	USDA Soil Structure-Grade	Percolation Rate (MPI)	Loading Rate for Graywater (gal./sq. ft./day)
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0	Soil Type 1 with more than 35% Rock (>2mm); Soil Types 2-5 with more than 50% Rock (>2mm)	--	0 (Single Grain)	Less than 5	Not suitable without augmentation 1.0 with augmentation
1	Sand, Loamy Sand	--	0	5-15	Not suitable without augmentation 1.0 with augmentation
2	Sandy Loam, Loam, Silt Loam	PR BK GR	2 (Moderate) 3 (Strong)	16-25	0.8
2A	Sandy Loam, Loam, Silt Loam	PR, BK, GR 0 (none)	1 (Weak) Massive	26-40	0.6
3	Sandy Clay Loam, Clay Loam, Silty Clay Loam	PR, BK, GR	2, 3	41-60	0.4
3A	Sandy Clay Loam, Clay Loam, Silty Clay Loam	PR, BK, GR 0	1 Massive	61-75	0.2
4	Sandy Clay, Clay, Silty Clay	PR, BK, GR	2, 3	76-90	Not suitable
4A	Sandy Clay, Clay, Silty Clay	PR, BK, GR 0	1 Massive	91-120	Not suitable
5	Soil Types 2-4A	Platy	1, 2, 3	121+	Not suitable

- (d) Suitable soil may consist of original, undisturbed soil or original soil that is augmented. Not suitable soil may be augmented as needed to ensure suitable soil is used.
- (e) If the original soil is augmented, the mixture used for augmentation must meet the following criteria to ensure that suitable soil is achieved:
 - (1) The mixture must have an organic content that is at least five percent (5%) and no greater than ten percent (10%);
 - (2) The mixture must be a well-blended mix of mineral aggregate (soil) and compost where the soil ratio depends on the requirements for the plant species; and
 - (3) The mineral aggregate must have the following gradation:

Sieve Size	Percent Passing
3/8	100
No. 4	95 - 100
No. 10	75 - 90
No. 40	25 - 40

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No. 100	4 - 10
No. 200	2 - 5

- (f) If the original soil is augmented, the additional soil must be tilled into the native soil a minimum of six inches (6") below irrigation application zone.
- (g) Soil types 0 and 1 must be augmented before use. Soil type 4, 4A, and 5 are not suitable for subsurface irrigation.
- ii) Irrigation area equation protocol: The following irrigation area equation protocol may be used to determine the appropriate size of the irrigation area for single family, dispersed subsurface irrigation systems (Categories A and C dispersed subsurface irrigation systems).

This protocol cannot be used to size mulch basins.

$$LA = GW / (CF \times ET \times PF)$$

Where:

- LA = Landscaped area (square feet) ;
- GW = Estimated graywater flow (gallons per week) ;
- CF = 0.62 (square foot x inch / gallon) = ((7.48 gallons/ 1-cu-ft) / 12 inch/ft) ;
- ET = Evapotranspiration rate (inch / week), as determined by USDA Natural Resources Conservation Service CO652.0408 "Figure CO4-1: Map of Colorado Climate Zones" dated April 1978, or weekly averages based on actual conditions;
- PF = Plant factor, 0.5

2. Mulch basin irrigation system requirements

The following minimum design criteria are required for graywater treatment systems using mulch basin systems for subsurface irrigation:

- a. Mulch shall be permeable enough to allow rapid infiltration of graywater.
- b. The minimum void space mulch basin volume must be either:
 - i. Three (3) times the anticipated average daily flow for graywater treatment works without a storage tank to allow for graywater volume surges and to prevent surfacing or runoff.
 - ii. One and a half (1.5) times the anticipated average daily flow for graywater treatment works with storage tank meeting the section

6.29.090.A design criteria.

- c. Piping to mulch basins must discharge a minimum of four inches (4") below grade into a container for dispersal of graywater into the mulch basin. The container must be designed to have four inches (4") of freefall between the invert of the discharge pipe and the mulch. The container must have an access lid for observation of flow and to check mulch levels.
- d. The mulch basin must have a minimum depth of twelve inches (12") below grade and not more than twenty four (24") below grade.
- e. A filter is not required.

3. Dispersed subsurface irrigation system requirements

The following minimum design criteria are required for graywater treatment systems using dispersed irrigation systems for subsurface irrigation:

- a. Include a cartridge filter, which must meet the following requirements:
 - i. A minimum of 60 mesh;
 - ii. Located between the storage tank and the irrigation system;
 - iii. If a pump is being used to pressurize the graywater distribution system, the filter must be located after the pump.

C. Design criteria for indoor toilet and urinal flushing graywater treatment systems (Categories C and D)

1. Category C: single family, indoor toilet and urinal flushing graywater treatmentsystems

The following minimum design criteria are required for graywater treatment systems for Category C: single family, indoor toilet and urinal flushing:

- a. The graywater treatment system must be certified under "Class R" of NSF/ANSI 350 Onsite Residential and Commercial Water Reuse Treatment Systems.
- b. If a disinfection process is not part of NSF/ANSI 350-2011 equipment, separate disinfection system equipment is required. For graywater treatment systems that use sodium hypochlorite (bleach), the graywater treatment works must be capable of providing a free chlorine residual of 0.2 to 4.0 mg/L in the graywater throughout the indoor graywater plumbing system.
- c. The graywater treatment system must include a dye injection system that is capable of providing a dye concentration that is visibly distinct from potable water.

- d. For Category C indoor toilet and urinal flushing graywater treatment systems that are also capable of using graywater for subsurface irrigation, the system may be designed to allow graywater to be diverted to the subsurface irrigation graywater treatment system prior to the disinfection and dye process, however after the point of diversion the subsurface irrigation portion of the system must meet the requirements in section 6.29.100.B.
2. Category D: non-single family, indoor toilet and urinal flushing graywater treatment works

The following minimum design criteria are required for Category D: non-single family, indoor toilet and urinal flushing:

 - a. The graywater treatment system must be certified under “Class R” or “Class C” of NSF/ANSI 350 Onsite Residential and Commercial Water Reuse Treatment Systems. Required classification shall be dictated by the size of the graywater treatment system and if the graywater sources are residential or commercial as defined by NSF/ANSI 350.
 - b. Separate disinfection system equipment is required if a disinfection process is not part of NSF/ANSI 350-2011 equipment. A graywater treatment system must be capable of providing a free chlorine residual of 0.2 to 4.0 mg/L in the graywater throughout the indoor graywater plumbing system.
 - c. The graywater treatment systems must include a dye injection system that is capable of providing a dye concentration that is visibly distinct from potable water.
 - d. For Category D indoor toilet and urinal flushing graywater treatment systems that are also capable of using graywater for subsurface irrigation, the system may be designed to allow graywater to be diverted to the subsurface irrigation graywater treatment system prior to the disinfection and dye process, however after the point of diversion the subsurface irrigation portion of the system must meet the requirements in section 6.29.100.B.
 - e. For graywater treatment systems that have a capacity to receive greater than 2,000 gallons per day, the design must be prepared under the supervision of and submitted with the seal and signature of a professional engineer licensed to practice engineering in the State of Colorado in accordance with the requirements of the Colorado Department of Regulatory Agencies (DORA) – Division of Registrations.
- D. Signage requirements for non-single family graywater treatment systems (Categories B and D)
1. All required notifications shall include posting of signs of sufficient size to be clearly read with the language below in the dominant language(s) expected to be spoken at the site.
 2. All non-single family graywater treatment systems (Categories B and D)
- All non-single graywater treatment systems must comply with the following signage requirements:
- a. A permanent warning sign must be visible at all fixtures from which graywater is collected. The signs must state that, “WATER FROM THIS FIXTURE IS REUSED. CHEMICALS, EXCRETA, PETROLEUM OILS AND HAZARDOUS MATERIALS MUST NOT BE DISPOSED DOWN THE DRAIN”;

- b. Each room that contains graywater treatment system components must have a sign that says “CAUTION GRAYWATER TREATMENT SYSTEM, DO NOT DRINK, DO NOT CONNECT TO THE POTABLE DRINKING WATER SYSTEM. NOTICE: CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM.”; and
3. Non-single family, subsurface irrigation non-single family graywater treatment systems (Categories B and D)
- Non-single family, subsurface irrigation graywater treatment systems (Categories B and D, if applicable) must comply with the following signage requirement:
- a. Each irrigation area must have a sign that says “CAUTION GRAYWATER BEING USED FOR IRRIGATION. DO NOT DRINK OR CONNECT TO THE POTABLE DRINKING WATER SYSTEM.”
4. Non-single family, indoor toilet or urinal flushing, non-single family graywater treatment systems (Category D)
- Non-single family, indoor toilet and urinal flushing graywater treatment systems (Category D) must comply with the following signage requirement:
- a. Each toilet and urinal must have a sign that says: “TO CONSERVE WATER, THIS BUILDING USES TREATED NON-POTABLE GRAYWATER TO FLUSH TOILETS AND URINALS.”

6.29.110 Operation and Maintenance Manual

All graywater systems must have an O&M manual. The O&M manual must include the following items:

- A. A graywater treatment system description including: equipment list, design basis data including but not limited to, design volumes, design flow rates of each component and service area, system as-built drawing, and process description.
- B. Maintenance information for the graywater treatment system including but not limited to: component maintenance schedule, instructions for component repair, replacement, or cleaning, replacement component source list, testing and frequency for potable containment device, and instructions for periodic removal of residuals.
- C. Operational ranges for parameters including but not limited to: disinfectant concentration levels, filter replacement parameters, pressure ranges, tank level, and valve status under normal operation.
- D. Step-by-step instructions for starting and shutting down the graywater treatment system including but not limited to: valve operation, any electrical connections, cleaning procedures, visual inspection, and filter installation.
- E. A guide for visually evaluating the graywater treatment system and narrowing any problem scope based on alarm activations, effluent characteristics, system operation, and history.
- F. A list of graywater control measures in which the graywater treatment system must be operated.

6.29.120 Graywater Use Requirements - Control Measures

- A. Control measures are operational requirements representing best management practices that graywater systems must follow when operating a graywater treatment systems.
- B. Control measures that apply to all graywater uses

All graywater treatment works must be operated in accordance with the following control measures:

1. Graywater must be collected in a manner that minimizes the presence or introduction of:
 - a. hazardous or toxic chemicals in the graywater to the greatest extent possible;
 - b. human excreta in the graywater to the greatest extent possible;
 - c. household wastes; and
 - d. animal or vegetable matter.
 2. Use of graywater is limited to the confines of the facility that generates the graywater.
 3. The graywater treatment system must be operated and maintained in accordance with the O&M manual, including all manufacturer recommended maintenance activities. The O&M manual must remain with the graywater treatment system throughout the system's life and be updated based on each modification and approval made to the system. The O&M manual must be transferred, upon change of ownership or occupancy, to the new owner or tenant.
 - a. For Category D graywater treatment systems that have a capacity to receive greater than 2,000 gallons per day (gpd), operational and maintenance records must be maintained for a minimum of the past five (5) years.
 4. The owner or operator of a graywater treatment system must minimize exposure of graywater to humans and domestic pets.
 5. Graywater use and graywater treatment systems must not create a public nuisance.
 6. Graywater must not be stored for more than 24 hours unless the graywater has been treated by a graywater treatment system that meets the design requirements of section 6.29.100. All graywater must be stored inside a tank(s) that meets the design requirements of section 6.29.100.A.5.
 7. Temporary or semi-temporary connections from the potable water system or public water system to the graywater treatment system are prohibited. Permanent connections from the potable water system or public water system to the graywater treatment system must meet the design requirements of 6.29.090.A.6.
- C. Control measures that apply to subsurface irrigation graywater use

Subsurface irrigation graywater treatment systems must be operated in accordance with the following additional control measures:

1. Agricultural irrigation with graywater is prohibited.
2. Irrigation is prohibited when the ground is frozen, plants are dormant, during rainfall events, or the ground is saturated.

3. Irrigation scheduling must be adjusted so that application rates are closely matched with soil and weather conditions.
4. Graywater must be applied in a manner that does not result in ponding, runoff, or unauthorized discharge to state waters. For dispersed subsurface irrigation systems, the graywater must be applied at an agronomic rate. For mulch basins systems, the graywater must not be applied in excess of the soil adsorption rate.
5. For mulch basin systems, mulch must be replenished and undergo periodic maintenance as needed to reshape or remove material to maintain surge capacity and to prevent ponding and runoff.

D. Control measures that apply to indoor toilet and urinal flushing graywater use

Indoor toilet and urinal flushing graywater treatment systems (Categories C and D) must be operated in accordance with the following additional control measures.

1. Graywater for toilet and urinal flushing use must be disinfected.
 - a. Graywater treatment works that utilize chlorine for disinfection must have a minimum of 0.2 mg/L and a maximum of 4.0 mg/L of free chlorine residual throughout the indoor graywater plumbing system, including fixtures.
 - b. Single family graywater treatment systems that utilize non-chemical methods, such as UV, for disinfection must have a chlorine puck present in each toilet or urinal tank.
2. Graywater for toilet and urinal flushing must be dyed with either blue or green food grade vegetable dye and be visibly distinct from potable water.

6.29.130 Revegetation of All OWTS Sites

A. Revegetation Requirements

An adequate layer of good quality topsoil capable of supporting revegetation shall be placed over the entire disturbed area of an OWTS installation. The topsoil may be part of the minimum required cover depth of 1 foot. The topsoil shall be planted with a mixture of native grass seed that has good soil stabilizing characteristics (but without taproots), provides a maximum transpiration rate, and competes well with primary successional species. No trees or shrubs, or any vegetation requiring regular irrigation, shall be planted over the area. All seed mixtures utilized for revegetation must be certified weed free and approved by Pitkin County Land Management (as confirmed by inclusion in *The Pitkin County Revegetation Guide*).

B. Maintenance of Vegetation

Until vegetation is reestablished, erosion and sediment control measures shall be implemented and maintained on site. The owner(s) of an OWTS shall be responsible for maintaining proper vegetative cover and may be required to remove inappropriate materials and properly re-vegetate any time a violation is found to exist.

6.29.140 Certified Operator

A graywater treatment system must be operated by qualified personnel who meet any applicable requirements of Regulation #100, the Water and Wastewater Facility Operators Certification

Requirements.

6.29.150 Enforcement

A. Primary Enforcement Responsibility

The primary responsibility for enforcement of this Regulation shall lie with the Department.

B. Access to Site

1. The Department and its authorized representative(s) are authorized to enter upon private property at reasonable times and upon reasonable notice to determine if a graywater treatment system is functioning in compliance with §25-8.101 *et. seq.* C.R.S., this Regulation, and the terms and conditions of any permit. The Department and its authorized representative(s) are further authorized to enter upon private property at reasonable times and upon reasonable notice to inspect and conduct tests for purposes of evaluating any permit application. The owner(s) and occupant(s) of every property having a graywater treatment system subject to a permit, or a pending permit application, shall, by virtue of that permit or application, be deemed to have granted the Department and its authorized representative(s) permission to access the property upon which the graywater treatment system is located to conduct required tests, take samples, monitor compliance, and make inspections in accordance with this Regulation.
2. The Department, or a licensed systems inspector, shall inspect an existing graywater treatment system at the request of the property owner(s) or occupant(s) for purposes including, but not limited to property transactions to determine the need for servicing, repair and appropriate upgrades. Inspections by the Department shall be conducted following submittal of a written inspection request, subject to staff availability and following payment of inspection fees to the Department.

C. Complaints Regarding Violations

Persons who believe that a graywater treatment system is in violation of the requirements of this Regulation shall report the purported violation to the Department. The Department, in its discretion, may require the information related to any complaint to be provided in writing. Upon receipt of a complaint, the Department shall investigate the matter and, if appropriate, issue a notice of violation. The Department, in its discretion, may also refer the matter immediately to the Pitkin County Attorney's Office and the Pitkin County Code Enforcement Officer.

D. Notice of Violation; No Other Approvals or Permits to Be Issued

Whenever the Department determines that there has been a violation of any provision of this Regulation, the Department (or the Pitkin County Attorney's Office, as specified above) shall give notice of such violation to the owner(s) of the property. Such notice shall be in writing, and shall describe in detail the violation(s), provide a reasonable time for correction, and be addressed to the owner(s) of the property at the owner's(s)' last known address, as shown on the records of the Pitkin County Assessor's Office. Service of such notice shall be provided according to the Colorado Rules of Civil Procedure, or by overnight mail. Service by overnight mail shall be considered complete one business day after mailing. If the owner(s) cannot be found or served after a diligent effort to do so, service may be made by posting a notice in a location conspicuous on or about the property affected by the notice.

1. Each day during which any violation of this Regulation continues shall be deemed a separate offense.
2. Pitkin County shall be entitled to suspend or revoke any building permit, or any other type of Pitkin County permit or land use approval issued for a property where a violation is known or believed to exist during the period of the violation. Additionally, no Pitkin County land use

approval or permit shall be issued for any property under the ownership or control of the same person(s) or other legal entity(ies) responsible for the violation during the period of the violation.

E. Cease and Desist Order

1. The Department may issue an order to cease and desist from the use of any graywater treatment system that is found not to be in compliance with a permit issued by the Department, not functioning in compliance with this Regulation, or that otherwise constitutes a nuisance or a hazard to public health or the environment, and that has not received timely repairs in accordance with the provisions of this Regulation. A cease and desist order may be issued only after a hearing that shall be conducted by the Public Health Director (or by the Chair of the Board of County Commissioners if the Public Health Director is not available) not less than 48 hours after written notice is given to the owner(s) of the property on which the graywater treatment system is located and at which the owner(s) may be present, with counsel, and be heard. Service of notice of the hearing shall be provided according to the Colorado Rules of Civil Procedure, or by overnight mail to the owner's(s)' last known address, as shown on the records of the Pitkin County Assessor's Office. Service by overnight mail shall be considered complete one business day after mailing. If the owner(s) cannot be found or served after a diligent effort to do so, service may be made by posting a notice in a location conspicuous on or about the property affected by the notice. The cease and desist order shall require that the owner(s) bring the graywater treatment system into compliance, or eliminate the nuisance or hazard within a reasonable period of time, not to exceed 30 days, or thereafter cease and desist from the use of the graywater treatment system.
2. A hearing on a cease and desist order may also include the assessment of monetary penalties, as specified in subparagraph F(2) below. Where the hearing is conducted by the Chair of the Board of County Commissioners (where the Public Health Director is not available), the Chair of the Board of County Commissioners shall also have the right to assess monetary penalties, as described below.

F. Penalties

1. Any person who commits any of the following acts or violates any of the provisions of this Regulation commits a Class 1 petty offense, as defined in §18-1.3-503 C.R.S:
 - a. Constructs, alters, installs, or permits the use of any graywater treatment system without first having applied for and received a permit as provided for in Section 6.29.070 of this Regulation;
 - b. Constructs, alters, or installs a graywater treatment system in a manner that involves a knowing and material variation from the terms or specifications contained in the application or permit;
 - c. Violates the terms of a cease and desist order that has become final under the terms of Section 6.29.150(E) of this Regulation;
 - d. Conducts a business as a systems contractor or systems cleaner, without having obtained the license provided for in Section 6.28.160 of this Regulation;
 - e. Falsifies or maintains improper record keeping concerning graywater treatment system cleaning activities not performed or performed improperly; or
 - f. It shall be the responsibility of the Pitkin County Attorney to bring a criminal enforcement action at the request of the Board of County Commissioners, following a request for criminal enforcement by the Department. Criminal enforcement shall be in addition to all other remedies specified in this Section 6.29.150.

2. Upon a finding by the Public Health Director that a person is in violation of the provisions of this Regulation, the Public Health Director, upon request by the Department, may assess a monetary penalty for each day of violation. Such penalty shall be not less than \$25 per day, nor more than \$100 per day. In determining the amount of the penalty to be assessed, the Public Health Director shall consider the seriousness of the danger to the public health and the environment caused by the violation, the duration of the violation, and whether the person has previously been determined to have committed a similar violation. A penalty may be assessed only after a hearing that shall be conducted by the Public Health Director after written notice is given to the owner(s) of the property on which the graywater treatment system is located and at which the owner(s) may be present, with counsel, and be heard. Service of notice of the hearing shall be provided according to the Colorado Rules of Civil Procedure, or by overnight mail to the owner's(s') last known address, as shown on the records of the Pitkin County Assessor's Office. Service by overnight mail shall be considered complete one business day after mailing. If the owner(s) cannot be found or served after a diligent effort to do so, service may be made by posting a notice in a location conspicuous on or about the property affected by the notice.
3. A person subject to assessment of a monetary penalty pursuant to subparagraph E(3) or subparagraph F(2) above may appeal the decision to the Board of County Commissioners. No appeal shall be considered unless a notice of appeal and brief written statement of the grounds for appeal is received by the Department not later than 30 days after the decision is rendered. Within 15 business days after receipt of a properly documented notice of appeal, the Department will schedule an appeal meeting (which shall be a public meeting) before the Board of County Commissioners. To the degree possible, appeals will be scheduled for the next regularly scheduled meeting of the Board of County Commissioners with an available time slot. At the meeting on the appeal, the Board of County Commissioners shall review the record of decision and shall provide the property owner(s) an opportunity to discuss the grounds for the appeal and the basis for the alleged error in the decision. The Board of County Commissioners may also hear from any third party it deems appropriate. The Board of County Commissioners shall only reverse, modify, or remand a decision on appeal if it finds that there has been a clear and demonstrable error, abuse of discretion, or denial of procedural due process in the application of the facts in the record to the standards of this Regulation.

G. Liens and Costs of Collection

Until paid, any monetary penalty assessed pursuant to this Regulation shall, as of recording with the Pitkin County Clerk & Recorder, be a lien against the property on which the violation has been found to exist. If the assessment is not paid within 30 days, it shall be certified by the Pitkin County Attorney to the Pitkin County Assessor, who shall collect the assessment, together with a 10 percent penalty for the cost of collection, in the same manner as other Pitkin County taxes are collected. The laws of the State of Colorado for assessment and collection of general taxes shall apply to the collection of assessments pursuant to this subparagraph (G).

6.29.160 Licensing

A. General

1. Systems Contractors
 - a. Any entity or individual engaged in the construction, installation, alteration, or repair of a graywater treatment system in Pitkin County is required to be licensed by the Department as a licensed systems contractor.
 - b. No entity or individual shall construct, install, alter, or repair a graywater treatment system unless the work is performed by a licensed systems contractor, or is being performed under the direct supervision of a licensed systems contractor.

Corporations and other entities operating as systems contractors in Pitkin County must employ at least one person who is a licensed systems contractor.

- c. A property owner may construct, install, alter, or repair an OWTS on such person's own property without a license, *provided that* the property owner (or an authorized representative of the property owner, in the case of an entity) receives the Department's approval by successfully demonstrating adequate knowledge of this Regulation by passing a test administered by the Department prior to construction, installation, alteration, or repair of the system.
- d. OWTS and graywater treatments system licenses are inclusive of each other. An individual or entity that is licensed to install OWTSs does not need to obtain a separate graywater treatment system installation license and *vice a versa*.

2. Systems Cleaners

- a. Any entity or individual engaged in graywater treatment system cleaning in Pitkin County is required to be licensed by the Department.
- b. No entity or individual shall engage in the cleaning of an graywater treatment system unless the work is performed by a licensed systems cleaner, or is being performed under the direct supervision of a licensed systems cleaner. Corporations and other entities operating as systems cleaners in Pitkin County must employ at least one person who is a licensed system cleaner.
- c. OWTS cleaner and graywater treatments system licenses are inclusive of each other. An individual or entity that is licensed to clean OWTSs does not need to obtain a separate graywater treatment system cleaner license and *vice a versa*.

3. Systems Inspectors

- a. Any entity or individual engaged in graywater treatment system inspection in Pitkin County is required to be licensed by the Department.
- b. No entity or individual shall engage in the inspection of a graywater treatment system unless the work is performed by a licensed systems inspector, or is being performed under the direct supervision of a licensed systems inspector. Corporations and other entities operating as systems inspectors in Pitkin County must employ at least one person who is a licensed systems inspector.
- c. OWTS and graywater treatments system licenses are inclusive of each other. An individual or entity that is licensed to inspect OWTSs does not need to obtain a separate graywater treatment system inspection license and *vice a versa*.

B. Licensing Procedures for Systems Contractors, Cleaners, and Inspectors

- 1. Application for a systems contractor, cleaner, or inspector license, or license renewal, shall be made on forms provided by the Department.
- 2. Fees for a systems contractor, cleaner, or inspector license and license renewal will be established by the Department from time to time. Initial licenses and renewals thereof shall be for a period of one year. A license that lapses because of failure to renew, or is revoked, shall be subject to the fee established for an initial license upon reapplication.
- 3. Prior to the issuance of an initial license, license renewal, or reinstatement of a revoked license, the applicant must demonstrate adequate knowledge of this Regulation by passing a test administered by the Department, or provide documentary evidence that they hold a similar type of license acceptable to the Department (e.g., NEHA's Certified Installer of

Onsite Wastewater Treatment Systems, for systems contractors and NAWT's Inspector credential, for systems inspectors). A test will be administered for: a) all initial licenses, b) every three years for renewals (or earlier, if necessitated by a material change in this Regulation), and c) prior to reinstatement of a revoked license.

4. The fee for testing (and retesting) of a property owner engaged in the construction, installation, alteration, or repair of an OWTS on such person's own property shall be charged at the same rate as a systems contractor initial license. Initial approval and subsequent approvals given by the Department to a property owner shall be for a period of one year.

C. Standards of Performance

1. General

- a. Performance: A graywater treatment system shall be designed and constructed to achieve the treatment level specified.
- b. Reliability: graywater treatment systems shall be designed and constructed such that each component shall function, when installed and operated, in a manner not adversely affected by normal operating conditions including erosion, corrosion, vibration, shock, climatic conditions, and usual household chemicals. Each component shall be free of non-functional protrusions or sharp edges, or other hazards, which could cause injury to persons, animals, or properties. Design shall be such as to exclude flies and rodents and other vectors and to prevent the creation of nuisances and public health hazards and shall provide for efficient operation and maintenance.
- c. It is the responsibility of the systems contractor, cleaner, or inspector to report to the property owner(s) and the Department, in writing, the discovery of any prohibited component of an graywater treatment system (such as a metal tank or cesspool), or a malfunctioning system.
- d. Plumbing Codes: Plumbing fixtures, building sewers, vents, sewer lines and other appurtenances shall be designed, operated and maintained so as to comply with the minimum requirements of the most recently revised locally enforceable plumbing code. In absence of a local plumbing code, designs shall adhere to the Colorado Plumbing Code (3 CCR 720-1). A local plumbing permit may be required.
- e. Surface Activity: Activity or use on the surface of the ground over any part of the graywater treatment system must be restricted to that which shall allow the system to function as designed and which shall not contribute to compaction of the soil or to structural loading detrimental to the structural integrity or capability of the component to function as designed. During construction, equipment shall be kept off of the ground surface above the soil treatment area and out of the excavation to prevent compaction. If compaction occurs, the disturbed or compacted soil shall be re-evaluated and new percolation tests may be performed to the disturbed or compacted soil and the system redesigned if the parameters have changed.

2. Additional Standards of Performance for Licensed Systems Contractors

The systems contractor shall be responsible for making arrangements for all inspections required for final approval of a graywater treatment system construction permit, unless the Department is notified and approves other arrangements.

3. Additional Standards of Performance for Licensed Systems Cleaners

- a. Systems cleaners, when cleaning a tank or other primary treatment unit, shall remove the liquid, sludge and scum, leaving no more than 3 inches depth of wastewater in a non-backflowing tank or other primary treatment unit. In backflowing types of systems, cleaning shall be effective in reducing solids and scum to the point of a near-new system. A dosing or pumping chamber is not required to be pumped unless accumulation of sludge or scum interferes with the proper operation of the graywater treatment system.
- b. After pumping the tank or other primary treatment unit, a systems cleaner shall 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(s), in writing, if any of these components are damaged or missing. Any filters, or other devices which require routine maintenance and cleaning shall be inspected and cleaned by the systems cleaner, if necessary.
- c. Systems cleaners shall maintain their equipment to ensure that no spillage of wastewater will occur during transportation and so that their employees are not subjected to hazards. Systems cleaners are strongly encouraged to have proper personal protective equipment and immunizations for protection against diseases associated with wastewater.
- d. Systems cleaners shall dispose of waste materials removed from any graywater treatment system only at an approved Domestic Wastewater Treatment Plant, as defined by CWQCC Regulation No. 22, or other site approved by the CWQCD that is willing to accept the waste. Disposal must occur in a manner that does not create a hazard to public health, a nuisance, or a risk of pollution.

4. Additional Standards of Performance for Licensed Systems Inspectors

It is the responsibility of the systems inspector to report to the property owner(s) and the Department, in writing, the discovery of any prohibited component of a graywater treatment system, encroachment into setback distances specified in Section 6.29.100.B.1 of this Regulation, any evidence of a malfunctioning system or component, an inadequately sized graywater treatment system, or lack of adequate servicing of mechanical equipment related to manufactured units. Systems inspectors shall be qualified to perform graywater treatment system inspections for all graywater treatment system use permits and shall submit a written report of such inspections to the property owner(s) and the Department.

D. Revocation of Licenses

1. A systems contractor, cleaner, or inspector license may be revoked for failure to comply with this Regulation, or for other good cause shown. Written notice of the violation(s) and/or other reasons for revocation of the license shall be delivered to the systems contractor, cleaner, or inspector by overnight mail, delivery requested the next business day, to the address specified on the license. The systems contractor, cleaner, or inspector shall have 10 business days after the date of delivery of the notice to provide a written response to the Department. Revocation of a license shall take place only after a hearing before the Board of County Commissioners. The systems contractor, cleaner, or inspector shall be given notice of the hearing in the same manner specified above, and may be represented at the hearing by counsel.
2. Application for a new license for a systems contractor, cleaner, or inspector whose license has been revoked shall not be considered for one year after revocation.