

The Texas Commission on Environmental Quality (commission or TCEQ) proposes new §§210.81 - 210.85.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The legislature passed House Bill 346 in 1993 which required rules to be developed by the commission and the Texas State Board of Plumbing Examiners for graywater use in Texas. The commission adopted rules under 30 TAC Chapter 285, On-Site Sewage Facilities, in June 2001 that allow water from clothes-washing machines as the only graywater to be discharged without going through an on-site sewage facility (OSSF). Water from other sources in a residence was not included in the use of graywater.

In 2003, the 78th Legislature passed House Bill 2661 which amended Texas Water Code (TWC), §26.0311, and Texas Health and Safety Code (THSC), §341.039 and §366.012. These amendments modify the definition of graywater and require the commission to adopt and implement standards for the use of graywater and to address the separation of graywater in a residence served by a publicly or privately owned treatment works. Additionally, this legislation directs the commission to address the use of graywater for commercial, industrial, irrigation, and other agricultural purposes.

To implement this legislation, the commission proposes to concurrently amend Chapter 210; Chapter 285; and 30 TAC Chapter 317; Design Criteria for Sewerage Systems. Proposed amendments to Chapter 285 and Chapter 317 are also published in the Proposed Rules section of this issue of the *Texas Register*.

## SECTION BY SECTION DISCUSSION

TWC, §26.0311(b), requires the commission to adopt and implement minimum standards for the use of graywater. TWC, §26.0311(b)(2), requires that the minimum standards for the domestic use of graywater be consistent with THSC, §341.039. Therefore, the commission proposes to create a new Subchapter F, Use of Graywater Systems, to include the requirements for graywater to implement TWC, §26.0311 and THSC, §341.039 and §366.012.

Proposed §210.81, Applicability, would specify that this subchapter applies to individuals who use graywater for: irrigation and other agricultural purposes; domestic use; commercial purposes; industrial purposes; and institutional purposes. This section also specifies that reclaimed water is regulated under Subchapters A - E of this chapter. The commission created an applicability section for new Subchapter F to be consistent with the structure of the other subchapters in this chapter and to ensure the consistency of the term "Site."

Proposed §210.82, General Requirements, would provide the general requirements for graywater use. These criteria are proposed to implement TWC, §26.0311 and THSC, §341.039.

Proposed §210.82(a) would define graywater as wastewater from clothes-washing machines; showers; bathtubs; handwashing lavatories; sinks that are not used for disposal of hazardous or toxic ingredients; and sinks not used for food preparation or disposal. This definition is from THSC, §341.039(e) and TWC, §26.0311(a), as amended by House Bill 2661.

Proposed §210.82(b) would exclude from the definition of graywater wastewater from the washing of material, including diapers, soiled with human excreta, and wastewater that has come in contact with toilet waste. This definition is from THSC, §341.039(e) and TWC, §26.0311(a), as amended by House Bill 2661.

Proposed §210.82(c) would require that construction of a graywater system, including the storage and disposal systems, comply with Chapter 210 and any requirements of the local permitting authority. The commission is proposing this provision to provide notice that local permitting authorities may have additional requirements, such as a plumbing code, to those in this rule.

Proposed §210.83, Criteria for Disposal of Domestic Graywater, would provide the criteria for use of graywater. The criteria are incorporated from TWC, §26.0311, and THSC, §341.039, as amended by House Bill 2661. The commission proposes to change the title of this section from “Criteria for Disposal of Domestic Greywater” to “Criteria for the Domestic Use of Graywater” to more accurately reflect the contents of the section.

Proposed §210.83(a) would specify that a person using less than 400 gallons of graywater each day does not need an authorization if the graywater originates from a private residence and if the graywater system is designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. New subsection (a) would also specify that the discharge from the graywater system must enter the organized wastewater system through two backflow preventers. The commission proposes the inclusion of two backflow preventers to prevent cross-contamination between the graywater system and the organized wastewater system. This will

help ensure that toilet waste or other types of wastewater that are not defined as graywater in TWC, §26.0311(a) do not commingle with the graywater system. Additionally, the graywater must be stored in tanks and the tanks must be clearly labeled as nonpotable water; must restrict access, especially to children; and eliminate habitat for mosquitoes and other vectors. These requirements are from THSC, §341.039(c).

While THSC, §341.039(c)(4), requires tanks, the statute is silent with regard to any tank specifications. However, TWC, §26.0311(b), requires the commission to adopt and implement minimum standards for the use of graywater and TWC, §26.0311(b)(2), requires that the domestic use of graywater be consistent with the requirements in THSC, §341.039. Both THSC, §341.039(b), and TWC, §26.0311(c), require that the use of graywater not be a nuisance and not damage the quality of surface water or groundwater in the state. Additionally, THSC, §341.039(c)(6) and (7) require that the graywater be used without the formation of ponds or pools and that graywater use does not create surface runoff across property lines or onto any paved surface. Thus, the commission is proposing two requirements that are not specifically enumerated in the statute to implement these statutory provisions: 1) that tanks are able to be cleaned; and 2) that the tanks meet certain structural requirements.

If the tanks cannot be cleaned, solid materials could clog the lines or increase the biomat buildup at the end of the line if graywater is discharged directly onto the ground. A clogged line could lead to a backup or overflow of the system, and a buildup of biomat could cause odor and prevent the graywater from soaking into the ground, causing ponding, pooling, or runoff. Furthermore, the commission proposes that the tanks must meet the structural requirements of §210.25(i) to ensure the structural integrity of the tanks. All of these provisions will help to ensure that graywater use is not a nuisance

and does not damage the quality of surface water or groundwater in the state as required by TWC, §26.0311(c), and THSC, §341.039(b).

Finally, proposed subsection (a) would require that a graywater system use piping that meets the purple piping requirements of §210.25; that the graywater be applied at a rate that will not result in ponding or pooling; that graywater use will not create runoff across property lines or onto any paved surface; and that the graywater is not disposed of using a spray distribution system. These provisions are from THSC, §341.039.

Proposed §210.83(b) would encourage builders of private residences to install plumbing in new housing to collect graywater from all allowable sources and design and install a subsurface graywater system around the foundation of new housing to minimize foundation movement or cracking. This provision is from THSC, §341.039(d).

Proposed §210.83(c) would include the allowable uses for graywater. This subsection proposes that the graywater system may only be used around the foundation of new housing to minimize foundation movement or cracking; for gardening, except that it may not be used such that the edible parts of crops intended for human consumption come in direct contact with the graywater; for composting; or for landscaping at the private residence. These requirements are from THSC, §341.039 and TWC, §26.0311. In the existing Chapter 210 rules, §210.32(2)(B) only allows irrigation of food crops where the reclaimed water is not likely to have direct contact with the edible part of the crop. The commission proposes to add the provision “that it may not be used such that the edible parts of the

crops intended for human consumption come into direct contact with graywater” to proposed §210.83(c)(2) to be consistent with the existing rules in Chapter 210.

Proposed §210.83(d) would prohibit graywater use from creating a nuisance or damaging surface water or groundwater. This provision is from THSC, §341.039(b), and TWC, §26.0311(c).

Proposed §210.83(e) would add language to allow homeowners who dispose of wastewater from residential clothes-washing machines before the effective date of the proposed rules to continue to dispose directly onto the ground surface as long as the homeowners meet certain conditions. The commission proposes this provision to limit the impact the proposed rules will have on homeowners who currently dispose of laundry graywater.

Proposed §210.83(f) specifies that graywater systems that are altered, create a nuisance, or discharge graywater from any source other than clothes-washing machines will not be authorized to discharge graywater under subsection (e) of this section. The commission proposes this provision to provide notice to homeowners that if they alter their system, allow their system to create a nuisance, or add an additional source of graywater to their system’s discharge that they are no longer eligible to discharge graywater under subsection (e) of this section.

Proposed §210.84, Criteria for Use of Graywater for Industrial, Commercial, or Institutional Purposes, specifies the criteria a person would need to follow to use graywater for industrial, commercial, or institutional purposes. New §210.84(a) specifies that graywater use for an industrial, commercial, or

institutional purpose does not require authorization from the commission. If graywater is used in a closed-loop process, it is covered under Subchapter E of this chapter and is not subject to these rules.

Proposed §210.84(b) requires that graywater systems used for industrial, institutional, or commercial purposes be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. This subsection also requires that the discharge from the graywater system enter the organized wastewater system through two backflow preventers. The commission proposes the inclusion of two backflow preventers to prevent cross-contamination between the graywater system and the organized wastewater system. This will help ensure that toilet waste or other types of wastewater that are not defined as graywater in TWC, §26.0311(a), do not commingle with the graywater system.

Proposed §210.84(c) specifies the allowable uses for graywater for commercial, institutional, or industrial purposes. Graywater may be used as process water, for landscape maintenance, for dust control, for toilet flushing, and for other similar uses. This subsection also allows graywater to be treated for use in an operational process and specifies that the treatment does not require authorization from the agency. The commission proposes these requirements to be consistent with §210.52(d). Under this proposed section, graywater that is used for landscape maintenance, dust control, toilet flushing, and similar uses must meet certain levels for fecal coliform, as determined by the potential for public contact with the graywater. The commission proposes these requirements to be consistent with §210.33(a)(2). Additionally, for toilet flushing that uses graywater the commission proposes that all exposed piping and piping within a building must be either purple pipe or painted purple; all buried piping installed after the effective date of these rules must be either manufactured in purple, painted

purple, taped with purple metallic tape, or bagged in purple; and all exposed piping must be stenciled in white with a warning reading "NON-POTABLE WATER." The commission proposes these requirements to be consistent with §210.25(g)(2).

Proposed §210.84(d) requires that graywater used for commercial, industrial, or institutional purposes be monitored for fecal coliform at least monthly in areas where the public may come into contact with graywater. These records must be readily available for inspection commission for a minimum of five years. The commission proposes this requirement to be consistent with §210.57(b)(2)(B).

Proposed §210.85, Criteria for Use of Graywater for Irrigation and for Other Agricultural Purposes, specifies the criteria for the use graywater for irrigation and other agricultural purposes.

Proposed §210.85(a) specifies that graywater used for irrigation and for other agricultural purposes does not require authorization from the commission.

Proposed §210.85(b) requires that graywater systems used for irrigation and other agricultural purposes be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. This subsection also requires that the discharge from the graywater system enter the organized wastewater system through two backflow preventers. The commission proposes the inclusion of two backflow preventers to prevent cross-contamination between the graywater system and the organized wastewater system. This will help ensure that toilet waste or other types of wastewater that are not defined as graywater in TWC, §26.0311(a), do not commingle with the graywater system.

Proposed §210.85(c) lists the allowable uses for graywater. Graywater can be used for process water, landscape maintenance, dust control, irrigation for fields, and other uses. This subsection also allows graywater to be treated for use in an operational process and specifies that the treatment does not require authorization from the agency. The commission proposes these treatments to be consistent with §210.51(d). Under this proposed section, graywater that is used for landscape maintenance, irrigation for fields where edible crops are grown or fields that are pastures for milking animals, and other uses must meet certain levels for fecal coliform, as determined by the potential for public contact with the graywater. The commission proposes these requirements to be consistent with §210.33(a)(2).

Proposed §210.85(d) requires that graywater used for irrigation and for other agricultural purposes be monitored at least monthly in areas where the public may come into contact with graywater. These records must be readily available for inspection by the commission for a minimum of five years. The commission proposes this requirement to be consistent with §210.57(b)(2)(B).

#### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jan Washburn, program specialist in the Strategic Planning and Appropriations Section, determined that, for the first five years the proposed amendments are in effect, there will be no significant fiscal implications for the agency or any other unit of state government. Ms. Washburn also determined that there will be no significant fiscal impact to units of local government as a result of these proposed rules.

The proposed rules allow the use of graywater in both residential and commercial settings. For residences, the proposed rules will allow the use of graywater from clothes-washing machines, showers, bathtubs, handwashing lavatories, sinks not used in the disposal of hazardous or toxic ingredients, and

sinks not used for food preparation or disposal for on-site irrigation or outside use at the private residence. Graywater use is also authorized in these proposed rules for commercial, industrial, institutional, irrigation, and other agricultural users provided graywater systems are in compliance with the commission's rules pertinent to graywater use.

#### PUBLIC BENEFITS AND COSTS

Ms. Washburn also determined that, for each year of the first five years the proposed rules are in effect, the public benefit anticipated from the proposed rules is water conservation by allowing the use of residential and commercial graywater for irrigation and other reuse purposes. The reduction in the use of potable water for irrigation or other use could decrease the demand on public drinking water systems as well as reduce customers' water bills. Demands on wastewater systems could also decline as a result of these proposed rules.

The use of these systems is purely voluntary. To meet the standards in the proposed rules, the cost for a graywater system in a new home can range from \$500 to \$4,000. For those residences with on-site septic systems, there could be an impact resulting from the reduced flow of water to those systems.

For businesses that choose to use graywater, costs will vary greatly depending upon the nature and size of the site. In addition to the base cost which would be similar to that of a residential system detailed previously, businesses would incur additional costs related to the potential volume of water to be reused. It is assumed that a business that chooses to use graywater would generate more than 400 gallons per day. For a commercial distribution and disinfection system, costs could be \$5,000 or more. Additionally, the business would incur ongoing costs of testing the graywater monthly for fecal

coliform and maintaining those records on site, available for inspection by the commission, for a period of five years. These tests are estimated to cost \$25 per month or \$300 per year or a total of \$1,500 for the five-year period. The total minimum cost for a business to voluntarily install and use a graywater system is estimated to be \$7,000 inclusive of the base costs, for the first five years the rules are in effect. It is not known how many individuals or businesses would choose to use graywater systems.

#### SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

Ms. Washburn also determined that there will be no adverse fiscal implications to small or micro-businesses as a result of implementation of the proposed rules. It is possible that small and micro-businesses may be able to decrease costs or increase revenue by installing graywater systems. For those small businesses choosing to use graywater systems, the total estimated costs would be the same as for a larger business, a minimum of \$7,000. Assuming a micro-business has 20 employees, the voluntary cost to cover the first five years of the proposed rules are in effect would equate to \$350 per employee.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The commission reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

#### DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed this rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a "major environmental rule" in that statute. Major

environmental rule means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The intent of this rule proposal is to implement legislative amendments that modify the definition of graywater and require the commission to adopt and implement standards for the use of graywater and to address the separation of graywater in a residence served by a publicly or privately owned treatment works. New Subchapter F, entitled “Use of Graywater Systems,” applies to individuals who use graywater for: irrigation and other agricultural practices; domestic use, to the extent consistent with §210.83(c); commercial purposes; institutional purposes; and industrial purposes. This new subchapter also sets out specific standards and installation requirements for graywater systems. The proposed graywater rules do not adversely affect, in a material way, the economy, a section of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

In addition, the proposed rules are not subject to Texas Government Code, §2001.0225, because they do not meet any of the four criteria specified in §2001.0225(a). Texas Government Code, §2001.0225(a), applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The proposed revisions to Chapter 210 do not meet any of these requirements. First, these revisions do not exceed a standard set by federal law as there are no federal requirements for these rules. As a result, there are no applicable standards set by federal law that could be exceeded by these rules. Second, these revisions do not exceed an express requirement of state law, but are being proposed to implement state law, including the requirement that graywater use not be a nuisance and not damage the quality of surface water or groundwater in the state. Therefore, the rulemaking does not exceed an express requirement of state law. Third, the commission is not a party to a delegation agreement with the federal government concerning a state and federal program that would be applicable to requirements set forth in these rules. Therefore, there are no delegation agreement requirements that could be exceeded by these rules. Fourth, the proposed rules were not developed solely under the commission's general powers, but rather were developed to implement the specific requirements of House Bill 2661, amending TWC, §26.0311 and THSC, §341.039 and §366.012. Therefore, the commission does not propose these rules solely under the commission's general powers. Thus, the commission concludes that a regulatory analysis is not required in this instance because the proposed rules do not meet any of the criteria of a major environmental rule as defined by Texas Government Code, §2001.0225.

#### TAKINGS IMPACT ASSESSMENT

The commission performed a preliminary assessment of these rules in accordance with Texas Government Code, §2007.043. The intent of the proposed rules is to implement legislative amendments that modify the definition of graywater and require the commission to adopt and implement standards for the use of graywater and to address the separation of graywater in a residence served by a publicly or privately owned treatment works. The proposed graywater rules are voluntary. Thus, the commission's preliminary assessment indicates that Texas Government Code, Chapter 2007, does not

apply to this rulemaking because the promulgation and enforcement of these rules will not create a burden on private real property.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the rules are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11, nor will they affect any action/authorization identified in §505.11. Therefore, the proposed rules are not subject to the Texas Coastal Management Program.

#### ANNOUNCEMENT OF HEARING

A public hearing on this proposal will be held in Austin on September 8, 2004, at 2:00 p.m., 12100 Park 35 Circle, Building E, Room 254S. Individuals may present oral or written statements when called upon in order of registration. There will be no open discussion during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearing and will answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearing should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Comments may be submitted to Joyce Spencer, MC 205, Office of Environmental Policy, Analysis, and Assessment, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-

3087, or faxed to (512) 239-4808. All comments should reference Rule Project Number 2003-056-317-WT. Comments must be received by 5:00 p.m., September 13, 2004. For further information, please contact Kathy Ramirez, Regulation Development Section, at (512) 239-6757.

**SUBCHAPTER F: USE OF GRAYWATER SYSTEMS**

**§§210.81, 210.82, 210.83, 210.84, and 210.85**

STATUTORY AUTHORITY

The proposed new sections are proposed under the authority granted to the commission by the legislature in THSC, Chapter 366. The new sections implement THSC, §366.012(a)(1), which requires the commission to adopt rules consistent with the policy defined in TWC, §26.0311 and THSC, §341.039 and §366.012, relating to Standards for Control of Graywater, Graywater Standards, and Rules Concerning On-Site Disposal Systems. Specific statutory authorization derives from House Bill 2661, 78th Legislature, 2003, which amended TWC, §26.0311 and THSC, §341.039 and §366.012.

The new sections are also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under TWC and other laws of the state; §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013(14)(b); and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed new sections implement TWC, §26.0311 and THSC, §341.039 and §366.012.

**§210.81. Applicability.**

(a) This subchapter applies to graywater used for irrigation and other agricultural purposes; for domestic use; for commercial purposes; for industrial purposes; and for institutional purposes.

(b) Reclaimed water use is regulated by Subchapters A - E of this chapter (relating to General Provisions; General Requirements for the Production, Conveyance, and Use of Reclaimed Water; Quality Criteria and Specific Uses for Reclaimed Water; Alternative and Pre-Existing Reclaimed Water Systems; and Special Requirements for Use of Industrial Reclaimed Water).

(c) For the purpose of this subchapter, the term "Site" has the same meaning as defined in Chapter 305, Subchapter A of this title (relating to General Provisions).

**§210.82. General Requirements.**

(a) Graywater is defined as wastewater from:

(1) showers;

(2) bathtubs;

(3) handwashing lavatories;

(4) sinks that are not used for disposal of hazardous or toxic ingredients;

(5) sinks not used for food preparation or disposal; and

(6) clothes-washing machines.

(b) Graywater does not include wastewater from the washing of material, including diapers, soiled with human excreta or wastewater that has come into contact with toilet waste.

(c) Construction of a graywater system, including storage and disposal systems, must comply with this chapter and any requirements of the local permitting authority.

**§210.83. Criteria for the Domestic Use of Graywater.**

(a) An authorization is not required for the domestic use of less than 400 gallons of graywater each day if:

(1) the graywater originates from a private residence;

(2) the graywater system is designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system and the discharge from the graywater system must enter the organized wastewater system through two backflow preventers;

(3) the graywater is stored in tanks and the tanks:

(A) are clearly labeled as nonpotable water;

(B) must restrict access, especially to children;

(C) eliminate habitat for mosquitoes and other vectors;

(D) are able to be cleaned; and

(E) meet the structural requirements of §210.25(i) of this title (relating to Special Design Criteria for Reclaimed Water Systems);

(4) the graywater system uses piping that meets the piping requirement of §210.25 of this title;

(5) the graywater is applied at a rate that:

(A) will not result in ponding or pooling; or

(B) will not cause runoff across the property lines or onto any paved surface;

and

(6) the graywater is not disposed of using a spray distribution system.

(b) Builders of private residences are encouraged to:

(1) install plumbing in new housing to collect graywater from all allowable sources;

and

(2) design and install a subsurface graywater system around the foundation of new housing to minimize foundation movement or cracking.

(c) A graywater system as described in subsection (a) of this section may only be used:

(1) around the foundation of new housing to minimize foundation movement or cracking;

(2) for gardening, except that it may not be used such that the edible parts of crops intended for human consumption come in direct contact with the graywater;

(3) for composting; or

(4) for landscaping at the private residence.

(d) The graywater system must not create a nuisance or damage the quality of surface water or groundwater.

(e) Homeowners who have been disposing wastewater from residential clothes-washing machines, otherwise known as laundry graywater, directly onto the ground before the effective date of this rule may continue disposing under the following conditions.

(1) The disposal area shall not create a public health nuisance.

(2) Surface ponding shall not occur in the disposal area.

(3) The disposal area shall support plant growth or be sodded with vegetative cover.

(4) The disposal area shall have limited access and use by residents and pets.

(5) Laundry graywater that has been in contact with human or animal waste shall not be disposed onto the ground surface.

(6) Laundry graywater must not be disposed to an area where the soil is wet.

(7) A lint trap must be affixed to the end of the discharge line.

(f) Graywater systems that are altered, create a nuisance, or discharge graywater from any source other than clothes-washing machines are not authorized to discharge graywater under subsection (e) of this section.

**§210.84. Criteria for Use of Graywater for Industrial, Commercial, or Institutional Purposes.**

(a) Authorization. If used in accordance with this subchapter, graywater used for an industrial, commercial, or institutional purpose does not require authorization from the commission.

(b) Graywater systems used for industrial, commercial, or institutional purposes must be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. The discharge from the graywater system must enter the organized wastewater system through two backflow preventers.

(c) Graywater, as defined in §210.82(a) of this title (relating to General Requirements), may be used for the following activities.

(1) Process water.

(A) Graywater used for an industrial, commercial, or institutional purposes shall be treated to a standard that allows the graywater to be used in operational processes.

(B) Treatment described in subparagraph (A) of this paragraph does not require an authorization from the agency.

(2) Landscape maintenance. If graywater is used for landscape maintenance, the graywater must meet the following standards.

(A) If the graywater will be applied in areas where the public may come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 20 colony forming units (CFU)/100 milliliters (ml), geometric mean; or

(ii) Fecal coliform (not to exceed), 75 CFU/100 ml, single grab sample.

(B) If the graywater will be applied in areas where the public is not present during the time when irrigation activities occur or disposed of for other uses where the public would not come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 200 CFU/100 ml, geometric mean; or

(ii) Fecal coliform (not to exceed), 800 CFU/100 ml, single grab sample.

(3) Dust control. If graywater is used for dust control, the graywater must meet the standards in paragraph (2)(B) of this subsection.

(4) Toilet flushing. If graywater is used for toilet flushing:

(A) the fecal coliform levels must meet the limits in paragraph (2)(A) of this subsection; and

(B) all exposed piping and piping carrying graywater within a building must be either purple pipe or painted purple; all buried piping installed after the effective date of these rules must be either manufactured in purple, painted purple, taped with purple metallic tape, or bagged in purple; and all exposed piping must be stenciled in white with a warning reading “NON-POTABLE WATER.”

(5) Other uses. If graywater is used for other similar activities where the potential for unintentional human exposure may occur, the graywater must meet the fecal coliform limits in paragraph (2)(A) of this subsection.

(d) Graywater used for commercial, industrial, or institutional purposes must be monitored for fecal coliform at least monthly in areas where the public may come into contact with graywater and

these records must be maintained at the site. These records shall be readily available for inspection by the commission for a minimum of five years.

**§210.85. Criteria for Use of Graywater for Irrigation and for Other Agricultural Purposes.**

(a) If used in accordance with this subchapter, graywater used for irrigation and other agricultural purposes does not require authorization from the commission.

(b) Graywater systems used for irrigation and other agricultural purposes must be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. The discharge from the graywater system must enter the organized wastewater system through two backflow preventers.

(c) Graywater, as defined in §210.82(a) of this title (relating to General Requirements), may be used for the following activities.

(1) Process water.

(A) Graywater used for irrigation and other agricultural purposes may be treated to a standard that allows the graywater to be used in operational processes.

(B) Treatment described in subparagraph (A) of this paragraph does not require an authorization from the commission.

(2) Landscape maintenance. If graywater is used for landscape maintenance, the graywater must meet the following standards.

(A) If the graywater will be applied in areas where the public may come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 20 colony forming units (CFU)/100 milliliters (ml), geometric mean; or

(ii) Fecal coliform (not to exceed), 75 CFU/100 ml, single grab sample.

(B) If the graywater will be applied in areas where the public is not present during the time when irrigation activities occur or disposed of for other uses where the public would not come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 200 CFU/100 ml, geometric mean; or

(ii) Fecal coliform, 800 CFU/100 ml, single grab sample.

(3) Dust control. If graywater is used for dust control, the graywater must meet the standards in paragraph (2)(B) of this subsection.

(4) Irrigation of fields. If graywater is used to irrigate fields where edible crops are grown or fields that are pastures for milking animals, the graywater must meet the standards in paragraph (2)(A) of this subsection.

(5) Other uses. If graywater is used for other similar activities where the potential for unintentional human exposure may occur, the graywater must meet the fecal coliform limits in paragraph (2)(A) of this subsection.

(d) Graywater used for irrigation and for other agricultural purposes must be monitored for fecal coliform at least monthly in areas where the public may come into contact with graywater and the records must be maintained at the site. These records must be readily available for inspection by the commission for a minimum period of five years.

