

SUBCHAPTER H: DISPOSAL OF GRAYWATER
§285.80, §285.81
Effective December 29, 2016

§285.80. General Requirements.

(a) For the purpose of this chapter, graywater is defined as wastewater from showers; bathtubs; handwashing lavatories; sinks that are used for disposal of household or domestic products; sinks that are not used for food preparation or disposal; and clothes-washing machines. Graywater does not include wastewater from the washing of material, including diapers, soiled with human excreta or wastewater that has come in contact with toilet waste.

(b) Construction of a graywater reuse system, including storage and disposal systems, must comply with this chapter; Chapter 210, Subchapter F of this title (relating to Use of Graywater and Alternative Onsite Water); and any more stringent requirements of the local permitting authority. For the purposes of this subchapter, a graywater reuse system begins at the graywater stub-out of a single family dwelling.

(c) A graywater reuse system must not create a nuisance or damage the quality of surface water or groundwater. If a graywater reuse system creates a nuisance, threatens human health, or damages the quality of surface water or groundwater, the permitting authority may take action under §285.71 of this title (relating to Authorized Agent Enforcement of OSSFs).

(d) A graywater reuse system shall comply with the requirements of this subchapter as they existed on the date installation was completed. The previous version of this subchapter is continued in effect for this purpose. Any alterations to an existing system must comply with this chapter; Chapter 210, Subchapter F of this title; and any more stringent requirements of the local permitting authority.

(e) No reduction in the size of the on-site sewage facility (OSSF) will be allowed when using a graywater reuse system unless the OSSF meets all of the conditions and requirements of §285.81 of this title (relating to Requirements and Conditions for Potentially Reducing the Size of an OSSF Disposal System for a Single Family Residence with a Graywater Reuse System or a Combined Reuse System).

(f) If the OSSF is not a reduced OSSF as described in §285.81 of this title, the graywater from either a graywater reuse system or a combined reuse system authorized under Chapter 210, Subchapter F of this title may, be connected to the OSSF to dispose of the graywater during periods when graywater is not being

reused. If the reuse system is a combined reuse system as defined under Chapter 210, Subchapter F of this title, the flows from alternative onsite water sources must be diverted and shall not be allowed to enter the OSSF. Alternative water reuse systems as defined in Chapter 210, Subchapter F of this title, shall not be connected to the OSSF as OSSFs are not authorized nor designed to treat or dispose of flows from alternative onsite water sources. The piping connecting the graywater to the OSSF shall meet the applicable requirements of Subchapter D of this chapter (relating to Planning, Construction, and Installation Standards for OSSFs).

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§285.81. Requirements and Conditions for Potentially Reducing the Size of an OSSF Disposal System for a Single Family Residence with a Graywater Reuse System or a Combined Reuse System.

(a) Graywater reuse systems and combined reuse systems are authorized in Chapter 210, Subchapter F of this title (relating to Use of Graywater and Alternative Onsite Water) without a permit, without the submission of planning materials, and without meeting the requirements and conditions of this section. However, a homeowner requesting an on-site sewage facility (OSSF) disposal system smaller than required in §285.33 of this title (relating to Criteria for Effluent Disposal Systems) must obtain a permit and meet the requirements and conditions of this section. Additionally, the potential reduction of the OSSF disposal system in this section only applies to single family residence with a graywater reuse or a combined reuse system. OSSF disposal systems for non-single family residences with a graywater reuse or a combined reuse system shall not have an OSSF disposal system reduction.

(b) Effluent disposal system sizing. If the graywater reuse system or combined reuse system serving the single family residence is in compliance with Chapter 210, Subchapter F of this title, the effluent disposal system required in §285.33 of this title may be reduced in accordance with Table I in Figure: 30 TAC §285.81(b) of this section.

Figure: 30 TAC §285.81(b)

Table I. Potential Percent Reduction

Sewage sources entering the graywater reuse system or combined reuse system	Potential percent reduction to the effluent disposal system required in §285.33 of this title
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Clothes-washing machine only	20
Showers, bathtubs, hand-washing lavatories, and sinks that are not used for the disposal of hazardous or toxic ingredients	30
Clothes-washing machines, showers, bathtubs, hand-washing lavatories, and sinks that are not used for the disposal of hazardous or toxic ingredients	50

(c) Verification of plumbing entering the OSSF. A licensed master plumber shall evaluate and document, after the plumbing is installed, which sewage sources will be entering the OSSF. The documentation must be provided to the OSSF permitting authority.

(d) Increased wastewater strength. When graywater is removed from the total sewage stream, the remaining sewage stream entering the OSSF will have a higher organic strength. The resulting increase in sewage strength shall be determined in accordance with Table II in Figure: 30 TAC §285.81(d) of this section.

Figure: 30 TAC §285.81(d)

Table II. Adjusted Organic Strength

Sewage sources entering a graywater reuse system or a combined reuse system	Five-day Biochemical Oxygen Demand (BOD₅) design strength for sewage entering on-site sewage facilities milligrams per liter (mg/l)
Clothes-washing machine only	375

Showers, bathtubs, hand-washing lavatories, and sinks that are not used for the disposal of hazardous or toxic ingredients	430
Clothes-washing machines, showers, bathtubs, hand-washing lavatories, and sinks that are not used for the disposal of hazardous or toxic ingredients	600

(e) If the effluent disposal system does not require secondary treatment, either a professional sanitarian or a professional engineer shall demonstrate with effective treatment design and supporting calculations that the proposed treatment system will reduce the effluent quality down to 140 milligrams per liter five-day biochemical oxygen demand (mg/l BOD₅) prior to entering the effluent disposal system.

(f) If the effluent disposal system requires secondary treatment, then a professional engineer shall demonstrate with effective treatment design and supporting calculations that the effluent quality meets the levels outlined in §285.32(e) of this title (relating to Criteria for Sewage Treatment Systems).

(g) If the effluent disposal system is reduced based on the presence of a graywater reuse system or a combined reuse system, a reserve area equivalent to the reduced area shall be shown to be available for future construction of a disposal field should the graywater reuse system or combined reuse system be abandoned at a later date. The reserve area shall meet the setbacks required by §285.91(10) of this title (relating to Tables) and shall not be used for any surface improvements.

(h) Graywater or alternative onsite water, as defined in Chapter 210, Subchapter F of this title, shall not be applied to the surface of a reduced effluent disposal system.

(i) The reduced effluent disposal system is not sized to accommodate graywater. Therefore, there shall not be any physical connection between the graywater reuse system or the combined reuse system and any part of the OSSF without authorization from the OSSF permitting authority.

(j) In addition to the requirements outlined in Chapter 210, Subchapter F of this title, a graywater reuse system or a combined reuse system, used in association with a reduced effluent disposal system under this section, must have a

storage tank capable of storing a volume of three days of graywater. The storage is necessary to prevent application of graywater during periods when the landscape is saturated.

(k) Before a license to operate is issued for a reduced effluent disposal system allowed under this section, an affidavit shall be properly filed and recorded in the deed records of the county. The affidavit must include the owner's full name, the legal description of the property, a statement that the permit for the OSSF is transferred to the new owner upon transfer of the property, a statement that the effluent disposal system is reduced due to the presence of a graywater reuse system or a combined reuse system, a statement that the specified reserve area shall not contain surface improvements, and a statement that the graywater reuse system or combined reuse system cannot be connected to the OSSF without obtaining a permit from the OSSF permitting authority.

(l) If the property owner of a graywater reuse system or a combined reuse system on a property served by a reduced effluent disposal system is convicted under or found in violation of any statute related to graywater or public health nuisance, and the system is not properly repaired in a timely manner, the OSSF permitting authority may require the graywater to be connected to the OSSF. If the OSSF permitting authority requires the graywater to be connected to the OSSF, the effluent disposal system must be expanded to accommodate all the flow required in §285.91(3) of this title, and the expansion must be permitted by the OSSF permitting authority.

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