

Plumbing and Fuel Gas Advisory Board (Monday, July 26, 2021)

Generated by Sandie Greene on Monday, July 26, 2021

Members Present:

Bernard Taylor, 2021 Chair of the Plumbing and Gas Fuel Advisory Board
Richard Montgomery, Local Plumber
Daniel Garrison, Local Plumber
John Fluhart, Local Plumber
Ed Hogan, St. Mary's County Metropolitan Commission (MetCom) Representative
Heather Moritz, St. Mary's Health Department Representative

Staff Attendance

Harry Knight, Deputy Director, Land Use and Growth Management
Larry Eberhard, Zoning Compliance Supervisor, Land Use and Growth Management
Sandie Greene, Senior Administrative Coordinator, Land Use and Growth Management

Meeting called to order at 11:30 a.m.

1. 11:30 a.m. Call to Order/Roll Call.

A. Call to Order of The Plumbing and Fuel Gas Advisory Board.

2. 11:35 a.m. New Business.

A. Proposed regulations for graywater reuse at single family residences.

Heather Moritz, St. Mary's Health Department lead the discussion of Title 26, Maryland Department of the Environment, Subtitle 04 Regulation of Water Supply, Sewage Disposal and Solid Waste, Chapter 12 Graywater Reuse Systems.

Areas of concern discussed:

01- Purpose and Policy- Each local government ad utility with plumbing authority shall ensure their plumbing code enables the implementation of these regulations.

03 — Definitions to be evaluated:

A. Terms Defined.

(3) "Bucket Irrigation" means the use of a bucket, of 5-gallons or less, in a single-family residential setting, to capture graywater and pour that graywater onto outdoor compost or the base of outdoor plants in a manner that achieves a beneficial purpose and prevents graywater runoff or ponding and prevents the harboring of disease vectors.

(8) "Graywater" is a subcategory of "Domestic Sewage" defined in COMAR 26.04.02.01. It is characterized as being generated by and collected from the following "graywater sources":

a. a shower;

- b. a bathtub; or
- c. a bathroom sink

For the purposes of this regulation, “graywater sources” do not include water from

- a. a toilet or urinal;
- b. a kitchen sink, with the exception of use for bucket irrigation.
- c. a dishwashing machine;
- d. a laundry washing machine;
- e. heating and air conditioning condensate capture;
- f. rainwater capture;
- g. sump pumps;
- h. groundwater from foundation dewatering; or
- i. other sources determined by the Approving Authority.

(10) “Graywater Reuse System” means any existing or proposed graywater collection and distribution system equipped with a diversion device that can direct graywater between beneficial purposes and disposal system or holding tank as defined in COMAR 26.04.02.01

(11) “Graywater Storage Tank” for the purpose of this regulation means a chamber designed to hold Type 3 graywater for a beneficial purpose.

04 General Provisions and Requirements for Graywater Reuse Systems

G. Waste strength limitations. A person may not divert graywater away from an onsite sewage disposal system if the resulting influent to the disposal system exceeds the BOD and TSS waste strength loading rates established in COMAR 26.04.02.05.K. If the resulting influent concentration to the septic tank does exceed the criteria for residential loading rate, the owner or operator of the graywater reuse system must take appropriate measures to reduce the loading rate, via pretreatment, reducing the amount of graywater diverted from the onsite sewage disposal system or other method deemed appropriate by the Approving Authority. The Approving Authority may require that the owner provide testing of the septic tank effluent following installation of a graywater reuse system.

05 Graywater Quality for Reuse

A. Type 1 Graywater for Outdoor Subsurface Irrigation: Uses and Methods. The following requirements apply to the use of Type 1 graywater:

- 1) Beneficial purposes. A person in a single-family residence may use Type 1 graywater only for the following beneficial purposes:
 - a) Bucket Irrigation;
 - b) Subsurface irrigation of gardens, lawns and landscape plants.
 - c) Subsurface irrigation of food crops, except root crops or crops that have edible portions that contact graywater;
 - d) Subsurface irrigation of compost.

- 2) Subsurface Irrigation Methods. Type 1 graywater may only be used with Graywater Subsurface Non-drip Irrigation Systems. This is to reduce the risk of failure due to clogging.

C. Type 3 Treated greywater: Uses and Methods. The following requirements apply to the use of Type 3 graywater:

- 1) Beneficial purposes. A person may use Type 3 greywater for the following beneficial purposes if the rules of this chapter are met:
 - a) Any beneficial purpose defined in Regulation 05.A.1 of the rule;
 - b) Toilet or urinal flushing in a single-family residence.
- 2) Treatment Requirements. Per definition, Type 3 graywater has undergone primary and secondary treatment and has been disinfected to meet the NSF/ANSI 350 standard for residential use.
- 3) Subsurface Irrigation Methods: Type 3 graywater may use any subsurface irrigation method in Regulation 05.A.2 of this rule and conventional subsurface drip irrigation methods designed for a residential setting using potable water.
- 4) Treatment System Operation and Maintenance. The operation and maintenance of a treatment system capable of producing Type 3 graywater must adhere to standards established in Informative Annex 1 (formerly Annex B) of the 2019 NSF/ANSI 350 Onsite Residential and Commercial Water Reuse Treatment Systems standard. The owner of the system is required to have a service contract, be in good financial standing with the service provider and comply with manufacturer's written recommendations regarding material discharged into the system.

06 Graywater Reuse System Design, Construction and Operation Standards

C. Design and Construction of Irrigation Systems

4) Irrigation discharge setbacks: The distances specified below in Table 06 A shall be maintained between the identified features, the graywater storage tank and irrigation discharge points unless waived by the Approving Authority in writing:

Features	Distance from Outdoor Graywater Storage Tank (feet)	Distance from Graywater Irrigation Discharge Point (feet)
building foundation exterior	5	2
lot line adjoining private property	5	5
water well (confined aquifer)/(unconfined aquifer)	50	(50)/(100)
streams and lakes	50	50
seepage pits	5	5
septic tanks	0	5
lateral field of an approved onsite wastewater system	3	6
water service line	5	5
public water main	10	10
Floodplain	5	5

5). Graywater Flows and Irrigation Receiving Area Sizing: The following design elements shall be included when determining the balance of graywater flow and irrigation area sizing:

- ii) Restricting Sources: Situations in which all bedrooms are not regularly occupied, and only one of several bathrooms are being proposed for use as the source for the graywater system, must be noted in the design plans. The Approving Authority must verify this during inspection. In such cases, the flow estimate and associated receiving area may be lower than the default method.

Overall biggest concern is “Bucket Litigation”

3. 12:20 a.m. Adjourn

A. Adjourn the meeting of the Plumbing and Fuel Gas Advisory Board.

Move to adjourn the July 26, 2021, Special Meeting of the Plumbing and Fuel Gas Advisory Board.

Motion by Richard Montgomery, second by Daniel Garrison.

Final Resolution: Motion Carries

Yea: Richard Montgomery, Daniel Garrison, Bernard Taylor, Heather Moritz, Ed Hogan and John Fluhart

Meeting adjourned at 12:20 p.m.