

HOUSE No.

The Commonwealth of Massachusetts

PRESENTED BY:

Mark J. Cusack

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to greywater recycling.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Mark J. Cusack</i>	<i>5th Norfolk</i>	<i>1/15/2025</i>

HOUSE No.

[Pin Slip]

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE HOUSE, NO. 280 OF 2023-2024.]

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Fourth General Court
(2025-2026)**

An Act relative to greywater recycling.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Chapter 142 of the General Laws, as so appearing in the 2022 Official
2 Edition, is hereby amended by inserting after section 22 the following section:-

3 Section 23. Regulating single family greywater recycling systems and mandating
4 greywater recycling in new multifamily construction projects in the commonwealth.

5 A. Definitions

6 In this section the following words shall have the following meanings unless the context
7 clearly requires otherwise:

8 “Blackwater”, wastewater containing fecal matter and urine. It is also known as brown
9 water, foul water, or sewage. It is distinct from greywater or sullage, the residues of washing

10 processes. Blackwater should not be used in the home because of the high risk of contamination
11 by bacteria, viruses and other pathogens.

12 “Greywater”, wastewater from showers, bathtubs, hand washing lavatories, sinks that are
13 not used for disposal of hazardous or toxic ingredients, sinks that are not used for food
14 preparation or disposal, and clothes-washing machines. Greywater does not include wastewater
15 from the washing of material, including diapers, soiled with human excreta or wastewater that
16 has come in contact with toilet waste.

17 “Greywater irrigation system”, an integrated system of components located on the
18 property it serves, on or nearby property where it is legally allowed to be used, that conveys
19 greywater from the building where it originates and provides irrigation of plants.

20 “On-site sewage system”, an integrated system of components located on or nearby the
21 property it serves that conveys, stores, treats, and/or provides subsurface soil treatment and
22 dispersal of sewage. It consists of a collection system, a treatment component or treatment
23 sequence, and a soil dispersal component. An on-site sewage system also refers to a holding tank
24 sewage system or other swage system that does not have a soil dispersal component.

25 “Public sewer system”, all facilities used in the collection, transmission, storage,
26 treatment, or discharge of any waterborne waste, whether domestic in origin or a combination of
27 domestic, commercial, or industrial wastewater. A public sewer system may also be called a
28 sanitary sewer system.

29 “Single family residence”, one single-family house that is not used for commercial or
30 other nonresidential purposes as defined by 780 CMR.

31 “Tier 1 greywater system”, a greywater recycling and irrigation system with a maximum
32 design flow of 400 gallons per day, as documented by the local building official during the
33 permitting phase, serving a single-family residence. A Tier 1 system serves a single-family
34 residence connected to an approved public sewer system or on-site sewage system.

35 “Tier 2 greywater system”, a greywater recycling and irrigation system serving a
36 residential or nonresidential building. A Tier 2 system only serves a building connected to an
37 approved public sewer system or large on-site sewage system.

38 B. Purpose

39 1. The purpose of this section is to establish regulations that provide building owners
40 with guidelines for simple, cost-effective options for reusing greywater for toilet flushing and
41 subsurface irrigation.

42 2. This section is intended to encourage water conservation, and re-use in communities
43 across the commonwealth, save money, increase the effective water supply, and protect public
44 health and water quality.

45 C. Applicability

46 1. This section applies to multi-family buildings utilizing less than 3,000 gallons of water
47 per day.

48 2. This section applies to the reuse of greywater inside buildings regulated by the
49 Uniform State Plumbing Code.

50 3. Greywater reuse must comply with all applicable local ordinances and codes, and state
51 statutes and regulations including, but not limited to, the Uniform State Plumbing Code.

52 4. The use of a greywater recycling and irrigation system does not serve as an alternative
53 to the use of an approved on-site sewerage system or connection to an approved public sewer for
54 greywater disposal at any building, including buildings using waterless toilets.

55 D. Administration

56 1. The local board of health for all cities and towns in the commonwealth shall implement
57 this section under the authority of 248 CMR 10.24. In the event that a local board of health does
58 not implement this section, the provisions of this section shall nonetheless apply to greywater
59 reuse for toilet flushing and irrigation in that jurisdiction.

60 2. If a local board of health is unable to adjust its resources to implement and enforce this
61 section in accordance with subsection (a) of this section, the provisions of section 23 shall
62 continue to apply to greywater reuse for toilet flushing and irrigation in that jurisdiction.

63 3. The local board of health is authorized to establish fees for greywater recycling system
64 permits under this section, and the local health officer is authorized to collect fees to implement
65 this section.

66 4. Nothing in this section prohibits the adoption and enforcement of more stringent
67 regulations by a local board of health.

68 E. General Requirements applicable to all Tiers

69 1. Construction of a greywater system, including storage and disposal systems, must
70 comply with this chapter and any more stringent requirements of the State Code.

71 2. Greywater does not contain hazardous chemicals derived from activities such as
72 cleaning car parts, washing greasy or oily rags, or disposing of waste solutions from home photo
73 labs or similar hobbyist or home occupational activities.

74 3. The design goal for a greywater recycling system is to store greywater for no longer
75 than 24 hours.

76 4. This section will allow the reuse of kitchen sink water with approval from the local
77 building official. It is required that kitchen sink water be applied subsoil or contained within a
78 rat-proof outlet shield.

79 5. Municipalities may not further limit the use of greywater described in this section by
80 rule or ordinance.

81 F. Tier 1 Greywater Systems allow private residential direct reuse of greywater for a flow
82 of less than 400 gallons per day. This section shall not require a permit for applying less than 400
83 gallons per day of private residential greywater originating from a residence for the residence s
84 toilet flushing, household gardening, composting, or landscape irrigation if the following
85 conditions are met:

86 i. The greywater originates from a single family dwelling;

87 ii. Human contact with greywater and soil irrigated by greywater is avoided;

88 iii. Greywater is applied in a manner that minimizes the potential for contact between
89 greywater or soil irrigated with greywater and domestic pets;

90 iv. A constructed greywater distribution system provides for overflow and/or diversion
91 into the sewer system or on-site wastewater treatment and disposal system;

92 G. Tier 1 Greywater Requirements. A greywater system may only be connected to the
93 public sewer system or on-site sewage system if the following requirements are met:

94 i. The connection must be in the line between the house stub-out for the on-site
95 wastewater treatment and disposal system and the on-site treatment tank.

96 ii. The greywater system is constructed so that if blockage, plugging, or backup of the
97 system occurs, greywater can be directed in to the sewage collection system or onsite wastewater
98 treatment and disposal system, as applicable except as provided for under 4, below. The
99 greywater system may include a means of filtration to reduce plugging and extend system
100 lifetime;

101 iii. The greywater distribution system shall be designed so that 100% of the greywater
102 can be diverted to the sewer system or on-site wastewater treatment and disposal system during
103 periods of non-use of the greywater system. For residential use an onsite wastewater treatment
104 facility for blackwater treatment and disposal, the use of a greywater system does not change the
105 design, capacity, or reserve area requirements for the onsite wastewater treatment facility at a
106 residence, and ensures that the facility can handle the combined blackwater and greywater flow
107 if the greywater system fails or is not fully used. The greywater system shall be designed with
108 two valved zones, each of which can accommodate the full expected greywater volume.
109 Providing the greywater system passes a flow test in each zone, the capacity of the on-site
110 system may be reduced, or in the instance that an approved composting toilet system is present,
111 eliminated;

112 iv. Greywater diverter valves shall be downstream from traps and vents in plumbing that
113 leads to septic or sewer;

- 114 v. The greywater is stored in tanks per 248 CMR 10.03(b)
- 115 vi. and the tanks, are clearly labeled as nonpotable water; utilize biodegradable nontoxic
116 dye to color the greywater to identify it in contrast to potable water; restrict access, especially to
117 children; covered to eliminate habitat for mosquitoes and other pests; able to be cleaned; sited
118 outside of a floodway; and meet the structural requirements of the 2004 American Water Works
119 Association standards;
- 120 vii. The greywater system uses piping clearly identified as a nonpotable water conduit,
121 including identification through the use of painted purple pipe, purple pipe or pipe taped with
122 purple metallic tape;
- 123 viii. The greywater system is operated to maintain a minimum vertical separation
124 distance of at least 5 feet from the point of greywater application to the top of the seasonally high
125 groundwater table;
- 126 ix. Greywater applied by surface irrigation does not contain water used to wash diapers or
127 similarly soiled or infectious garments unless the greywater is disinfected before irrigation;
- 128 x. Application of greywater is managed to minimize standing water on the surface and to
129 ensure that the hydraulic capacity of the soil is not exceeded, for example by splitting the flow,
130 moderate application rates, and generous mulching;
- 131 xi. The greywater is applied at a rate that will not result in ponding or pooling or will not
132 cause runoff across the property lines outside of the site where it was generated or onto any
133 paved surface;

134 xii. Surface application of greywater is not used for irrigation of food plants which have
135 an edible portion that comes in direct contact with greywater;

136 xiii. Surface irrigation for greywater is only by flood or drip irrigation. Containment
137 within horticultural basins or swales is encouraged for flood irrigation;

138 xiv. The greywater is not disposed of using a spray distribution system;

139 xv. the greywater is not discharged into a river corridor as defined by 302 CMR 3; and

140 xvi. the greywater use within cities or towns complies with all applicable local
141 ordinances.

142 xvii. No reduction in the size of the on-site septic system will be allowed when using a
143 greywater system.

144 xviii. Builders of single family dwellings are allowed by right to install plumbing in new
145 housing to collect greywater from all allowable sources; and design and install a subsurface
146 greywater system around the foundation of new housing to minimize foundation movement or
147 cracking.

148 xix. Greywater shall only be used for flushing toilets; gardening inedible food plants;
149 composting; or landscaping at a single family dwelling.

150 xx. The installer of the greywater system must advise the owner of basic operating and
151 maintenance procedures including any effects on the on-site septic system.

152 xxi. Greywater use must not create a nuisance or damage the quality of surface water or
153 groundwater. If greywater use creates a nuisance or damages the quality of surface water or
154 groundwater, the permitting authority may take action to protect the surface or groundwater.

155 H. Tier 2 Greywater Systems are for greywater systems that process over 400 gallons but
156 under 3,000 gallons of water per day. This category includes commercial, multifamily, and
157 institutional systems. They follow the same requirements as Tier 1 above, with the additional
158 requirement that Tier 2 Greywater Systems require a standard permit. The department of
159 environmental protection in conjunction with the Department of Public Health and
160 Massachusetts Plumbing Board of the commonwealth shall promulgate guidelines for Tier 2
161 Greywater Systems.

162 I. Permits

163 Permits shall be issued by the local regulatory authority for a reasonable fee.

164 J. Enforcement

165 1. The local health officer shall enforce these rules and may initiate enforcement actions
166 against the system owner or other person causing or responsible for the violation of these rules
167 including system failure. Enforcement actions may include, but are not limited to, fines for each
168 day the violation continues, requiring a person to stop work on any greywater system, or to divert
169 the greywater to the approved public sewer system or on-site sewage system serving the
170 building, until all permits, approvals, and registrations required by rule or statute are obtained.

171 2. Enforcement orders issued under this section shall be in writing and shall include the
172 violation and the corrective action required, and the name, business address, and phone number
173 of an appropriate staff person who may be contacted regarding the order.

174 3. Enforcement orders shall be personally served in the manner of service of a summons
175 in a civil action or in a manner showing proof of receipt.

176 K. Waivers

177 The local health officer may grant a waiver from specific requirements of this section if
178 the officer determines:

179 1. That the waiver requested is the minimum deviation from the specific requirements of
180 this chapter that is necessary for the conditions; and

181 2. The alternative approach proposed by the person requesting the waiver is consistent
182 with the requirements and intent of these rules.

183 L. Applicable Building Types

184 This section shall apply as a mandatory regulation to all new multifamily building
185 construction projects, as defined in 780 CMR for one and two family units and multifamily units,
186 and all significant multifamily addition or renovation projects over 10,000 square feet and as
187 defined by the Massachusetts Building Code.

188 SECTION 2. Chapter 248 of the Code of Massachusetts Regulations Section 10.03 of the
189 Uniform State Plumbing Code is hereby amended by replacing the definition of Gray-water. with
190 the following:

191 A. Greywater is defined as wastewater from showers, bathtubs, hand washing lavatories,
192 sinks that are not used for disposal of hazardous or toxic ingredients, sinks that are not used for
193 food preparation or disposal, and clothes washing machines. Greywater does not include
194 wastewater from the washing of material, including diapers, soiled with human excreta or
195 wastewater that has come in contact with toilet waste.

196 SECTION 3. Section 1 shall take effect on January 1, 2026.