

SENATE No.

The Commonwealth of Massachusetts

PRESENTED BY:

James B. Eldridge

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:

James B. Eldridge

DISTRICT/ADDRESS:

Middlesex and Worcester

SENATE No.

[Pin Slip]

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 is hereby amended by inserting after
2 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) As used in this section, the following words shall, unless the context clearly requires
6 otherwise, have the following meanings:-

7 “Blackwater”, wastewater containing fecal matter and urine. It is also known as brown
8 water, foul water, or sewage. It is distinct from greywater or sullage, the residues of washing
9 processes. Blackwater should not be used in the home because of the high risk of contamination
10 by bacteria, viruses and other pathogens.

11 “Greywater”, wastewater from showers, bathtubs, hand washing lavatories, sinks that are
12 not used for disposal of hazardous or toxic ingredients, sinks that are not used for food

13 preparation or disposal, and clothes-washing machines. Greywater does not include wastewater
14 from the washing of material, including diapers, soiled with human excreta or wastewater that
15 has come in contact with toilet waste.

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

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

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

28 “Single family residence”, a single-family house that is not used for commercial or other
29 nonresidential purposes.

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

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

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

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

43 (c) Applicability

44 (1) This section applies to (i) multi-family buildings utilizing less than 3,000 gallons of
45 water per day; and the reuse of greywater inside buildings regulated by the Uniform State
46 Plumbing Code.

47 (2) Greywater reuse shall comply with all applicable local ordinances and codes, and
48 state statutes and regulations including, but not limited to, the Uniform State Plumbing Code.

49 (3) The use of a greywater recycling and irrigation system shall not serve as an
50 alternative to the use of an approved on-site sewerage system or connection to an approved
51 public sewer for greywater disposal at any building, including buildings using waterless toilets.

52 (d) (1) The local board of health for all cities and towns in the commonwealth shall
53 implement this section. In the event that a local board of health does not implement this section,

54 the provisions of this section shall nonetheless apply to greywater reuse for toilet flushing and
55 irrigation in that jurisdiction.

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

59 (3) The local board of health may establish fees for greywater recycling system permits
60 under this section and the local health officer is authorized to collect fees to implement this
61 section.

62 (4) Nothing in this section prohibits a local board of health from adopting and enforcing
63 more stringent regulations than those set forth in this section.

64 (e) (1) Construction of a greywater system, including storage and disposal systems, must
65 comply with this chapter and any more stringent requirements of the state code.

66 (2) Greywater shall not contain hazardous chemicals derived from activities including,
67 but not limited to, cleaning car parts, washing greasy or oily rags or disposing of waste solutions
68 from home photo labs or similar hobbyist or home occupational activities.

69 (3) The design goal for a greywater recycling system shall be to store greywater for no
70 longer than 24 hours.

71 (4) This section shall permit the reuse of kitchen sink water with approval from the local
72 building official; provided, further, that that kitchen sink water shall be applied subsoil or
73 contained within a rat-proof outlet shield.

74 (5) Towns or cities shall not further limit the use of greywater described in this section by
75 rule or ordinance.

76 (f) Tier 1 Greywater Systems allow private residential direct reuse of greywater for a
77 flow of less than 400 gallons per day. This section shall not require a permit for applying less
78 than 400 gallons per day of private residential greywater originating from a residence for the
79 residence s toilet flushing, household gardening, composting, or landscape irrigation if the
80 following conditions are satisfied:

81 (1) The greywater originates from a single family dwelling;

82 (2) Human contact with greywater and soil irrigated by greywater is avoided;

83 (3) Greywater is applied in a manner that minimizes the potential for contact between
84 greywater or soil irrigated with greywater and domestic pets;

85 (4) A constructed greywater distribution system provides for overflow or diversion into
86 the sewer system or on-site wastewater treatment and disposal system;

87 (g) (1) A greywater system shall be connected to the public sewer system or on-site
88 sewage system if the following requirements are satisfied:

89 (i) The connection shall be in the line between the house stub-out for the on-site
90 wastewater treatment and disposal system and the on-site treatment tank.

91 (ii) The greywater system is constructed so that if blockage, plugging or backup of the
92 system occurs greywater can be directed in to the sewage collection system or onsite wastewater
93 treatment and disposal system, as applicable except as provided for under the fourth paragraph.

94 The greywater system may include a means of filtration to reduce plugging and extend system
95 lifetime;

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

107 (iv) Greywater diverter valves shall be downstream from traps and vents in plumbing that
108 leads to septic or sewer;

109 (v) The greywater is stored in tanks per 248 CMR 10.03(b) and the tanks:

110 (A) Are clearly labeled as nonpotable water;

111 (B) Utilize biodegradable nontoxic dye to color the greywater to identify it in contrast to
112 potable water;

113 (C) Restrict access, including, but not limited to, children;

114 (D) Are covered to eliminate habitat for mosquitoes and other pests;

115 (E) Are able to be cleaned;

116 (F) Are sited outside of a floodway; and

117 (G) Meet the structural requirements of the 2004 American Water Works Association
118 standards;

119 (vi) The greywater system shall use piping clearly identified as a nonpotable water
120 conduit, including, but not limited to, identification through the use of painted purple pipe,
121 purple pipe or pipe taped with purple metallic tape;

122 (vii) The greywater system shall be operated to maintain a minimum vertical separation
123 distance of at least 5 feet from the point of greywater application to the top of the seasonally high
124 groundwater table;

125 (viii) Greywater applied by surface irrigation shall not contain water used to wash diapers
126 or similarly soiled or infectious garments unless the greywater is disinfected before irrigation;

127 (ix) Application of greywater shall be managed to minimize standing water on the surface
128 and to ensure that the hydraulic capacity of the soil is not exceeded, for example by splitting the
129 flow, moderate application rates, and generous mulching;

130 (x) The greywater shall be applied at a rate that will not result in ponding or pooling or
131 will not cause runoff across the property lines outside of the site where it was generated or onto
132 any paved surface;

133 (xi) Surface application of greywater shall not be used for irrigation of food plants which
134 have an edible portion that comes in direct contact with greywater;

- 135 (xii) Surface irrigation for greywater shall only be by flood or drip irrigation.
136 Containment within horticultural basins or swales is encouraged for flood irrigation;
- 137 (xiii) The greywater shall not be disposed of using a spray distribution system;
138 (xiv) the greywater shall not be discharged into a river corridor as defined by 302 CMR
139 3; and
- 140 (xv) the greywater use within cities or towns shall comply with all applicable local
141 ordinances.
- 142 (xvi) No reduction in the size of the on-site septic system shall be permitted when using a
143 greywater system.
- 144 (xvii) A builder of a single family dwellings may:
- 145 (A) Install plumbing in new housing to collect greywater from all allowable sources; and
146 (B) Design and install a subsurface greywater system around the foundation of new
147 housing to minimize foundation movement or cracking.
- 148 (xviii) Greywater shall only be used:
- 149 (A) For flushing toilets;
150 (B) For gardening inedible food plants;
151 (C) For composting; or
152 (D) For landscaping at a single family dwelling.

153 (xix) The installer of the greywater system shall advise the owner of basic operating and
154 maintenance procedures including any effects on the on-site septic system.

155 (xx) Greywater shall not create a nuisance or damage the quality of surface water or
156 groundwater. If greywater use creates a nuisance or damages the quality of surface water or
157 groundwater, the permitting authority may take action to protect the surface or groundwater.

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

165 (i) (1) Permits shall be issued by the local regulatory authority for a reasonable fee.

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

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

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

177 (k) (1) The local health officer may grant a waiver from specific requirements of this
178 section if the officer determines:

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

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

183 (l) (1) This section shall apply as a mandatory regulation to all new multifamily building
184 construction projects, as defined in 780 CMR for one and two family units and multifamily units,
185 and all significant multifamily addition or renovation projects over 10,000 square feet and as
186 defined by the Massachusetts Building Code.

187 (m) (1) This section shall take effect on January 1, 2026.