

2010 -- S 2353

=====
LC01237
=====

STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2010

A N A C T

RELATING TO HEALTH AND SAFETY - MERCURY REDUCTION AND EDUCATION
ACT

Introduced By: Senators Ruggerio, Sosnowski, Jabour, Felag, and Miller

Date Introduced: February 11, 2010

Referred To: Senate Environment & Agriculture

It is enacted by the General Assembly as follows:

1 SECTION 1. Sections 23-24.9-2, 23-24.9-3, 23-24.9-6, 23-24.9-9 and 23-24.9-10 of the
2 General Laws in Chapter 23-24.9 entitled "Mercury Reduction and Education Act" are hereby
3 amended to read as follows:

4 **23-24.9-2. Findings.** -- The general assembly has found and hereby declares that:

5 (1) Mercury is a persistent and toxic pollutant that bioaccumulates in the environment;

6 (2) Mercury deposition has proven to be a significant problem in the northeastern United
7 States;

8 (3) Consumption of mercury-contaminated freshwater fish poses a significant public
9 health threat to the residents of Rhode Island;

10 (4) In order to address these real threats to public health and the environment, the state
11 has been and should continue to actively cooperate with other states in the region to help
12 minimize harm resulting from mercury in food, soil, air and water; ~~and~~

13 (5) According to a 2004 study by the U.S. environmental protection agency titled
14 "International mercury market study and the role and impact of U.S. environmental policy," more
15 than ten percent (10%) of the estimated mercury reservoir in the United States is in thermostats;

16 (6) In 1998, thermostat manufacturers general electric, Honeywell, and White Rodgers
17 established the thermostat recycling corporation "(TRC)", a non-profit corporation to facilitate
18 recycling of mercury thermostats nationwide. The TRC originally operated solely through

1 wholesalers but has since expanded to enable collection by contractors, household hazardous
2 waste facilities, and retailers. The TRC is a voluntary program in most states, but several states
3 make wholesalers participation in the TRC, or a similar program, a requirement under state law.

4 (7) The manufacturers of mercury-containing thermostats, with the cooperation of the
5 department, should be encouraged to submit a single unified plan for the collection of mercury-
6 containing thermostats, the cost of which should be appropriately apportioned between
7 participating manufacturer; and

8 ~~(5)~~ (8) The intent of this chapter is to achieve significant reductions in environmental
9 mercury by encouraging the establishment of effective waste reduction, recycling, management
10 and education programs.

11 **23-24.9-3. Definitions.** -- For the purpose of this chapter:

12 (1) "Component" means a mercury-added product which is incorporated into another
13 product to form a fabricated mercury-added product, including, but not limited to, electrical
14 switches and lamps.

15 (2) "Department" means the department of environmental management.

16 (3) "Director" means the director of the department of environmental management or any
17 subordinate or subordinates to whom the director has delegated the powers and duties vested in
18 him or her by this chapter.

19 (4) "Fabricated mercury-added product" means a product that consists of a combination
20 of individual components that combine to make a single unit, including, but not limited to,
21 mercury-added measuring devices, lamps and switches to which mercury or a mercury compound
22 is intentionally added in order to provide a specific characteristic, appearance, or quality, or to
23 perform a specific function or for any other reason.

24 (5) "Formulated mercury-added product" means a product that includes, but is not
25 limited to, laboratory chemicals, cleaning products, cosmetics, pharmaceuticals and coating
26 materials that are sold as a consistent mixture of chemicals to which mercury or a mercury
27 compound is intentionally added in order to provide a specific characteristic, appearance, or
28 quality, or to perform a specific function or for any other reason.

29 (6) "Healthcare facility" means any hospital, nursing home, extended care facility, long-
30 term care facility, clinical or medical laboratory, state or private health or mental institution,
31 clinic, physician's office or health maintenance organization.

32 (7) "Manufacturer" means any person, firm, association, partnership, corporation,
33 governmental entity, organization, combination or joint venture that produces a mercury-added
34 product or an importer or domestic distributor of a mercury-added product produced in a foreign

1 country. In the case of a multi-component mercury-added product, the manufacturer is the last
2 manufacturer to produce or assemble the product. If the multi-component product is produced in
3 a foreign country, the manufacturer is the importer or domestic distributor. In the case of
4 mercury-containing thermostats, the manufacturer is the original equipment manufacturer who
5 sells or sold a mercury-containing thermostat under a brand or label it owns, or is or was licensed
6 to use a mercury-containing thermostat produced by other suppliers..

7 (8) "Mercury-added button cell battery" means a button cell battery to which the
8 manufacturer intentionally introduces mercury for the operation of the battery.

9 (9) "Mercury-added novelty" means a mercury-added product intended mainly for
10 personal or household enjoyment or adornment. Mercury-added novelties include, but are not
11 limited to, items intended for use as figurines, adornments, toys, games, cards, ornaments, yard
12 statues and figures, candles, jewelry, holiday decorations, items of apparel (including footwear),
13 or similar products.

14 (10) "Mercury-added product" means a product, commodity, chemical or a product with
15 a component that contains mercury or a mercury compound intentionally added to the product,
16 commodity, chemical or component in order to provide a specific characteristic, appearance, or
17 quality, or to perform a specific function or for any other reason. These products include
18 formulated mercury-added products and fabricated mercury-added products.

19 (11) "Mercury fever thermometer" means a mercury-added product that is used for
20 measuring body temperature.

21 (12) "Mercury-containing thermostat" means a product or device that uses a mercury
22 switch to sense and control room temperature through communication with heating, ventilating,
23 or air-conditions equipment. "Mercury-containing thermostat" includes thermostats used to sense
24 and control room temperature in residential, commercial, industrial, and other buildings but does
25 not include a thermostat used to sense and control temperature as part of a manufacturing process.

26 (13) "Person" means an individual, trust, firm, joint stock company, corporation
27 (including a government corporation), partnership, association, the federal government or any
28 agency or subdivision thereof, a state, municipality, commission, political subdivision of a state,
29 or any interstate body.

30 (14) "Thermostat retailer" means a person who sells thermostats of any kind directly to
31 homeowners or other nonprofessionals through any selling or distribution mechanism, including,
32 but not limited to, sales using the internet or catalogues. A retailer may also be a wholesaler if it
33 meets the definition of wholesaler.

34 (15) "Thermostat wholesaler" means a person that is engaged in the distribution and

1 [wholesale sale of thermostats and other heating, ventilation, and air-conditioning components to](#)
2 [contractors who install heating, ventilation, and air-conditioning components.](#)

3 **23-24.9-6. Restrictions on the sale of certain mercury-added products.** -- (a) No later
4 than January 1, 2003, no mercury-added novelty shall be offered for final sale or use or
5 distributed for promotional purposes in Rhode Island. Manufacturers that produce and sell
6 mercury-added novelties must notify retailers about the provisions of this product ban and how to
7 dispose of the remaining inventory properly. The requirements of this section shall apply to all
8 mercury-added novelties irrespective of whether or not the product is exempt from the phase-out
9 requirements of section 23-24.9-11.

10 (b) No mercury fever thermometer may be distributed, sold or offered for sale in this
11 state on or after January 1, 2002, except by prescription. As used in this section, the term
12 "mercury fever thermometer" includes any device containing mercury in which the mercury is
13 used to measure the internal body temperature of a person. This restriction shall not apply to
14 digital thermometers utilizing mercury-added button cell batteries. The manufacturers of mercury
15 fever thermometers shall supply clear instructions on the careful handling of the thermometer to
16 avoid breakage and proper cleanup should a breakage occur with all mercury fever thermometers
17 sold through prescription. Mercury fever thermometers manufacturers must also comply with
18 sections 23-24.9-5 and 23-24.9-7 -- 23-24.9-10.

19 (c) After January 1, 2003, no school in Rhode Island may use or purchase for use in a
20 primary or secondary classroom, bulk elemental or chemical mercury, or mercury compounds.
21 Manufacturers that produce and sell such materials must notify retailers about the provisions of
22 this ban and how to dispose of the remaining inventory properly. Other mercury-added products
23 that are used by schools are not subject to this prohibition.

24 (d) Button cell batteries. - After June 30, 2011 a person may not sell or offer to sell or
25 distribute for promotional purposes a mercury-added cell battery for consumer use or a product
26 for consumer use that contains a mercury-added button cell battery.

27 [\(e\) Commencing April 1, 2011, the following sales prohibitions shall apply to](#)
28 [manufacturers, thermostat wholesalers, and thermostat retailers:](#)

29 [\(1\) A manufacturer not in compliance with section 23-24.9-10.2, is prohibited from](#)
30 [offering any thermostat for final sale in the state, selling any thermostat at final sale in the state or](#)
31 [distributing any thermostat in the state.](#)

32 [\(2\) By January 1, 2012, a thermostat wholesaler shall not offer for final sale, sell at final](#)
33 [sale or distribute any thermostat unless the wholesaler:](#)

34 [\(i\) Acts as a collection site for thermostats that contain mercury; and](#)

1 (ii) Promotes and utilizes the collection containers provided by thermostat manufacturers
2 to facilitate a contractor collection program as established by section 23-24.9-10.2, and performs
3 all other tasks as needed to establish and maintain a cost-effective manufacturer collection and
4 financial incentive program.

5 (3) By April 1, 2012, a thermostat retailer shall not offer for final sale, sell, or distribute
6 any thermostat in the state unless the thermostat retailer participates in the manufacturers'
7 education and outreach program to educate consumers on the collection program for mercury
8 thermostats as described in section 23-24.9-10.2.

9 (4) A thermostat wholesaler or thermostat retailer shall not offer for final sale, sell at final
10 sale, or distribute in this state any thermostat of a manufacturer that is not in compliance with
11 section 23-24.9-10.2.

12 **23-24.9-9. Disposal ban.** -- (a) Except as otherwise provided for in this chapter, after
13 July 1, 2006, no person shall dispose of mercury-added products in a manner other than by
14 recycling or disposal as hazardous waste. Mercury from mercury-added products may not be
15 discharged to water, wastewater treatment, and wastewater disposal systems except when it is
16 done in compliance with local, state, and federal applicable requirements.

17 (b) If a formulated mercury-added product is a cosmetic or pharmaceutical product
18 subject to the regulatory requirements relating to mercury of the federal Food and Drug
19 Administration, then the product is exempt from the requirements of this section.

20 (c) This section shall not apply to: (1) anyone who disposes of a mercury-added button
21 cell battery; or (2) mercury-added components as contained in motor vehicles except as provided
22 in subdivision 23-24.9-10(b)(2) and in accordance with such regulations as may be adopted by
23 the department in order to achieve the purposes of subdivision 23-24.9-10(b)(2); and (3)
24 households disposing of lamps and products containing lamps.

25 (d) The restrictions on the disposal of mercury-added components in motor vehicles shall
26 be as set forth in subsection (a) of this section effective January 1, 2006, and shall be
27 implemented as provided for in subdivision (c)(2) of this section and subdivision 23-24.9-
28 10(b)(2).

29 (e) The restrictions on amalgam waste recycling and disposal shall be implemented as
30 provided for in section 23-24.9-9.3.

31 (f) Any contractor who replaces a mercury-containing thermostat from a building shall
32 deliver the mercury-containing thermostat to an appropriate wholesaler, retailer or municipal
33 collection location for recycling.

34 (g) Any contractor who demolishes a building shall remove any mercury-containing

1 [thermostats from the building prior to demolition and shall deliver the mercury- containing](#)
2 [thermostats to an appropriate, wholesaler, retailer or collection location for recycling.](#)

3 **23-24.9-10. Collection of mercury-added products.** -- (a) After January 1, 2006, no
4 mercury-added product shall be offered for final sale or use or distribution for promotional
5 purposes in Rhode Island unless the manufacturer, either on its own or in concert with other
6 persons, has implemented a system, after review and approval of the director, for the convenient
7 and accessible collection of such products when the consumer is finished with them. Where a
8 mercury-added product is a component of another product, the collection system must provide for
9 removal and collection of the mercury-added component or collection of both the mercury-added
10 component and the product containing it. Mercury-added components in motor vehicles shall be
11 collected and recycled as provided for in subdivision (b)(2) of this section. [Mercury-containing](#)
12 [thermostats shall be collected and recycled as provided for in section 23-24.9-10.2.](#)

13 (b) (1) This section shall not apply to the collection of mercury-added button cell
14 batteries or mercury-added lamps or products where the only mercury contained in the product
15 comes from a mercury-added button cell battery or a mercury-added lamp; and

16 (2) Mercury-added components in motor vehicles at end-of-life shall be collected and
17 recycled as provided in this subsection. Significant, willful failure to comply with rules and/or
18 regulations to implement the provisions of this section shall constitute, as may be determined by
19 the department, a violation of the ban established in section 23-24.9-9. No scrap recycling facility
20 or other person that receives a flattened, crushed or baled end-of-life vehicle shall be deemed to
21 be in violation of subdivision 23-24.9-10(b)(2) and rules and regulations pursuant thereto or
22 section 23-24.9-9 if a mercury switch is found in the vehicle after its acquisition.

23 For the purposes of subdivision 23-24.9-10(b)(2) the following terms shall have the
24 following meanings: (i) "Capture rate" means the annual removal, collection, and recovery of
25 mercury switches, as a percentage of the total number of mercury switches available for removal
26 from end-of-life vehicles as determined by the department of environmental management.
27 Capture rate shall not include mercury switches that are inaccessible due to significant damage to
28 the motor vehicle in the area where the mercury switch is located; (ii) "Mercury added
29 component" or "Mercury switch" means a mercury-added convenience light switch assembly or
30 capsule from an end-of-life motor vehicle; (iii) "Scrap recycling facility" means a fixed location
31 where machinery and equipment are utilized for processing and manufacturing scrap metal into
32 prepared grades and whose principal product is scrap iron, scrap steel, or nonferrous metallic
33 scrap for sale for remelting purposes; and (iv) "Vehicle recycler" means an individual or entity
34 licensed under the provisions of section 42-14.2-3 that engages in the business of acquiring,

1 dismantling, parts recycling from, or destroying six (6) or more end-of-life vehicles in a calendar
2 year.

3 (A) Manufacturers of motor vehicles sold in Rhode Island that contain mercury switches
4 shall, individually or collectively, establish and implement a collection program for mercury
5 switches to achieve a capture rate of not less than fifty percent (50%) for calendar year 2006, and
6 not less than seventy percent (70%) for calendar year 2007 and each calendar year thereafter
7 through calendar year 2017.

8 (B) The department shall develop, issue, administer and enforce regulation compelling
9 the manufacturers of motor vehicles sold in Rhode Island that contain mercury switches to
10 undertake a collection program as set forth in this subparagraph, 23-24.9-10(b)(2)(B). The
11 department shall determine that the capture rate in each year of the program and shall assess
12 whether any failure to achieve the capture rate was the result of a force-majeure. The department
13 shall report publicly on or before March 31, each year its findings with regard to the capture rate
14 during the prior year. The manufacturer or manufacturers shall pay the total cost of the removal,
15 replacement, collection and recovery system for mercury switches, under this subparagraph, 23-
16 24.9-10(b)(2)(B), to the vehicle recycler or scrap recycling facility that removed the switch. The
17 total cost shall include, but not be limited to a minimum of five dollars (\$5.00) for each mercury
18 switch removed by a vehicle recycler or by a scrap recycling facility, as partial compensation for
19 the labor and other costs incurred in the removal of the mercury switch.

20 (3) The provisions of subdivision 23-24.9-10(b)(2) shall satisfy collection programs and
21 disposal requirements for mercury switches for all motor vehicles sold in the state.

22 SECTION 2. Chapter 23-24.9 of the General Laws entitled "Mercury Reduction and
23 Education Act" is hereby amended by adding thereto the following sections:

24 **23-24.9-10.2. Mercury-containing thermostats. – (a) Manufacturer responsibility. Each**
25 **thermostat manufacturer that has offered for final sale, sold at final sale, or has distributed**
26 **mercury-containing thermostats in Rhode Island shall, individually or collectively:**

27 **(1) No later than September 1, 2011, submit a plan to the department for approval that**
28 **describes a collection program for mercury thermostats. The program contained in this plan shall**
29 **ensure that the following take place:**

30 **(i) That an effective education and outreach program shall be developed, and shall be**
31 **directed toward wholesalers, retailers, contractors, and homeowners. There shall be no direct cost**
32 **to thermostat wholesalers, thermostat retailers or contractors for participating in the program,**
33 **except that thermostat wholesalers, thermostat retailers and contractors may be assessed a**
34 **nominal, one-time administrative fee to offset the cost of each collection bin for each collection**

1 location of out-of-service mercury thermostats as specified in the plan. Information and education
2 on proper management and recycling of mercury thermostats shall be provided to contractors,
3 service technicians, wholesalers, retailers adopted by the department, and provided for without
4 cost to thermostat retailers, wholesalers, contractors nonprofessionals and homeowner, except as
5 provided in paragraphs (iii) of this section.

6 (ii) That the handling, transportation and recycling of mercury-containing thermostats is
7 accomplished in a manner that is consistent with the provisions of the universal waste rules
8 adopted by the department, and provided for without cost to thermostat retailers, wholesalers,
9 contractors, nonprofessionals, and homeowners, except as provided in paragraphs (iii) of this
10 section.

11 (iii) That collection systems are provided to all collection points registered pursuant to
12 subdivision 23-24.9-10.2(b)(3). Collection systems can include individual product mail back or
13 multiple collection containers. The cost to registered collection points shall be limited to an
14 initial, reasonable one-time fee per container as specified in the plan.

15 (2) No later than January 1, 2012, implement a mercury thermostat collection plan
16 approved by the department under subsection 23-24.9-10.2(b) for thermostats collected by
17 contractors or service technicians, and no later than April 1, 2011 implement an approved
18 mercury thermostat collection plan for thermostats collected by homeowners or nonprofessionals.

19 (3) Beginning in 2013, submit an annual report to the department by April 1, of each year
20 that includes, at a minimum, all of the following:

21 (i) The number of mercury-containing thermostats collected and recycled by that
22 manufacturer pursuant to this section during the previous calendar year and the number for each
23 state within the United States.

24 (ii) The estimated total amount of mercury contained in the thermostat components
25 collected by that manufacturer pursuant to this section in the previous calendar year, and the
26 amount for each state within the United States.

27 (iii) An evaluation of the effectiveness of the manufacturer's collection program and the
28 financial incentive.

29 (iv) An accounting of the administrative costs incurred in the course of administering the
30 collection and recycling program and the financial incentive plan.

31 (b) Department responsibilities.

32 (1) Within sixty (60) days of receipt of a collection plan from a manufacturer, the
33 department shall review and may grant, deny, or approve with modifications a manufacturer plan
34 required by subdivision 23-24.9-10.2(a)(1). The department shall not approve a plan unless all

1 elements of subdivision 23-24.9-10.2(a)(1) are fully and adequately addressed. In reviewing a
2 plan, the department may consider consistency of the plan with collection and financial incentive
3 requirements in other states and consider consistency between manufacturer collection programs.
4 In reviewing plans, the department shall ensure that education and outreach programs are uniform
5 and consistent to ensure ease of implementation by thermostat wholesalers and thermostat
6 retailers. In the event that a total of more than five (5) manufacturer plans are submitted to
7 comply with this law, the department may develop a schedule for the plan approval process
8 which is longer than sixty (60) days.

9 (2) The department shall establish a process under which a plan submitted by a
10 manufacturer is, prior to plan approval, available for public review and comment for fourteen (14)
11 days. The department shall consult with interested persons, including representatives from
12 thermostat manufacturers, environmental groups, thermostat wholesalers, thermostat retailers,
13 service contractors, municipalities, and solid waste districts.

14 (3) Registered collection points. The department shall maintain and post on their website
15 a list of municipalities, thermostat retailers and any other locations that are registered collection
16 points for mercury thermostats.

17 (4) Education and outreach. In conjunction with the educational and outreach programs
18 implemented by manufacturers, the department may conduct an education and outreach program
19 directed toward wholesalers, retailers, contractors, and homeowners to promote the collection of
20 discarded mercury-containing thermostats.

21 (5) Rate of collection. By June 1, 2011, the department shall promulgate regulations
22 pursuant to section 23-24.9-20 that: (i) estimate the number of out-of-service thermostats
23 becoming waste in Rhode Island on an annual basis, in consultation with interested persons,
24 including representatives from thermostat manufacturers, thermostat wholesalers, thermostat
25 retailers, service contractors, environmental groups, and municipalities, and (ii) establish
26 performance requirements that specify collection rates expressed as a percentage of out-of-service
27 mercury thermostats becoming waste annually as determined in (i) above. Beginning January 1,
28 2012, collection efforts shall result in the collection and recycling of out-of service mercury-
29 containing thermostats in the state at the rate determined by the department in (ii) above. Should
30 collection efforts fail to result in the collection and recycling of the minimum required collection
31 rate in any given year, the department shall, in consultation with interested persons, require
32 modifications to manufacturer's collection plans, including establishment of and adjustments to
33 the financial incentive provided for in section (c) below, in an attempt to improve collection rates
34 in accordance with these goals.

1 (c) Financial incentive. In the event that the rate of collection established by the
2 department pursuant to subdivision (b)(5) is not achieved in any given year, then a financial
3 incentive shall be established to achieve the rate of collection defined by the department.

4 (1) The department shall notify all thermostat manufacturers that participate in a
5 collection program in this state that a financial incentive must be included in the collection
6 program plans submitted and approved by the department. Every thermostat manufacturer as
7 defined in subdivision 23-24.9-3(7) shall amend its collection program plan to include a financial
8 incentive within six (6) months of receipt of notice from the department that the collection rate
9 was not achieved for the year. Every thermostat manufacturer shall implement the financial
10 incentive within ten (10) months of receipt of notice from the department that the collection rate
11 was not achieved for the year.

12 (2) The financial incentive shall have a minimum value of five dollars (\$5.00) for the
13 return of each mercury-containing thermostat to a thermostat wholesaler by a contractor or
14 service technician. The financial incentive shall be in the form of cash or coupons that are
15 redeemable by the contractor or service technician.

16 (3) The financial incentive shall have a minimum value of five dollars (\$5.00) to
17 homeowners or nonprofessionals for the return of each mercury-containing thermostat to a
18 collection point registered with the department. The financial incentive shall be in the form of a
19 coupon that can be redeemed for a credit toward purchase of general merchandise in the retail
20 location where the thermostat was returned. The department may provide exemptions from this
21 subsection for certain collection programs that are offered to homeowners and nonprofessionals
22 including, but not limited to, municipal and state household hazardous waste collection programs.

23 **23-24.9-10.3. Sunset provisions.** – The department shall review the provisions of section
24 23-24.9-10.2 no later than September 1, 2017 to determine if the provisions of said section shall
25 sunset and the appropriate date for such action. The department shall make such a determination
26 based on the best available data pertaining to the remaining number of out-of-service mercury-
27 containing thermostats and the collection rates achieved under the provisions. The department
28 shall report to the general assembly no later than January 1, 2018 as to the determination made by
29 the department. If the department determines that the provisions of section 23-24.9-10.2 shall
30 continue then the department shall subsequently review the provisions of said section no later
31 than September 1, 2020 and every two (2) years thereafter until such provisions are no longer
32 required and the department shall report such findings to the general assembly for purposes of
33 repealing the section

1 SECTION 3. This act shall take effect upon passage, and would sunset under certain
2 circumstances.

=====
LC01237
=====

EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF
A N A C T
RELATING TO HEALTH AND SAFETY - MERCURY REDUCTION AND EDUCATION
ACT

- 1 This act would revise the mercury reduction and education act in order to require
- 2 thermostat manufacturers to submit plans for the collection and disposal of mercury thermostats.
- 3 This act would take effect upon passage, and would sunset under certain circumstances.

=====
LC01237
=====