



Outline for Extended Producer Responsibility Legislation for Mercury Thermostats September 21, 2011

Element	Description and/or bill language taken from other legislation
Problem definition	<i>Example from Massachusetts' 2010 bill included at the end of this document</i>
Definitions	
Department	"Department" means the {insert environmental agency}
Manufacturer	A "manufacturer" of a mercury-added thermostat means the person who owned or owns the brand name of the thermostat. If the manufacturer is not located in the United States, the first importer shall be considered the manufacturer.
Mercury-added thermostat	A "mercury-added thermostat" means a product or device that uses a mercury switch to sense and control room temperature through communication with heating, ventilating or air-conditioning equipment. "Mercury-added thermostat" includes thermostats used to sense and control room temperature in residential, commercial, industrial and other buildings but does not include a thermostat used to sense and control temperature as part of a manufacturing process.
Person	"Person" means any individual, corporation, partnership, cooperative, association, firm, sole proprietorship, governmental agency, or other entity.
Retailer	"Retailer" means a person who sells thermostats of any kind directly to homeowners or other non-professionals through any selling or distribution mechanism, including but not limited to sales using the Internet or catalogues. A retailer may also be a wholesaler if it meets the definition of wholesaler.
Wholesaler	"Wholesaler" means a person that the Department determines is engaged in the distribution and wholesale selling of significant quantities of heating, ventilation, and air conditioning components to contractors who install heating, ventilation, and air conditioning components.
Manufacturer Responsibility	
Must implement stewardship	(1) Each manufacturer of mercury-added thermostats that have been sold in {insert state} shall, individually or collectively, establish and maintain a department-approved collection and recycling program for out-of-service mercury-added thermostats. The program must not involve any direct cost to contractors, service technicians, homeowners or others for

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program	<p>participating in the program.</p> <p>(2) The program required under paragraph (1) shall be developed to maximize the capture rate of out-of-service mercury-added thermostats; provide adequate financial incentives and education to encourage the return of mercury-added thermostats to established recycling collection points; and ensure the handling and recycling of mercury-added thermostats is performed in accordance with applicable law.</p>	
	Recommended addition to paragraph (2)	<p>The financial incentive shall have a minimum value of \$5.00 for the return of each mercury-added thermostat. The financial incentive may include, without limitation, cash, rebates, discounts, coupons, or other incentives.</p>
	<p>(3) Collection bins shall be provided to all wholesaler locations and all household hazardous waste and universal waste collection locations approved by the Department for this purpose, as part of the program under paragraph (X). Collection bins shall also be provided to all contractors, retailers, fire departments, local solid waste agencies, local departments of public health and similar organizations approved by the Department for this purpose that request to participate in the program under paragraph (X). In consultation with the manufacturer, the Department may specify minimum safety training, operating conditions, and other requirements as may be needed to ensure the safe and efficient collection of mercury-added thermostats.</p> <p>(4) Maintain an internet website with thermostat collection locations in the state. The database should be downloadable in a commonly used format.</p> <p>(5) Annual reports covering the program shall be submitted to the Department in accordance with subsection (X) of this section on a form developed by the department.</p> <p>(6) A manufacturer not in compliance with this section is prohibited from offering any thermostat for sale in this state, and shall provide the necessary support to wholesalers and retailers to ensure the manufacturer's thermostats are not offered for sale in this state.</p>	
Registration and oversight fees	<p>(1) Each manufacturer must register with the state agency</p> <p>(2) Each manufacturer must pay an annual registration fee of {\$ X} to assist with the oversight and enforcement</p>	
Submit stewardship plan	<p>(1) Each manufacturer must propose to the Department for review and approval the collection program no later than 120 days after the enactment of this law. The proposed program may include appropriate enhancements to an existing program or a new program. The program shall also include an education and outreach component, which identifies the mechanisms for providing the necessary information on an initial and ongoing basis, and identifies the appropriate persons utilizing those mechanisms. The proposed program may include more than one complementary collection mechanism, such as contractor collection plus household hazardous waste collection and mail-back.</p> <p>(2) Within 30 days after receipt of a manufacturer's collection program proposal, the department shall issue a public notice of the availability of the proposal and solicit public comment on it. Within 90 days after receipt of a proposal, the department shall approve, conditionally approve, or disapprove the entire proposal.</p> <p>(3) If the program proposal is approved, with or without conditions, the manufacturer or manufacturers shall begin implementing</p>	

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	<p>the program within 30 days after receipt of approval.</p> <p>(4) If the entire plan is disapproved, the department shall inform the manufacturer as to the reasons for the disapproval. The manufacturer shall have 30 days thereafter to submit a new plan.</p> <p>(5) If the new plan is disapproved following public notice and an opportunity to comment, the manufacturer shall be considered out of compliance for the purposes of Paragraph X beginning on the date the new plan is disapproved by the department.</p> <p>(6) In conducting its oversight obligation under this section, the Department shall take into account the experience of relevant thermostat collection programs in other states, and shall approve a proposed manufacturer collection program if it contains terms and conditions sufficient for the department to conclude that the proposed program represents the best available approach to improve substantially mercury thermostat collection in this state.</p>
Submit estimate of the number of thermostats available for collection	<p>On or before March 1, 20XX, a manufacturer, or a group of manufacturers operating a program, shall present to the department a survey plan and methodology for a survey to be conducted by an independent third party to provide statistically valid data on the number of mercury-added thermostats that become waste annually in {the state}. The Department must approve the survey plan and methodology prior to the survey implementation. The manufacturer or group of manufacturers shall complete the survey by December 1, 20XX, and shall present all survey data to the department by December 31, 20XX.</p>
Submit annual report	<p>Beginning in 201X, every thermostat manufacturer shall submit an annual report to the department by March 1 of each year that includes, at a minimum, the following information:</p> <p>(1) The number of mercury-added thermostats collected and recycled by that manufacturer during the previous calendar year.</p> <p>(2) The estimated total amount of mercury contained in the thermostat components collected by that manufacturer in the previous calendar year.</p> <p>(3) An evaluation of the effectiveness of the manufacturer’s collection program.</p> <p>(4) An accounting of the costs incurred through the direct administration of the collection and recycling program and the financial incentive plan including a copy of Internal Revenue Service Form 990 for a nonprofit organization’s program. For a for-profit organization’s program, the manufacturer, or group of manufacturers operating a program, shall submit independently audited financial statements detailing revenues and a full accounting of administrative costs incurred.</p> <p>(5) A description of the outreach strategies employed to increase participation and collection rates.</p> <p>(6) Examples of outreach and educational materials used.</p> <p>(7) Names, addresses and contact information for all participating collection locations.</p> <p>(8) The number of out-of-service mercury-added thermostats collected at each collection location.</p> <p>(9) The Internet Web site address where the annual report may be viewed online by the public.</p> <p>(10) A description of how the collected out-of-service mercury-added thermostats were managed.</p> <p>(11) Modifications that the manufacturer is proposing to make in its collection and recycling program and planned outreach and education for the upcoming year.</p>

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<i>Retailer/Wholesaler/Contractor Responsibilities</i>		
Sales prohibition	<p>(1) Effective one year after enactment of this law, a wholesaler may not sell a thermostat in the State unless the wholesaler acts as a collection site for thermostats that contain mercury. A wholesaler may meet the requirements of this paragraph by participating as a collection site in a manufacturer collection program as described under subsection (X) of this section or by collecting thermostats that contain mercury and ensuring the recycling of the collected thermostats in accordance with universal waste rules adopted by the department. A wholesaler shall also perform its educational responsibilities identified under paragraph (X) of this section.</p> <p>(2) A wholesaler or retailer may not offer for sale in this state any thermostat of a manufacturer that is not in compliance with this section.</p>	
	Recommended addition	A retailer or wholesaler that distributes new thermostats by mail to buyers in the state shall include with the sale of the new thermostat, an Internet Web site address and toll-free telephone number with instructions on obtaining a prepaid mail-in label, supplied by the manufacturers that a consumer may use to send an out-of-service mercury-added thermostat to a manufacturer designated location for recycling.
Information	Provide point-of-sale educational materials and signage regarding the importance of recycling mercury-added thermostats and the location of available collection locations for homeowners; and	
<i>Agency Responsibilities</i>		
Review and approve plans	<p>(1) Within 60 days of receipt of a complete application from a manufacturer, the department shall review and may grant, deny, or approve with modifications a manufacturer plan required by paragraph (x) of this section. The department shall not approve a plan unless all elements of paragraph (x) are adequately addressed. In reviewing a plan, the department may consider consistency of the plan with collection and financial incentive requirements in other states and consider consistency between manufacturer collection programs. In reviewing plans, the department shall ensure that education and outreach programs are uniform and consistent to ensure ease of implementation by thermostat wholesalers and thermostat retailers.</p> <p>(2) The department shall establish a process under which a plan submitted by a manufacturer is, prior to plan approval, available for public review and comment for 30 days. The department shall consult with interested persons, including representatives from thermostat manufacturers, environmental groups, thermostat wholesalers, thermostat retailers, service contractors, municipalities, and solid waste districts.</p>	
Report to Legislature	(1) Not later than April 15, 2013, and annually thereafter, the department shall submit a report on the collection and recycling of mercury-added thermostats in the state to the (appropriate legislative committee). The first annual report shall include a description and discussion of any financial incentive plan established under this section and recommendations for any statutory changes concerning the collection and recycling of mercury-added thermostats. Subsequent reports must include an evaluation of the effectiveness of the thermostat collection and recycling programs established under this section, information on actual collection rates, and recommendations for any statutory changes needed to improve the collection and	

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	recycling of mercury-added thermostats. These reporting requirements may be combined with other reports on mercury that the department is required to provide to the legislature.
Post information on compliance	Post registered manufacturers on government website with a link to stewardship plans.
Preemption	Any local law or ordinance which is inconsistent with any provision of this title is preempted.
Oversight fees	All oversight fees must be deposited into special revenue account to be used exclusively to implement this title.
<i>Sales, Installation and Disposal Prohibition</i>	
Sales and Installation Prohibition	Effective one year after enactment of this law, no person shall sell, offer for sale, or install a mercury-added thermostat in this state.
Disposal ban	<p>(1) No person shall dispose, permit the disposal of, or send to a resource recovery facility for processing, a mercury-added thermostat from which the mercury has not been removed for reuse, recycling, or other methods approved by the department.¹</p> <p>(2) This section shall not be construed to affect prior existing laws, rules, or regulations more stringent than paragraph (1) governing the disposal of mercury, mercury thermostats, and other products containing mercury.</p> <p>(3) A contractor replacing or repairing a mercury-added thermostat in a residence shall ensure compliance with this section and deliver the thermostat to an appropriate collection location for recycling.</p> <p>(4) The effective date of this section is one year after enactment of this law.</p>
Professional Licensing	The Department of {insert agency} shall make compliance with this section a condition of professional licensing of persons engaged in the repair or installation of heating, ventilation, and air conditioning equipment, or otherwise licensed to remove or replace a mercury-added thermostat, and shall revise applicable regulations, guidance, continuing education requirements, and outreach materials to give this section full force and effect. ²
<i>Performance Goals</i>	
Setting performance goals	(1) Within six months of enactment, the Department shall estimate how many mercury thermostats go out of service in the state each year. The goal of the collection programs outlined in this section is to collect at least 30% of out-of-service mercury thermostats in calendar year 20XX, and at least an additional 10% per year in each calendar year until achieving a rate of 90%.

¹ Although the term “resource recovery facility” is not defined in the model, the intent is to cover facilities such as waste incinerators or shredders where the mercury in the thermostats may be released. The term is not intended to include facilities where the mercury is actually recycled, such as retort facilities.

² This subsection is recommended in states with professional licensing requirements for HVAC contractors already in place. The recommendation does not anticipate the creation of a licensing requirement for the purpose of facilitating mercury thermostat collection.

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	<p>(2) Should collection efforts fail to meet these goals, the Department shall, in consultation with stakeholders, require alterations to collection programs in an attempt to improve collection rates in accordance with these goals.</p> <p>(3) The Department is authorized to alter any and all elements of the previously developed manufacturer collection programs, including but not limited to the size and nature of the incentives provided, the number and location of the collection points, and the roles of thermostat manufacturers, wholesalers, retailers, service contractors, and municipal governments in the collection programs, provided such alterations are not inconsistent with the requirements of this and other applicable laws.</p>
Program performance reporting	<p>(1) Within 90 days after receipt of the manufacturer's annual reports, the Department shall publish information on its Internet website about the collection and recycling of mercury thermostats in the state. This information must include an estimate of how many mercury thermostats go out of service in the state each year, a description of the collection programs established under this section, data on actual collection rates, and any recommendations for changes concerning the collection and recycling of mercury thermostats.</p>
Legislative Intent	<p>It is the intent of this article to provide for the collection and recycling of the maximum feasible number of out-of-service mercury-added thermostats.</p>

NOTES

- **Bin Fee:** *TRC currently collects a one-time fee of \$25.00 to receive the first TRC collection bin. The subsequent costs of transportation and recycling, and providing replacement bins, are borne by TRC. The model does not recommend the continuation of this one-time initiation fee. These fees may deter locations from signing up to participate in the program.*
- **Incentives:** *There are two key aspects of the financial incentive: the amount and nature of the incentive.*
 - **Amount of the incentive:** *There is insufficient data available to recommend a specific amount for the incentive; however, experience with state programs and several pilot programs has demonstrated the effectiveness of incentives for increasing collection. For example, King County, Washington, achieved substantial improvements in its collection program with a \$4.00 cash incentive to contractors during the six-month timeframe the incentive was available. Pilots conducted in Oregon and Indiana during 2006 were based on \$4.00 and \$3.00 rebates to contractors (respectively) off the purchase of a new Energy Star non-mercury thermostat. Maine law stipulates a minimum \$5.00 financial incentive value. Through a stakeholder process conducted during the fall of 2006, the Maine Department of Environmental Protection designed a \$5.00 cash award to the service technician delivered through a coupon system. The cash award directly to the service technician was chosen in order to maximize the incentive for the person responsible for handling thermostats on a daily basis.*
 - **Nature of the incentive:** *There are two basic options though variations could be designed. A cash-based incentive simply provides cash to the contractor or technician when they return a mercury thermostat. Another approach is to provide a rebate or discount which reduces the price of a product subsequently purchased by the contractor. The principal advantages of a cash incentive are its simplicity and ease. The principal advantages of the rebate or discount are that they encourage wholesalers and manufacturers to participate by driving new sales.*
- **Performance Goals:** *The recommended performance standard is based on a capture rate, which is the percentage of collected thermostats compared to the estimated percentage of mercury thermostats coming off the wall. The manufacturers should be responsible for providing an estimate of the number of available for collection based upon a statistically-valid study that is available to the public for review. Most importantly, if performance goals are not achieved, the state agency is provided the authority to change certain program variables, such as the size and nature of the incentive as needed to improve program performance.*

Example Issue Statement/Preamble: ([From Mass. Bill H.251](#))

Whereas, the Mercury Management Act, Chapter 190 of the Acts of 2006, prohibited the sale of mercury-added thermostats as of May 1, 2008 and prohibited their disposal. Whereas, according to a 2004 study by the U.S. Environmental Protection Agency, titled “International Mercury Market Study and the Role and Impact of U.S. Environmental Policy,” more than 10 percent of the estimated mercury reservoir in the United States is in thermostats. Whereas, in 2000, thermostat manufacturers General Electric, Honeywell, and White Rodgers established the Thermostat Recycling Corporation (TRC) that runs the program for collecting mercury containing thermostat discarded in Vermont. Under the TRC program, thermostat wholesalers volunteer to place bins where heating, ventilation, and air conditioning (HVAC) contractors can discard thermostats. Whereas, the June 2008 report by the New England Waste Managers Association (NEWMOA) on thermostat collection in New England found that only about 6% of discarded mercury-added thermostats are recycled in Massachusetts. Whereas, the cost for collection and recycling of mercury-added thermostats are now borne by cities and towns, who need those funds for other municipal programs. Wherefore, the Great and General court finds that the collection and recycling of discarded mercury thermostats should be paid for by the manufacturers of these products. Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows: