



# Report on the Collection and Recycling of Mercury-Added Thermostats

Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

March 2009

Contact: Mark Hyland, Director Bureau of Remediation and Waste Management Phone (207) 287-7890 Email Mark.Hyland@maine.gov



### **Executive Summary**

In 2006 the Maine Legislature passed the first law in the country (Public Law 2005, chapter 558, Appendix A) that established a financial incentive for the return of a mercury-added thermostat. To encourage recycling, thermostat manufacturers are required to pay an incentive with a minimum value of \$5 per thermostat. There were several factors that prompted this law, including

- o previous attempts to capture out-of-service thermostats did not have substantial success;
- o mercury thermostats have the greatest estimated reservoir of mercury of any source in Maine's waste stream;
- o Maine has environmental degradation due to mercury pollution; and
- Maine, like 48 other states, has a health advisory recommending limits on consumption of fish caught in state waters.

The 2006 law required the Maine Department of Environmental Protection (DEP) to develop a manufacturer financial incentive plan in two phases with the help of stakeholders. Manufacturers, with considerable help from DEP, implemented Phase 1, the incentive plan for plumbing, heating and electrical contractors, by May 2007. Manufacturer implementation of all aspects of Phase 2, the incentive plan for homeowners, was substantially delayed but is fully underway as of February 2009.

Since the startup of Phase 1, contractors have responded favorably and thermostat returns have increased substantially. However, the number of thermostats collected is far short of the statutory goal. To achieve this goal, the program needs strengthening in several areas, and statutory changes are recommended.

### I. Background

In the spring of 2006 the 122<sup>nd</sup> Maine Legislature passed An Act To Protect Maine Families and the Environment by Improving the Collection and Recycling of Mercury Thermostats (Public Law 2005, chapter 558, attached as Attachment A). This legislation required all manufacturers of mercury-added thermostats that have been sold in Maine to:

- establish and maintain a collection and recycling program for out-of-service mercury thermostats;
- provide a financial incentive with a minimum value of \$5 for the return of each mercury thermostat to an established collection point;
- make collection bins available at authorized sites that sell thermostats and at Maine Department of Environmental Protection (DEP) approved public sites that collect universal or household hazardous waste; and
- beginning in 2008, report annually to the DEP concerning the collection and recycling program.

The legislation requires DEP to develop the manufacturer financial incentive plan in consultation with a stakeholder group. Phase 1 of the plan addresses the collection of mercury-added thermostats from plumbing, heating and electrical professionals. Phase 2 addresses the collection of these thermostats

from homeowners. A manufacturer not in compliance within three months of the plan's implementation is prohibited from selling any thermostat within the State.

The DEP is also required to report annually on the collection and recycling program to the Joint Standing Committee on Natural Resources. This report is the third such report. It summarizes mercury-added thermostat collection efforts through 2008, outlines the financial incentive plan developed pursuant to the above legislation and includes a discussion of compliance and enforcement actions related to program implementation. Conclusions and recommendations are included.

### **II.** Overview of mercury thermostat collection in Maine

The Thermostat Recycling Corporation (TRC) program, a non-profit recycling program sponsored by Honeywell, General Electric and White-Rodgers, has been in operation in Maine since 2001. In 2005 DEP supplied TRC recycling bins to 70 plumbing, heating and electrical wholesalers in the spring, mailed information packages out to 11,500 professional licensees in the summer, and surveyed the wholesalers in the late fall to gauge the response to these outreach activities. Increased wholesaler participation in the TRC program and the resulting bin availability, coupled with substantial outreach activities by the DEP helped to increase the capture rate in 2006 as can be seen in Table 1. Still, the overall percentage captured was disappointing.

						00110000		
Year	2001	2002	2003	2004	2005	2006	2007	2008
TRC Program	233	280	482	1,079	1,290	2924	4656	5555
UW collection	253	856	1398	335	701	361	667	823
EPI Program <sup>1</sup>	0	0	0	0	0	0	363	353
Total	486	1136	1880	1414	1991	3285	5686	6731
Recycling Rate*	2%	4.2%	7%	5.2%	7.3%	12%	20.9%	24.75%

**Table 1: Number of Thermostats Collected** 

\*Based on baseline calculations of 27,200 estimated mercury thermostat removals per year in Maine. National discussions on how to calculate a state baseline are underway. Using the methodology under discussion, which is based on industry data, Maine's baseline would be substantially higher i.e. more than 27,200 mercury thermostats removals per year. Maine for now is staying with its more conservative estimate.

Nationally Maine had the highest per capita thermostat capture rate in 2007, due in most part to the incentive. In 2008 Maine was the only state offering an ongoing incentive. Consequently it is expected that Maine will retain the highest per capita rate of returned mercury thermostats in the country in 2008; one for every 195 people<sup>2</sup>. Vermont, which also offered a \$5 incentive through a short pilot

<sup>&</sup>lt;sup>1</sup> EPI is the program administrator for the many of the manufacturers.

<sup>&</sup>lt;sup>2</sup> National numbers for 2008 are not available yet for comparison.

project, collected about one thermostat for every 373 people in 2007 and had the second highest per capita capture rate for that year<sup>3</sup>.

The Legislature set a statutory goal to collect and recycle at least 125 pounds of mercury per year within two years of Phase 1 implementation, which was January 2009. In 2008, 46.69 pounds of mercury were captured through thermostat collection, well short of the statutory goal.

Table 2:	2008 Pounds of Mercury Collected					
TRC Program	38.54					
UW Collection	5.71					
EPI Program	2.45					
Total	46.69					
Percentage of Goal	37.3%**					

\*\*The percentage achieved of the 2008 statutory goal of 125 pounds.

The TRC reported their costs to administer the Maine Thermostat Incentive program in 2008 as \$57,557.<sup>4</sup> This works out to an average of \$10.36 per mercury thermostat, which includes the \$5 incentive payment.

### **III.** The Financial Incentive Plan

#### A. Phase 1 – The Contractor Plan

The plan for Phase 1 was accepted and signed by the DEP Commissioner on December 28, 2006. To create a system that encourages participation, is easy to implement, is fraud resistant, and that minimizes administrative costs, the program is structured as follows:

- 1. The contractor or technician receives 100% of the incentive.
- 2. The incentive is \$5 per thermostat received.
- 3. When the contractor or technician brings in a thermostat, the wholesaler puts a numbered sticker on the thermostat and gives the contractor or technician a \$5 coupon.
- 4. The coupon has a number corresponding to the sticker number. The contractor or technician is responsible for filling out the coupon and mailing it in to the TRC in order to receive their payment.
- 5. The manufacturers are responsible for printing the stickers/coupons, to pay the incentive, establish and maintain the recycling program including education and outreach efforts, and to supply the State with annual data.
- 6. The wholesaler is responsible for maintaining the collection bin, handing out the coupons, requesting additional stickers/coupons when needed, and responding to fraud inquiries from the manufacturers.

<sup>&</sup>lt;sup>3</sup> After their successful pilot in 2008 Vermont passed legislation which includes the \$5 incentive and is based on Maine's model.

<sup>&</sup>lt;sup>4</sup> Actual legitimate reported costs were \$49,725 without the costs included of recycling included. DEP calculated the recycling costs based on previous year costs and added them as legitimate program expenditures.

- 7. The DEP identifies and works with the manufacturers on education and outreach and compliance. (DEP also volunteered to dispense program materials supplied by the manufacturers to wholesalers even though this is a manufacturer responsibility under the plan.)
- 8. DEP works with wholesalers and contractors to make sure they understand the program and are participating.
- 9. DEP has enforcement responsibility.

#### B. Phase 2: The Homeowner Plan

The homeowner program has similar components to the Phase 1 contractor program, but includes additional collection options such as a mail-in program, and voluntary collection at retail locations and at solid waste disposal facilities. It was agreed that the program would offer the following collection options:

- The homeowner may call a toll-free number to request a pre-paid mailing label. Once the label is received, the homeowner supplies the packaging, mails the thermostat and receives a check.
- The homeowner may take the thermostat to a wholesaler or select solid waste facilities and receive a coupon which they fill out and mail in order to receive their check.
- The homeowner may take the thermostat to a retail store that volunteers to participate in the program. It was agreed that it would minimize the TRC's costs if the homeowner received an in-store \$5 gift card they may spend on anything in the store and the retailer would bill the TRC directly when they ship the thermostats for processing. The TRC can then issue one check to the store rather than multiple checks to individual homeowners.

The Phase 2 Homeowner Incentive Plan was signed by the DEP Commissioner on July 31, 2007 and sent to the manufacturers so that they could comply with the November 1, 2007 statutory deadline for implementation. The TRC did not initiate the mail-in option for homeowners until February 2008. Retail collection, the major component of the homeowner program began as of February 2009.. Retail collection is now available in 59 hardware stores across the state.

### IV. Education and outreach (E&O) activities.

In 2008, the manufacturers, through the TRC, conducted the following education and outreach activities.

- 1. Paid for two rounds of newspaper ads in the 5 daily papers and 5 weeklies.
- 2. Distributed a radio and TV Public Service Announcement with no guarantee or record of use (air time).
- 3. Distributed two press releases concerning the homeowner program.
- 4. Distributed a short announcement about the homeowner mail-in program by email to local and statewide organizations.

The above efforts were initiated to advertise the homeowner program. No education and outreach activities were undertaken to promote the contractor program.

During 2008 DEP completed the following education and outreach program activities:

- 1. Visited all 72 wholesaler and contractor collection sites throughout the state at least once throughout the year to assist them with the program. Staff answered questions, delivered program materials, checked for compliance and often helped pack up thermostats for shipment.
- 2. Recruited select municipal solid waste facilities into the program and delivered program materials.
- 3. Developed and distributed a poster to advertise the program. (See Appendix 2)
- 4. Purchased paid advertising in the 2009 *Sunrise Guide* targeted to southern Maine. Advertising promoted the thermostat recycling program availability.
- 5. Recruited 59 (to date) retailers into the retail collection program. Participating retailers are posted on DEP's web site at <u>http://www.maine.gov/dep/rwm/mercury/hgthermo.htm</u>
- 6. Developed, printed and helped deliver retail program materials including a window cling sticker (see Appendix 2), coupons, sign up documents, tracking sheets and program instructions.
- 7. Trained Efficiency Maine staff so that they could train participating retailers.
- 8. Presented program information at a HVAC contractors' annual meeting.

### V. Impediments to implementing an efficient program

Several obstacles have been encountered during the implementation of the program.

**1. Dual Collection System.** Since the inception of the program the DEP staff has worked on identifying and locating the mercury thermostat manufacturers. Because there is no definition of "manufacturer" in 38 MRSA §1665-B, the DEP referred to 38 MRSA §1610, the "Electronic Waste" law, which identifies the manufacturer as the brand owner. In all, DEP has identified 54 companies as "manufacturers" of thermostats using this definition. The founding three TRC members (Honeywell, White-Rodgers, General Electric) account for approximately 97% of mercury thermostats previously sold nationally. To date the DEP has identified 51 companies that collectively are responsible for an anticipated 800 thermostats recovered per year (an estimated 3% of the total). Several of these companies are no longer in business.

The State cannot require that a manufacturer join the TRC. After Maine's law passed, the TRC Board established an annual membership fee of \$30,000. Several companies determined that joining TRC was not financially prudent or viable given the number of their mercury thermostats that might be recovered through Maine's program (usually less than 10 per year). DEP worked with these manufacturers to develop a parallel system to the TRC's to fulfill their statutory responsibilities, administered by a private Maine hazardous waste company, Environmental Projects Inc. (EPI). This has added a layer of complexity for everyone, especially the wholesalers.

In 2008 the TRC lowered their membership fee and actively sought new members. With the passage of the Vermont thermostat incentive legislation, several companies either had to join the TRC or find another company to act as their program administrator in Vermont. Vermont's legislation made a distinction between the companies that actually made the thermostats, the original equipment manufacturers (OEMs), and those which purchased thermostats from the OEMs and had their brand

name printed on the thermostat prior to reselling. In Vermont's legislation only the OEMs are responsible for the collection, recycling and incentive payments. All OEMs have now joined the TRC and therefore Vermont's program will operate under a single collection system. An added benefit is that there are not any 'orphan' thermostats, i.e., thermostats "manufactured" by a company which is no longer in business, since all OEMs are still in business. In Maine's program, DEP has paid the cost of the incentive payments for orphan thermostats.

Late in 2008 the TRC and EPI reached an agreement to streamline the collection system. This has resulted in one collection system which simplifies the program for the wholesalers, but has not resolved other issues such as that of orphan thermostats which the State is presently paying for.

**2. Incentive Payment Consistency, Timing and Procedures.** From the beginning of the program through 2008 the department received complaints from contractors and technicians about lack of payment or lengthy delays in payment. Both situations discourage participation in the program.

Lack of payments resulted from lost bins<sup>5</sup>, lost coupons or the TRC administrative problems. In response DEP staff worked with wholesalers to make sure they kept a receipt for bin shipments so that a lost bin could be tracked. The TRC has initiated new operating procedures to facilitate the remittance of incentive payments. Still the issue of lengthy delays in payments persists, in part because payment is predicated on the TRC receiving the coupon by mail and verification from Honeywell it has received the thermostat at its processing facility. The TRC bin is large and may take a wholesaler up to a year to fill. Rather than provide smaller bins, the TRC has recommended that the TRC provide a large pre-paid mailer to collect the coupons at the wholesale location rather than have each technician mail their own. The mailer would be sent whenever the bin is shipped. This would streamline the program and make lost coupons less likely.

**3. Retail Collection.** The Phase 2 Homeowner plan requires manufacturers to institute a homeowner program that provides convenient access to thermostat recycling for all Maine residents. Early in 2008 it became clear that the TRC did not believe it was their responsibility to recruit retail into the program. Without retail collection, the homeowner program would rely principally on mail-in, an option that is not convenient for many homeowners, and is the most costly for the manufacturers. Subsequently DEP, working with Efficiency Maine, took responsibility for the recruitment and training of retail stores, and the development of retail program materials. Lengthy negotiations commenced with the TRC about the program's structure and content, as well as the production of program materials. Due to the TRC's reticence about paying for retail materials, DEP printed most of the needed items in order to prevent further program delay. DEP, with Efficiency Maine's assistance, launched retail collection for homeowners in February 2009.

**4.** Education and Outreach. Since the inception of the program, the manufacturers' education and outreach (E&O) program has not been effective in reaching key populations with information on why, where and how to recycle mercury thermostats. DEP staff who regularly interact with wholesalers and technicians still find those who don't know about the incentive program or have misconceptions about how it works. As noted above, in 2008 there was no manufacturer-generated E&O directed at the

<sup>&</sup>lt;sup>5</sup> From June 2007 through mid 2008 DEP received reports from wholesalers of 3 bins lost in transit or at the Honeywell processing facility.

heating, ventilation and air conditioning (HVAC) professionals who are responsible for removing an estimated 75% of thermostats. The TRC did produce a one page handout for professionals in 2007, but relied on DEP to distribute it to wholesalers and on wholesalers to make it available to their customers.

38 MRSA §1665-B. 2. requires that the manufacturers "Establish and maintain a collection and recycling program... to ensure that: (1) A maximum rate of collection of mercury-added thermostats is achieved; ...". An on-going robust education and outreach program is needed in order to fulfill this requirement: to date the manufacturers' education and outreach efforts have not achieved the maximum collection of mercury-added thermostats.

### VI. Recommendations and conclusion

The mercury thermostat capture rate grew modestly in 2008, but fell well short of the statutory goal of 125 pounds. Lack of manufacturer generated E&O aimed at HVAC professionals and the lengthy delay in the start-up of the retail program have certainly been important factors. The TRC has acknowledged that an E&O strategy needs to be developed for the contractors, but the DEP and the TRC disagree on the scope and type of effort required. Because <u>ongoing</u> E&O will be necessary to attain the statutory goals, DEP is recommending a statutory change to require the TRC to submit an annual E&O plan for DEP approval or approval with conditions.

DEP also recommends that the statute be changed to require a quarterly data report (basically a one page Excel spreadsheet the TRC already generates for internal use). This will help DEP gauge progress and target outreach, as well as react to contractor complaints in a timely manner. The department believes that this reporting requirement is not additional work for the TRC, other than sending the data electronically to DEP on a more frequent basis.

Finally DEP recommends a change in the definition of "manufacturer" to exclude companies whose brand or label appears on the thermostat if the thermostat was manufactured by someone else. There are several reasons for this recommendation.

1. <u>This will streamline all aspects of the system.</u> It greatly reduces the number of companies involved and simplifies program administration. Some brand names are orphans. The original manufacturer can be identified by the code printed or embossed on the inside of the thermostat and all original manufacturers are still in business. The change would require the OEMs to pay the incentive, and would change the number of businesses involved in the collection and incentive payment system from forty to nine. It would also relieve DEP from covering the recycling costs and incentive payments for orphan thermostats. Reducing the number of entities subject to the manufacturer responsibilities of the law will also reduce the compliance and enforcement resources DEP needs to allocate for ensuring compliance by manufacturers.

2. <u>This will improve the consistency of incentive payments and rebuild credibility that turning in a</u> <u>mercury thermostat for recycling will result in an incentive payment</u>. The TRC has insisted that they will only pay the incentive if the cover is on the thermostat to identify the brand name. All thermostats have a printed code inside that identifies the actual manufacturer (no cover needed). Technicians have to take a cover off to remove the thermostat and may forget to reattach it. Therefore, even though the thermostat with the mercury is collected and recycled and the actual

manufacturer can be identified, under the current program the technician hasn't been paid. Lack of payment is a disincentive to future participation. Although covers may provide additional protection during collection and shipment, the TRC does not insist on covers in other states other than Maine and Vermont.

3. <u>Creating consistency with Vermont's law can reduce costs for manufacturers.</u> Vermont has passed a thermostat manufacturer responsibility law with an incentive provision. Because of the difficulty of tracking down all brand owners and the fact that some are out of business, Vermont's law limits the manufacturers' program responsibilities to the OEMs. Regulating the same group of manufacturers allows these manufacturers to develop educational materials and outreach efforts which meet their requirements in both states.

Statutory revisions to implement these recommendations are included as Appendix C.

Although Maine's mercury-added thermostat incentive program has been successful in substantially increasing the number of thermostats collected for recycling, it is falling short of the statutory goal. Instead of capturing 125 pounds of mercury this year, only 46.7 pounds were collected, 37% of the statutory goal. Through the first two years of program implementation, DEP has worked diligently with all parties and has identified obstacles to a more robust collection program. Implementation of the recommendations in this report will remove these obstacles and create a more efficient, streamlined, and convenient program for everyone, manufacturers, contractors, homeowners and the DEP.

### Appendix A

#### PUBLIC LAW 2005, CHAPTER 558

#### An Act To Protect Maine Families and the Environment by Improving the Collection and Recycling of Mercury Thermostats

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §1665-B is enacted to read:

#### §1665-B. Mercury-added thermostats

1. Definition. For purposes of this section, "mercury-added thermostat" means a mercury-added thermostat as defined in section 1661-C, subsection 5.

<u>2. Manufacturer responsibility.</u> Each manufacturer of mercury-added thermostats that have been sold in this State shall, individually or collectively:

<u>A.</u> Establish and maintain a collection and recycling program for out-of-service mercury-added thermostats. The collection and recycling program must be designed and implemented to ensure that:

(1) A maximum rate of collection of mercury-added thermostats is achieved;

(2) Handling and recycling of mercury-added thermostats are accomplished in a manner that is consistent with section 1663, with other provisions of

this chapter and with the universal waste rules adopted by the board pursuant to section 1319-O;

(3) Authorized bins for mercury-added thermostat collection are made available at all heating, ventilation and air conditioning supply, electrical supply and plumbing supply distributor locations that sell thermostats; and

(4) By January 1, 2007, authorized bins for mercury-added thermostat collection are made available to municipalities and regions requesting bins for mercury-added thermostat collection at universal waste collection sites or at periodic household hazardous waste collection events, as long as the collection sites or events are approved by the department for mercury-added thermostat collections;

B. Work cooperatively with the department and others in accordance with subsection 4 to establish appropriate systems in order to implement the plan developed pursuant to subsection 4;

C. Within 3 months after the department develops phase one of the plan required by subsection 4, implement phase one of the plan;

D. Within 3 months after the department develops phase 2 of the plan required by subsection 4, implement phase 2 of the plan;

E. Within 3 months after the department develops phase one of the plan required by subsection 4, provide a financial incentive with a minimum value of \$5 for the return of each mercury-added thermostat by a contractor or service technician to an established recycling collection point;

F. Within 3 months after the department develops phase 2 of the plan required by subsection 4, provide a financial incentive with a minimum value of \$5 for the return of each mercury-added thermostat by a homeowner to an established recycling collection point; and

<u>G.</u> Beginning in 2008, submit an annual report to the department by January 30th of each year that includes at a minimum:

(1) The number of mercury-added thermostats collected and recycled by that manufacturer pursuant to this section during the previous calendar year;

(2) The estimated total amount of mercury contained in the thermostat components collected by that manufacturer pursuant to this section;

(3) An evaluation of the effectiveness of the manufacturer's collection and recycling program and the financial incentive provided pursuant to paragraphs E and F; and

(4) An accounting of the administrative costs incurred in the course of administering the collection and recycling program and the financial incentive plan developed pursuant to subsection 4.

3. Sales prohibition. Within 3 months after phase 2 of the plan required by subsection 4 has been developed, the following sales prohibitions apply to manufacturers, wholesalers and retailers of thermostats:

A. A manufacturer not in compliance with this section is prohibited from offering any thermostat for sale in the State. A manufacturer not in compliance with this section shall provide the necessary support to retailers to ensure the manufacturer's thermostats are not offered for sale in this State; and

B. 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.

4. Financial incentive plan. The department shall develop a manufacturer financial incentive plan in 2 phases. By January 1, 2007, the department shall develop phase one of the plan, which must address collection of mercury-added thermostats from contractors and service technicians. By August 1, 2007, the department shall develop phase 2 of the plan, which must address collection of mercury-added thermostats from homeowners. The plan

must be developed in consultation with a stakeholder group that includes representatives from the thermostat industry, environmental groups, thermostat wholesalers and service contractors. The plan must be developed in a manner that ensures to the maximum extent practical that:

A. The capture rate of out-of-service mercury-added thermostats is maximized;

B. Adequate incentives and education are provided to contractors, service technicians and homeowners to encourage

return of thermostats to established recycling collection points;

C. Administrative costs of the plan are minimized;

D. The plan encourages the purchase of nonmercury thermostats qualified by the United States Environmental Protection Agency's Energy Star program as replacements for mercury-added thermostats; and

E. Mechanisms are in place to protect against the fraudulent return of thermostats.

The plan must include a requirement that manufacturers provide a financial incentive with a minimum value of \$5 for the return of each mercury-added thermostat to an established recycling collection point in accordance with subsection 2, paragraphs E and F. The financial incentive may include, without limitation, cash, rebates, discounts, coupons or other incentives.

5. Goals. The goal of the collection and recycling efforts under this section is to collect and recycle at least 125 pounds of mercury per year from mercury-added thermostats within 2 years after the development of phase one of the plan required by subsection 4 and at least 160 pounds of mercury per year within 3 years after the development of phase 2 of the plan required by subsection 4.

6. Report. By March 15, 2007 and annually thereafter, the department shall submit a report on the collection and recycling of mercury-added thermostats in the State to the joint standing committee of the Legislature having jurisdiction over natural resources matters. The report due in 2007 must include a description and discussion of the financial incentive plan established under this section and recommendations for any statutory changes concerning the collection and recycling of the 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 concerning the collection and recycling of mercury-added thermostat.

Sec. 2. Authority to report legislation. The joint standing committee of the Legislature having jurisdiction over natural resources matters may report out legislation to the First Regular Session of the 123rd Legislature in connection with the report required pursuant to the Maine Revised Statutes, Title 38, section 1665-B, subsection 6.

· . 

## Appendix B

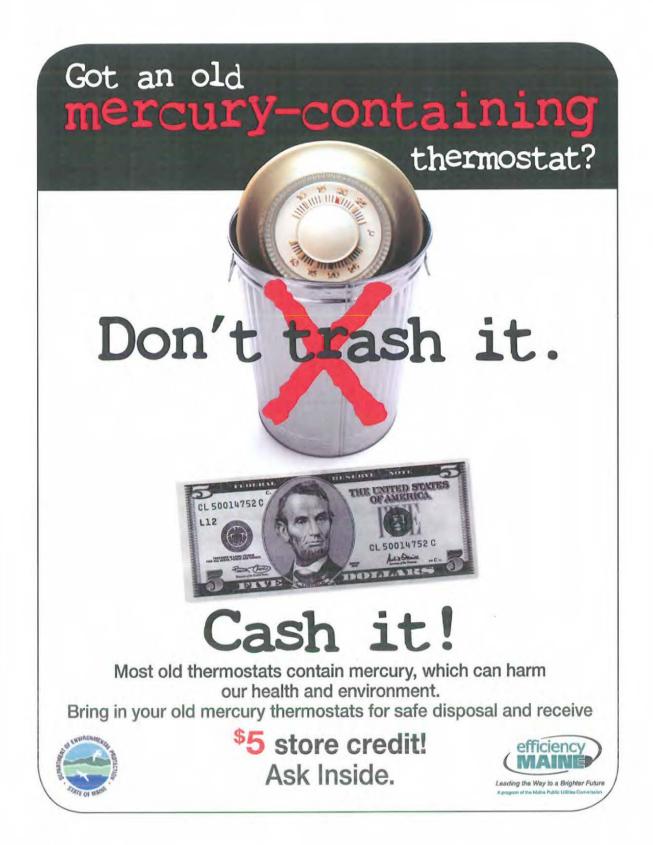
Thermostat Wholesaler Poster Thermostat Retail Cling Sticker



Hand Law Gall

an Millis more will present more fri







### Appendix C

#### **Recommended Statutory Changes**

#### An Act to Continue to Reduce Mercury Use and Emissions

#### Be it enacted by the People of the State of Maine as follows:

Sec. 5. 38 MRSA § 1665-B, sub-§ 1, as enacted by PL 2005, c. 558, § 1, is repealed and the following enacted in its place:

<u>**1.**</u> **Definitions.** For the purposes of this section, the following terms have the following meanings:

A. "Manufacturer" means the first person who assembles component parts into a functioning thermostat. "Manufacturer" does not include a person who purchased a functioning mercury thermostat and affixed its brand or label to the thermostat for resale.

**B.** "Mercury-added thermostat" or "mercury 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 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.

**C.** "Retailer" means a person who sells thermostats of any kind directly to homeowners or other nonprofessionals through any selling or distribution mechanism, including but not limited to sales using the Internet or catalogues.

Sec. 6. 38 MRSA § 1665-B, sub-§ 1-A, is enacted to read:

<u>1-A. Prohibition.</u> After January 1, 2006, a person may not sell or offer to sell or distribute for promotional purposes a mercury thermostat.

Sec. 7. 38 MRSA § 1665-B, sub-§ 2, ¶ A, as enacted by PL 2005, c. 558, § 1, is amended to read:

**A.** Establish and maintain a collection and recycling program for out-of-service mercury-added thermostats. The collection and recycling program must be designed and implemented to ensure that:

(1) A maximum rate of collection of mercury-added thermostats is achieved;

For the purpose of subparagraph 4, administrative costs are limited to costs associated with processing thermostats shipped to the manufacturer for recycling, issuing incentive payments and conducting education and outreach activities;

Sec. 10. 38 MRSA § 1665-B, sub-§ 2, ¶ H and I, are enacted to read:

**H.** Beginning in 2009, submit a quarterly report to the department within 30 days after the end of each quarter that, for each shipment of thermostats received by the manufacturer or manufacturer's agent for recycling during the quarter, provides the following information:

(1) The collection location that shipped the thermostats;

(2) The date the manufacturer received the shipment;

(3) The number of mercury thermostats; and

(4) The total amount of mercury collected. The manufacturer may include in this total mercury amounts in devices other than thermostats it made if the shipment included such devices and the mercury in those devices is recovered; and

**I.** Beginning July 1, 2009, implement the education and outreach plan approved by the department under subsection 4-A.

Sec. 11. 38 MRSA § 1665-B, sub-§ 2-A, is enacted to read:

<u>2-A. Termination of retailer participation.</u> A manufacturer may terminate a retailer's participation in the collection program only after complying with the following:

**A.** The manufacture must notify the retailer, in writing, of non-compliance with program policies and procedures and provide the retailer an opportunity to comply.

**B.** Should the retailer continue to send in significant ineligible materials through the collection program after three written notices of non-compliance, the manufacturers may terminate the retailer's participation.

**C.** For termination to occur, the manufacturer must notify the retailer and the department in writing.

Sec. 12. 38 MRSA § 1665-B, sub-§ 4-A, is enacted to read:

<u>4-A. Education and outreach plan.</u> The annual report required under subsection 2, paragraph G, must include a plan setting forth the steps that the manufacturer will take to inform wholesalers, retailers, contractors and homeowners about the thermostat collection and recycling program and encourage their participation. Copies of all informational material proposed for distribution must be submitted with the plan. The plan must provide for distribution of the material at no cost to thermostat wholesalers and retailers.