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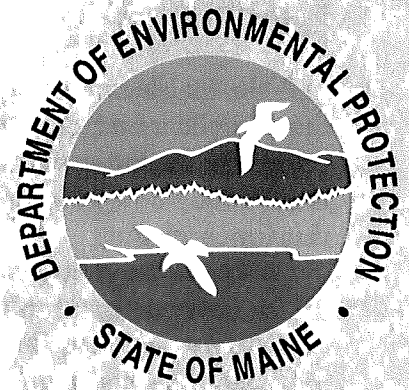
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Report on the Collection and Recycling of Mercury-Added Thermostats

Maine Department of Environmental Protection
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March 2008

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Executive Summary

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

- previous attempts to capture out-of-service thermostats did not have substantial success;
- mercury thermostats have the greatest estimated reservoir of mercury of any source in Maine's waste stream;
- 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 financial incentive plan was developed in two phases with the help of stakeholders. Phase 1, the incentive plan for plumbing, heating and electrical contractors, was implemented by May 2007. Phase 2, the incentive plan for homeowners, is just beginning and will not be fully underway until May 2008.

Since the startup of Phase 1, contractors have responded favorably and thermostat returns have increased substantially. The incentive seems to be working, however it is early in the program development and it is recommended to allow full implementation of both phases before evaluating whether any changes are needed in statute.

I. Background

In the spring of 2006 the 122nd 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

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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 second such report. It summarizes mercury-added thermostat collection efforts through 2007, 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. 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.

Table 1: Number of Thermostats Collected

Year	2001	2002	2003	2004	2005	2006	2007	2007 lbs. Hg ¹
TRC Program	233	280	482	1,079	1,290	2924	4656*	36.92
UW collection ²	253	856	1398	335	701	361	667**	4.41
EPI Program ³	0	0	0	0	0	0	363	2.39
Total	486	1136	1880	1414	1991	3285	5686	43.73
Recycling Rate***	2%	4.2%	7%	5.2%	7.3%	12%	20.9%	

* At least 3 full bins, holding as many as 120 thermostats each, were lost in transit. Actual numbers of thermostats should be higher.
 ** Preliminary number – has not been quality checked.
 ***Based on baseline calculations of 27,200 estimated thermostat removals per year in Maine.

With the start-up of the contractor incentive program in mid-May 2007, returns more than doubled over the same period in the previous year, as shown in Table 2 below.

¹ "lbs. Hg" is the estimated pounds of mercury (Hg) collected .
² UW collection refers to the collection of universal wastes at municipal sites that are reported to the DEP.
³ EPI is the program administrator for the majority of the manufacturers.

Table 2: 2006/2007 Comparison

	2006 May-December	2007 May-December
TRC T-stat ⁴ returns	1609	3153*
EPI T-stat returns	0	363
Total	1609	3516
# of TRC bins returned	17	47

* At least 3 full bins, holding as many as 100 thermostats each, were lost in transit. Actual numbers of thermostats should be higher.

Maine, which is the only state to date offering an incentive, had the highest per capita rate of returned mercury thermostats in the country in 2007; one for every 230 people. The next closest state, Minnesota, collected about one thermostat for every 440 people in 2006. (National numbers for 2007 are not available yet.)

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 will be January 2009. In 2007, 43.73 pounds of mercury were captured through thermostat collection.

III. Phase 1: The Financial Incentive Plan for Contractors

DEP organized a series of four stakeholder meetings to develop Phase 1 of the incentive plan. The stakeholder advisory group included representatives of thermostat manufacturers, plumbing and heating service contractors, heating, ventilation and air conditioning (HVAC) wholesalers, environmental organizations, DEP and the Department of Professional and Financial Regulation's Oil and Solid Fuel Board (OSFB). The Product Stewardship Institute (PSI), a national non-profit organization that advocates a product stewardship approach to solving waste management problems, was also invited and was an active member of the group.

This advisory group provided valuable information, opinions and experience resulting in a program with two distinct components: the structure of the incentive program, and the education and outreach activities necessary to implement the incentive program. DEP circulated a draft plan for review and comment to the stakeholders in mid-December 2006. The plan for Phase 1 was accepted and signed by the DEP Commissioner on December 28, 2006.

The advisory group ultimately agreed that providing a coupon that could be redeemed for cash would be the most effective incentive to motivate the professional contractor or service technician to recycle mercury-added thermostats. To create a system that encourages participation, is easy to implement, is fraud resistant, and that minimizes administrative costs, the advisory group designed the program structures as follows:

1. The contractor or technician receives 100% of the incentive.
2. The incentive is \$5 per thermostat received.

⁴ "T-stat" is short for mercury-added thermostat.

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 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.
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.

In addition to these program parameters, the advisory group also delineated two major topics and the target audiences for education and outreach about the program. The educational messages include how Maine's incentive program for recycling mercury thermostats works, and the advantages of using thermostats with Energy Star ratings. Specific content needs to be tailored differently depending on the audience, with the public, technicians, contractors, wholesalers, and manufacturers receiving slightly different messages.

The OSFB was identified as an extremely important link to technicians through its licensing regulations. The advisory group recommended that this board incorporate the statutory requirement to recycle mercury-added thermostats in its 2008 rule revisions (adherence to these rules is important for technicians in retaining their individual license). Based on this, during the most recent OSFB rule-making process, DEP recommended that the licensing regulations include specific language informing the technicians that state law requires them to recycle mercury-added thermostats. However, following its staff recommendation, the OSFB simply included a generic requirement that technicians comply with all state and federal disposal requirements.

IV. Phase 2: The Financial Incentive Plan for Homeowners

The DEP formed a new stakeholder advisory group to develop Phase 2, the homeowner incentive program. It included all the Phase 1 stakeholder members minus the representative from the Department of Professional and Financial Regulation, plus a representative of municipal government, a retail business, and the United Parcel Service.

The DEP held three stakeholder meetings to determine the structure of the homeowner program and the necessary education and outreach components. 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 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 TRC directly when they ship the thermostats for processing. TRC would then cut one check to the store rather than multiple checks to individual homeowners.

To be successful, the homeowner collection program needs to be widely and repeatedly advertised to Maine residents. The Phase 2 plan also includes minimum requirements for the manufacturers' education and outreach program.

The Phase 2 Homeowner Incentive Plan was signed by the DEP Commissioner on July 31, 2007 and sent to the manufacturers immediately so that they could comply with the November 1, 2007 statutory deadline for implementation.

V. Problems Encountered

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

1. Dual Collection System. Over the past year DEP staff worked on identifying and locating the mercury thermostat manufacturers. The present TRC members (Honeywell, White-Rodgers, General Electric and Nordyne) account for approximately 97% of mercury thermostats previously sold nationally. DEP sought to identify the companies responsible for the residual 3% of mercury thermostats that may be collected. To date the DEP has identified three dozen companies that collectively are responsible for an anticipated 800 thermostats recovered per year (an estimated 3% of the total).

The State cannot require that a manufacturer join the already existing 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 (usually less than 10 per year). DEP worked with these manufacturers to develop a parallel system to TRC's to fulfill their statutory responsibilities. This has added a layer of complexity for everyone, especially the wholesalers.

2. Retail Collection Pilot. PSI had offered to coordinate pilot collections at multiple retail locations and had received participation commitments from three hardware chains. PSI, supported by Honeywell, had received a grant from the U.S. Environmental Protection Agency

(EPA) to conduct the pilot project. Honeywell subsequently decided not to participate in the pilot. Since retail collection is an important component in the homeowner program, and probably the most cost-efficient method of collecting homeowner thermostats, the DEP has pursued development of the retail component by working with the Maine Public Utilities Commission (PUC). With the PUC's assistance, DEP expects to launch the retail collection for homeowners in May 2008.

3. Implementation Delays. The TRC, on behalf of the major thermostat manufacturers, failed to submit the Phase 1 program materials on time to the DEP. Consequently, the contractor program implementation was delayed by almost two months, and not fully implemented until June 2007. Although Honeywell and the TRC participated in the development of the Phase 2 Homeowner Program (see Attachment B) and thus had ample notice of the implementation timeframes required in the plan, they again failed to submit materials and implement the homeowner program within the plan and statutory deadlines. Consequently the homeowner plan implementation has been substantially delayed and is only now getting underway.

VI. Conclusions

Despite the delays, the contractor program is going relatively well. During the last half of 2007, the number of mercury-added thermostats returned for recycling has jumped substantially. The DEP expects substantial additional growth in 2008 with the startup of the homeowner program at retail establishments in May, and as more of the heating technicians learn about the incentive program.

The DEP recommends that the statute remain unchanged at this time. The program and associated education and outreach activities are at various points of development and implementation. Time is needed to allow the program to be fully implemented during 2008. Subsequent to full implementation, a further evaluation of the various components and overall program effectiveness will be undertaken.

Attachment 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.

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

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;

(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

G. 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 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 concerning the collection and recycling of mercury-added thermostats.

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.

Attachment B

Manufacturer Financial Incentive Plan **for the** **Collection of Mercury-Added Thermostats from Homeowners**

July 2007

Pursuant to Public Law Chapter 558, *An Act To Protect Maine Families and the Environment by Improving the Collection and Recycling of Mercury Thermostats* (Appendix A), the Maine Department of Environmental Protection (Maine DEP) developed this plan for the recycling of mercury-added thermostats collected from homeowners.

The purpose of this law is to maximize the recycling rate of mercury thermostats by providing convenient access and an incentive to anyone who turns in a mercury thermostat. During the Spring 2007, thermostat manufacturers, with assistance from Maine DEP, implemented Phase 1 of the incentive program, which is designed to reward contractors and technicians when they return mercury thermostats to any plumbing, heating or electrical wholesale location in Maine. This homeowner plan is Phase 2 of the incentive program, and was developed with the help of a stakeholder group. The stakeholder group included representatives of thermostat manufacturers, a wholesaler, a contractor, two environmental organizations, a municipal representative, a representative of the United Parcel Service (UPS) and the Maine DEP (Appendix B).

Concurrently, the Product Stewardship Institute (PSI) under a grant from the United States Environmental Protection Agency (EPA), engaged in discussions with representatives of thermostat manufacturers, retailers, UPS and Maine DEP to design a pilot for a homeowner collection program. A PSI pilot homeowner collection will run concurrently in Maine with other collection opportunities during the first full calendar year of the homeowner incentive program. The purpose of the PSI pilot is to assess the efficacy of a homeowner collection and incentive program operated through retail locations and through a pre-paid mail-in system.

Incentive Program for Collection of Mercury Thermostats from Homeowners

The manufacturers shall institute a homeowner incentive program that provides convenient access to all residents of Maine and that includes:

1. A free mail-in system. Manufacturers shall provide homeowners with a postage paid shipping label via the internet and a toll-free telephone number. Upon receipt of a mercury thermostat through the mail-in program from a Maine resident, the manufacturer will send the resident a \$5.00 check.
2. Mercury thermostat collection and provision of an incentive coupon at thermostat wholesale locations. Thermostat wholesalers in Maine are required to participate in the

incentive program for contractors and service technicians; approximately 70 wholesalers in 24 municipalities in Maine have agreed to provide this collection and incentive program to homeowners.

3. Additionally, manufacturers may provide access to the incentive program at thermostat retailers and municipal universal waste (UW) and household hazardous waste (HHW) collection sites. Manufacturers may do so by making postage-paid shipping labels/mailers and/or the collection/coupon incentive program available at retail locations that sell thermostats and at municipal UW/HHW collection sites.
4. Manufacturers will conduct on-going education and outreach activities to ensure that Maine residents are aware of the mercury thermostat collection incentive program and how to access the system for recycling mercury thermostats.

Based on data collected for at least one year, the Maine DEP may amend this plan to increase the effectiveness and/or decrease costs of the collection and incentive program.

Implementation Plan

Following is a list of tasks and applicable deadlines that manufacturers must perform to implement Phase 2, the homeowner portion, of the manufacturer incentive program as required by 38 MRSA §1665-B. Other than the dates set in statute for implementation of Phase 2, all dates are goals set to ensure that the statutory deadlines can be met.

Manufacturers shall:

1. Develop and submit by September 1, 2007 to Maine DEP for approval, draft materials and a detailed implementation plan for a homeowner incentive program that provides convenient access to residents throughout Maine and includes at a minimum the following elements:
 - Provision of an incentive worth at least \$5 for each mercury thermostat turned in for recycling.
 - A mail-back option that residents can access in two ways - through the internet and through a toll-free telephone number. This shall include a pre-paid shipping label offered at no cost to any Maine resident wanting to return a mercury thermostat;
 - Mechanisms to provide the homeowner incentive program at retail locations and at municipal HHW/UW collection facilities¹. For sites that collect thermostats for bulk shipment and for whom the manufacturers provide a mail-in incentive

¹ Under Maine law, retail and municipal participation in the thermostat incentive recycling program is voluntary; retail and HHW/UW participation after 2008 will be determined based on an evaluation of the data collected by PSI, the manufacturers, and other appropriate sources, and the willingness of retailers and HHW/UW facilities to continue collection activities.

coupon, the coupons shall be coded to match accompanying stickers so that the stickers may be placed on the thermostats and matched to returned coupons to prevent fraud in the redemption system;

- Provisions for managing other manufacturers' thermostats received through the offered collection mechanisms and the associated incentive payments, including proposed administrative costs;
 - A statement on whether and how the manufacturer(s) plans to participate in the PSI homeowner collection pilot study to be conducted in calendar year 2008;
 - A description of a short-term and long-term outreach program to educate homeowners about the incentive program, including advertising of the toll-free number and internet site, and information on available promotional materials for Energy Star thermostats;
 - A description of the data that will be collected and performance measures that will be used to evaluate the effectiveness of each component of the program. The evaluation shall be included in the manufacturer's annual report, and must include an assessment of state coverage, costs of the various collection methods and participation rates in rural versus service community areas.
2. Brief their sales forces on the program plan by October 15, 2007.
 3. Distribute to participating retail establishments and municipal and regional HHW/UW collection sites all applicable program materials, including instructions for participation, collection bins, coupons (if necessary, such as for retailers that do not want to provide coupons specific to their stores), pre-paid mailers and/or pre-paid shipping labels at locations not providing coupons, mail-back information and other materials as needed by November 1, 2007.
 4. Implement the homeowner incentive program, including education and outreach activities, no later than November 1, 2007.
 5. Notify the Maine Attorney General and the Maine DEP of any suspected fraud in the redemption of coupons for appropriate investigation and enforcement; a manufacturer's suspicion of fraud does not constitute grounds for refusal or delay of payment of the recycling incentive.
 6. Submit a progress report to Maine DEP on Phase 2 of the mercury thermostat incentive program by January 30, 2008 and annually thereafter². The January 30, 2009 report and those thereafter may include recommendations for adjustments to the program for review and approval by the Maine DEP. Manufacturers may also make recommendations for statutory changes which they believe may improve collection rates. The report must be submitted in a format approved by the Maine DEP.

² Manufacturers are required to report on Phase 1 of the incentive program in the same timeframe.

To support manufacturers' implementation of the homeowner financial incentive program for recycling of mercury thermostats, Maine DEP will:

1. Evaluate manufacturer plans and program materials and notify manufacturers of evaluation results including any changes needed by September 15, 2007.
2. Provide notice of the homeowner incentive program to municipal and regional HHW/UW collection sites by October 15, 2007.
3. Identify non-participating manufacturers and take appropriate action as needed.
4. Collect data from HHW/UW facilities on the mercury thermostats collected for recycling. The amount of mercury recycled from HHW/UW thermostats shall be included as part of the overall volume collected and counted to attain statutory recycling goals.
5. Place information on the mercury thermostat collection program on the department website and include links to the manufacturers' and the US EPA Energy Star websites for additional information on mercury thermostat recycling and potential energy savings through purchase of an Energy Star-rated thermostat.
6. Provide the manufacturers with an annual reporting format no later than October 31, 2008.
7. Maine DEP, in conjunction with the Maine Public Utilities Commission, will promote the use of US EPA Energy Star programmable thermostats.

Pursuant to the requirements of Title 38, §1665-B.4, this *Manufacturer Financial Incentive Plan for the Collection of Mercury-Added Thermostats from Homeowners* has been developed in conjunction with stakeholders and approved by the Maine Department of Environmental Protection.

David P. Littell, Commissioner

Date

Appendix A

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

CHAPTER 558

S.P. 709 - L.D. 1792

**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.

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

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;

(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

G. 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 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 concerning the collection and recycling of mercury-added thermostats.

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

Participants in Stakeholder Process to Develop the
*Manufacturer Financial Incentive Plan for the Collection of Mercury-Added Thermostats from
Homeowners*

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