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**DRAFT REGULATIONS IMPLEMENTING THE  
MASSACHUSETTS MERCURY MANAGEMENT ACT  
(Chapter 190 of the Acts of 2006)**


**PHASE 2: MERCURY-ADDED PRODUCTS: SALE BANS, LABELING AND  
DISPOSAL PROHIBITION**

**Prepared by:  
MassDEP Bureau of Waste Prevention**

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## **DRAFT Regulations: Mercury in Products**

### **DRAFT REGULATIONS IMPLEMENTING THE MASSACHUSETTS MERCURY MANAGEMENT ACT (Chapter 190 of the Acts of 2006)**

#### **PHASE 2: MERCURY-ADDED PRODUCTS: SALE BANS, LABELING AND DISPOSAL PROHIBITION**

##### **1. Introduction**

An Act Relative to Mercury Management (Chapter 190 of the Acts of 2006, also known as the “Massachusetts Mercury Management Act” which was signed into law on July 28, 2006) is designed to keep mercury out of our trash and wastewater, where it is then released into the environment. The law prohibits the sale of many products containing mercury unless properly labeled by the manufacturer, requires the phase-out of certain products containing mercury, and establishes a prohibition on the disposal of many mercury-containing products.

The Mercury Management Act amends Chapter 21H of the Massachusetts General Laws. It requires the Massachusetts Department of Environmental Protection (MassDEP) to oversee the programs and initiatives established to meet the Act’s goals, and contains deadlines for implementing them. MassDEP is proposing regulations that will govern three requirements that become effective as of May 1, 2008 and May 1, 2009:

- *Product Sales Bans*: retailers, distributors and manufacturers must stop selling a specified list of measuring devices containing mercury as of May 1, 2008, and must stop selling any kind of mercury containing switch and relay as of May 1, 2009. A process for requesting exemptions is included in the regulations.
- *Labeling of mercury-added products*: manufacturers must label products containing mercury in order for retailers, distributors and manufacturers to continue selling such products after May 1, 2008. Exemptions are defined and performance standards are established for label placement, size and content.
- *Prohibition on the Disposal of Mercury-Added Products in Solid Waste*: generators of end-of-life mercury containing products must not knowingly dispose of these products in solid waste, and haulers of solid waste must not knowingly collect mercury-containing products in solid waste as of May 1, 2008.

In addition, MassDEP is proposing an amendment to the regulations governing removal and recycling of mercury-added components from vehicles (Phase 1 of the mercury regulations).

This document describes these proposals:

Section 2: Background

Section 3: Summary of Proposals

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MANAGEMENT

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Section 7: Proposed new section 310 CMR 76.00: DISPOSAL PROHIBITION OF  
MERCURY-ADDED PRODUCTS IN SOLID WASTE

Section 8: Public Hearings and Comment Period

Appendix A: Comparison of State Labeling Regulations

Please see the public hearing schedule and information about how to submit comments to MassDEP in Section 8.

In addition to the regulations proposed in this document, MassDEP has developed two guidance documents for operators of solid waste management facilities and recycling operations about handling products containing mercury in compliance with the ban on disposal of mercury products in solid waste. These documents are available at:  
<http://www.mass.gov/dep/toxics/stypes/hgres.htm#mma>.

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### **2. Background**

Mercury is a toxic metal. When products containing mercury are discarded at the end of their useful lives, the mercury is released into the air when products break. Solid waste disposal facilities (e.g., trash incinerators, landfills) and manufacturing facilities that use mercury in their production processes can also release mercury into the air. Airborne mercury is deposited on land and in lakes and ponds, where it can be eaten by fish and, in turn, by people and wildlife. Mercury that is discharged in wastewater ends up in sewage sludge, which is either burned in an incinerator or applied to land as a soil amendment. In both cases, rain can wash mercury into lakes, ponds, and streams.

People are exposed to mercury primarily when they eat certain fish, but can also be exposed to high levels of mercury vapor if they are near a mercury-added product that breaks. Mercury can impact the nervous system, even at low levels of exposure. Massachusetts public health officials have warned people to limit their consumption of certain types of fish caught in state water bodies that typically have high concentrations of mercury, with particular cautions for pregnant women, nursing mothers, women of child-bearing years, and young children. Children and fetuses are particularly vulnerable to mercury, because it can damage their developing brains.

Massachusetts has addressed three significant sources of mercury since the mid-1990's:

- The state's largest trash incinerators (which were the largest single source of mercury emissions to the Massachusetts environment) have responded to requirements for new pollution control equipment that were enacted in 1998, and have initiated programs to divert mercury-containing items from the trash prior to disposal. As a group, they have reduced their mercury emissions from 6,000 pounds/year (in 1996) to 600 pounds per year (in 2003).
- Massachusetts dentists have installed wastewater treatment units at their facilities, in response to a voluntary initiative and regulations. These treatment units filter particles of mercury dental amalgam from their wastewater. The Massachusetts Water Resources Authority (the state's largest wastewater treatment district) reports that mercury levels in its sludge have dropped by more than 50%, largely as a result of this program.
- Massachusetts coal-fired power plants are now in the process of upgrading their pollution control equipment to reduce their emissions of mercury into our air by 85% by 2008 and 95% by 2012.

Despite these successes, mercury in products is still a significant source of pollution, and in turn, a significant concern for public health and the environment.

Regulations governing management of mercury-added vehicle switches, collection plans for mercury-added products that continue to be sold in Massachusetts and recycling of mercury-added lamps were promulgated on December 28, 2007 and have been posted on the MassDEP website at: <http://www.mass.gov/dep/service/approvals/erpregs.htm#hg>.

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### **3. Summary of Proposals**

#### **3.1 Modification of mercury-added vehicle switch provision**

MassDEP is proposing a modification to one mercury-added vehicle switch provision of these regulations. The Mercury Management Act requires vehicle manufacturers to implement plans for collecting and recycling mercury-added switches that must capture at least 90% of those available from “end of life” vehicles. MassDEP’s regulations governing the vehicle switch recovery program, (Phase I of the mercury regulations, 310 CMR 74.00, promulgated December 28, 2007), included an estimate of the total number of switches available for capture in 2007 for Massachusetts based on a population-weighted fraction of a national estimate produced by End of Life Vehicle Solutions (ELVS), a consortium of vehicle manufacturers. This estimate was considerably lower than an estimate produced by the Clean Car Campaign, a consortium of environmental advocacy organizations. As noted in the “Response to Comments” published with the final Phase I rules, MassDEP decided to use the ELVS estimate for calendar year 2007 (for reasons including above average proportion of foreign vehicles in the Massachusetts fleet that do not have mercury-added switches, vehicle owners keeping their cars longer, and an estimate of over 8% of the vehicle fleet that is lost or stolen and not returned for recycling).

MassDEP is now proposing an amendment to the recycling measurement regulation because better and more widely accepted information regarding the number of vehicle switches available for recovery in Massachusetts has been identified. The measurement team of the National Vehicle Mercury Switch Recovery Program (NVMSRP) has developed a methodology to estimate the number of switches that will become available every year for the next ten years.<sup>1</sup> This methodology has been accepted by the NVMSRP. The proposed amendment uses the resulting estimates to establish the denominator of the capture rate for 2008 and subsequent years.

This new methodology relied on actual vehicle registration data by state, as opposed to national fleet data used in the earlier calculations. The resulting estimates of mercury-added switches, calculated for each state, are posted on the ELVS website along with an explanation of the methodology. (<http://www.elvsolutions.org/model.html>). Massachusetts specific estimates are in Table 1:

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<sup>1</sup> The NVMSRP tasked the measurement team, which included representatives from ELVS, the Clean Car Campaign and government, with developing estimates of switches available for capture for the duration of the National Vehicle Mercury Switch Recovery Program, which is expected to continue through 2017.

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**Table 1: Estimate of Number of Mercury-added Vehicle Switches Available for Capture in Massachusetts by Year**

Year	Estimate of the number of switches available	Number of switches needed to meet 90% capture rate <sup>2</sup>
2008	74,000	66,600
2009	71,000	63,900
2010	67,000	60,300
2011	63,000	56,700
2012	59,000	53,100
2013	54,000	48,600
2014	50,000	45,000
2015	45,000	40,500
2016	41,000	36,900
2017	36,000	32,400

MassDEP is proposing to use the estimates in Table 1 as a basis for calculating target capture rates starting in 2008. MassDEP is proposing to not revise the estimate used to calculate the capture rate for 2007 in 310 CMR 74.07(3).

### 3.2 Implementation Timeline

The additional sections of the Mercury Management Act covered by this package of regulations (product sales bans, product labeling and disposal prohibition), all take effect May 1, 2008, except for certain product sales bans that take effect May 1, 2009. MassDEP has started to inform regulated entities of these statutory requirements through direct mailings to manufacturers and trade associations and newsletters that serve those communities. This package of regulations will establish more formal implementation requirements.

Similar regulations to those in this package are in place in many other northeastern states. Processes are already being used by those states to implement their regulations. For example, sales bans of all of the same measuring devices in this package as well as mercury-added switches and relays are in place in several other states and manufacturers are applying for exemptions to the sales ban using the process outlined in this package. Similarly, a system has been in place for product labeling. Given that most products are sold on a regional, if not national basis, most manufacturers of mercury-added products are familiar with, or at least have been notified of these requirements.

Disposal prohibitions are also in place in several other states. However, implementation of this rule affects entities on a local, rather than national level. To implement the disposal prohibition, MassDEP with the input from a broad group of stakeholders, developed interim guidance for solid waste and recycling facilities. MassDEP mailed this interim guidance and other information to these facilities and sent these and other materials to municipal recycling staff in

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<sup>2</sup> Switches need to be collected during the calendar year noted and counted by ELVS or their designated contractor.

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each city and town and to solid waste haulers. MassDEP will continue outreach through presentations and other media over a period of months.

### 3.3 Implementing Product Sales Bans

Sections 6D and 6E of the Mercury Management Act ban the sale of a number of specific products to which mercury has been intentionally added, by May 1, 2008 and May 1, 2009 depending on the product, as described in Table 2. Non-mercury alternatives that are effective in most applications exist for all of these banned items. The proposed amendments to 310 CMR 75.00 would implement these sales bans.

**Table 2: Mercury-added Products Banned from Sale and Effective Dates**

May 1, 2008	May 1, 2009
Thermostats	Switches
Barometers	Relays
Esophageal dilators, bougie tubes, and gastrointestinal tubes	
Flow meters	
Hydrometers	
Hygrometers and psychrometers	
Manometers	
Pyrometers	
Sphygmomanometers	
Basal thermometers	

Thirteen states, including all the northeastern states, have banned the sale of selected mercury-added products as a way to reduce possible mercury releases to the environment.

There are, however, certain applications for which no non-mercury substitute for a banned product has been found to date, such as certain high temperature applications, or where the use of a non-mercury substitute is not cost-effective. Section 6F of the Mercury Management Act provides a process by which a manufacturer of a mercury-added product can apply for an exemption from the sales ban for up to three years. The statute lists criteria that must be met for MassDEP to grant an exemption, and requires MassDEP to establish a timeline for reviewing applications and allows MassDEP to impose fees to support this review.

The regulations being proposed establish the specific products and dates for the commencement of the sales ban. The regulations also identify the specific information that a manufacturer would need to provide to MassDEP in an application for an exemption from the sales ban. Exemptions from the sales bans will take the form of a MassDEP permit that would allow a manufacturer to continue to sell or distribute an otherwise banned mercury-added product in the Commonwealth for up to three years. The Mercury Management Act directs MassDEP to consult with the other states that have adopted similar requirements (through the Interstate Mercury Education and Reduction Clearinghouse, or “IMERC”) in reviewing applications for exemptions, to ensure regional consistency to the greatest extent possible. A regional approach to granting exemptions would facilitate industry compliance, as most products are sold regionally, if not nationally.

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Since June 2003, seven states working through IMERC have reviewed 47 exemption applications; 26 applications have been approved, 14 have been denied, five are under review and two were determined to not need to go through the process. To facilitate review by IMERC states, MassDEP has crafted the proposed rules to be as similar as possible to those adopted by other participating states, to the extent allowed by statute.

The Mercury Management Act also requires that MassDEP consult with the Massachusetts Executive Office of Housing and Economic Development and the Department of Public Health in allowing exemptions to the sales bans. Both agencies have reviewed the draft regulations. A representative of the Department of Public Health's Office of Environmental Health will participate in the review of applications for exemptions covering products and devices used in medical settings.

Timelines for MassDEP to review exemption applications and the associated fees will be proposed for public comment in upcoming amendments of 310 CMR 4.00, MassDEP's regulations governing Timely Action Schedule and Fee Provisions.



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### **3.4. Requirements for Labeling Mercury-Added Products**

Section 6K of the Mercury Management Act requires manufacturers of most mercury-added products to label these products, to clearly inform purchasers that the product contains mercury and will require special handling at the end of its useful life. This label also serves to identify mercury-added products at the point of disposal so that they can be kept out of the trash and recycled. The states of Connecticut, Maine, Minnesota, New York, Rhode Island, Vermont and Washington (which all participate in IMERC) have enacted similar requirements. Appendix A compares the labeling requirements of five of these states. Because the vast majority of products are marketed regionally and nationally, the Mercury Management Act directs Massachusetts to strive for consistency with other state labeling regulations and programs.

Vermont was the first state to enact a labeling requirement for mercury-added products. That law establishes criteria for labels (e.g., they need to be printed in at least 10-point font and made sufficiently durable to last the life of the product). Manufacturers selling their product in Vermont must send labeling plans to the Vermont Department of Environmental Conservation (VT DEC), where they are reviewed, and if approved, kept on file. While some other IMERC states have the authority to issue approvals (e.g., Rhode Island and Maine), in practice Vermont has been the only state to issue approvals for plans that meet the standard requirements. Once approved by VT DEC, the plan is automatically considered to comply with the labeling laws of the other IMERC states, including Massachusetts.

Manufacturers who cannot meet the standard criteria can propose an alternative labeling plan to VT DEC, if they meet eligibility criteria set by Vermont's law. When an alternative plan is proposed, the VT DEC consults the other IMERC states that have labeling requirements, who review the proposed plan and make recommendations as to whether it should be accepted or modified. To date, consensus has been reached among the IMERC states participating in the plan review on approvals of alternate labeling plans that have been proposed. Once VT DEC approves an alternative labeling plan, it is considered to comply with the labeling laws of the other IMERC states.

Section 6K(b) of the Mercury Management Act directs MassDEP to consider a labeling plan that has been approved by another IMERC state (e.g., Vermont) to comply with Massachusetts requirements, as long as the plan is being effectively implemented in Massachusetts. Therefore, MassDEP proposes to accept manufacturers' labeling plans that have already been approved and that are approved in the future by Vermont or by any other IMERC state. To implement this, the regulations propose to require manufacturers to provide the following documentation that their plan is being effectively implemented in Massachusetts (upon MassDEP request):

- a copy of the label as it appears on products and product packaging sold in Massachusetts
- a copy of the application or labeling plan approved by the other IMERC state and
- a copy of the letter from the other IMERC state that approves the use of the labeling plan.

If a manufacturer plans to begin selling a mercury-added product in Massachusetts before having a labeling plan approved by another IMERC state, a labeling plan meeting the requirements outlined in 310 CMR 75.08 must be filed with the Department before the product is marketed in the Commonwealth. These requirements are similar to those established by Vermont.

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In other MassDEP programs that rely on submittals of plans, regulated entities are usually required to submit periodic certifications that they are complying with the relevant requirements. MassDEP is not proposing to establish a periodic certification requirement for the labeling plans filed with the Department because the vast majority of mercury-added products are expected to be covered by labeling plans approved by other IMERC states. MassDEP may inspect mercury-added products offered for sale or distribution in the Commonwealth to determine whether they are appropriately labeled. MassDEP seeks comment on this approach.

*What mercury-added products need to be labeled to be sold/distributed in Massachusetts?* The Massachusetts Mercury Management Act requires a label on all mercury-added products sold or distributed in the Commonwealth, except for:

- products whose only mercury is contained in button cell batteries
- products whose only mercury is contained in one or more removable mercury-added lamps
- refurbished medical equipment or
- mercury-added formulated products, such as chemical reagents or biological products with mercury-added preservatives.<sup>3</sup>

As noted in Appendix A, the other IMERC states with labeling requirements have slightly different exemptions, so some products may need a label to be sold in Massachusetts but do not need to be labeled to be sold in Vermont (e.g., photographic film). The manufacturers of such products will need to file a labeling plan with the Department.

*Who is responsible for labeling mercury-added products?* The Mercury Management Act assigns responsibility for labeling mercury-added products to their manufacturers. However, where mercury-added products are manufactured abroad, and have not already been labeled by the manufacturer, the importer or domestic distributor (who is considered to be the “manufacturer” under the Mercury Management Act) is responsible for labeling.

When the labeling requirement takes effect in Massachusetts on May 1, 2008, no person can legally offer to sell a covered mercury-added product in the state unless it is properly labeled. Retailers, importers, and distributors of mercury-added products will need to coordinate with manufacturers to ensure that products have met the applicable labeling requirements.

*What information do labels need to contain?* The Mercury Management Act requires that labels identify the product as one that contains mercury, and specify that the product must be reused, recycled or properly disposed of as hazardous waste at the end of its useful life.

MassDEP is seeking comment on the level of detail that should be in the regulations. Should detailed requirements be established about the visibility of the label to prospective purchasers? Some states, including Maine and Rhode Island, provide examples of acceptable labeling language in regulations. To date, states with labeling regulations require the label to be in English only. The Department seeks comment on whether it would be helpful to the regulated community for specific wording to be included in the regulations or through supplemental guidance. Examples of acceptable labeling language used in other states include the following:

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<sup>3</sup> In addition, a label is not required for products made with coal ash, products used to manufacture semi-conductor devices, and elemental mercury in pre-capsulated form sold to dentists, as these products are excluded from the statutory definition of “mercury-added product.”

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*Contains Mercury. Don't Put in Trash. Recycle or Manage as Hazardous Waste.*

or

*Contains Mercury, Dispose of Properly*



*Where must labels be placed?* The Mercury Management Act requires that the label “clearly inform the purchaser” that the product contains mercury and will require special handling at the end of its useful life. To effectively implement this requirement, the regulations propose that each covered mercury-added *product and component* be labeled. Further, the regulations propose that the packaging be labeled when the product label is not visible at the time of purchase, thereby enabling the purchaser to make an informed choice or seek a non-mercury alternative.

The Mercury Management Act allows mercury-added products whose only mercury comes from an irremovable mercury-added lamp used for backlighting to be labeled either on the product or in the product’s “care and use” manual. The proposed regulations implement this provision, but also require that the product’s package be labeled so that prospective purchasers can make informed choices.

The requirements for label placement vary among the IMERC states. See Appendix A: Comparison of State Labeling Regulations. Please note that as MassDEP accepts the labeling plans approved by other IMERC states, MassDEP will also be accepting their labeling placement decisions.

*Special requirements for mercury-added lamps:* Another requirement of Section 6K of the Mercury Management Act pertains to sales of mercury-added lamps to owners and managers of industrial, commercial and office buildings, and to people who replace and install outdoor lamps. Specifically, whoever sells lamps to these users must clearly inform purchasers in writing (on the invoice for the lamps or in a separate document) that the lamps contain mercury, that mercury is a hazardous substance regulated by federal and state law, and that the lamps may not be placed in solid waste destined for disposal. This requirement does not apply to retail establishments that incidentally sell mercury-added lamps. Section 75.08(6) of the proposed regulation would implement this requirement. This section proposes to define “incidental sales” at a retail establishment as 50 or fewer bulbs per transaction. The effect of this requirement is that a retail establishment that sells fewer than 50 bulbs in a single transaction to a party identified above does not have to provide the notice to any lamp purchasers.

### **3.5. Prohibition on the Disposal of Mercury-Added Products in Solid Waste**

Sections 6I and 6L of the Mercury Management Act establish a prohibition on the disposal of mercury-added products except by recycling, management as hazardous waste, or a method approved by MassDEP. In terms of access to recycling opportunities, some of the products covered by the disposal prohibition have many opportunities for being recycled, while others have very few. Some mercury-added products contain relatively large quantities of mercury and must currently be managed as hazardous waste, while others (which contain relatively small quantities of mercury) can currently be managed as solid waste, as described in Table 3 below.

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*Rules for managing end-of-life mercury-added products that are covered by the disposal prohibition:* MassDEP is proposing to establish a new chapter of the Code of Massachusetts Regulations, 310 CMR 76.00, to implement the disposal prohibition. The regulations proposed below would require that:

- mercury-added products (and mercury-added components of larger products) that are currently classified as “hazardous waste” continue to be managed in accordance with 310 CMR 30.000, *Hazardous Waste Regulations*
- mercury-added products that are classified as “universal waste” pursuant to 310 CMR 30.1000, *Universal Waste Rule*, could continue to be managed (i.e., recycled) under the terms of that rule and
- mercury-added products (and mercury-added components of larger products) that are not classified as “hazardous waste” would need to be separated from solid waste, managed to minimize breakage while they are being stored and transported, and recycled to reclaim their mercury content.

The proposed management requirements for products that are not hazardous waste are similar to those in the Universal Waste Rule, which have been working effectively for many years to ensure that certain mercury products are safely transported to a recycling or mercury reclamation facility where the mercury content is recycled.

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**Table 3: Examples of Products That May Contain Mercury at End-of-Life**

<u>Hazardous Waste</u>	<u>Non-hazardous Waste</u>
<i>These items must be handled as either hazardous waste or as universal waste</i>	<ul style="list-style-type: none"> <li>• Green cap fluorescent lamps and low mercury compact fluorescent lamps (CFLs)</li> <li>• Electronic devices with screens that are backlit using a fluorescent lamp, such as:                             <ul style="list-style-type: none"> <li>- Flat panel computer monitors</li> <li>- Flat panel TVs</li> <li>- Handheld gaming devices</li> <li>- Portable DVD players</li> </ul> </li> <li>• Some appliances/white goods such as:                             <ul style="list-style-type: none"> <li>- Gas ovens with mercury thermocouple</li> <li>- Chest freezers with tilt switches in lid</li> </ul> </li> <li>• Toys containing button cell batteries that are not designed to be removed by the user/parent</li> </ul>
<ul style="list-style-type: none"> <li>• Bilge pumps and sump pumps (some contain mercury switches)</li> <li>• Button batteries</li> <li>• Electrical switches</li> <li>• Sphygmomanometers</li> <li>• Thermostats</li> <li>• Thermometers</li> <li>• Tilt switches and mercury thermocouples removed from appliances/white goods</li> <li>• Neon lamps and some fluorescent lamps, such as 4ft straight tubes, u-tubes, circular</li> </ul>	
<i>These items must be handled as hazardous waste</i>	
<ul style="list-style-type: none"> <li>• Elemental mercury<sup>1</sup></li> <li>• Glass ampoules of mercury removed from devices</li> </ul>	
<p><sup>1</sup> Elemental mercury is not covered by the Mercury Management Act or by 310 CMR 76.00 but is mentioned here to remind facilities that it is hazardous waste</p>	

*MassDEP Approval of Alternative Methods of Disposal:* Processes exist for almost all mercury-added products and components to be safely recycled so that their mercury content is reclaimed and not disposed of as a solid waste. These products can also be regulated as “hazardous waste”, although in most cases this option is more expensive than recycling. While the statute [section 6I (a)] allows MassDEP to approve other methods, the agency is not currently aware of management or disposal options beyond recycling/mercury reclamation or disposal as hazardous waste.

To be prepared in case a new technology is developed, the regulations propose criteria that would guide MassDEP’s evaluation, as well as a simple process for proposing a new technology for review [See 310 CMR 76.04(2)]. MassDEP does not expect many of these requests, and is therefore not proposing to establish a formal permit process for these approvals. However, if advances in alternative disposal technology result in numerous requests, the agency will consider amending these regulations to set up a new type of permit. MassDEP seeks comment on the proposed criteria and process for approval.

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MassDEP is proposing that approved alternative methods for managing categories or types of mercury-added products (other than recycling and hazardous waste management) would be adopted in accordance with MGL c. 30A and incorporated at 310 CMR 76.04(2), requiring public hearing and public comment.

Initially, the agency is proposing to establish an approved management method for one type of product, accidentally broken mercury-added lamps. When a mercury-added lamp breaks accidentally, the small glass shards that result can be a safety hazard and much of the lamp's mercury content vaporizes quickly, leaving very little mercury to be recovered. Therefore, MassDEP is proposing to allow incidental numbers of accidentally broken mercury lamps from household generators to be disposed of as solid waste. All other generators (e.g., industrial, commercial) must manage accidentally broken mercury lamps as universal waste.

*Management of mercury-added products at waste disposal and recycling collection facilities:* MassDEP recognizes that, even with the best intentions on the part of waste generators, some mercury-added products will reach Massachusetts solid waste management facilities (just as these facilities occasionally receive hazardous wastes, which are segregated and managed in accordance with the facility's MassDEP permit when they are discovered). To ensure that mercury-added products are managed appropriately when they are found at a permitted solid waste facility or a recycling operation, the regulations propose to add references in 310 CMR 19.000 (the regulations that govern operations of solid waste facilities in Massachusetts) to the management standards that are being proposed in 310 CMR 76.00.

In addition, MassDEP has drafted guidance for these facilities about managing specific types of mercury-added products that they may receive. The draft guidance document for permitted solid waste facilities outlines the proposed management standards that will need to be incorporated into the facility's operation and maintenance (O&M) plan as of the effective date of these regulations. A similar guidance document outlines MassDEP's expectations for the handling of mercury-added products at conditionally exempt recycling operations. These documents are available at <http://www.mass.gov/dep/toxics/stypes/hgres.htm#mma>.

*How will the public be notified of the disposal ban?* The Mercury Management Act requires that the disposal prohibition take effect on May 1, 2008. To ensure that the disposal prohibition is effectively implemented and to minimize the extent to which mercury-added products will be disposed of as solid waste, the Mercury Management Act also requires MassDEP to develop and implement a campaign to educate the public about the requirements of the disposal prohibition. The Department started giving presentations about the disposal prohibition in September 2007 and presented an outline of the plan for the public education campaign to the Solid Waste Advisory Committee in October 2007. Implementation of the plan will continue as necessary after the prohibition takes effect. Components of the plan include:

- letters to the chief elected official and recycling contact in each municipality describing the disposal prohibition and requirements for disposal and recycling centers
- letters to Boards of Health and municipal Building Departments describing the disposal prohibition and encouraging outreach to specific target audiences

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- public outreach through sample press releases and newsletter articles for municipalities to use
- presentations to appropriate associations and stakeholder groups such as the regional Municipal Recycling Council, Massachusetts Municipal Association, Building Owners and Managers Association, Massachusetts Health Officers Association, HVAC contractors, appliance recyclers, etc. and
- updated signage for solid waste management facilities.

Many products covered by this prohibition will have to be labeled by the manufacturer in order to be sold or distributed in the state after May 1, 2008. This label will help the product user know that special handling or recycling is required at the end of the product's life.

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### **4. Proposed amendments to 310 CMR 19.000**

#### **310 CMR 19.000: SOLID WASTE MANAGEMENT**

##### 19.006: Definitions

Add a new definition after MEPA Process:

Mercury-added product means a product to which the manufacturer intentionally introduces mercury, including, but not limited to, electric lamps, thermostats, automotive devices, electric switches, medical or scientific instruments, electric relays or other electrical devices, but not including products made with coal ash or other products that are incorporated into equipment used to manufacture semiconductor devices, elemental mercury in pre-capsulated form that is sold, distributed or provided to a dental practitioner for use in compliance with the department's regulations concerning amalgam wastewater and recycling for dental facilities, or mercury-added formulated products. This term includes mercury-added components that are incorporated into larger products.

##### 19.130: Operation and Maintenance Requirements

Add a new provision after 19.130(36):

(37) End-of-Life Mercury-Added Products. Mercury-added products that are hazardous waste pursuant to 310 CMR 30.000 shall be handled in accordance with 310 CMR 30.000. Mercury-added products that are not hazardous waste shall be handled in accordance with 310 CMR 76.05(2).

##### 19.207: Handling Facility Operation and Maintenance Requirements

Add a new provision after 19.207(25):

(26) End-of-Life Mercury-Added Products. Mercury-added products that are hazardous waste pursuant to 310 CMR 30.000 shall be handled in accordance with 310 CMR 30.000. Mercury-added products that are not hazardous waste shall be handled in accordance with 310 CMR 76.05(2).



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### 5. Proposed amendments to 310 CMR 74.00

#### 310 CMR 74.00 REMOVAL AND RECYCLING OF MERCURY-ADDED COMPONENTS IN VEHICLES

74.07(4) Determining Compliance with the Target Capture Rate for all Plans in 2008 and Subsequent Years.

- (a) For calendar years 2008 through 2017, the target capture rate shall be 90% of the mercury switches estimated to be available for recovery in each calendar year, as described in Table 1.
- (b) Programs that achieve a capture rate of 90% by December 31st of each calendar year, as determined by the Department, shall be deemed to be in compliance. Programs that do not achieve the 90% capture rate by December 31st of each calendar year shall be deemed to be not in compliance, and their proponents shall comply with the provisions of 310 CMR 74.06 as applicable.

Table 1: Estimate of Number of Mercury-added Vehicle Switches Available for Capture in Massachusetts by Year

Year	Estimate of the number of switches available	Number of switches needed to meet 90% capture rate
2008	74,000	66,600
2009	71,000	63,900
2010	67,000	60,300
2011	63,000	56,700
2012	59,000	53,100
2013	54,000	48,600
2014	50,000	45,000
2015	45,000	40,500
2016	41,000	36,900
2017	36,000	32,400

## **DRAFT Regulations: Mercury in Products**

### **6. Proposed amendments to 310 CMR 75.00**

#### **310 CMR 75.00: COLLECTION, RECYCLING, LABELING AND SALES BAN OF MERCURY-ADDED PRODUCTS**

75.01: Purpose and Authority

75.02: Definitions

75.03: Applicability

75.04: Plans for Collecting and Recycling Mercury-Added Products

75.05: Public Education Plans for Mercury-Added Lamps

75.06: Ban on Sales of Mercury-Added Products

75.07: Exemptions from the Sales Ban

75.08: Labeling of Mercury-Added Products and Notification to Purchasers

##### **75.01: Purpose and Authority**

(1) The purpose of 310 CMR 75.00 is to protect public health, safety, welfare and the environment by implementing the Mercury Management Act (Chapter 190 of the Acts of 2006). These regulations prohibit the sale or distribution of mercury-added products in Massachusetts unless the manufacturer of the product creates, files with the Department, and implements a convenient and accessible collection plan for mercury-added products at the end-of-life, including a system for the direct return of the mercury-added product to the manufacturer or a collection and recycling plan, in accordance with MGL c. 21C and 310 CMR 30.000, using new or existing collection systems. This section establishes performance standards and other requirements for collection and recycling plans, and requires a performance-based compliance certification in accordance with 310 CMR 70.00. These regulations also apply to bans on the sale or distribution of mercury-added products and the process for obtaining an exemption. They also apply to the labeling of mercury-added products.

(2) 310 CMR 75.00 is promulgated pursuant to the authority of M.G.L. c. 21C, §§ 4 and 6, M.G.L. c. 21H, §§6D, 6E, 6F, 6J, 6K and 6N.

##### **75.02: Definitions**

The definitions found in 310 CMR 75.02 apply and are limited to 310 CMR 75.00.

Distributor means any person who imports, consigns, or offers for sale, sells, barter or otherwise supplies mercury-added products in the commonwealth.

IMERC means the Interstate Mercury Education and Reduction Clearinghouse, a regional, multi-state clearinghouse established to coordinate the administration of state laws on mercury-added products.

Irremovable means not intended by the manufacturer to be replaceable by the product user or consumer (e.g., an irremovable component is one for which the manufacturer does not sell replacement parts).

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Manufacturer means any person, firm, association, partnership, corporation, governmental entity, organization, combination or joint venture which produces a product containing mercury or an importer or domestic distributor of a product containing mercury produced in a foreign country. In the case of a mercury-added multi-component product where the only mercury is contained in a mercury-added component manufactured by a different manufacturer, which is intended to be readily removable and replaceable by the consumer or user, the manufacturer is the manufacturer who produced the mercury-added component. If the product or component is produced in a foreign country, the manufacturer is the importer or domestic distributor. However, if a company from whom an importer purchases the merchandise has a United States presence or assets, that company shall be considered to be the manufacturer. This definition shall not apply to a “distributor” of motor vehicles as defined in section 1 of chapter 93B.

Mercury-added component means a component that contains mercury.

Mercury-added product means a product to which the manufacturer intentionally introduces mercury, including, but not limited to, electric lamps, thermostats, automotive devices, electric switches, medical or scientific instruments, electric relays or other electrical devices, but not including products made with coal ash or other products that are incorporated into equipment used to manufacture semiconductor devices, elemental mercury in pre-capsulated form that is sold, distributed or provided to a dental practitioner for use in compliance with the department’s regulations concerning amalgam wastewater and recycling for dental facilities, or mercury-added formulated products. This term includes mercury-added components that are incorporated into larger products.

Mercury-added lamp means an electric lamp to which the manufacturer intentionally introduces mercury for the operation of the lamp, including, but not limited to, fluorescents, compact fluorescents, black lights, high intensity discharge lamps, ultraviolet lamps and neon lamps.

Mercury-added formulated product means a chemical product to which mercury has been added, intentionally or unintentionally, including, but not limited to, laboratory chemicals, cleaning products, cosmetics, pharmaceuticals and coating materials that are sold as consistent mixtures of chemicals.

Mercury relay means a mercury-added product that opens or closes electrical contacts to affect the operation of other devices in the same or another electrical circuit.

Mercury switch means a mercury-added product that opens or closes an electrical circuit or gas valve.

Mercury-added thermostat means a product or device that uses a mercury switch to sense and control room temperature through communication with heating, ventilation or air conditioning equipment, including thermostats used to sense and control room temperature in residential, commercial, industrial and other buildings, but shall not include a thermostat used to sense and control temperature as part of a manufacturing process.

Person means any natural or corporate person, whether public or private, including corporations,

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societies, associations and partnerships and bodies politic and corporate, public agencies, authorities, departments, offices and political subdivisions of the Commonwealth.

### **75.03 Applicability**

(1) 310 CMR 75.00 applies to any person who manufactures, sells, offers for sale or distributes mercury-added products in Massachusetts.

(2) The following products are exempt from the requirements of 310 CMR 75. 04:

- (a) motor vehicles and mercury-added components in motor vehicles,
- (b) refurbished medical equipment,
- (c) mercury-added button cell batteries,
- (d) products where the only mercury contained in the product comes from a removable mercury-added button cell battery,
- (e) products where the only mercury contained in the product is contained in one or more mercury-added lamps,
- (f) mercury-added formulated products intended to be totally consumed in use, such as reagents, cosmetics, pharmaceuticals and other laboratory chemicals,
- (g) Products made with coal ash,
- (h) Products that are incorporated into equipment used to manufacture semi-conductor devices, or
- (i) elemental mercury in pre-capsulated form that is sold, distributed or provided to a dental practitioner for use in compliance with the department's regulations concerning amalgam wastewater and recycling for dental facilities.

(3) After December 28, 2007, once a mercury-added product is no longer sold, offered for sale, or distributed in Massachusetts, the product's manufacturer will no longer be subject to the requirements of 310 CMR 75. 04.

(4) Compliance with 310 CMR 75.00 does not release manufacturers, distributors, wholesalers, or retailers from the need to comply with other applicable state, federal and local requirements.

### **75.06: Ban on Sales and Distribution of Mercury-Added Products**

(1) No person shall sell, offer to sell, or distribute in Massachusetts the following mercury-added products on or after May 1, 2008:

- (a) thermostats
- (b) barometers;
- (c) flow meters;
- (d) hydrometers;
- (e) hygrometers or psychrometers;
- (f) manometers;
- (g) pyrometers;
- (h) sphygmomanometers;
- (i) basal thermometers; or
- (j) esophageal dilators, bourgie tubes or gastrointestinal tubes.

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(2) The ban on sale or distribution established in 310 CMR 75.06(1) shall not apply to thermometers if they are determined to be medically necessary by a licensed physician or are ordered by prescription.

(3) No person shall sell, offer to sell, or distribute in Massachusetts a mercury switch or mercury relay, individually or as a product component, on or after May 1, 2009. This prohibition shall not apply if:

- (a) The mercury switch or mercury relay is a component in a larger product in use before May 1, 2009 and the Department determines or there is a majority of IMERC states who determine that there is no mercury-free alternative available for the component, and:
  - 1. the larger product is used in manufacturing (equipment or machinery at a fixed location that is used in making a product from raw materials, e.g., a papermaking machine); or
  - 2. the switch or relay is integrated and not physically separate from other components of the larger product (i.e., embedded in the larger product such that the larger product would have to be replaced to accommodate a non-mercury replacement switch or relay); or
- (b) A mercury switch or a mercury relay is integrated as a component of a larger product that has been refurbished for resale and which was originally manufactured before October 26, 2006.

### **75.07: Exemptions from the Sales and Distribution Ban**

(1) The manufacturer, importer, or distributor of a mercury switch, relay, instrument or device subject to the sales prohibitions in 310 CMR 75.06 may apply to the Department for an exemption from the prohibition on sale or distribution.

(2) The Department may grant an exemption, with or without conditions, upon determining that the conditions described in (a) - (d) all apply, or that the condition described in (e) applies:

- (a) Use of the mercury-added product is beneficial to the environment, or protective of public health or public safety, based on consideration of:
  - 1. The amount of mercury expected to be placed in commerce annually if the exemption is granted;
  - 2. The likelihood that the mercury in the product will be released to the environment, or that users of the product will be exposed to the mercury;
  - 3. The steps that will be taken through product design and other methods to ensure that mercury is not released during use and disposal of the product; and
  - 4. The nature of the claimed benefit, and whether it differs in kind or degree from the environment, public health and public safety benefits afforded by available non-mercury alternatives.
- (b) There is no technically feasible non-mercury alternative available, based on consideration of:
  - 1. A description of past, current and planned efforts to identify or develop non-mercury alternatives;
  - 2. The individuals, companies and resources consulted during the search for non-mercury alternatives;

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3. A description of all potential non-mercury alternatives that have been identified and considered; and
  4. The specific basis (e.g., electrical performance, size, power consumption; product life) for concluding that each potential alternative was not technically feasible for the intended use.
- (c) There is no comparable non-mercury alternative available at a reasonable cost, based on consideration of:
1. The purchase price differential between the mercury-added product and any available non-mercury alternatives; and
  2. Costs other than purchase price associated with the substitution of a non-mercury alternative, if applicable.
- (d) An effective system for the collection, transportation and processing of the mercury-added product at the end of life has been approved by the Department pursuant to 310 CMR 75.04 and has been implemented at the time that the exemption application is submitted.
- (e) The use of the product is a federal requirement, as evidenced by
1. a statute or regulation;
  2. a contract specification; or
  3. another documented federal requirement.
- (3) Contents of Applications for Exemption from Sales and Distribution Ban
- (a) An application for an exemption based on the conditions in 310 CMR 75.07(2)(a)–(d) shall contain the following information, as applicable:
1. Applicant's name, mailing address, telephone number, North American Industry Classification System, e-mail address, web address and relationship to the product manufacturer;
  2. The name, mailing address, telephone number, and e-mail address of a contact person for the applicant;
  3. Product manufacturer's name, mailing address, telephone number, North American Industry Classification System, e-mail address and web address (if different from applicant);
  4. The name, mailing address, telephone number, and e-mail address of a contact person for the product manufacturer;
  5. A description of the mercury-added product for which an exemption is requested, including the specific uses of the product and an explanation of the amount and purpose of the mercury in the product;
  6. An explanation of the environmental, public health or public safety benefits that the mercury-added product offers in comparison with available non-mercury alternatives;
  7. The amount of mercury expected to be placed in commerce annually if the exemption is granted;
  8. The likelihood that the mercury in the product will be released to the environment, or that users of the product will be exposed to the mercury;
  9. The steps that will be taken through product design and other methods to ensure that mercury is not released during use and disposal of the product;
  10. A description of past, current and planned efforts to identify or develop non-mercury alternatives;
  11. A list of the individuals, companies and resources consulted during the search for alternatives;

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12. A description of all potential non-mercury alternatives that have been identified and considered;
13. The specific basis (e.g., electrical performance, size, power consumption; product life) for concluding that each potential alternative was not technically feasible for the intended use;
14. The purchase price differential between the mercury-added product and any available non-mercury alternatives;
15. Costs other than purchase price associated with the substitution of a non-mercury alternative, if applicable; and
16. A short description of the collection and recycling system that has been approved by the Department and has been implemented for end-of-life products pursuant to the requirements of 310 CMR 75.04.

### **(4) Submission of Applications for Exemption from Sales and Distribution Ban**

- (a) Applications for exemptions from the sales and distribution ban shall be submitted to the Department or IMERC on a form prescribed by IMERC that shall include the information described in 310 CMR 75.07(3).
- (b) Such application shall be accompanied by a statement prescribed by 310 CMR 70.03 (2)(d), to certify the accuracy of the information in the application.
- (c) Manufacturers may request that the Department keep the information described in 310 CMR 75.07(3) confidential, in accordance with the requirements and procedures established in 310 CMR 3.00.
- (d) An exemption application filed with IMERC that complies with the requirements of 310 CMR 75.07(2) and (3) or requirements established by other IMERC states shall be deemed to have been submitted to the Department.

### **(5) The applicant applying directly to the Department or IMERC shall publish a legal notice in a Massachusetts newspaper of general circulation.**

- (a) The legal notice shall include:
  1. A summary of the application for exemption;
  2. A statement that comments can be sent to the Mercury Program Manager at the Massachusetts Department of Environmental Protection up to 21 days after the date that the legal notice is published, and instructions for sending comments including the appropriate mailing address; and
  3. Instructions for obtaining a complete copy of the application for exemption.
- (b) Within five days following the publication of the legal notice, the applicant shall send a tear sheet of the legal notice to the Mercury Program Manager at the Massachusetts Department of Environmental Protection.

### **(6) Decisions on Applications for Exemption from Sales and Distribution Ban**

- (a) The Department shall determine whether the application is complete based on the information required in 310 CMR 75.07, and may request additional information.
- (b) The Department shall consult with the Massachusetts Department of Public Health in reviewing applications for exemptions that pertain to mercury-added products used in medical settings and other items that may affect public health.
- (c) The Department shall consult with other states that regulate mercury-added products that are affected by the sales ban to ensure consistency in decisions among states to the extent practicable.

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(d) Exemptions shall be valid for a period of time not to exceed three years from the date of approval. An exemption may be renewed at the discretion of the Department, based on an application that meets the requirements of 310 CMR 75.07, submitted no later than 6 months prior to the end of the previously approved exemption period.

(e) Exemptions that have been approved by IMERC states prior to the effective date of this section shall be deemed to be approved by the Department for the duration that the exemption has been granted.

(7) An application for an exemption based on 310 CMR 75.07(2)(e) shall contain the following information:

(a) All information required in 310 CMR 75.07(3)(a) 1-5;

(b) A copy of the relevant federal statute, regulation, contract specification, or other federal requirement, and contact information for the federal agency (including a staff contact) that established the requirement; and

(c) A statement prescribed by 310 CMR 70.03 (2)(d).

(d) An applicant requesting an exemption under this subsection is not required to publish a legal notice as per 310 CMR 75.07(5).

(e) If the Department determines that the product is not eligible for an exemption from the sales and distribution ban under 310 CMR 75.07(2)(e), the manufacturer shall either comply with the sales and distribution ban or apply for an exemption in accordance with 310 CMR 75.07(3).

### **75.08 Labeling of Mercury-Added Products and Notification to Purchasers**

(1) General Labeling Requirements. On or after May 1, 2008, no person shall sell, offer to sell, or distribute a mercury-added product in Massachusetts unless the manufacturer:

(a) Submits to the Department a labeling plan for such product that meets the requirements of 310 CMR 75.08(3) and (4) and implements the labeling plan in accordance with the requirements of 310 CMR 75.08(3) and (4), or

(b) Labels such product in compliance with a labeling plan approved by another state that is a member of IMERC, pursuant to 310 CMR 75.08(5).

(2) The following mercury-added products are exempt from the requirements of 310 CMR 75.08:

(a) Refurbished medical equipment,

(b) Mercury-added products whose only mercury component is a removable mercury-added lamp,

(c) Mercury-added products whose only mercury component is a button cell battery.

(3) Labeling Standards for Labeling Plans submitted to the Department. Prior to sale or distribution of a mercury-added product, the manufacturer of the product shall affix or cause to be affixed a label that conforms to the following requirements:

(a) Label Content. Product labels, and package labels if required, shall clearly inform the prospective purchasers and product users, using words or symbols, that the product contains mercury and shall clearly specify that the mercury-added product be reused, recycled or properly disposed of as hazardous waste at the end of the product's useful life.

Examples of acceptable labeling language used in other states include the following:

*Contains Mercury. Don't Put in Trash. Recycle or Manage as Hazardous Waste.*



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or

*Contains Mercury, Dispose of Properly*



End Note]

### (b) Product Label Standards

1. The label must be affixed to the product so that the label is clearly visible (e.g., on an outer surface of the product) and legible. A label printed using 10-point font or larger is presumed to be legible.
2. Labels affixed to products must be printed, mounted, molded, engraved or otherwise affixed using materials that are sufficiently durable to remain legible under the conditions of the product's intended use for the useful life of the product.

### (c) Product Label Location

1. Labels shall be placed on mercury-added products so they can be seen by prospective purchasers and product users who may make decisions about management of end-of-life products, and in conformance with the labeling plan described in 310 CMR 75.08(4).
2. Manufacturers of products that contain, as their only mercury-added component, one or more irremovable mercury-added lamps that are used for backlighting shall meet the requirements of 310 CMR 75.08(3)(b) and (c) by placing the label on the product or in its "care and use" manual (if such a manual is provided to purchasers).
3. Mercury-added products that are components of larger products shall be labeled as required by 310 CMR 75.08(3)(a) and (b). In addition:
  - a. If the mercury-added component label is not clearly visible to prospective purchasers and product users, then the product shall be labeled. Such label shall identify the component in sufficient detail so that it can be readily located for removal and proper end-of-life management.
  - b. Supplemental information about the location of the mercury-added component and instructions on its removal and proper end-of-life management may be provided in the care and use manual.
  - c. Each new motor vehicle sold on or after May 1, 2008 shall contain a label listing the mercury-added product(s) that may be components in the vehicle. The label shall be affixed in a visible location on the doorpost of the driver's compartment (and not on the door itself) unless, in accordance with 310 CMR 75.08(5), a different location has been proposed by the manufacturer and accepted by another state that is a member of IMERC.

### (d) Product Package Label

1. In addition to the label on the product required by 310 CMR 75.08(3)(b) and (c), the packaging for a mercury-added product shall be labeled, except when the product label can easily be viewed through the packaging, in order to inform prospective purchasers and product users, prior to purchase, that the product contains mercury and will need to be managed properly at the end of its useful life.

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2. Packaging of mercury-added components offered for sale or distribution as replacement parts shall be labeled in accordance with 310 CMR 75.08(3)(a).

3. Labels affixed to packaging of mercury-added products must be printed, mounted, molded, engraved or otherwise affixed using materials that are sufficiently durable to remain legible under the conditions of the packaging's intended use for the expected life of the packaging. A label printed using 10-point font or larger is presumed to be legible.

4. If a manufacturer purchases a mercury-added product from another manufacturer and repackages the product, the manufacturer repackaging the product shall label the package in accordance with 310 CMR 75.08(3)(a).

(e) Where labels on the product or product packaging are not clearly visible and legible to prospective purchasers and product users prior to purchase, (e.g., in catalog sales transactions that occur over the internet or telephone), the manufacturer or retailer shall:

1. Clearly inform the purchaser that the product contains mercury and shall clearly specify that the mercury-added product be reused, recycled or properly disposed of as hazardous waste at the end of the product's useful life.

2. Such notice shall be provided as part of the product's description either in the catalog or on the website used to place the online order.

(4) Labeling Plans. Manufacturers of mercury-added products for which an IMERC state has not approved a labeling plan, or who are revising a labeling plan previously filed with the Department, shall submit a labeling plan to the Department that includes, at a minimum, the following information:

(a) Applicant's name, mailing address, telephone number, North American Industry Classification System, e-mail address, and web address.

(b) The name, mailing address, telephone number, and e-mail address of a contact person for the applicant.

(c) A detailed description of:

1. the products covered by the plan, label size, font size, label material, wording, location, and attachment method for each product and for the product packaging in accordance with 310 CMR 75.08(3);

2. how prospective purchasers and product users shall be notified that the product contains mercury, and that the product must be reused, recycled or properly disposed of as hazardous waste at the end of the product's useful life in accordance with 310 CMR 75.08(3); and

3. the certification required by 310 CMR 70.03.

(5) Consistency With Other States. The manufacturer of a mercury-added product may satisfy the requirements of 310 CMR 75.08 by labeling all units of the product sold or distributed in Massachusetts in compliance with a labeling plan approved by another state that is a member of IMERC if such labeling plan is being effectively implemented in Massachusetts. In order for the Department to determine whether a product labeling plan approved by another state is being effectively implemented in Massachusetts, the manufacturer shall provide the following, upon the Department's request:

(a) A copy of the label as it appears on products and product packaging sold in Massachusetts;

(b) A copy of the application or labeling plan approved by another state that is a member of IMERC; and

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(c) A copy of the letter approving the use of the label in another state that is a member of IMERC.

### **(6) Notification to Purchasers of Mercury-Added Lamps.**

(a) In addition to the requirements of 310 CMR 75.08 for labeling mercury-added products, a person who sells mercury-added lamps, either directly or through a service contract, to the owner or manager of an industrial, commercial or office building, or to any person who replaces or removes from service outdoor lamps that contain mercury, or to an agent or contractor of such parties, shall clearly inform the purchaser in writing on the invoice or in a separate document that:

1. the lamps contain mercury;
2. mercury is a hazardous substance that is regulated by federal and state law; and
3. end-of-life lamps must be managed in accordance with 310 CMR 76.05.

### **(b) Recordkeeping Requirements**

1. A person subject to 310 CMR 75.08(6)(a) shall keep records on-site that demonstrate compliance with this section.

2. Records shall be maintained for at least three years.

(c) Retail establishments that incidentally sell mercury-added lamps (i.e., fewer than 50 lamps per transaction) to the purchasers specified in 310 CMR 75.08(6)(a) are exempt from 310 CMR 75.08(6).

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### **Section 7: Proposed new section 310 CMR 76.00**

#### **310 CMR 76.00: DISPOSAL PROHIBITION OF MERCURY-ADDED PRODUCTS IN SOLID WASTE**

76.01: Purpose and Authority

76.02: Definitions

76.03: Applicability

76.04: Disposal Requirements

76.05: Management of End-of-Life Mercury-Added Products

##### 76.01: Purpose and Authority

(1) The purpose of 310 CMR 76.00 is to protect public health, safety, welfare and the environment by implementing the Mercury Management Act (Chapter 190 of the Acts of 2006). These regulations prohibit the disposal of mercury-added products in any manner other than by recycling, disposing as hazardous waste in accordance with M.G.L. c. 21C and 310 CMR 30.000, or using an alternative method approved by the Department.

(2) 310 CMR 76.00 is promulgated pursuant to the authority of M.G.L. c. 21C, §§ 4 and 6, M.G.L. c. 21H, §§ 6I and 6L.

##### 76.02: Definitions

The definitions found in 310 CMR 76.02 apply and are limited to 310 CMR 76.00.

End of life mercury-added product means any mercury-added product that is no longer being used for its intended purpose and meets the definition of solid waste or hazardous waste.

Hazardous waste means Hazardous Waste, as defined in 310 CMR 30.010.

Mercury-added component means a component that contains mercury.

Mercury-added product means a product to which the manufacturer intentionally introduces mercury, including, but not limited to, electric lamps, thermostats, automotive devices, electric switches, medical or scientific instruments, electric relays or other electrical devices, but not including products made with coal ash or other products that are incorporated into equipment used to manufacture semiconductor devices, elemental mercury in pre-capsulated form that is sold, distributed or provided to a dental practitioner for use in compliance with the department's regulations concerning amalgam wastewater and recycling for dental facilities, or mercury-added formulated products. This term includes mercury-added components that are incorporated into larger products.

Mercury-added formulated product means a chemical product to which mercury has been added, intentionally or unintentionally, including, but not limited to, laboratory chemicals, cleaning products, cosmetics, pharmaceuticals and coating materials that are sold as consistent mixtures of chemicals.

Person means any natural or corporate person, whether public or private, including corporations, societies, associations and partnerships and bodies politic and corporate, public agencies, authorities, departments, offices and political subdivisions of the Commonwealth.

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Reclaimed or Reclamation means processing to recover a usable product, but does not include burning (e.g., for energy recovery) or use constituting disposal.

Scrap Recycling Facility means a facility, location, device or unit where machinery and equipment are used for processing and manufacturing scrap metal into prepared grades and whose principal product is scrap iron, scrap steel or nonferrous metallic scrap for sale for remelting purposes.

Solid Waste means Solid Waste as defined in 310 CMR 16.02 and 310 CMR 19.006.

Solid waste collector means any person who collects solid waste from residential, business, commercial, industrial or other establishments.

### 76.03 Applicability

(1) 310 CMR 76.00 applies, on or after May 1, 2008, to any person who generates (including the original consumer), collects or processes a mercury-added product for disposal and to any solid waste collector in Massachusetts.

(2) Compliance with 310 CMR 76.00 does not release any person from the need to comply with other applicable federal, state and local requirements.

### 76.04 Disposal Requirements

(1) No person, household, school, healthcare facility, state or municipal government or business (including solid waste landfills, municipal waste combustors, and solid waste handling facilities) shall knowingly dispose of a mercury-added product in any manner other than by recycling, disposing as hazardous waste or using an alternate method approved by the Department.

(2) Alternative methods of disposal for mercury-added products and mercury-added components.

(a) Alternative methods of disposal for categories or types of mercury-added products and mercury-added components.

1. The department in its discretion may approve alternative methods of disposal for categories or types of mercury-added products and components. Such approvals may be made in response to requests in writing that describe:

- a. why an alternative to recycling or disposal as hazardous waste is necessary;
- b. the alternative method proposed;
- c. the environmental impacts of the proposed method; and
- d. a description of the measures that will be implemented to minimize exposure of people to mercury.

2. In approving an alternative method of disposal, the department will consider the following:

- a. the ability to reclaim the mercury from the product or component in a cost efficient manner;
- b. the ability to safely contain and transport the product or component; and
- c. the existence of a manufacturer's plan for collecting the product or component, in accordance with 310 CMR 75.04, and reclaiming its mercury content or otherwise preventing the mercury from entering the waste stream.

3. List of Approved Alternative Methods of Disposal for Categories of Mercury-added Products and Components

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a. Accidentally broken mercury lamps that are excluded from the hazardous waste regulations pursuant to 310 CMR 30.104(2)(g) [household waste exclusion] may be disposed of as solid waste.

(b) The Department may also issue approvals of alternative methods for disposal of individual mercury-added products or components on a case-by-case basis, in response to requests submitted in writing. Any such requests shall include at a minimum:

1. why an alternative to recycling or disposal as hazardous waste is necessary; ,
2. the alternative method proposed; ,
3. an implementation schedule;
4. the environmental impacts of the proposed method; and
5. a description of the measures that will be implemented to minimize exposure of people to mercury.

(3) A solid waste collector shall refuse to collect the contents of a solid waste container that the solid waste collector knows or reasonably should know contains one or more mercury-added products unless such solid waste is collected for the purpose of being reused, recycled or properly disposed of as hazardous waste or otherwise managed to ensure that the mercury does not become mixed with other solid waste or wastewater.

(4) Mercury from mercury-added products shall not knowingly be discharged into water, wastewater treatment or wastewater disposal systems unless it is done in compliance with applicable federal, state and local requirements.

### 76.05: Management of End-of-Life Mercury-Added Products

(1) End of life mercury-added products that are hazardous waste pursuant to 310 CMR 30.000 shall be handled in accordance with 310 CMR 30.000.

(a) End of life mercury-added products that are universal wastes pursuant to 310 CMR 30.1000 may be handled in accordance with 310 CMR 30.1000.

(b) Mercury-added components that are removed from larger products and that are classified as universal waste may be handled in accordance with 310 CMR 30.1000.

(2) End of life mercury-added products that are not hazardous waste shall be managed in accordance with an alternative method approved by the Department pursuant to 310 CMR 76.04(2) or in accordance with the following requirements:

(a) separated from solid waste;

(b) handled and stored in a manner that minimizes breakage, prevents an unpermitted discharge of mercury to air, land, water or other natural resources of Massachusetts and results in no public nuisance;

(c) transported by either a licensed hazardous waste transporter or by common carrier with a bill of lading; and

(d) transferred to a permitted hazardous waste recycling facility, licensed hazardous waste facility or a facility that consolidates shipment of mercury-added products or mercury-added components before being shipped off-site for reclamation, or if shipped out of state, a facility that is authorized to reclaim mercury from mercury-added products.

(3) No person shall knowingly send a multi-component product that contains mercury to a scrap recycling facility or a facility for further processing or recycling without first removing, or

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arranging for the removal and appropriate management of the mercury-added product or products prior to crushing, unless such facility agrees, in writing, to be responsible for removing such product or products and recycling them or disposing of them as hazardous waste.

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Section 8: Public Hearings and Comment Period

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WASTE PREVENTION

NOTICE

Notice is hereby given that the Department of Environmental Protection, acting in accordance with the provisions of M.G.L. c.21C (the Hazardous Waste Management Act) and c.21H, §§ 6A-6N (the Mercury Management Act), will hold public hearings on (dates), 2008 on proposed amendments to 310 CMR 75.00 and new chapter 310 CMR 76.00.

The proposed regulations will ban the sale of certain mercury-added products, requiring labeling of mercury-added products that are still allowed to be sold and prohibit the disposal of mercury-added products in solid waste.

Public hearings will be conducted under the provisions of M.G.L. Chapter 30A on:

Department of Environmental Protection  
205B Lowell Street  
Wilmington, Massachusetts

Department of Environmental Protection  
One Winter Street, 2<sup>nd</sup> Floor Conference Room  
Boston, Massachusetts

Department of Environmental Protection  
436 Dwight Street, Room B42  
Springfield, Massachusetts

Department of Environmental Protection  
973 Iyannough Road, Route 132  
Hyannis, MA

Department of Environmental Protection  
Commissioner's Conference Room  
627 Main Street  
Worcester, Massachusetts

Testimony may be presented orally or in writing at the public hearings. Persons planning to give oral testimony at the hearings are encouraged to also provide a written summary. Written comments will also be accepted until 5:00 PM on (date), 2008. Written testimony must be submitted to:



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Department of Environmental Protection  
Bureau of Waste Prevention  
One Winter Street 8<sup>th</sup> Floor  
Boston, MA 02108  
Attn: Lori Segall

Copies of the proposed regulations and background information are available from DEP's web site at <http://www.mass.gov/dep/public/publiche.htm>. In addition, copies are available for inspection during normal business hours at: the Bureau of Waste Prevention, One Winter Street, Boston, MA, DEP's four regional offices, or by contacting Lori Segall at 617-654-6595.

For special accommodations for these events or hearing information in an alternate format, please contact Donald Gomes, DEP's ADA Coordinator at 617-556-1057, TDD Service 1-800-298-2207, BAS/HR, 4th Floor, One Winter Street, Boston, MA 02108.

By Order of the Department  
Laurie Burt  
Commissioner

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### APPENDIX A: Comparison of State Labeling Regulations

	<b>Massachusetts.</b> <u>Statute:</u> Mercury Management Act <u>Regulations:</u> 310 CMR 75.00 (proposed)	<b>Vermont.</b> <u>Statute only:</u> Title 10 Chapter 159 Section 6621d. No regulations	<b>New York.</b> <u>Statute:</u> Chapter 145 Title 21 Sec 27-2103
<b>What gets labeled?</b>	Mercury-added products	-Mercury-added products (Including formulated products) - Doorpost of motor vehicle	- Mercury-added consumer products; - Doorpost of motor vehicles
<b>What does not get labeled?</b>	-Refurbished medical equip -Button batteries -Products containing button batteries -Formulated products -Hg-added products whose only Hg component is a removable lamp	-Refurbished medical equip - button batteries - Products containing button batteries - Formulated products -specific photographic film -Hg-added components of motor vehicles	-Products containing button batteries -Over-the-counter substances -Pharmaceutical products -Biological products -Photographic film or paper
<b>Where is the label?</b>	-Required on the product unless lamp used for backlighting, then label may be in care & use in lieu of product  -Required on product pkg if product label is obscured by pkg  -Invoice notification if lamps sold to commercial, industrial or office bldg, or person who replaces or removes outdoor lamps, except if incidental retail sale	-Required on the product unless: 1. Flashlight 2. LCD <7" then C&U only -Required on component, unless internal irreplaceable lamp then replacement component pkg -Required on product packaging, unless large appliance or electronic product with non replaceable lamp -If lamp is replaceable and housing obscures lamp label then lamp housing must be labeled -If lamp housing within a product then product, C&U, lamp, lamp housing, product pkg and replacement lamp pkg	- Required on the product
<b>What does the label consist of? (performance stds)</b>	- Words or symbols -Must convey that mercury is present, product cannot be put in trash and must be recycled or properly disposed of as HW - Sufficiently durable to remain legible for useful life -10 point font presumed to be legible	-Words, symbols -Must convey that mercury is present, may not be disposed of until Hg is removed and reused, recycled or managed to prevent it from entering SW or wastewater -10 point font -Durable and legible for useful life -Visible	-Durable and legible for useful life - Clear and conspicuous -Must convey that mercury is present, product cannot be put in trash and must be recycled or properly disposed of as HW
<b>Requirement for label to be visible prior to purchase?</b>	yes	yes unless: 1. Screen or LCD <7"2. only hg component is irreplaceable lamp used for backlighting, LCD, scanning or copying3. Large appliance	-conspicuous prior to purchase, during installation and removal
<b>Who is required to do the labeling?</b>	Manufacturer - defined as any person, firm, assoc... or an importer of domestic distributor	Manufacturer or importer	Manufacturer
<b>Are plans required? Approved?</b>	-May comply with labeling requirements with a labeling plan approved by another IMERC state and MassDEP may require documentation of approval  -No approval authority	Plans are required and are approved	- Automobile mfg may apply to Commissioner for alternative labeling - Regulations, not yet developed, required for alternative labeling  - No approval authority

**Abbreviations:**

pkg - packaging

C&U - care and use manual

mfg - manufacturer

Hg - mercury

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	<b>Connecticut.</b> <u>Statute only:</u> Chapter 446m Mercury Reduction and Education, Sec 22a-612 to 22a-628. No regulations.	<b>Maine.</b> <u>Regulation:</u> Chapter 870. <u>Statute:</u> 38 MRSA Sec1662.	<b>Rhode Island.</b> <u>Regulation:</u> Rules and Regulations Governing the Administration and Enforcement of the Rhode Island Mercury Education and Reduction Act
<b>What gets labeled?</b>	-Mercury-added products ( <i>Including formulated products</i> ) - Doorpost of motor vehicle -Mercury-added component when component is removable by purchaser	- Mercury-added products ( <i>definition excludes button batteries and products containing button batteries</i> ) - Doorpost of motor vehicle - Mercury-added products that are components of larger products	-Mercury-added products ( <i>Including formulated products</i> ) -Doorpost of car unless alternate location approved by Department or another State
<b>What does not get labeled?</b>	-Medical equipment not intended for non-medical personnel -Button batteries containing mercury - Mercury-added products with date of mfg prior to 1/1/04 -Vehicles manufactured prior to 10/1/03 -Pharmaceuticals, biological, over-the-counter substances that can be sold without Rx under FDCA -Packaging components containing Hg	- Button batteries - Products containing button batteries - formulated products - Hg-added components of motor vehicles -Hg lamp not readily replaceable that is part of larger product	-Individual motor vehicle components unless suggested by manufacturer -button batteries -Products whose only component is button battery or mercury-added lamp
<b>Where is the label?</b>	-Required on product & either pkg or C&U -If irremovable lamp used for backlighting, then may label product or C&U -If product contains only a button battery, then packaging requirements met by product instruction, if any, and on packaging; no product label required -Lamps & HID: Hg on each lamp plus packaging label -No pkg label for large appliance -For luminaries not sold thru retail: web site and catalog	-Required on product -Required on packaging if product label not visible to purchaser -Invoice notification if lamps sold in bulk to commercial/industrial customer	-Mercury-added component, larger product that contains the component, and the package (the label on the larger product must identify, describe, and give the location of each component)  -Invoice notification if lamps sold in bulk to commercial, industrial or office building
<b>What does the label consist of? (performance stds)</b>	-Words or symbols -Sufficiently durable to remain legible for useful life -Must convey that mercury is present, product cannot be put in trash and must be recycled or properly disposed of as HW -Parent product label sufficiently detailed to enable component to be located for removal	-Words, symbols -Must convey that mercury is present, may not be disposed of until Hg is removed and reused, recycled or managed as hazardous waste -Clearly visible and legible - 10 point font or larger presumed to be legible -Sufficiently durable for useful life -Acceptable: "contains mercury. Don't Put in Trash. Recycle or Manage as Hazardous Waste"	-Words, symbols -Must convey that mercury is present, may not be disposed of until Hg is removed and reused, recycled or managed -Clearly visible and legible - 10 point font or larger presumed to be legible -Sufficiently durable for useful life -Acceptable: "contains mercury. Don't Put in Trash. Recycle or Manage as Hazardous Waste"
<b>Requirement for label to be visible prior to purchase?</b>	-packaging labels must be clearly visible prior to sale-prior to sale or distribution for catalog sales and promotional purposes-prior to sale for telephone sales	yes	Visible at time of purchase or receipt unless internet or catalog sales (then manufacturer or retailer must inform prior to sale or distribution)
<b>Who is required to do the labeling?</b>	Manufacturer unless a wholesaler or retailer agrees in writing to an approved alternate plan	"...the manufacturer of the product shall affix or cause to be affixed..."  Retailer, if product is repackaged	manufacturer (very long definition of manufacturer in the regs)
<b>Are plans required? Accepted?</b>	-Alternate plans may be submitted to the commissioner and IMERC	- Manufacturer may submit alternate plan -Department approves alternates -May comply with labeling requirements with a labeling plan approved by another state	- manufacturer may submit alternate plan -department approves alternates (no more than 3 years with renewals at least 90 days prior to expiration) - may use plan approved by another state