

DEVAL L. PATRICK Governor

TIMOTHY P. MURRAY Lieutenant Governor

# COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

IAN A. BOWLES Secretary

LAURIE BURT Commissioner

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

#### PHASE 1:

- MERCURY VEHICLE SWITCHES
- MANUFACTURERS' COLLECTION/RECYCLING PLANS

## RESPONSE TO COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD

**December 12, 2007** 

#### **Comments and MassDEP's Responses**

#### A. Mercury-Added Vehicle Components

List of Commenters:

- 1. Automotive Recyclers of Massachusetts
- 2. Chuckran Auto Parts, Inc.
- 3. Allied Recycling Center
- 4. Bridgewater Auto Parts
- 5. Goyette's Inc.
- 6. Hank Zion's Auto Salvage, Inc.
- 7. Amherst Oakham Auto Recycling
- 8. Plaza Used Auto Parts
- 9. Toy Town Auto Salvage
- 10. Berkley Used Auto Parts
- 11. Westgate Auto
- 12. Linder's
- 13. Phil's Auto Parts
- 14. E.T Cote & Son Auto Exchange
- 15. West Springfield Auto Salvage
- 16. Everett's Auto Parts
- 17. Highway Auto Salvage
- 18. Middleboro Auto Salvage
- 19. Perry's Auto Sales and Parts
- 20. East Freetown Auto Salvage
- 21. Steve's Auto Recycling
- 22. Airport Auto Parts
- 23. Universal Auto Salvage
- 24. Robertson's Auto Salvage
- 25. Nissenbaum's Quality Used OEM Parts
- 26. Freedman's Inc.
- 27. M.L. Norwood Auto Recycling
- 28. Handler Auto Salvage
- 29. Mansfield yard (unidentified)
- 30. Middleboro Recycling, Inc.
- 31. Prolerized New England
- 32. Toyota Motor Sales USA
- 33. End of Life Vehicle Solutions
- 34. Cape Cod Commission
- 35. Clean Water Action
- 36. Dan Adsit, End of Life Vehicle Solutions

#### 1. Assignment of responsibility for removing mercury switches from vehicles

**Comment:** Page 1 of the introduction states: *vehicle recyclers and scrap recycling facilities* must have started removing mercury-added components from end-of-life vehicles in October 2006, but on page 2, paragraph beginning with "Section 6C", the sentence reads "...requiring Massachusetts *vehicle recyclers* to remove all mercury-added components..." MassDEP should be consistent and say "...requiring Massachusetts *vehicle recyclers and scrap recycling facilities* to remove all mercury-added components..."

Commenters: 1-23

**Response:** Vehicle recyclers and scrap recycling facilities are both responsible for ensuring that mercury-added components are removed prior to crushing. The final regulations reflect this allocation of responsibility.

#### 2. Removal of all mercury components

**Comment:** The introduction states: "Over 99% of the mercury in motor vehicles is found in switches." and "Each light switch contains approximately 1 gram of mercury, and sensor switches in ABS units typically contain 1-2 grams of mercury." It is clear based on these facts we should be focusing on the hood, trunk and ABS switches, which would cover 99% of the mercury contained in motor vehicles. The other 1% would take an inordinate amount of time to recover effectively. (Commenters 1-30)

Comment: There are many locations in an automobile that might require a couple of hours to access. This has the potential to place an unrealistic financial burden on automotive recyclers. This situation is easily remedied by requiring the original vehicle manufacturer to pay a bounty that fairly compensates recyclers to remove each and every mercury added component. There are manuals called "Mitchell Manuals" that list the average hours to perform an operation on a vehicle. It is very simple to calculate the bounty for each mercury-added component by determining the number of hours to remove a specific part and multiplying that by actual labor costs of approximately \$48 per hour. If a bounty is not paid by the manufacturer, then the "hard to remove" mercury-added components should be excluded from these regulations. (Commenters 24, 31)

Comment: The statute already provides an exemption from the requirement to remove mercury-added switches that are inaccessible due to damage [Section 6C (g)(5)]. Exemptions for ABS mercury switches and dashboard lighting are also warranted because removal is infeasible and the potential environmental benefit is marginal. While regulatory exemptions are appropriate, ... MassDEP may question its ability to create an exemption if authority is not provided in the statute, based on the recent Massachusetts Supreme Judicial Court decision on landlocked tidelands. However, ... Commenter believes MassDEP is giving too expansive a reading of the Moot decision, which dealt with the relinquishment or extinguishment of public rights in tidelands that exist under common law, the Colonial Ordinances and M.G. L. Chapter 91. The Mercury Management Act does not deal with such historical rights, but instead creates a new law, which seeks to recover some but not all mercury switches from end-of-life vehicles. Goals are established, not absolute removals, and MassDEP can approve alternate removal plans. MassDEP has been given broad latitude to develop a program, which is both feasible and

provides a reduction (not elimination) in the potential for the release of mercury into the air by steel manufacturers, which use recycled metals. (Commenter 31)

**Comment:** 74.04 (1) I agree that components that are inaccessible due to the vehicle damage or are otherwise difficult to remove should be excluded from the program. This can be accomplished through the use of the National Vehicle Mercury Switch Recovery Program (NVMSRP) definition of mercury switches:

"Mercury switch" means each mercury-containing capsule or mercury-containing switch assembly that is part of a convenience light switch assembly or part of an antilock brake system assembly installed in a vehicle.

Rather than providing an exemption per se for damage situations or specific inaccessible components, the department could add language to the effect that: "This rule covers only components as defined by the NVMSRP. Mercury-containing components not included in the NVMSRP and which are not accessible due to vehicle damage, are not easily removed due to a location within the vehicle structure, or which contain only trace amounts of mercury are not required to be removed under this program. Further guidance on covered components can be found in MassDEP publication XXX." (Commenter: 33)

Comment: Regarding the question of how to exempt components that are not feasible to remove either because of damage to the vehicle or because they are fluorescent bulbs in hard to reach locations, either of the exemption approaches proposed by DEP seem reasonable. The Commenter's only concern is that the regulations and accompanying guidelines be written in such a way that dismantlers be encouraged to make every attempt to remove the challenging products. If it is possible to make a comprehensive specific list of exempted products that would be preferable because it would eliminate the variable of having different dismantlers make different judgment calls as to which bulbs were accessible or not. However, if it is not feasible to make such a comprehensive list then a more general approach would be a reasonable solution. (Commenter: 35)

**Response:** Section 6C(d) of the Mercury Management Act provides that

No person shall crush, cause to be crushed or otherwise arrange for an end-of-life motor vehicle to be crushed without first having removed any mercury-added components, including, but not limited to, mercury-added vehicle switches.

The statute defines a "mercury-added component" as any component that contains mercury. However, case law supports the notion that if a literal reading of a statute leads to absurd or unreasonable consequences, the literal construction of the statute should not be adopted. Applying this principle to the component removal requirement, MassDEP has determined that it would be unreasonable to require the removal of mercury-added switches and other components from vehicles where the component is inaccessible due to significant damage to the motor

<sup>1</sup> Bates v. Director of Office of Campaign and Political Finance, 436 Mass 144, 763 N.E.2d 6 (2002); Attorney General v. School Committee Of Essex, 387 Mass. 326, 439 N.E.2d 770 (1982)

vehicle in the area where the component is located. Therefore, the final rules exempt such switches and components from the removal requirements.

With respect to mercury-added lamps used to backlight dashboards and other components, MassDEP has carefully considered the comments received on this issue. MassDEP has also contacted stakeholders and verified that, in particular, the fluorescent bulbs used for backlighting instrument panels are very difficult to remove intact. Therefore, the final rules exempt bulbs that are used for backlighting instrument panels. These components would be difficult to remove intact, and would not be available to be recycled if they are broken.

The statute does not give MassDEP the authority to require auto manufacturers to reimburse recyclers for labor costs incurred in removing the switches.

#### 3. Calculation of mercury switch capture rate

**Comment:** End of Life Vehicle Solution (ELVS) has proposed to reduceits estimate of the total number of switches available for capture by 8.36% to account for stolen vehicles that are never returned to the fleet. This is a misleading [percentage] because many of the [vehicles in this] 8.36% are newer than 2003 or are foreign cars that never had mercury switches to begin with. To be fair this 8.36% should be reduced by at least one half to no more than 4.18%

**Commenters:** 1-23

Comment: For 2007, DEP has been presented with a range of estimates of the number of switches available for collection and has selected the lowest number possible. This amounts to "letting the manufacturers off the hook." ELVS is an industry trade association, which represents companies who do not want to be required to pay a bounty to dismantlers for collecting switches, which they will have to do if they do not successfully collect 50% of switches assumed to be available for collection in calendar year 2007. Thus ELVS has a conflict of interest in that if the denominator of the capture rate is higher, they will have to collect more switches and if they do not succeed then the companies that they represent will have to spend more money on paying a bounty to dismantlers. [....]The 2007 capture rate should be higher, either utilizing the numbers of the Clean Car Campaign, or another similarly aggressive estimate.

**Commenter: 35** 

**Response:** As was explained in the "Background" section of the draft regulations, MassDEP chose ELVS' estimate for three reasons:

- 1. vehicle scrappage rates have slowed down between 2001 and 2005,
- 2. the Massachusetts vehicle fleet includes more foreign vehicles than the national average, and
- 3. the National Insurance Crime Bureau (NICB) reported the rate of 8.36% of vehicles that make up the "lost or stolen" category.

MassDEP contacted NICB for data on the types of vehicles that make up the "lost or stolen" category in Massachusetts, but NICB could not provide that type of information. Without a quantitative basis for modifying the ELVS estimate, the 2007 goal will remain as proposed. MassDEP is following on-going discussions between ELVS and the Clean Car Campaign, and

may adjust the recycling goal for 2008 and subsequent years based on a consensus estimation method if one becomes available.

**Comment:** In 74.07(3)(a), MassDEP requested comments on the appropriate capture rate for 2007, noting that it is currently proposed to be 50%. Section 6C(n) of the Massachusetts Mercury Management Act established the 2007 50% capture rate for manufacturers operating under an approved alternate plan. ELVS' alternate plan was approved by the state in December 2006 and therefore manufacturers have assumed that they are working toward a 50% capture rate for the remainder of this year. As the national program has recognized, achievement of 80% or 90% capture rate is infeasible in the first years of the program. The initial year or two focuses on awareness of the program by dismantlers, along with education on how to collect and process mercury switches.

**Commenter: 33** 

**Response:** The capture rate goals of 50% for 2007 and 90% for 2008 and subsequent years were established by statute. MassDEP does not have the authority to modify it. The request for comment concerned the basis for estimating the number of vehicle switches available for recycling.

**Comment:** As proposed in 74.07(3) and (4), and under the alternate plan submitted by ELVS and approved by MassDEP, mercury switch collection capture rates must be achieved by December 31 of each year. Scrap recycling facilities and vehicle recyclers must certify compliance to their requirements for the "covered period" by March 1 of each year (covered period is not defined in 74.09(1) - if meant to be the previous calendar year, it should be so stated). Automobile manufacturers likewise must also certify their switch collection and recycling results for the previous year (this is clearly stated) by March 1 of the following year.

In order to determine the capture rate that must be met by December 31, 2007, three essential pieces of information are required:

- 1. The period during which individual dismantlers collected the switches in 2007 must be recorded. Because 2007 is the inaugural year for the state's program, dismantlers are still joining the program and will continue to do so for the foreseeable future and therefore many are collecting switches only part of year. Many will also retain switches otherwise collected in 2007 until collection buckets are filled and returned in 2008 (or in anticipation of higher bounties if the capture rate is not meant).
- 2. The number of vehicles processed for switch removal in this certification period must be known.
- 3. The number of switches collected in this certification period must be known.

Therefore, the capture rate cannot be established as of December 31, 2007 if dismantlers are required to submit their certifications three months later in March 2008 or if they are not required to report the number of 2007 collected switches until the buckets are full. We believe every effort must be made by the state to encourage timely reporting and certification of collected switches to support an accurate measure of the 2007 capture rate. Dismantlers must be required to report that information at least two weeks prior to the end of the year (2007) for which the capture rate must be met.

**Comment**: Failure to meet the 50% target rate should not directly lead to implementation of a bounty. This provides an incentive to hold switches until the bounty takes effect. Instead, if the capture rate does not meet 50% in 2007, the DEP should investigate the cause of the failure and take action to correct the cause. For example, the law requires recyclers to certify that they have removed all mercury switches. If the certification is received from all recyclers, then the logical conclusion is that the program is successful and switches are being held. In this case, corrective action in the form of a bounty would not be justified because the goal of the program, to remove switches to prevent mercury release to the environment has been met.

**Commenters:** 33 & 36

**Response:** The statute defines "capture rate" as "the annual removal, collection, and recovery of mercury-added vehicle switches as a percentage of that total number of mercury-added vehicle switches available for the removal from end-of-life motor vehicles as determined by the Department." For a switch to be counted toward a given year's capture rate, it needs to be removed from an end-of-life vehicle, collected, and recovered. Therefore, MassDEP believes that it is inappropriate to count switches that have been removed from their vehicles but not yet collected or recovered.

While MassDEP may conduct outreach to encourage participating recycling facilities to mail their buckets to ELVS's recovery facility by the end of December, the statute assigns responsibility for implementing a mercury switch collection and recovery program that will meet the specified capture rates to the auto manufacturers. Auto manufacturers (and the entity that they have established to meet these requirements) are free to provide incentives to vehicle recyclers to encourage them to send their buckets to the designated facility. If the capture rates are not met, then the statute prescribes an incentive in the form of a \$3/switch fee.

Regarding tracking the number of vehicles processed, it will be impossible to determine this number based on reporting by the recyclers. Recyclers are not required to keep track of this information as a part of this program. Therefore, MassDEP plans to rely on estimates of the number of end-of-life vehicles with switches available for recycling that have been presented by ELVS for 2007, and that are being developed through the National Mercury Vehicle Switch Recovery Program for subsequent years.

Mercury switches removed from vehicles are regulated in Massachusetts as "universal wastes" under the Massachusetts Hazardous Waste Management Act (MGL c. 21C) and its implementing regulations (310 CMR 30.000). Under these regulations, generators of universal wastes are allowed to accumulate them for up to a year. MassDEP believes that incentives provided by the auto manufacturers for early shipment of removed switches to the recycling facility would accomplish the goal of increasing recovery without the costs involved of rewriting a long-established regulation that has been working well to accomplish the agency's goals.

The final rules [74.09(1)] clarify that the "covered period" is the previous calendar year ending on December 31. The March 1 deadline for submittal of reports and certifications provides a three-month period for the vehicle recyclers and scrap recycling facilities to prepare their reports.

#### 4. Responsibility for paying fees

**Comment:** In the introduction, under 6., DEP states "Please note that MassDEP is considering establishing fees that would be paid to the Department by businesses covered by these regulations." Any new fees regarding mercury regulations should be borne by the manufacturers who caused these switches to be used. The fee would be charged to any manufacturer who produced a motor vehicle containing mercury added switches. The fee will continue for ten years after the last vehicle containing mercury switches was sold in the commonwealth.

Commenters: 1-23

**Response:** The purpose of the Administrative Fee statute (MGL c. 21A, section 18) is to provide MassDEP with funds to cover the agency's costs of auditing/reviewing reports, conducting compliance inspections, etc. This law authorizes MassDEP to charge fees to parties (e.g., vehicle recyclers and scrap metal facilities) who submit reports, certifications, permit applications, but does not authorize the agency to bill other parties (e.g., auto manufacturers) for these fees related to submissions by other parties (e.g., vehicle recyclers and scrap metal facilities). MassDEP anticipates these fee regulations to be released for public comment later this fall.

**Comment:** Section 6 of the preamble indicates that MassDEP is considering establishing fees that "would be paid to the Department by businesses covered by these regulations".

We believe this is unnecessary. The essential elements of the mercury switch collection program have been developed and implemented by ELVS, its members and partners of the National Vehicle Mercury Switch Recycling Program. These elements include organization, management, and outreach to recyclers, and financing by ELVS. The plan also provides information, training, and technical assistance to vehicle dismantlers and scrap recyclers about the removal of mercury switches from vehicles as well as on-line tracking of switch collection results within the state - all at no cost to the state. Administration by the state has therefore been substantially reduced and should not warrant fees given the significant investment in information and tracking systems made by the members of ELVS.

Commenter: 33

**Response:** Massachusetts law (MGL c. 21A, sec. 18) requires MassDEP to assess fees to reimburse the agency for its costs to administer programs, such as reminder mailings for certifications, assistance with completing certifications, data management and site visits to assess compliance. Fees are generally assessed on businesses where the regulatory program will require this type of work. The fee statute and regulations allow MassDEP to forego a fee when the administrative costs are so low that it would cost the Commonwealth more to bill the fee than it would collect. MassDEP is proposing to establish specific fees associated with the mercury vehicle switch submittals in a regulation that is expected to be proposed for public hearing later this fall.

#### 5. Manufacturer and vehicle recycler certification(s)

**Comment:** In 70.03 1 (g) 9. "Scrap recycling facilities, vehicle recyclers and vehicle manufacturers subject to 310 CMR 74.00 shall submit certification forms in compliance with the applicable schedules and conditions referenced in 310 CMR 74.09." The current version of the certification form is not feasible. We propose to develop a new version(s) of this certification form for DEP approval. This may include a blanket certificate for pre-approved facilities. **Commenters:** 1-23

**Response:** There appears to be confusion between the annual certification required of regulated businesses to confirm their compliance with the mercury recycling law and the certification of the person delivering crushed vehicle bodies to a scrap recycling facility stating that all mercury switches have been removed. Chapter 70 of the regulations describes basic content of all certifications required by MassDEP's "Environmental Results Program", and Chapter 74.09 establishes additional requirements that are specific to the annual certifications by vehicle recyclers, scrap recycling facilities, and auto manufacturers about their compliance with the Mercury Management Act. Over the last ten years, MassDEP has used the Environmental Results Program's tools (which include periodic certifications from business owners and operators) to successfully bring many firms into compliance with a wide variety of environmental rules.

Separately, the Mercury Management Act [Section 6C(s)] requires that, before delivering or selling automobile bodies to scrap recycling facilities, vehicle recyclers shall certify in writing, in a form approved by MassDEP, that all mercury-added switches have been removed. The regulation implementing this requirement is in 310 CMR 74.04(2). A blanket certification that promises to remove mercury switches from vehicles to be delivered to a scrap recycling facility in the future would not comply with the statute's requirement that the certification be provided "before delivering or selling automobile bodies to scrap recycling facilities". The form that MassDEP will require for this certification is discussed below.

**Comment:** Regarding 74.04(2) Only Massachusetts licensed class III dealers may bring crushed cars to a scrap recycling facility. If cars are brought from out of state, a separate out of state certification form must be [obtained] before the scrap recycling facility can accept the load. **Commenters:** 1-23

**Response:** The Mercury Management Act requires that Massachusetts scrap recycling facilities obtain a certification from anyone who sells or delivers vehicles, either from in or out-of-state sources. MassDEP does not believe it necessary to require that out of state suppliers use a different form of certification.

**Comment:** A commenter described the difficulties in implementing the "per-shipment" paper certification that was proposed: The commenter's company doesn't have the space to queue trucks while drivers sort out the paperwork, nor do they have an area to pull over and wait, if there is an issue. This commenter submitted an alternative annual certification form for consideration that relies upon a system of marking vehicles with a symbol in spray paint when the mercury switches are removed, and relying on an annual paper certification that the recyclers would submit to the scrap recycling facilities that describes efforts that the vehicle recyclers' owners/managers take to ensure that their staff are in fact removing mercury switches.

Many other commenters also expressed interest in using an annual certification form that relies on spray paint or other waterproof markings to identify end-of-life vehicles that switches have been removed from, as this system is currently used in their industry to note other vehicle body-specific information for management of their own yards and/or for scrap recycling facilities.

**Response:** Section 6C(s) of the statute states that persons delivering vehicle bodies to scrap recycling facilities must certify that the mercury-added switches *have been* removed, which removes the possibility of an annual certification that promises to remove the switches in the future. MassDEP agrees that a separate paper certification that accompanies each shipment of vehicle bodies is cumbersome and impractical, and may discourage switch removal. The final rules provide three choices to people delivering vehicles to scrap recycling facilities: 1) a signed certification statement may be printed on each bill of lading accompanying each shipment of vehicles, 2) one or more stickers may be affixed to each vehicle stating that the mercury components have been removed in accordance with 310 CMR 74.00, or 3) another manner of providing a written certification may be used, based on a proposal by a vehicle recycler or scrap recycling facility that has been approved by the Department. When an alternative method is proposed, the Department will determine if it meets the requirements of the statute.

#### 6. Mobile crushers' responsibilities

**Comment**: Regarding 74.02, would a mobile crusher be responsible for obtaining a certification form from the person or entity he is crushing cars for OR would the mobile crushing company itself be the responsible party for removing the switches and filling out the certification forms? **Commenters**: 1-23

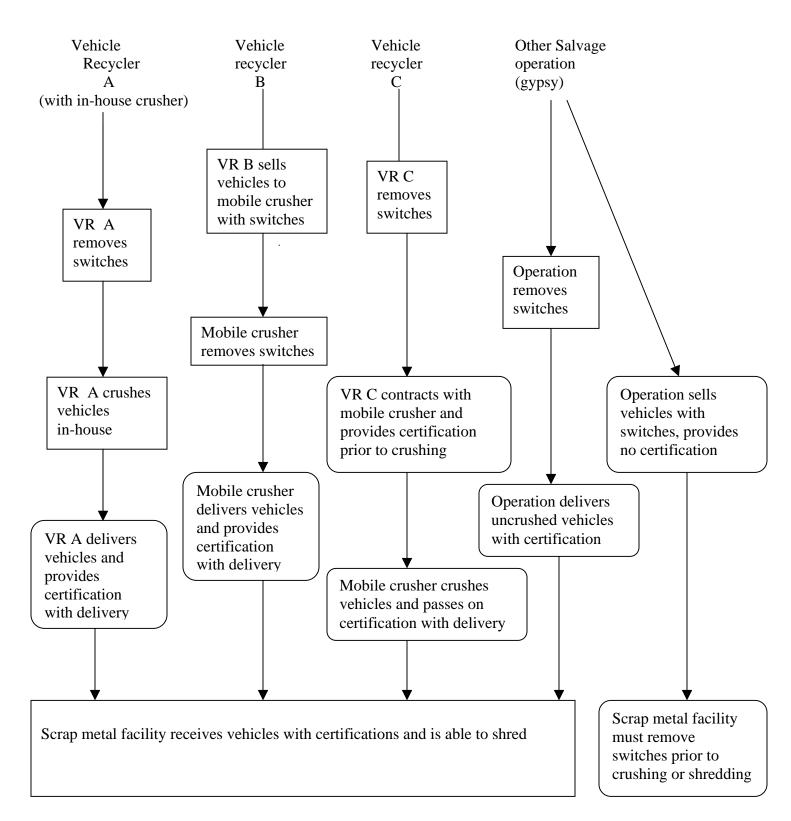
**Response:** The statute requires that anyone delivering crushed vehicles to the scrap recycling facility certify that all mercury switches have been removed, but does not require that a specific party always be the one to remove the mercury components. Therefore, the final regulations do not specify who needs to remove the switches, so either party can take responsibility. By adding the last sentence to the definition of "vehicle recycler" (as proposed in the draft) MassDEP is clarifying that mobile crushers as well as vehicle recyclers who perform their own crushing must ensure that mercury components are removed before they crush vehicles, and must also provide the certification required by section 6C(s) of the Act to the scrap recycling facility to whom they deliver crushed vehicles. Figure 1 (below) describes several different (and acceptable) ways that mercury switches can be removed from vehicles before the bodies are delivered to a scrap recycling facility.

**Comment**: A separate mobile crushing license should be considered for Massachusetts.

**Response:** The legislature assigned responsibility to municipalities for Class III licenses (Chapter 140 MGL Section 58). MassDEP does not have the authority to license mobile crushing companies, salvage yards or scrap recyclers.

Commenters: 1-23

Figure 1
Scenarios for providing certification to the Scrap Recycling Facility



#### 7. Scrap recycling facilities' acceptance of vehicles containing mercury-added components

**Comment:** Regarding 74.04 (3), scrap recycling facilities should be required to fill out certification forms for all vehicles they acquire in the same manner as those who deliver vehicles to them. It should be the responsibility of the scrap recycling facility, not the former vehicle owner.

**Commenters:** 1-23

**Response:** The law allows scrap recycling facilities to accept uncrushed vehicles from which the mercury added switches have not been removed, but in doing so the scrap recycling facility must remove the switches before these vehicles are crushed or shredded. The law does not require scrap recycling facilities that remove mercury switches to certify to anyone that they have done so.

#### 8. Alternative plans developed pursuant to 310 CMR 74.06(4)

**Comment:** The manufacturers should continue to make bounty payments until ten years after the last vehicle containing mercury added switches was sold in the Commonwealth.

**Commenters:** 1-23

**Response:** Section 6C(o) of the statute allows the vehicle manufacturers to submit an alternative plan that does not include a payment for each switch removed, provided that the manufacturers have implemented a payment program for a year and can demonstrate that a 90% capture rate has been achieved in another state using the "non-payment" plan proposed. Once the payment program is in place, the statute does not establish a "sunset" provision unless MassDEP approves an alternate plan that meets the criteria insection 6C(o).

**Comment:** When considering a proposal for an alternate switch collection plan in 74.06 (4) to replace the bounty based plan, DEP should require manufacturers to demonstrate that their alternate plan meets the criteria in 74.06 (4) (a-c) and that the plan is fully expected and highly likely to achieve a 90% or greater capture rate in Massachusetts. Any plan that DEP does not think can achieve this goal should not be allowed to replace an incentive-based plan. In the instance that DEP decides that the alternate plan is acceptable, bounty payments should not be allowed to cease until the infrastructure is fully in place to switch to the new plan and dismantlers have been given ample notice of the impending change such that the can redeem bounty payments for any switches already removed.

Commenter: 35

**Response:** MassDEP will only authorize an alternate plan that has demonstrated a 90% or greater capture rate in another state. The final rules reflect that, in the case that this alternate plan is approved, bounty payments would continue until the new program's effective date [see 74.06(6)].

#### 9. Record keeping for certification

**Comment:** Does 74.08 (1) simply mean keeping a copy of the certification form(s)?

**Commenters:** 1-23

**Response:** The records that demonstrate compliance will be different for each type of facility. Vehicle manufacturers will have to demonstrate that they are implementing the ELVS plan to collect and recycle mercury switches or another plan approved by MassDEP. Vehicle recyclers should keep copies of shipping receipts for mercury switches or print outs from the EQ website (ELVS's recycler) detailing the number of switches received from the recycler, copies of certifications provided to scrap recycling facilities, and records of switch removal training sessions for employees. Scrap recycling facilities should keep certifications provided by vehicle recyclers and any evidence of their having shipped mercury switches that they have removed themselves to a licensed mercury recycler.

#### 10. Removal of all mercury-added components prior to crushing

**Comment:** Section 74.04(1) presents an unrealistic scenario when it states "... Without having first removed any mercury-added components." We are recyclers, not manufacturers. We do not know where all of the mercury added components are located in a vehicle. So far, the manufacturers have not provided us with a comprehensive list of what these components are or where they are located. Without being told where these components are, how can we be expected to remove them?

Commenters: 24-30

**Response:** ELVS has released documents with more specific information about which vehicle makes and models contained ABS G-force sensors and where they can be found in each vehicle. These and other documents will be sent to each program participant with each replacement bucket and can be found on ELVS' website: <a href="http://www.elvsolutions.org/educational.html">http://www.elvsolutions.org/educational.html</a>. Information about makes and models for which mercury convenience light switches were available is also posted on ELVS's website.

#### 11. Number of end-of-life vehicles handled

**Comment:** 74.09 (1)(a) 4. asks vehicle recyclers to report with their annual certifications to MassDEP the number of end-of-life vehicles handled. This is another difficult term to quantify and is also an intrusive question. Not every vehicle entering our facility is crushed. Many vehicles are either resold, exported or otherwise left for extended periods pending assignment. Questions of this nature would better be addressed to the Registry of Motor Vehicles (RMV) records.

Commenter: 26

**Response:** This requirement was not included in the final rule.

#### 12. Training materials included with the ELVS program

**Comment:** There are deficiencies with the ELVS program. Under 74.06, section (d.) states "provide information, training, technical assistance to vehicle recyclers, scrap recyclers and all other persons involved in removing mercury added vehicle switches from motor vehicles." There has been no training provided to the recyclers by ELVS. All ELVS has done is to ship each recycler a plastic bucket with a universal waste label in a box with a UPS shipping label to ship the removed mercury added switches. I don't believe this has fulfilled their responsibility for a training program.

Commenter: 24

**Response:** ELVS informed MassDEP that they would send each participating recycler a collection bucket, a training DVD, and lists of vehicles where switches may be found. Updated materials are being sent out in replacement buckets. If you did not receive a training DVD or associated training material, please contact Mary Bills at ELVS at <a href="https://example.com/hgswitch@twmi.rr.com">hgswitch@twmi.rr.com</a> or 877 225-3587.

#### 13. Responsibility of vehicle recycling companies for employee performance

**Comment:** (paraphrase) Vehicle recyclers would like some kind of assurance that if they train their employees to remove mercury-added switches and provide them with all the tools and information needed that the yard owner or manager will not be held responsible if an employee does not remove a switch prior to crushing.

Commenters: 27-30

**Response:** MassDEP cannot give this assurance. Any violation of the mercury recycling law that MassDEP finds upon an inspection will be evaluated on a case-by-case basis. Proof of employee training and provision of the necessary tools and information would certainly be taken into account. However, one training session may not be sufficient for a given facility, depending on the number of employees and turnover. The required frequency of training will have to vary among facilities. When noncompliance is found, MassDEP will have to evaluate the facility's effort to comply with the law, in deciding what action to take.

MassDEP's Environmental Results Program (ERP), on which the certification concept is based, requires corporate officials to take responsibility for what happens in their company. This program has been in place for ten years. It was developed to hold corporate officials accountable for giving their staff the time and tools necessary to comply with environmental regulations. Thousands of corporate officials are signing certifications every year. While MassDEP does not generally enforce against corporate officials for occasional and inconsequential mistakes of their employees, the agency reserves the right to take enforcement action for significant violations. Since the owner or manager is the responsible person, the enforcement action would be sent to the corporate official.

#### 14. Recycling of mercury-added components not collected by ELVS

**Comment:** (paraphrase) Vehicle recyclers do not understand how to get rid of other mercury components that are not collected by ELVS.

Commenters: 28-29

Response: There are a number of mercury recycling companies (including two that are located in Massachusetts) that can recycle most types of mercury-containing items found in vehicles. A list of the recycling companies serving the northeastern U.S. is posted on MassDEP's website: <a href="http://www.mass.gov/dep/toxics/stypes/hgres.htm#dispose">http://www.mass.gov/dep/toxics/stypes/hgres.htm#dispose</a>. [Note to DEP reviewers: The mercury information on the website is being updated, but the information will be there when the package goes to the Commissioner]. These firms charge for this recycling service, depending on the types and weight or volume of the items being sent for recycling. MassDEP recommends that recyclers find the company that will provide the best pricing and service for their needs, and also that a contract be established for collection of mercury items not covered by ELVS's service, including burned out fluorescent lamps used for lighting within the facility.

#### 15. Identification of mercury-containing HID headlights

Comment: (paraphrase) How do you identify mercury-containing HID headlights?

Commenter: 26

**Response:** HID headlights will have a wiring system with a ballast and igniter. The bulb looks different than a standard filament bulb, since it contains a thin glass tube filled with gas between two electrodes.

#### 16. Toyota airbag deployment sensors

**Comment:** (paraphrase) Toyota used an airbag deployment unit that contained two small mercury sensors in specific vehicle models during 1990-1993. These units are currently removed from end-of-life vehicles because they have a resale value between \$300-\$400 each. It makes no sense to require Toyota to set up a program to remove and recycle mercury sensors, when the recycler can realize up to \$100 profit on each item. Maine's program has not yielded a single unit to date, which indicates that recyclers are earning more money outside the bounty program.

Commenter: 32

**Response:** The mercury sensor in these airbag deployment units meets the statutory definition of a switch and, therefore, Toyota is required to establish a program for collecting these units. The Massachusetts Mercury Act prohibits the sale of mercury-added switches, unless there is no non-mercury alternative available for that use. If non-mercury units cannot be substituted for these airbag units, recyclers can continue to sell recovered units. However, at some point when the Toyotas that contain these mercury switches are too old to repair, there will no longer be a market for this used part, which is why a collection program is needed. Please note that since this comment was submitted, Toyota has joined ELVS.

#### 17. Definition of Responsible Official

Comment: Regarding the definition in 70.02 for Responsible Official - vehicle manufacturers are typically very large corporations with many layers of management. We believe the first part of the proposed definition is too restrictive. The lowest title of responsible official specifically listed is vice president. However, vice presidents frequently have directors or senior managers who have responsibility for the overall operation of units of the companies. These positions should also be covered by the definition. Additionally, "corporate vote" is undefined, and is inappropriate for the latter part of the proposed definition. By law, corporate officers have a parent authority to bind the Corporation so there is no need for a "corporate vote." The definition can be rephrased as follows to allow vice presidents to designate directors or senior managers to act as responsible officials:

#### "Responsible official is one of the following:

(a) For a corporation: a president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or a representative of the corporation who has been duly authorized by a president, secretary, treasurer, or a vice president of the corporation provided the representative is responsible for the overall operation of the facility or unit of operation."

Commenter: 33

**Response:** The definition of "Responsible Official" has been used by MassDEP's Environmental Results Program for more than ten years, and has been developed to ensure accountability for complying with environmental regulations in a wide variety of business arrangements. Thousands of businesses use it, including large multi-national corporations (such as major oil companies) and a wide variety of very small businesses. MassDEP intended to apply the existing tools of the Environmental Results Program to a reporting requirement for a new sector, and does not believe that the definition needs to be revised.

## 18. Definition compatibility between Mercury Management Act and the Universal Waste Rule

**Comment:** MassDEP should carefully consider how these new rules will interact with existing hazardous waste regulations, particularly the state's universal waste rule. For example, 310 CMR 30.1010 already contains definitions for a mercury containing device, mercury containing lamp and other terms that are defined differently than in 310 CMR 74.02

Commenter: 34

**Response:** The definitions in 74.02 (which are largely taken directly from the Mercury Management Act) do not conflict with those in 310 CMR 30.1010.

#### 19. Addition of specific guidance in certain sections

**Comment**: It may not be possible to provide definitive guidance on some sections of the regulations, such as what constitutes "adequate due diligence" under 74.05(3), or when manufacturers should be allowed to stop making "bounty payments" for removed mercury containing switches per 74.06(4).

Uncertainty in the regulation could be recognized through inclusion of specific revision target dates for re-review or "sun setting." This is consistent with my experience as a member of the state's Hazardous Waste Advisory Committee. Periodic review and revision would allow both the DEP and the regulated community to gain some experience with these regulations, and allow the regulations to respond to an evolving waste management regime for mercury-containing devices.

Commenter: 34

**Response:** Since the statute allows auto manufacturers to submit alternative plans for MassDEP approval that do not contain a bounty payment under certain circumstances, MassDEP will need some criteria for deciding whether such an application should be approved or not. The final regulations include only the criteria established by the statute. If such criteria are needed in the future, MassDEP will propose to amend this regulation.

#### 20. Responsibility for mercury poisoning

**Comment:** (paraphrase) The regulations do not assign responsibility in the case that an employee suffers from mercury poisoning.

Commenter: 17

**Response:** While the Mercury Management Act does not address the issue of potential exposure when removing mercury components, other federal and state laws and regulations address the safe handling of mercury components (which are regulated as "hazardous" or "universal" waste), and also regulate workplace exposure to hazardous materials. In most mercury vehicle switches, the mercury is enclosed in an ampoule that is made of metal and is therefore not fragile. However, to minimize the potential for breakage, MassDEP and ELVS recommend placing the entire switch assembly in the collection bucket rather than removing the ampoule from the switch assembly.

#### B. Manufacturers' Collection/Recycling Plans (310 CMR 75.00)

#### List of commenters:

- 1. Clean Water Action
- 2. Saugus Action Volunteers for the Environment
- 3. League of Women Voters of Massachusetts
- 4. Joan Kulash, Chair, People for the Environment
- 5. Robin Thomas
- 6. Pam Green
- 7. Jenny Pickett
- 8. Mr. & Mrs. John Cadarette
- 9. Maureen Boyle
- 10. Maureen A Landers
- 11. Anita Djermoun
- 12. Dr. Bonnie G. Kanner
- 13. Janet Lees
- 14. Roberta H. Whitney
- 15. Warren F. Kelley
- 16. Roz McKeon
- 17. G. Wilkes
- 18. Marilyn Licciardello
- 19. Julie Crocker
- 20. Karen M. Kline
- 21. Richard McCarthy
- 22. Brenda Reeve
- 23. Mary DiMauro
- 24. Richard Smyth
- 25. Karen T Nemeth
- 26. Michael LaBonte
- 27. Susan Baeslack
- 28. Brent Baeslack, Haverhill Environmental League
- 29. Tom Ellis
- 30. Electronic Industry Alliance
- 31. National Electrical Manufacturers Association
- 32. Philips Electronics North America
- 33. International Sign Association
- 34. Cape Cod Commission
- 35. Lorenzo Macaluso, Center for Environmental Technology

#### 1. Continued collection of mercury-added products after sale termination

**Comment:** As written, these regulations exempt manufacturers who stop selling a mercury-added product from having to collect the products they have sold at the end of their useful lives. Many commenters wrote that MassDEP should not allow this "exemption." One commenter stated that manufacturers should be required to collect at least as long after ceasing production of a mercury-added product as the average lifespan of the product plus one year.

Commenters: 1-29

Commenter: 30

**Response:** The statute states that "No person shall sell or offer to sell or distribute a mercury-added product in the commonwealth unless the manufacturer has created and filed...." This section took effect on May 1, 2007. MassDEP interprets this section to apply to mercury-added products that are offered for sale or distribution in Massachusetts on or after May 1, 2007, and does not apply to products that were removed from the market *before* that date. MassDEP also interprets this section to mean that mercury-added products that are removed from the market *after* May 1, 2007 do not need to be collected and recycled after the day on which they are removed from the market. This interpretation is consistent with other states' interpretation of similar language.

#### 2. Fate and transport of mercury from mercury-added products

**Comment:** (paraphrase) A commenter raised questions about the scientific basis for regulating mercury in products, questioning the fate and transport of mercury in the environment originating from man-made products. This commenter also mentions a study that questions limiting fish consumption by pregnant women and challenges MassDEP's suggestion that requiring manufacturers to implement collection and recycling plans for their end-of-life mercury-added products will encourage to them find non-mercury alternatives.

**Response:** MassDEP continues to believe that mercury products are a significant source of mercury in the Massachusetts environment and therefore create risks to public health and the environment. Municipal waste combustors, which burn mercury products that are thrown in the trash, remain the largest point source category of mercury emissions in Massachusetts. Mercuryadded products in the trash may also release mercury to the environment through breakage in handling and transport, and landfilling. The Massachusetts Mercury Management Act was established to minimize these types of releases by establishing programs to collect end-of-life mercury-added products and recycle the mercury. Natural sources of mercury have been estimated to account for about 20-30% of mercury deposition in water bodies in New England and the Great Lakes States. [e.g see Kamman, N.C. and D.R. Engstrom. 2002. Historic and Present Fluxes of Mercury to Vermont and New Hampshire Lakes Inferred from 210Pb-dated sediment cores. Atmos. Environ. 26:1599-1609; William F. Fitzgerald et al., The Case for Atmospheric Mercury Contamination in Remote Areas, 32 ENVTL. Sci. & Tech. 1 (1998); Edward B. Swain et al., Increasing Rates Of Atmospheric Mercury Deposition in Midcontinental North America, 257 SCIENCE 784 (1992)).] These regulations were required by statute to implement the Mercury Management Act.

Mercury-added products have been identified as a source of mercury releases to the environment in the EPA Mercury Study Report to Congress, Dec 1997; several references document that there is a complete exposure pathway through which people have been directly exposed to mercury from broken mercury-added products. See <a href="http://www.atsdr.cdc.gov/cabs/mercury/#route">http://www.atsdr.cdc.gov/mercmetal5.html</a>; <a href="http://www.atsdr.cdc.gov/mercmetal5.html">http://www.atsdr.cdc.gov/mercmetal5.html</a>; <a href="http://www.atsdr.cdc.gov/alerts/970626.html">http://www.atsdr.cdc.gov/mercmetal5.html</a>; <a href="http://www.atsdr.cdc.gov/alerts/970626.html">http://www.atsdr.cdc.gov/alerts/970626.html</a>. Public health agencies (including the Massachusetts Department of Public Health) and professionals around the world continue to recommend that pregnant women limit or avoid consuming certain types of fish because of mercury contamination.

There are very few mercury-added products for which there are no mercury-free alternatives. Over the past ten years in which states have been implementing similar mercury management legislation, many manufacturers have re-engineered their products to be mercury-free to avoid regulation. There are actually very few types of mercury-added products still being manufactured. Therefore, MassDEP believes that the regulation of mercury has encouraged the development of a whole range of alternative products.

#### **3. Applicability (75.03)**

**Comment:** Part (2) lists the products that are exempt from the collection requirements. Part (e) lists products where the only mercury is from one or more mercury-added lamps, "except as provided in 310 CMR 75.05." It is not clear what this last phrase is referring to. Moreover, the law does not condition the exemption of products containing mercury only in lamps upon meeting any education plan requirements. Therefore, it is critical that the phrase 'except as provided in 310 CMR 75.05' be deleted from 75.03(2)(e) to ensure consistency with the law." **Commenter:** 30

**Response:** This provision has been redrafted to establish that 1) products whose only mercury component is a mercury-added lamp are not subject to the collection and recycling requirements of 310 CMR 75.00, and 2) lamp manufacturers do not need to establish a collection/recycling plan under 310 CMR 75.04 as long as they comply with the requirements of 310 CMR 75.05, (which describes public education plans about lamp recycling, certifications, and payments to an expendable trust fund when target recycling rates are not met). The revised rule [310 CMR 75.03(5)] also clarifies that the Department will direct lamp manufacturers to establish collection/recycling programs for their spent lamps if the manufacturer does not comply with the requirements of 310 CMR 75.05.

#### 4. Mercury in xenon short arc lamps

**Comment:** This definition (in the preamble) is slightly inaccurate in that Xenon short-arc lamps **do not** contain mercury. The term "mercury short arc" is sufficient to cover this category of specialized industrial/medical lamps

Commenter: 31

**Response:** Thank you for this comment. We had intended to list "mercury-xenon short arc lamps", which are designed to provide high radiant energy of ultraviolet wavelength. This clarification will not change the regulations.

#### 5. Difference between definitions of mercury-added product and mercury-added lamp

**Comment:** The definitions of mercury-added product and mercury-added lamp create a point of confusion. The former definition specifically excludes "other products that are incorporated into equipment used to manufacture semiconductor devices, . . . ." It happens that certain mercury-added lamps are used in semiconductor manufacturing equipment and typically are recycled at a rate of almost 100%. The definition of mercury-added lamp, however, which is the basis for the regulatory requirements and provisions that follow, appears to encompass these lamps. Commenter requests that the Department clarify the status of these lamps – are they included as a mercury-added lamp or excluded as an "other product incorporated in equipment for manufacturing semiconductors?"

Commenter: 31

**Response:** Section 75.05 (4) (b) requires lamp manufacturers to report the total number of lamps sold in Massachusetts each calendar year. The commenter would like to know if this figure can reflect sales of all mercury-added lamps minus the number of lamps sold to be incorporated into equipment used to manufacture semiconductor devices, due to the exemption in the statutory definition of "mercury-added product". Section 6J(d)(2) requires lamp manufacturers to report annually to MassDEP the total number of mercury-added lamps sold in the Commmonwealth in the previous year. However, MassDEP has revised 310 CMR 75.05(4)(b) to allow that, if the number of lamps sold for use in manufacturing semi-conductor devices is known, it can be reported and subtracted from total lamp sales. In addition, manufacturers of lamps used in semiconductor manufacturing equipment are not required to submit an education plan for the recycling of these lamps.

#### 6. Capture rate requirement for new mercury-added products

**Comment:** The proposed regulations specify a target capture rate for new mercury-added products introduced after May 1, 2007 of 75%. Commenter understands the importance of promoting a recycling mentality among both producers and consumers in the Commonwealth, but would caution that market and product characteristics differ widely and make some products far better candidates for recycling than others. Thus a uniform capture rate as high as 75% applicable to any and all products entering the market, within the first year, is ambitious at the very least and may not be reasonably attainable in all cases. Commenter is also curious to know the basis for this figure, which is not in the underlying legislation, and respectfully suggests that DEP consider whether it represents a realistic standard.

In addition, the Department needs to clarify whether the 75% figure, or whatever it may change to, supercedes the target rates for lamps specified in Table 2 of the proposed regulations. If so, then manufacturers of any new mercury-added lamp products introduced in the Commonwealth henceforth must meet a 75% capture rate, while companies selling existing products have as many as five years before they have to meet that level of collection. Commenter strongly urges the Department to amend the regulations to make clear that the graduated target rates in Table 2 apply to all mercury-added lamps, regardless of when they are introduced to the market.

Commenter: 31

**Response:** 75.04 (6)(1)4. only applies to a new mercury-added product introduced after May 1, 2007, for which the manufacturer will be responsible for implementing a collection and recycling plan. Mercury-added lamps are not subject to manufacturer collection and recycling requirements, as long as their manufacturers comply with 310 CMR 75.05. It is clear that the Legislature wanted mercury to be removed from products offered for sale or distribution in Massachusetts. New mercury-added products will most likely be subject to the ban on disposal in solid waste (section 6I of the statute). Therefore, the final rule requires manufacturers introducing new mercury-added products to set up a comprehensive system for end-of-life product management from the beginning of the product's "life" and not to expect some other entity, such as the public sector, to incur the expense for this activity.. The 75% figure was intended to make the manufacturers factor the collection and recycling into their planning, while understanding that they cannot guarantee 100% end-of-life product recycling since they cannot control the behavior of their products' users.

To provide the same recycling goal for both existing products and new products, Table 1 has been changed so the recycling rate for 2011 and subsequent years is set at 75% in the final regulations.

#### 7. Confidentiality of business information

Comment: Under Section 75.05 (4) of the proposed regulations, companies will be required to submit highly sensitive sales data to the Department to aid in the calculation of recycling rates and achievement of the mandated targets. These data must be supplied for each individual manufacturer, regardless of whether companies jointly submit through a representative organization, such as a trade association. Commenter has serious concerns regarding the procedures for protecting confidential business information (CBI), as detailed in 310 CMR 3.00. According to Sec 3.20 of 310 CMR 3.00, "Anything which the Department determines to be a trade secret shall not be deemed to be a public record and shall be exempt from disclosure to the general public on request." There are no provisions in the rules, however, which outline a proper "chain of custody" for the data, indicate how long data will be retained, and under what circumstances it will be destroyed.

Commenter's statistical department devotes substantial effort and expense to maintain the confidentiality of proprietary data it collects from member companies. We seek assurance from the Department that it will take appropriate measures to ensure the same level of protection for lamp sales data. We therefore recommend that the Department work with the commenter to establish a Memorandum of Understanding that describes mutually agreed upon procedures for managing CBI collected under these rules.

Commenter: 31

**Response:** Anyone who wants the Department to hold submitted information confidential must apply for an exemption from disclosure. MassDEP keeps records confidential if the information contained in them qualifies for exemption from public disclosure as provided by the Public Records Law and MassDEP regulations (and handles records as confidential during the period in which the request is being reviewed). The agency has instructed employees on proper chain of

custody procedures. MassDEP believes the existing regulations are adequate and does not see a reason to develop special procedures for this case.

#### 8. Lamp manufacturer payments to the expendable trust fund

**Comment:** Commenter understands that the industry's financial obligations are tied to the Commonwealth's success in meeting the targets, but we also know from experience how difficult it is to calculate lamp recycling rates . . . . . it is a process fraught with uncertainty even using the best available data and whatever figures that do exist come with a broad margin of error. Thus even a 'graduated' system like that proposed in the regulations, where payment levels increase as the recycling rate falls further below target rates, can be difficult to justify empirically.

Under the MA Mercury Management Act, the DEP has broad latitude in determining how much money to collect and what factors it can consider in determining whether to lower the collected level, either from an individual company or from the industry as a whole. The only limit is on the maximum that the State shall collect, not the minimum. Yet DEP's proposed payment system empowers the department to impose the maximum possible penalty on the industry, \$1,000,000, in the case of very limited variance from the specified targets. In light of the aforementioned difficulty in determining recycling rates, Commenter considers this to be an unreasonable limitation on the broad authority given to the DEP by the legislature in establishing the penalty provisions.

Commenter: 31

Response: MassDEP understands that there are many issues associated with the accuracy of lamp recycling data, particularly in the first years of the program. A concerted effort by industry will be needed to gather all the information needed to calculate the recycling rate. The statute provides a year (2007) to perform a "dry run" to identify and correct problems by the end of 2008 when the data will count. To more explicitly recognize that lamp recycling data may be less certain in the program's first year, the payment formulae in 310 CMR 75.05 (8)(d) have been adjusted in the final rule so that the maximum payment of \$1 million would only be made if actual lamp recycling is more than 9 percentage points below the statutory target for 2008 data. However, the Department expects that the accuracy of lamp recycling data will improve considerably once the reporting system is underway, and has tightened the difference between payment levels in subsequent years, to two percentage points in 2009 and one percentage point in 2010.

Comment: The statute specifically says, "The department shall establish, by December 31, 2007, a process for determining the mercury-added lamp recycling rate and the aggregate and individual funding commitments based on information that includes, but is not limited to, the actual recycling rate compared with the target recycling rate, each manufacturer's lamp market share in the Commonwealth and **specific manufacturer program effectiveness.**" (emphasis added.) DEP's proposal, however, indicates no consideration of "specific program effectiveness" or for that matter the effort that manufacturers make as a group to promote lamp recycling. Since manufacturers do not control how users will dispose of lamps and only the state has the authority to enforce existing bans against disposal, lamp manufacturers should not be penalized if they have made significant efforts on factors under their control to promote lamp recycling.

In summary, the Department has not collaborated with stakeholders on this issue, has taken an unnecessarily limited stance under its authority to set penalties, and appears to be ignoring its statutory requirement to consider "specific program effectiveness" in meeting recycling targets. We respectfully request that the Department reconsider its position on these issues and confer with industry in doing so.

Commenter: 31, 32

**Response:** The goal of the Mercury Management Act is to have products containing mercury recycled at the end of their useful lives. The only way to measure the effectiveness of manufacturers' public education programs is to measure the extent to which spent lamps are recycled. To address the concern about specific program effectiveness, MassDEP added a subparagraph [310 CMR 75.05(8)(j)] that allows a manufacturer who can document the number of its lamps that were recycled during the previous year to report this information, which MassDEP would then use as the basis for calculating any payments required under 310 CMR 75.05(8).

Please note that the trade association's education plan that was submitted to MassDEP in December 2006 (<a href="http://www.mass.gov/dep/toxics/stypes/nemaplan.pdf">http://www.mass.gov/dep/toxics/stypes/nemaplan.pdf</a>) does not: 1) list specific activities that would be implemented by individual manufacturers or 2) propose to collect data on the number of each manufacturer's lamps that are recycled. Therefore, there is no yardstick against which to measure the effectiveness of specific manufacturers' initiatives as part of this industry/group effort.

Lamp manufacturers who do not participate in an industry-sponsored education program or set up their own program may be subject to enforcement action by the Department, which can include a directive to collect and recycle its spent lamps, as well as fines and penalties.

#### 9. Using mercury source reduction instead of recycling to achieve program effectiveness

**Comment:** Any penalty fee should first reward the industry's reduction in mercury content per lamp, and additionally should recognize and reward a specific company's mercury use below an industry average in addition to recycling

Commenter: 32

**Response:** Section 6J (d) of the Mercury Management Act allows lamp manufacturers to educate and encourage lamp users to recycle their spent mercury-added lamps instead of requiring these manufacturers to establish and fund collection/recycling programs. The goal of the collection/recycling programs that manufacturers of other mercury-added products must establish is the removal of these sources of mercury from the waste stream. While reduction of mercury in the production of lamps is laudable, it does not address the rate at which spent mercury lamps are recycled. The term "specific manufacturer program effectiveness" in Section 6J(d) of the statute refers to the education program, not other aspects of lamp manufacturing.

#### 10. Payment period for the expendable trust fund

**Comment:** The 30-day payment period specified in the regulations is not consistent with standard industry accounting procedures, particularly with regard to unscheduled disbursements

of uncertain amounts. NEMA strongly urges the Department to alter this provision to a more appropriate and reasonable 90-day payment period, calculated from receipt of notice.

**Commenter:** 31

**Response:** The final regulations require payment within 45 days of receipt of a bill.

#### 11. Neon lights considered as mercury-added lamps

**Comment:** (paraphrase) Manufacturers of neon light signs seek clarification that their product will be considered to be a mercury-added lamp rather than a mercury-added product, so that they do not have to submit a collection plan. The industry trade association reports that they are organizing a neon lamp recycling network for their members.

**Commenter: 33** 

**Response:** MassDEP considers neon light signs to be mercury-added lamps. Please note that this will require the neon light manufacturers to develop a plan for educating their customers about recycling, and that this plan must be submitted to MassDEP. In addition, given the high levels of mercury in many neon lights, MassDEP is happy to know that the industry is researching recycling options for neon signs and looks forward to assisting with outreach on this issue.

#### 12. MassDEP development of educational materials

**Comment:** MassDEP should develop educational materials to help users of mercury-added products, especially lamps, understand that the products contain mercury and provide them with guidance on end-of-life management.

Commenter: 34

**Response:** MassDEP is updating the agency's website with new fact sheets and guidance on recycling mercury-added products. However, the Mercury Management Act assigns responsibility for educating users about mercury in lamps to the lamp manufacturing industry.

#### 13. Promotion of lamp recycling through local health departments

**Comment:** (paraphrase) Health Departments have been very effective in promoting lamp recycling in a number of western Massachusetts communities through enacting recycling bylaws and requiring proof of recycling as a condition of holding a permit. MassDEP should consider doing more outreach to Health Departments as a part of its outreach plan.

**Commenter: 35** 

**Response:** MassDEP has suggested to the lamp manufacturers that they work with Health Departments (and Boards of Health) on outreach.