

Outline of Key Components
Mercury Education and Reduction Model Legislation

Prepare by the Northeast Waste Management Officials' Association.

Background

The Conference of New England Governors/Eastern Canadian Premiers (NEG/ECT) Mercury Action Plan included the following objectives and recommendations for the development of mercury reduction in waste model programs:

Objective: Eliminate or reduce non-essential uses of mercury in household, institutional and industrial products and processes. Segregate and recycle mercury attributable to the remaining uses and/or products to the maximum degree possible

Objective: By 2003 reduce the overall amount of mercury-containing waste from household, commercial, and industrial sources, through source reduction, segregation, and safe waste management, including recycling

Recommendations:

- reduce/eliminate the use of mercury in medical and consumer products to the extent feasible;
- identify and implement source reduction programs and develop model legislation;
- draft model legislation implementing coordinated labeling and manufacturer take-back programs to help consumers identify products containing mercury and how to properly dispose of them;
- eliminate the use of mercury in school science programs through initiation of programs and/or legislation; and
- adopt measures to curtail the sale of elemental mercury.

The Mercury Task Force has been developing model legislation to implement these recommendations. The intent of the model legislation is to present specific program ideas that could substantially advance the region toward the Action Plan goals and objectives. NEWMOA developed the Mercury Education and Reduction Model Act at the request of the Mercury Task Force in 1999.

As a synthesis of numerous complementary approaches, the model legislation outlined below provide a comprehensive framework to help states develop more consistent approaches to managing mercury-containing wastes. By sharing their experiences and expertise the states can avoid duplication of effort and research, thereby saving time and money. Product manufacturers can also benefit from having more consistent programs throughout New England and Eastern Canada.

The model legislative elements reflect current efforts in the U.S. and Canada to reduce mercury in waste streams. Each jurisdiction would not have to implement all of the identified programs together or at the same time. This model is designed to be a flexible set of concepts from which the states can choose those that meet their jurisdictional priorities. Many of the elements in the model have been included in legislation that has been adopted or proposed in one or more states. The following are proposed

elements of the Mercury Education and Reduction Model Legislation. Each of the program elements described below includes a brief description of the program function and a rationale for the approach.

Model Legislation for Mercury Education and Reduction

Notification

Program: Require manufacturers and wholesalers to inform the state of the mercury-added products they sell and specify the type of product, name and address of manufacturer, amount of mercury in each unit, and total amount of mercury in all of the mercury-added products produced by the manufacturer. Establishes confidential business information procedures.

Rationale: Would inform the states about the universe of mercury-added products to enable the jurisdictions to administer other elements of the model legislation. Data on the total quantity of mercury in all of the products would enable the states to assess some of the impacts of the model programs.

Interstate Clearinghouse

Program: Establish a Clearinghouse to coordinate key elements of the model legislation, including manufacturers' product notifications, applications for phase-out exemptions, collection plan reviews, applications for alternative labeling, mercury content disclosures, and public education and outreach.

Rationale: Would promote cooperation and efficiency in implementing key sections of the model legislation. Would provide a single point for submission and management of data and applications from manufacturers.

Bans on Certain Mercury-Added Products

Program: Ban the sale of mercury-added toys, games, cards, ornaments, apparel, and novelties in the state. Restrict the sale of mercury fever thermometers allowing consumers to purchase them with a prescription. Require manufacturers of mercury fever thermometers to include instructions on the careful handling, disposal, and cleanup of the thermometers sold through prescriptions. Ban the sale of dairy manometers in the state and authorize the state to establish collection and exchange programs for these products. Prohibit primary or secondary schools from using or purchasing elemental chemical mercury or mercury compounds in the classroom.

Rationale: Would prevent mercury from frivolous uses from entering solid waste. Products, such as toys, games, cards, novelties, ornaments, and apparel, are not durable and quickly end up in the waste stream. The addition of mercury to these products is frivolous and non-essential. Thermometer breakage in homes and schools and mercury spills in classrooms are common. Mercury-added dairy manometers contain a large amount of mercury that can be easily eliminated in the future. There are currently available alternative non-mercury manometers that are in widespread use in the dairy industry.

Phase-out and Exemptions

Program: Gradually phase-out mercury-added products starting with those products that contain more

than one gram of mercury down to those that contain 10 milligrams over a period of time. Manufacturers of fluorescent lamps with greater than 10 milligrams of mercury would have a longer period of time to apply for an exemption. Exemptions would be allowed for products that meet one or more of the following criteria:

- manufactured prior the effective date of the program;
- mercury required to meet federal or state health and safety rules;
- is beneficial to the environment or protective of public health and safety;
- are no feasible alternatives to use of mercury in the product; or
- is no comparable non-mercury-added product available at reasonable cost.

Applications for exemptions would have to justify their exemption request and include a plan to collect and manage used mercury-added products through manufacturer take-back or by funding other private or public collection programs.

Rationale: Would substantially move toward virtual elimination of mercury from products where this is feasible. Would establish a collection system for those products that receive an exemption so that these materials do not end up in solid waste management facilities. Would have regional coordination among states on exemption requests.

Labeling

Program: Require mercury-added products, components, and packaging to have a label. At a minimum labels would inform the purchaser that the product contains mercury and requires proper management practices; be clearly visible; and be sufficiently durable to remain legible. Manufacturers or their representatives would be responsible for affixing the labels. Would allow for applications for alternative labeling or notification systems that meet certain specifications. Administrative procedures that specifically define the label's content and location and establish a waiver or alternative labeling/notification requirements would be adopted. Thermometers and button batteries would be exempt from product labeling. Appliances would be exempt from packaging labeling. Special provisions would be required for the labeling of cars. Cosmetics and pharmaceuticals would be exempt from these provisions.

Rationale: Would inform purchasers that the product contains mercury and how to properly dispose of the product at the end of its life. Labeling needs to be uniform among jurisdictions to make it reasonable for manufacturers to implement. For technical reasons all products may not be able to have the same label. Labeling may need to vary with the different types of products.

Disposal Ban

Program: Prohibit mercury-added products from disposal in a solid waste management or wastewater treatment facilities, unless allowed under a permit or license. Such products can only be accepted at state permitted or otherwise approved household hazardous waste facilities, recycling, or permitted hazardous waste facilities. Would require separation of mercury components by scrap metal processing facilities. Also, identifies the obligations of the owners and operators of solid waste facilities under the ban. Products intended to be consumed in use, such as cosmetics and pharmaceuticals, would be

exempted.

Rationale: Would reduce the amount of mercury allowed to enter waste combustors, wastewater treatment, and solid waste management facilities. In the Northeastern US one of the largest sources of mercury emissions is waste combustors. There is also at least one study underway that suggests that transfer stations and waste handling practices may also be important local sources of mercury emissions.

Collection

Program: Require that manufacturers develop a plan and ensure the implementation of a system for the collection of mercury-added products through whatever mechanisms they choose. Manufacturers would submit a collection plan to the state that covers the jurisdiction. Legislation designates key elements of the plan. Also requires manufacturers to periodically report on the success of the collection system.

Rationale: Would establish an acceptable alternative recycling/disposal infrastructure, which is necessary for successful implementation of the disposal ban. States do not have the financial resources or knowledge to carry out the necessary collection programs; manufacturers are much better suited to efficiently implement collection programs.

Disclosure Requirements for Certain Products That Are Used by Health Care Facilities and Contain Incidental Mercury

Program: Require manufacturers of specified formulated product categories that are used in health care facilities to disclose the mercury content of tested batches of their formulated product. These formulated products include acids; alkalies; bleach; materials used for cleaning, maintenance and disinfection; pharmaceutical products; stains; reagents; preservatives; fixatives; buffers; and dyes. This would apply to the formulated products in those categories that contain incidental amounts of mercury above one part per billion.

Rationale: Would assist health care facilities that are struggling to meet stringent wastewater standards, which can be one part per billion or lower. Part of the problem is the mercury that comes from the chemicals they purchase for their laboratories and maintenance activities. They need better information on the mercury content of these formulated products. Evidence from some studies conducted by Boston-area hospitals indicate that the product categories listed above can contain incidental amounts of mercury and contribute to mercury in wastewater discharges. Hospitals can choose substitute products that have no mercury or lower mercury levels, but they need to have the necessary information from the manufacturers.

Control on the Sale of Elemental Mercury

Program: Limit the sale of elemental mercury except for medical, dental amalgam, research, or manufacturing purposes and require provision of safety information, including a Material Safety Data Sheet.

Rationale: Would limit the availability of elemental mercury. Elemental mercury is readily available to

the public and is sometimes used in rituals with young children and babies, who are especially susceptible to mercury poisoning.

Public Education and Outreach

Program: Implement educational and outreach programs to support the implementation of the program elements outlined above. Establish an awards programs. Require state to develop best management practices guidance for dental offices and laboratories to assist them with compliance with the disposal ban.

Rationale: Would establish education and outreach programs that are critical to the success of the other programs elements outlined above.

Universal Waste Rule

Program: Require state to adopt Universal Waste Rules for largest feasible number of mercury-added products and elemental mercury that is not contained in a product. Promote regional cooperation in development and implementation of these rules.

Rationale: Would create the regulatory framework for the collection of mercury-added products and elemental mercury.

State Procurement

Program: Implement a state procurement initiative that would allow for state contracts for goods and services to explicitly include a preference for low or non-mercury-added products that have comparable performance to mercury-added products. The preference shall apply to all state purchases, as well as any purchases made by others with state funds. Energy efficient lamps would have preference over less efficient lighting and preference would be given to the lights that contain the lowest total mercury per lumen hour content available. The spent bulbs would be collected to the extent economically feasible. State contracts for dental services for state employees would provide equal coverage for non-mercury and mercury amalgam fillings at no additional expense to the employee.

Rationale: Would create a financial incentive for companies to produce low or non-mercury- added products. States are important consumers of goods and services. Through these procurement program those firms that have developed low or non-mercury products can be rewarded through the marketplace for making the necessary investments in those alternatives.

For more information on the NEWMOA Mercury Education and Reduction Model Legislation, see www.newmoa.org or contact Terri Goldberg, NEWMOA, (617) 367-8558 x302.