

March 14, 2011

Document Control Office Mailcode: 7407M Office of Pollution Prevention and Toxics Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460-0001

Re: Docket No. EPA-HQ-OPPT-2010-0518

To Whom It May Concern:

The Northeast Waste Management Officials' Association's (NEWMOA), Interstate Mercury Education and Reduction Clearinghouse (IMERC) is pleased to provide comments on the proposed rulemaking "Incorporation of Revised ASTM Standards That Provide Flexibility in the Use of Alternatives to Mercury-Containing Thermometers; Solicitation of Public Comment on the Required Use of Mercury-Containing Thermometers in EPA Regulations," published in the Federal Register Vol. 76, No. 8 (76 FR 2056) on January 12, 2011.

IMERC is comprised of member-state environmental agencies of California, Connecticut, Illinois, Louisiana, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Rhode Island, Vermont, and Washington. The IMERC-member states have enacted a variety of education and reduction laws focusing on products that contain mercury, including thermometers. For more information about IMERC, visit: www.newmoa.org/prevention/mercury/imerc.cfm. A number of IMERC-member states restrict the sale of mercury-containing thermometers without a state-approved exemption, including:

- Minnesota (effective August 1, 2001 covering thermometers manufactured after June 1, 2001)
- Michigan (effective January 1, 2003)
- Connecticut products >1,000 mg of mercury (effective July 1, 2004)
- Washington (effective January 1, 2006)
- Rhode Island products >1,000 mg of mercury (effective January 1, 2006)
- California (effective July 1, 2006)
- Maine (effective July 1, 2006)
- Vermont (effective January 1, 2007)
- New Hampshire (effective January 1, 2008)
- Illinois (effective July 1, 2008)
- Louisiana products >1,000 mg of mercury (effective July 1, 2008)

IMERC generally supports EPA's proposal to incorporate revised ASTM International (ASTM) standards that provide flexibility to use alternatives to mercury-containing industrial thermometers. However, IMERC urges EPA not to allow the continued use of mercury devices by allowing the use of previous standards (e.g., D5856–01a, D5856–03a, and D5856–04) when updated standards allow for or require the use of non-mercury thermometer alternatives. Historically, IMERC-member states have not granted exemptions allowing the continued sale of otherwise banned mercury-containing thermometers for uses where effective mercury-free alternatives have been identified and are available at a reasonable cost. EPA's proposal to retain old standards allowing mercury thermometer use as an option conflicts with the states' past actions. The sale of mercury thermometers would not be allowed in the states listed above.

The following are IMERC's responses to the questions raised by EPA:

1. How can EPA provide additional flexibility in the use of mercury-free thermometers to comply with the Agency's relevant regulations?

As stated in 76 FR 2056 (Sec. III. I. Technical Standards), the National Technology Transfer and Advancement Act of 1995 (NTTAA) directs EPA to use voluntary consensus standards, such as those developed by ASTM. EPA should progressively and aggressively adopt the newest voluntary consensus standards by reference immediately upon their effective date, and should require the use of the least toxic alternative allowed under such standards. That is consistent with the spirit and letter of NTTAA, three Presidential Executive Orders that directly pertain to this issue (Executive Orders 13148, 13423, and 13541), and the internal EPA Memorandum dated September 30, 2008 that directs EPA to reduce its own purchase, use, and inventory of mercury thermometers. Incorporation of voluntary consensus standards by reference, including ASTM standards, would also eliminate the need for EPA rulemaking to address any future amendments or changes to these standards.

2. Are requirements to use mercury-containing thermometers necessary for performance reasons or should flexibility be provided in most if not all measurement applications?

The IMERC-member state agencies have actively promoted the elimination of mercury thermometer use in state laboratories and have not experienced reduced performance from the non-mercury alternatives. The state agencies have found that it is technologically possible to eliminate the use of mercury thermometers in most if not all applications. EPA's requirements should be performance-based, provide flexibility to use non-mercury alternatives, and require the use of the alternatives to the maximum extent possible.

The states' experience is supported by the National Institute of Standards and Technology (NIST) statement referenced in 76 FR 2056 that "there are no fundamental barriers to the replacement of mercury-containing thermometers." This view is further supported by NIST's decision to discontinue the calibration of mercury thermometers as of March 1, 2011 as part of a larger effort to phase-out the use of mercury thermometers, in collaboration with EPA, other professional standards organizations, and environmental and industry groups. This action will facilitate the transition to mercury-free alternatives in laboratories where annual mercury thermometer re-calibration requirements have proven to be an impediment to the complete removal of mercury measurement devices. Furthermore, NIST's decision to stop this service provides strong evidence that mercury thermometers are no longer necessary as primary standards and for accurate and reproducible temperature measurement.

Use of digital alternatives to mercury thermometers provides the added benefit of electronic record-keeping processes that would otherwise require manual documentation that could lead to human error in recording measurements.

3. Does the use of data-loggers for temperature measurement in autoclaves provide a viable alternative to the use of mercury-containing thermometers?

The IMERC-member states believe data-loggers offer a viable alternative to maximum registering mercury thermometers. Although initially more expensive, use of data-loggers potentially represents a significant lifecycle cost savings by avoiding possible thermometer breakage and resulting spills of mercury in the autoclave. A mercury spill would entail expensive cleanup or even unit disposal. Mercury vapor release from a mercury spill in an operating autoclave is potentially very dangerous to employees who could be unknowingly exposed to high vapor levels.

Data-loggers also allow for the ability to track temperature over time within autoclaves, providing assurance that adequate temperatures have been achieved for a sufficient period of time to ensure proper sterilization, while avoiding potential degradation of microbiological media. This information may also be useful in optimizing productivity and could potentially save energy by allowing for fine-tuning of cycle timing.

4. What else can EPA do to help expedite the use of alternatives to mercury-containing thermometers where feasible, comparable, and available?

The IMERC-member states encourage EPA to take the following steps to help expedite the use of alternatives to mercury-containing thermometers where feasible, comparable, and available:

- Actively engage as participants in ASTM committees and encourage ASTM to evaluate its standards as soon as possible.
- Provide assistance to states, ASTM, and others in evaluating non-mercury alternatives and publicize the outcomes of these performance-based studies.
- Clarify uses where mercury thermometers are no longer necessary as primary standards and for accurate and reproducible temperature measurement.
- Work with NIST to facilitate the switchover to non-mercury alternatives.
- Broaden EPA's efforts across programs to identify additional requirements, including other Clean Air Act and Resource Conservation and Recovery Act requirements, where mercury thermometers are referenced directly and provide more comprehensive flexibility under these requirements.

IMERC applauds EPA's efforts to reduce the unnecessary use of mercury thermometers and looks forward to continuing its partnership with EPA in this effort. Please do not hesitate to contact Adam Wienert, IMERC Coordinator at (617) 367-8558 x307 if you have any questions regarding this letter. Thank you for the opportunity to provide these comments and suggestions.

Sincerely,

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IMERC Chair

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