

## QUICKSILVER CAUCUS

The Association of State Drinking Water Administrators (ASDWA);  
The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA);  
The Association of State and Territorial Solid Waste Management Officials (ASTSWMO);  
The Environmental Council of the States (ECOS);  
The National Association of Clean Air Agencies (NACAA);  
The National Pollution Prevention Roundtable (NPPR)

Document Control Office  
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Office of Pollution Prevention and Toxics  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460-0001

March 10, 2011

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

[Submitted via Federal eRulemaking Portal]

Dear Sir or Madam:

On behalf of the Quicksilver Caucus (QSC), we are pleased to submit this comment letter 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* on January 12, 2011.

The QSC is a coalition of state environmental association leaders working to reduce mercury pollution in all environmental media as well as unnecessary uses of mercury, which can result in environmental pollution and direct human exposures to this developmental toxin. QSC members work collaboratively to develop and implement approaches to reduce human-derived sources of mercury in the environment and to share information on mercury sources, pollution controls, pollution prevention, research and monitoring. QSC members include the Environmental Council of the States (ECOS), the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the National Association of Clean Air Agencies (NACAA), the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), the Association of State Drinking Water Administrators (ASDWA) and the National Pollution Prevention Roundtable (NPPR). QSC has been a stakeholder in the mercury-containing thermometer dialog for several years. Many states have bans on the use of mercury thermometers and have moved to non-mercury alternatives in their state laboratories where non-mercury containing thermometers are available and where federal requirements allow.

QSC supports EPA’s proposal to incorporate revised ASTM International (ASTM) standards that provide flexibility to use alternatives to mercury-containing industrial thermometers. QSC suggests that EPA revise their rulemaking to require that non-mercury thermometers be used in instances where ASTM has updated their standards to require a non-mercury alternative (e.g. D-5865-10). In these cases, EPA should not allow the continued use of the mercury device as an option by retaining the obsolete ASTM standard.

QSC also urges EPA to require, to the extent possible, the use of non-mercury thermometer alternatives in instances where they are comparable, available and feasible, rather than just allowing the non-mercury alternative as an option.

**QSC recommendations in response to the specific questions raised by EPA are noted below:**

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

EPA should explore options to incorporate the ASTM standards by reference so any future amendments or changes to the ASTM standard do not necessitate an EPA rulemaking for those changes or amendments to be allowed pursuant to EPA's regulations.

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

Requirements should be performance-based. Flexibility to use non-mercury alternatives should be allowed and where effective non-mercury alternatives exist these should be required to the extent possible.

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

Data loggers appear to offer a viable alternative to maximum registering mercury thermometers and, although initially more expensive, offer potentially significant advantages. Avoidance of potential thermometer breakage and resulting spills of mercury in the autoclave, which would entail expensive cleanup or even unit disposal, represents a significant lifecycle cost savings. The ability to track temperature over time within the autoclave also provides 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.*

EPA should encourage ASTM to evaluate its standards as soon as possible. Assistance should be provided to states, ASTM, etc. in evaluating non-mercury alternatives. EPA should publicize and make available the outcomes of these performance-based studies. Where possible, it should be made clear where mercury thermometers are no longer necessary as primary standards and for accurate and reproducible temperature measurement. EPA should work with NIST to facilitate the switchover to non-mercury alternatives.

QSC particularly notes the statements of Gregory Strouse, Acting Division Chief, Group Leader, Temperature, Pressure, Flow and Metrology Division, Temperature and Humidity Group, National

Institute of Standards and Technology (NIST), referenced in the proposed rule, that NIST believes there are no fundamental barriers to the replacement of mercury-containing thermometers. QSC was also encouraged by the statements made by NIST that it is going to discontinue the calibration of mercury thermometers as of March 1 as part of a larger effort, in collaboration with EPA and other professional standards organizations, environmental, and industry groups to phase out the use of mercury thermometers. This will facilitate the transition to mercury-free alternatives in State laboratories, where the annual mercury thermometer re-calibration requirement has proven to be an impediment. Furthermore, if NIST is discontinuing this service, then it is clear that mercury thermometers are no longer necessary as primary standards and for accurate and reproducible temperature measurement.

QSC encourages EPA to expand this effort to include other CAA and RCRA requirements where mercury thermometer requirements are referenced directly in the regulation for more comprehensive flexibility. EPA should also encourage ASTM committees to revise standards that require the use of mercury-containing thermometers where viable alternatives exist as quickly as possible.

In conclusion, the QSC applauds EPA's efforts to reduce the unnecessary use of mercury thermometers. As EPA states in the FR notice on page 2059, NTTAA directs EPA to use voluntary consensus standards, such as the ASTM standards, and we urge that EPA's regulations allow the use of these voluntary consensus standards immediately upon their effective date, and should require the use of non-mercury thermometer alternatives where feasible. If you have any questions about this submittal, please contact staffer Matthew Jones ([mjones@ecos.org](mailto:mjones@ecos.org)) at ECOS/ 50 F Street, NW, Suite 350/ Washington, DC 20001.

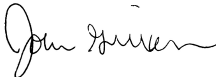
Sincerely,



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**Cc:** U.S. EPA OPPT c/o Robert Courtnage  
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The Quicksilver Caucus is a coalition of state environmental association leaders working to reduce mercury in the environment. More information about the Caucus is available at:

[http://www.ecos.org/section/committees/cross\\_media/quick\\_silver](http://www.ecos.org/section/committees/cross_media/quick_silver)