

Comments on RI Proposed Collection Targets for 2015 – 2020 for Collection of Out-Of-Service Mercury Containing Thermostats

The Rhode Island Department of Environmental Management would like to thank you for your review and comments on the Proposed Collection Targets for 2015 – 2020 for Collection of Out-Of-Service Mercury Containing Thermostats. RIDEM is currently in the process of reviewing and evaluating the comments submitted. At this point in time we would like to share the public comments received as of Wednesday, September 30, 2015.

Your comments and feedback are appreciated as RIDEM works to finalize the agreement with the manufacturers to improve their mercury thermostat collection program. For additional information, you can refer to RIDEM's website at: <http://www.dem.ri.gov/programs/benviron/assist/thrmstat/index.htm> or you may contact Beverly Migliore at Beverly.migliore@dem.ri.gov.

Thank you for your time and Feedback.

September 28, 2015

Beverly M. Migliore
Supervising Environmental Scientist
RIDEM Office of Customer and Technical Assistance
235 Promenade St.
Providence, RI 02908
via email to: beverly.migliore@dem.ri.gov

Re: Clean Water Action Comments on proposed collection targets for 2015 – 2020 for collection of out-of-service mercury containing thermostats

Dear Bev,

Thank you for the opportunity to comment on DEM's proposed targets for 2015 – 2020 collection of mercury containing thermostats. Overall, Clean Water believes that the collection goals are too low and that TRC could do much more to promote the program so additional thermostats are safely recycled. We encourage DEM to set more ambitious goals so TRC will publicize and run the program to capture as many thermostats as possible.

The program collects only a fraction of the thermostats that come out of service.

Skumatz Economic Research Associates, Inc. (SERA) completed a study in February 2014, "Estimated Annual Outflow of Mercury Containing Thermostats in the State of Rhode Island". SERA's statistically-valid estimate of the mercury containing thermostats in Rhode Island was 200,280 in residential properties, 58,101 in commercial properties for a total of 258,381. The study estimated that the number of mercury containing thermostats flowing out of residential and commercial buildings in the state is approximately 8,000 – 11,000 annually over the next 10 – 15 years.

While DEM's white paper seems to agree with the SERA estimates of mercury containing thermostats still in use in Rhode Island, "The Mercury Reduction and Education Act made it illegal to sell mercury-added thermostats in Rhode Island since 2006. However, **hundreds of thousands of mercury-added thermostats are still in use in Rhode Island homes and businesses**, and the law is aimed at collecting as many of those old thermostats as possible " (pg. 2), the annual collection goals are significantly below the SERA estimated outflow from residential and commercial properties.

The 2015 goal is less than what was collected in 2014

The White paper states that TRC collected 2,720 thermostats in 2014, yet sets a goal of 2,500 for 2015. It

seems odd to set a goal that is even less than the actual likely collection.

Subsequent annual collection goals are too modest

The 2016 proposal of 3250 is an increase of only 420 thermostats over the 2720 collected in 2014. The increase of 750 thermostats each year for 2016 to 2017, then no increase for 2018 seems very unambitious. To put it into perspective, 4000 thermostats in 2018 translates to about 45% capture of the Skumatz estimated 8600 coming out of service that year. And this is 8 years into the implementation of the program – a well publicized program would be doing a lot better on collecting the thermostats.

TRC spends little time promoting the program to contractors or overseeing the existing collection sites

TRC's 2013 annual report Appendix A lists the collection location site visits conducted by TRC during 2014. Six visits were made on June 12, 2014 between 9:01 AM and 9:19 AM with companies in Providence and Pawtucket. Assuming at least a few minutes drive time and time to park the car, TRC is spending little or no time at the facility, but simply went in and picked up the container of thermostats. On November 18, TRC conducted 28 site visits between 6:35 AM and 12:40 PM. These facilities ranged from Providence, Woonsocket, Smithfield, Peacedale, Middletown and Warwick. Again, it is impossible to imagine that any time was spent with the staff at the collection site.

The program is not well publicized

The program receives little publicity and relies almost entirely on communication to HVAC contractors and technicians. Limited/no outreach is conducted to homeowners or building contractors.¹ Clean Water has operated a homeowner focused CFL bulb recycling program at 14 hardware stores during 2015. None of the participating stores has any information for their customers about the need for thermostat recycling, or even a sign or handout to alert homeowners to the fact that thermostats also contain mercury. An informed homeowner who was concerned about mercury in the environment (someone who recycled their CFL bulbs) would make sure that the contractor they hire for work in their home or business, also safely disposed of the thermostat.

Recommended alternate collection goals

The collection goals need to be set based on the proven effectiveness of collection programs throughout the county. Other states have demonstrated that non-wholesaler collections are effective. Incentive programs in IL, ME and VT also demonstrate significant impact on collection numbers. We recommend that RI's program use these strategies to increase collections and offer the following alternate goals:

¹ TRC's 2013 annual Report, pg. 5 "Homeowners remain a secondary market as they represent a small segment of the market (+/- 10%)...TRC derives the greatest impact /value from its marketing activities by concentrating on the channel segment that conducts the vast majority of repeat thermostat replacements.

2015 – 2720 (Same as 2014 actual collection)
2016 – 4000
2017 – 5,000
2018 – 5,500
2019 – 6,000
2020 – 6,500

Thank you for the opportunity to comment. Please let me know if you have any question.

Sincerely,

A handwritten signature in cursive script that reads "Meg Kerr". The ink is dark and the signature is centered on the page.

Meg Kerr,
RI Director



September 30, 2015

Beverly M. Migliore
Supervising Environmental Scientist
RIDEM Office of Customer and Technical Assistance
235 Promenade St.
Providence, RI 02908

Re: Comments on Proposed Mercury Thermostat Collection Goals

Dear Ms. Migliore:

The Natural Resources Defense Council (NRDC) hereby submits these comments on the proposed Rhode Island (RI) mercury thermostat collection goals. NRDC supports the comments already submitted by Clean Water Action (CWA), and offers these additional comments below to reinforce some of the points made by CWA.

1. The Skumatz Economic Research Associates study for Rhode Island was provided to you on October 16, 2014.
2. In Rhode Island, TRC collected 0 mercury thermostats from retailers in 2013 and 2014, 0 thermostats from household hazardous waste (HHW) facilities in 2013, and 28 thermostats from HHW facilities in 2014. TRC has conducted virtually no outreach to these entities, in violation of the Rhode Island law governing this program. In contrast, 44% of the Maine thermostats collected in 2013 originated from HHW facilities or retailers, and in Vermont, 52% of the thermostats collected that year came from HHW facilities or retailers.¹ In 2014, 2,427 of the 4,341 thermostats TRC collected in Maine, and 68% of the thermostats collected in Vermont, came from retailers or HHW facilities.
3. The collection data, and the Maine and Vermont state program planning and outreach requirements directed at retailers and HHW facilities, demonstrate TRC can and should be required to collect substantially more thermostats than it is collecting now. The proposed Rhode Island goals do not reflect the program improvements achievable by requiring TRC to fully comply with the Rhode Island collection law and conduct the necessary outreach to retailers and HHW facilities.
4. Collections from large contractors in Rhode Island are also underperforming. TRC spent “one day” visiting contractors in 2013 – and won’t say how many

¹ We provide the 2013 and 2014 TRC annual reports for Vermont and Maine as attachments to these comments, since they are not available online.

contractors it actually contacted (TRC 2013 RI Annual Report, p.11). TRC conducted 34 "collection location" visits in 2014 (mostly wholesalers), but the use of the term "visit" is misleading – it was more like a fly by. Reviewing the time of the visits, its clear TRC spent less than two minutes at most locations (TRC RI 2014 Annual Report, Appendix A). TRC's plan for 2015 is the same as 2014 (TRC RI 2014 Annual Report, p. 19). This is hardly education and outreach. It is thus not surprising that only nine different contractor companies returned bins in 2013 (TRC RI 2013 Annual Report, Appendix A), and only five different companies in 2014. TRC acknowledges this weakness in its program (TRC RI 2014 Annual Report, p. 23), but ironically observes recent program increases are largely attributable to one large contractor company (Rise Engineering, which collected 848 thermostats in 2014, or 31% of the total 2014 RI collection). TRC also acknowledged the program is not visible enough to contractors generally (TRC 2013 RI Annual Report, p. 17). TRC's proposed remedy is inadequate - work with one multi-state company in 2015. We note Illinois recently mandated TRC program changes to do more in this area.² Again, the proposed Rhode Island collection goals do not adequately account for improvements in this facet of the TRC collection program, particularly in the short-term.

5. There is no real financial incentive element in the TRC RI program for either contractors or homeowners. A \$5 dollar coupon to Dunkin Donuts coupon at one RI location hardly qualifies (TRC 2014 RI Annual Report, p. 17). TRC acknowledges preliminary results from this incentive suggest little impact (p.23), which is not surprising because this incentive was meaningless. The extremely limited donut coupon stands in sharp contrast to the money incentive TRC provided for wholesalers, albeit a limited one, which TRC touts as a success. It also stands in sharp contrast to the financial incentives required by the Maine and Vermont programs, recent program changes mandated by Illinois, and the financial incentive RI DEM is authorized to impose if the program is underperforming.
6. The statute requires that RI DEM take into consideration the collection requirements in other states, and the effectiveness of programs in other states, when setting the RI mercury thermostat collection goals. Given the potential improvements to the RI program already demonstrated and required in other states, by targeting retailers, HHW facilities, and large contractors, and through utilization of a meaningful financial incentive, NRDC respectfully submits the alternative proposed collection goals advanced by CWA are more consistent with the intent of the statute and RI DEM "to collect as many of these old thermostats as possible."

Respectfully submitted,


David Lennett, Senior Attorney

² We attach the mandated IL program changes for your convenience.

KYLE PITSOR

Vice President, Government Relations

September 30, 2015

Beverly M. Migliore
Supervising Environmental Scientist
RIDEM Office of Customer and Technical Assistance
235 Promenade St.
Providence, RI 02908

RE: NEMA comments regarding Rhode Island DEM Proposed Collection Targets for 2015 – 2020 for Collection of Out-Of-Service Mercury Containing Thermostats

Dear Ms. Migliori:

The National Electrical Manufacturers Association (NEMA) is the principal trade association representing the US electrical products industry, including manufacturers of residential climate control devices. In 1998, three NEMA member companies – Honeywell, White-Rodgers, and GE – launched the Thermostat Recycling Corporation (TRC), a non-profit enterprise designed to facilitate recycling of mercury-added thermostats. The TRC now has 30 corporate members and is the only national program of its kind in the US (see www.thermostat-recycle.org).

On behalf of NEMA member companies that founded the TRC, we are pleased to respond to the proposed performance standards referenced above that establish collection goals for calendar years 2015 through 2020 for mercury thermostat collection programs operating in Rhode Island.

The TRC in Rhode Island

Since passage of the RI thermostat collection mandate in 2010, the TRC has conferred regularly and productively with DEM staff on measures to optimize the program’s performance in the state. This open communication leads to mutual understanding of the obstacles to higher thermostat collections and helps direct program resources to their most productive use. The manufacturers view this ongoing relationship as a key element in the program’s success in Rhode Island thus far.¹

Looking ahead, NEMA is hopeful this collaborative process will lead to additional growth in collections. But it will depend – as it does in all states with mandatory programs – on the extent to which **all parties** meet their obligations under the statute and participate effectively in the program. In Rhode Island, manufacturers must provide a statewide, accessible collection program, but HVAC wholesalers and contractors are legally obligated to serve as collection points, and “*any contractor who replaces a mercury-containing thermostat from a building*” must recycle that thermostat.² In addition, retail outlets and local government units may serve as collection points and the manufacturers’ program supplies promotional assistance to those that do so.

¹ In its memorandum announcing the proposed collection targets, DEM notes accurately that “*Based upon programmatic modifications enacted by TRC in response to feedback provided by the Department, in 2013 TRC reported that it significantly increased collections in RI by exceeding the established goal by 5%.*”

² Section 23-24.9-9(f) of the RI General Laws (RI Mercury Reduction and Education Act)

While all of these elements are crucial to the success of the program, collections will only occur if the party closest to the disposal decision – the contractors – complies with the legal obligation to recycle. Similarly, wholesalers can accept and maintain a TRC-provided collection bin but it provides no value to the program unless staff at the wholesaler outlet is appropriately trained to monitor and promote the program and return the bin regularly. Without a high level of compliance at these two levels, even the most expertly planned and executed program by manufacturers will struggle to meet even modest goals.

In light of the above, collection goals for the TRC program are quite clearly a **shared responsibility**. Policies and program changes aimed at achieving those goals must be based on that premise or they will have little impact.

In a related issue, NEMA sought to arrange agreement earlier in 2015 between DEM and the Rhode Island Resource Recovery Corporation for RIRRC to provide regular reports to DEM of the number of mercury thermostats recovered during its “offsite” collection events. NEMA conferred with both parties and it appeared that these reports would be forthcoming so that all thermostats collected by RIRRC could be counted towards the statutory collection targets. If this system is not yet in place, NEMA urges DEM to take additional steps to secure this arrangement.

DEM’s Proposed Annual Collection Goals

NEMA did not support the inclusion of numerical collection targets in the RI statute at the time of its enactment. We argued that the targets by necessity were arbitrary because there was no scientifically sound basis for determining the number of mercury thermostats in place in RI and the number removed from service each year.

This reality has not changed in the intervening years. We are aware of the study conducted by SERA for the Natural Resources Defense Council in early 2014 that purports to estimate these parameters for Rhode Island.³ The methodology used there – and in other states – to profile the “stock” and “flow” of mercury thermostats over time has been severely criticized in peer review.⁴ Among its core weaknesses is reliance on observation and recall by untrained homeowners for most of the data used to generate findings. To the extent that the proposed targets rely on the SERA study, NEMA reiterates its position that the study is an inadequate foundation for such a policy decision.

As described in the DEM memorandum, after an initial adjustment period following enactment of the law the TRC successfully achieved its goals for 2013 and 2014. Collections jumped almost 70% from 2012 to 2013 (to 2,618 units from 1,543) then leveled off the next year.

This phenomenon is typical of how the TRC program evolves in a state. Rhode Island had little if any infrastructure when the law was enacted and time was required to spread awareness of the program and establish the collection network. After two years, participation increased and

³ “*Estimated Annual Outflow of Mercury-Containing Thermostats in the State of Rhode Island*,” prepared for the Natural Resources Defense Council and the Multi-States Mercury Product Campaign Clean Water Fund by Lisa A. Skumatz, Ph.D., Skumatz Economic Research Associates, Inc. (SERA), February 2014.

⁴ See <https://dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Mercury-Peer-Review-Crespi.pdf> for critical review of the SERA methodology as originally applied in CA. A SERA study conducted for IL generated similar criticisms by reviewers at University of Illinois Prairie Research Institute.

collections rose substantially. This early stage jump is characteristic of new programs. Based on experience in other states observed over the past 18 years, however, yearly thermostat collections in Rhode Island going forward will likely level off or – at best - grow at a modest rate temporarily.

That being the case, NEMA believes the proposed collection goals beyond 2015 are overly ambitious. As noted in the TRC's most recent annual report, the participation rate among Rhode Island wholesalers is the highest among all mandatory state programs. TRC field work within the wholesaler community is an ongoing endeavor and undoubtedly will expand the collection network over time. But experience in Rhode Island – as well as other states - suggests these efforts are unlikely to produce such large and sustained increases in collections envisioned by the goals.

NEMA also notes that sale and distribution of mercury-switch thermostats was effectively banned in Rhode Island as of January 1, 2006.⁵ Thus no new installations have occurred in the state for nearly ten years and the “stock” of units still present in households has been declining steadily over that period. More generally, NEMA's reports to the IMERC Mercury Products Data Base reveal that total mercury content of thermostats sold by the three founding TRC members between 2004 and 2007 declined by more than 75%, indicating vastly lower sales nationwide during that period.⁶ All of this reflects the market transformation to programmable thermostats both before and after 2006.

HVAC Contractor Behavior

Ultimately, the success of any recycling program depends on the decisions made by the principal generator of the waste product being recovered. The vast majority of mercury thermostats are removed from service by HVAC contractors. TRC's operating structure is based on this reality – its principal collection channel is the wholesale outlets that contractors visit regularly and it allows contractors to obtain their own collection bins if they meet certain business size criteria.

The importance of contractor behavior to the success of the TRC cannot be overstated. Thermostat manufacturers are **several steps removed** from the actions of HVAC contractors and have no authority or direct influence over their activities. To bridge this gap, TRC staff reaches out to trade groups as well as senior management at large contractor firms to introduce the program and advise them of disposal bans in place in Rhode Island and other states. More often than not the response is discouraging as contractors see no value in ensuring their technicians will comply and no risk of consequence if they do not.

This sentiment was expressed just this month to TRC's representative by two Vice Presidents of a large HVAC contracting organization that operates franchise operations in many states, including Rhode Island. They agreed to provide TRC informational materials to their franchise owners in states with mandated collection programs, but would take no steps to compel them to comply.

⁵ § 23-24.9-7 of the RI General Laws banned the sale or use of mercury-added products containing more than one gram (1000 mg) of mercury after 1 January 2006. Mercury content in mercury switch thermostats typically exceeds this threshold.

⁶ See <http://www.newmoa.org/prevention/mercury/imerc/notification/>

TRC employs incentive programs aimed at individual technicians in the field that have had a modest effect in some cases. But NEMA believes dramatic change in behavior can only result either from 1) internal “top down” pressure from HVAC company management to make thermostat recycling a measureable performance metric, and 2) active enforcement of the disposal ban by state regulatory authorities. Policy choices that do not further these objectives will have a negligible impact on recycling rates.

In addition, the Rhode Island DEM has a clearly defined obligation under the statute to “*conduct an education and outreach program directed toward wholesalers, retailers, contractors, and homeowners to promote the collection of out-of-service mercury-containing thermostats.*”⁷ NEMA believes that regular, aggressive efforts in line with this directive, particularly aimed at increasing participation by large retail outlets, could increase the effectiveness of industry outreach in that sector.

Summary

NEMA appreciates the opportunity to present these comments. As explained above, we believe that DEM’s proposed collection goals for the TRC are overly ambitious given the expected course of the program in the state. No matter what goals are established, however, the more important policy objectives must be to expand the collection network, increase active participation by wholesalers, and force compliance within the HVAC contractor community. Manufacturers welcome the department’s help in this regard and urge DEM staff to collaborate with TRC on appropriate measures for doing so.

Sincerely,



Kyle Pitsor
Vice-President, Government Relations

Contact

Mark A. Kohorst
Senior Manager - Environment, Health & Safety
National Electrical Manufacturers Association
Suite 900
1300 N. 17th Street
Rosslyn, Va. 22209
Ph: 703-841-3249
Fax: 703-841-3349
mar_kohorst@nema.org
www.nema.org

⁷ *Op cit.*, 23-24.9-10.2(b)(2)

September 30, 2015

Ms. Beverly M. Migliore
Supervising Environmental Scientist
RIDEM Office of Customer and Technical Assistance
235 Promenade St.
Providence, RI 02908

Dear Ms. Migliore:

On behalf of Carrier Corporation, Lennox International, and Nortek we are pleased to respond to the proposed performance standards by the Rhode Island Department of Environmental Management (RIDEM) that establish collection goals for mercury thermostat collection programs operating in Rhode Island. In addition to the over 200 jobs and significant economic impact that our companies support in Rhode Island, we are also members of the Thermostat Recycling Corporation (TRC), a non-profit stewardship organization that facilitates and manages the collection and proper disposal of mercury-containing thermostats. TRC's mission is to promote the safe collection and proper disposal of mercury-containing thermostats and keep mercury out of the waste stream in order to protect the environment.

Outlined below are the reasons we cannot support the thermostat collection targets currently being proposed by Rhode Island.

1. In Rhode Island, manufacturers must provide a statewide, accessible collection program, and HVAC wholesalers and contractors are legally obligated to serve as collection points. The vast majority of mercury thermostats are removed from service by consumers, remodelers or HVAC contractors. Manufacturers are several steps removed from the actions of these contractors and collections will only occur if the party closest to the disposal decision – the contractors – complies with the legal obligation to recycle. Ultimately, the success of any recycling program depends on the decisions made by the principal generator of the waste product being recovered.
2. Mercury thermostat collection will only succeed through **shared responsibility**. No matter the standards set, they will not be attained unless all parties meet their obligations under the law – manufacturers, contractors, consumers, etc. Policies and program changes aimed at achieving those goals must rely on shared responsibility, or they will have little impact.
3. The proposed collection goals are overly ambitious. The sale and distribution of mercury-switch thermostats was effectively banned in Rhode Island as of January 1, 2006. Thus no new installations have occurred in the state for nearly ten years and the “stock” of units still present in households has declined steadily over that period. As noted in the TRC's most recent annual report, the participation rate among Rhode Island wholesalers is the highest among all mandatory state programs. TRC's work is ongoing and undoubtedly will expand the collection network over time. However, experience in Rhode Island – as well as other states – suggests these efforts are unlikely to produce large and sustained increases in collections.

We appreciate the opportunity to present these comments. Because of the reasons outlined above, we are unable to support DEM's proposed collection goals for thermostats. No matter what goals are

established, however, the more important policy objective must be to grow awareness and use of the program within the HVAC contractor community. We welcome DEM's help in this regard and urge staff to collaborate with TRC on appropriate measures to do so.

Sincerely,

John Hurst
Vice President, Government Affairs and Communications
Lennox International Inc.

Matt H. Lattanzi
Director of Warranty and Technical Service
Nortek Global HVAC

Neil W. Beup
State Government Relations
United Technologies Corporation