



Air Conditioning Contractors of America

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February 18, 2013

Sent Via Email: regs@dtsc.ca.gov

Randi Wood
Regulations Coordinator
Department of Toxic Substances Control
Office of Legal Affairs, Regulations Section
PO Box 806
Sacramento, CA 95812-0806

Re: Comments on 15-Day Public Notice
(DTSC Reference Number: R-2010-03, OAL Reference Number Z-2012-0807-05)

Ms. Wood,

The Air Conditioning Contractors of America (ACCA) appreciate the opportunity to provide comments on the 15-day public notice for the mercury thermostat collection and performance requirements. As the only nationwide association representing the technical, educational and policy interests of small and large businesses that design, install and maintain indoor environmental systems, ACCA takes special interest in this issue. ACCA supports the goal of reducing and eventually eliminating mercury from entering California's landfills with proper disposal of mercury thermostats. To this end, ACCA has partnered with the Thermostat Recycling Corporation (TRC), a non-profit corporation voluntarily founded by thermostat manufacturers.

As ACCA stated in its October 19, 2011 and October 1, 2012 comments, contractors in California already comply with California law (and Universal Waste Rules) by properly dispose of mercury thermostats through the TRC program. **For this proposed regulation to accomplish its goal, it must be simple and flexible so that nothing hinders participation.** Any step that fundamentally alters the simplicity of the program needs to be weighed against any perceived benefits of the change. It is well understood that economics and convenience are critical factor in any recycling program^[1]. Currently, using any of TRC's collection locations in California to properly dispose of thermostats requires nothing more than dropping the thermostat in the

^[1] Shaufique F. Sidiq, et al, The Effects of Behavior and Attitudes on Drop-off Recycling Activities, Resource Conservation and Recycling 54 (2010) 163-170.

collection bin. HVACR Technicians simply place whole thermostats in the provided collection container.

The requirement that technicians provide a CSLB Number to the business operating the collection location or on a bag or container adds unnecessary steps, reduces convenience and adds waste. At the same time the use of additional packaging would decrease bin volume requiring more frequent bin shipments and add to TRC's administrative costs with additional handling and disposal of the packaging. For the collection location it takes around 5 minutes to prepare the collection bin for shipment. Adding the step of reporting the CSLB Number at a collection location fundamentally alters the process for both the collection point and program participant. Finally, additional transaction costs (e.g. providing number, recording number, requiring staff assistance with recycling) will result in less recycling rather than more.

Considering these issues, ACCA requests the elimination of regulatory language requiring the reporting and disclosure of contractor license numbers and information. ACCA believes this increased requirement would have the opposite desired effect. The propose regulation is unclear how CSLB Numbers would be captured and reported to TRC. Would the collection points use log sheets and include them in the bin or would they create electronic records and transmit them? ACCA has some familiarity with information disclosure requirements and notes the potential volume of data to be captured and reported. There are 11,449 active C-20 licenses in California and according to the Bureau of Labor Statistics a minimum 17,000 HVAC technicians.^[2] Assuming an average of 3 thermostats per transaction, under the proposed performance requirements the regulation contemplates approximately 49,000 transactions be recorded and reported annually. As a CSLB license certifies the business not the technician, it is uncertain how the CSLB number or the absence of a CSLB number (or the frequency the number was reported) is a valid indicator of compliance with the requirement to recycle mercury-added thermostats. In the 15-Day Public Notice announcement, it is stated that these proposed regulations would not impose any new waste management requirements on handlers, but that just isn't the case.

Proper disposal of mercury thermostats is already required by law under the Universal Waste Rules. The majority of our contractors act in accordance with these rules, but as with any industry, there are some who will choose not to comply. Experience in our industry has informed us that there is indeed a correlation between additional requirements and the regulatory program's ultimate success. The more inconvenience associated with mercury switch recycling, the greater the risk for non-compliance by those who will choose to take the easier, less burdensome path.

^[2] Estimate undercounts total number of technicians as it does not include self-employed workers. Available at: [http://www.bls.gov/oes/current/oes499021.htm#\(1\)](http://www.bls.gov/oes/current/oes499021.htm#(1)).

ACCA again requests that the California Department of Toxic Substances Control remove text requiring placement of mercury thermostats in additional waste and the disclosure of the contractor's Contractors State Licensing Board Identification Number.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Emily Rogers", with a large, looping flourish extending to the right.

Emily Rogers
Director, Energy Policy

VIA E-MAIL (REGS@DTSC.CA.GOV) AND FAX (916-323-5542)

Randi Wood
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Office of Legal Affairs, Regulations Section
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Re: Mercury Thermostat Collection and Performance Requirements

Dear Ms. Wood:

On behalf of Honeywell International Inc. (“Honeywell”), we respectfully submit the following comments on the Economic and Fiscal Impact Analysis: Mercury Thermostat Collection and Performance Requirements (“EFIA”), which has been added to the rulemaking file for the Mercury Thermostat Collection Regulations (“Regulations”). We ask that these comments be included in the rulemaking file, along with all other comments, in accordance with Government Code Section 11347.3(b)(6).

Based on our review, the EFIA fails to consider significant effects the Regulations would have on the California economy.

I. DTSC Is Required To Conduct A Meaningful Assessment Of The Potential Adverse Economic Impact Of Its Proposed Regulations.

Government Code Section 11346.3(a) requires state agencies proposing regulations to “assess the potential for adverse economic impact on California business enterprises and individuals, avoiding the imposition of unnecessary or unreasonable regulations or reporting, recordkeeping, or compliance requirements.” If the agency determines there will not be a “significant, statewide adverse economic impact . . . it shall make a declaration [and] provide in the record facts, evidence, documents, testimony, or other evidence upon which the agency relies to support its initial determination.” *Id.* §11346.5(a)(8). In addition, the notice of proposed adoption of a regulation must include “[a] description of all cost impacts . . . that a representative . . . business would

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necessarily incur in reasonable compliance with the proposed action.” *Id.* §11346.5(a)(9).

These statutes require the agency to do more than “merely ‘consider’ a proposal’s impact.” *California Ass’n of Med. Prods. Suppliers v. Maxwell-Jolly*, 199 Cal. App. 4th 286, 305 (2011). Rather, an agency “specifically must ‘assess’ the potential adverse economic impact” of a proposed regulation, and not rely on “speculative belief.” *Id.* at 306.

II. The EFIA Substantially Underestimates The Costs Of Compliance.

As noted above, the EFIA must include “[a] description of all cost impacts . . . that a representative . . . business would necessarily incur in reasonable compliance with the” Regulations. Gov’t Code § 11346.5(a)(9). However, the EFIA contains no such description, and what little analysis it does contain is seriously flawed.

First, the EFIA is internally inconsistent as to whether the Regulations will result in new costs. On the one hand, it asserts that: (1) “there are no mandated additional requirements for new equipment, additional staff, consultants, testing laboratory costs, or other professional services” and (2) the Regulations “require no additional costs associated with maintaining shipping, receiving, and recordkeeping.” EFIA at 7. On the other hand, it asserts that: (1) “manufacturers may incur some increased costs associated with meeting the specified performance requirements” (*id.* at 4); (2) “TRC will be required to invest some additional resources in order to meet the collection rate goals established in these regulations” (*id.* at 9); and (3) the Regulations “will have a modest economic impact on approximately 30 manufacturers whose mercury thermostats were formerly sold in California.” *Id.* The EFIA does not recognize the contradiction between these two groups of statements, let alone attempt to reconcile them.

Second, the EFIA errs to the extent it concludes that because “[e]xisting law requires the manufacturer to establish a collection program,” the Regulations “do not impose any additional governmental fees, charges or assessments” on manufacturers. EFIA at 6. Instead, it asserts that the Regulations only “establish the performance requirement for that program.” *Id.* However, the fact that an existing statute requires thermostat manufacturers to establish a thermostat collection program does not drive the *costs* of the program. Instead, those costs are driven by the regulations setting the performance standards for collection.

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Third, in attempting to quantify the cost of compliance by the TRC, the EFIA focuses on the average cost to collect each thermostat. Using some of the 2011 TRC program administration expenses and an alleged 300,000 thermostat collection figure for that year,¹ the EFIA concludes that the average cost of collection is \$2.37 per thermostat. However, the EFIA's focus on average cost, rather than marginal cost, is misguided. TRC necessarily collected the most easily obtainable thermostats first. Accordingly, the cost of collecting each additional thermostat will increase as the difficulty of locating and collecting these thermostats increases. For example, in order to increase the collection rate, TRC would necessarily have to increase expenditures in a variety of categories, including marketing, education, travel, providing incentives, and likely increased personnel or contractors. These costs will far exceed \$2.37 per thermostat. The EFIA's failure to account for the marginal costs of collection efforts undermines its analysis.

Fourth, and finally, the EFIA also errs in assuming that collection costs per thermostat will remain constant over time. Instead, these costs will increase, not decrease, as the number of out-of-service mercury thermostats coming into the waste stream decreases (as the Regulations predict).

III. The EFIA Ignores The Significant Economic Impact Of Failing To Comply.

In addition to dramatically understating the costs of compliance with the Regulations, the EFIA ignores the substantial harm to the California economy that will be caused by non-compliance. Indeed, the EFIA indicates that it "presents estimates of the cost to comply with the proposed rules," not the costs of failing to comply. EFIA at 1. This is improper, particularly with respect to regulations that, as Honeywell and others have demonstrated, impose impossible performance goals.

The stated purpose of requiring agencies to analyze the economic impact of proposed regulations is to avoid "unnecessary or unreasonable regulations." Gov't Code §11346.3(a). To determine the reasonableness of the Regulations, DTSC must "'assess' the potential adverse economic impact." *California Ass'n of Med. Prods. Suppliers*, 199 Cal. App. 4th at 305. This assessment is to "be based on adequate information concerning the . . . consequences of[] proposed governmental action." Gov't Code §11346.3(a)(1).

¹ It is unclear where the 300,000 figure comes from.

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If a manufacturer fails to meet the performance requirements established by the Regulations, the statute provides that no one may sell a thermostat produced by that manufacturer. *See* Health & Safety Code § 25214.8.12(b)(1). As a result, whether manufacturers are subject to the penalties in the Mercury Thermostat Collection Act is directly linked to whether they can meet the performance requirements established by the Regulations. Accordingly, whether the Regulations are reasonable must turn in part on whether non-compliance is reasonably likely and what the impact to the California economy will be if approximately thirty thermostat manufacturers are subject to the sales ban. Yet the EFIA does not respond to the comments made by Honeywell and others that meeting the Regulations' targets will be difficult, if not impossible.

Moreover, even if the EFIA were correct in assuming that compliance with the targets is likely, the drastic consequences of a sales ban are so far-reaching that they must be analyzed in determining the Regulations' economic impact. The approximately thirty manufacturers the EFIA describes as affected by the Regulations represent a substantial majority of the California thermostat market. Indeed, these manufacturers represent well over half the market. As a result, if a sales ban is imposed on these manufacturers, the supply of thermostats will decline drastically as distributors, contractors and retailers cease selling entire product lines. The decreased supply, which will worsen as sales bans are imposed on more and more manufacturers, will increase thermostat costs. Not only will this increased cost will be passed on to consumers, but the EFIA leaves unaddressed if and how the remaining manufacturers could fill the void in the California residential and commercial market when sales bans are imposed.²

The EFIA also fails to consider the significant effects the sales bans will have on distributors, retailers, and contractors. For example, four of the largest California-based thermostat distributors focus on, and sell thermostats primarily from, only two manufacturers, both of which are included in this legislation. A sales ban on either of these manufacturers—let alone both—would have devastating consequences for both consumers and participants in the HVAC industry. In addition, even assuming the void left by the sales bans could be filled by other manufacturers, it will require investment to determine how these replacement thermostats work in the countless unique applications

² Although the EFIA identifies “approximately 30” manufacturers affected by the Regulations, the Regulations will likely affect more. As a result, the risk of a drastically decreased supply of thermostats is even greater than the number of manufacturers identified in the EFIA would suggest.

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that exist, and distributors will have to train their workforce and contractors accordingly. Finally, distributors would be at a significant disadvantage vis-à-vis out-of-state distributors that would still be permitted to purchase the banned products and bring them into California. For example, distributors with locations in neighboring states could sell banned thermostats at those locations, with the thermostats then being brought into California for installation. The EFIA ignores the dire consequences this would have on California businesses, as well as the related loss of tax revenue.

The impact on retailers is similarly significant and yet unaccounted for in the EFIA. Many retailers with substantial business in California have exclusive supplier contracts with manufacturers covered by the Regulations, and the loss of California sales would therefore be absolute if a sales ban were imposed on those manufacturers. Given increased thermostat costs as a result of decreased supply and the potential inability of the remaining manufacturers to keep up with demand, the EFIA should consider the economic consequences to retailers in California, especially compared with out-of-state retailers, of adopting the Regulations. Yet these costs and consequences have gone entirely unaddressed in the EFIA.

The sales bans would also impact contractors—notwithstanding the EFIA’s conclusion that they will feel “no economic impact.” As mentioned above, even assuming replacement thermostats could be found, contractors will need training in how the new thermostats operate in the variety of situations requiring replacements. This concern is especially urgent because new home construction is currently on the rise. Moreover, California contractors will be at a competitive disadvantage. First, the increased price of thermostats in California could result in contractors losing business to out-of-state competitors. Second, as discussed above, out-of-state contractors would be able to buy thermostats that couldn’t be sold in California and bring them into the state for installation.

For all these reasons, the EFIA fails to adequately address both the cost of compliance with the Regulations and the cost of non-compliance.

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Thank you for providing the opportunity to submit comments on the EFIA. We look forward to DTSC's response to these comments and those made previously.

Sincerely,



Steven L. Mayer



February 19, 2013

Randi Wood, Regulations Coordinator
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PO Box 806
Sacramento, CA 95812-0806

RE: NEMA Comments on Mercury Thermostat Collection and Performance Requirements

- **Department of Toxic Substances Control Reference Number: R-2010-03**
- **Office of Administrative Law Notice File Number: Z-2012-0807-05**

Dear Ms. Wood:

The National Electrical Manufacturers Association (NEMA) is the primary trade association representing the interests of the US electrical products industry. Our 450 member companies manufacture products used in the generation, transmission, distribution, control, and end-use of electricity, constituting the very foundation of the worldwide infrastructure for supplying electrical power.

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 more than 30 corporate members and is the only national program of its kind in the US (see www.thermostat-recycle.org). The program has recycled more than 1.5 million mercury thermostats nationwide since its inception, thereby diverting nearly 7 tons of mercury from the solid waste stream.

NEMA again appreciates the opportunity to comment on DTSC's proposed regulations implementing the Mercury Thermostat Collection Act of 2008 (Article 10.2.2, of chapter 6.5 of the Health and Safety Code, or "the Act"). Our membership supports product stewardship and the formation of the TRC long before any legislative mandates concerning mercury thermostats were enacted testifies to that commitment.

We focus on the new material included with the 15-day language including the "Economic and Fiscal Impact Analysis" (EFIA) released by DTSC in support of the rule.¹ Regrettably, the critical flaws that underlie the rule as it was initially proposed last year, which NEMA highlighted in its comments on the proposed rule last fall, are still present in the amended version and infect the EFIA. We are referring to the same flawed assumptions and limited understanding of thermostat installation and disposal channels, the unheard of annual incremental increases in thermostat collections in California that are deemed performance requirements,² the reliance

¹ "Economic and Fiscal Analysis: Mercury Thermostat Collection and Performance Requirements; DTSC Reference # R-2010-03

² Nor does the inclusion of data in the rulemaking record about California recycling rates support DTSC's analysis. NEMA referenced this data in its October 2012 comments, pointing out that this data *contradicts DTSC's prescribed*

on a flawed *per capita* thermostat collection metric that treats radically different and unique thermostat collection environments in other states as though they are the same as California.³ In addition, the EFIA is marred by cost assumptions that, when corrected, indicates that the economic burden of the rule on manufacturers will be much higher than projected by the Department.

More importantly, as NEMA pointed out in its previous comments, there is simply ***no valid basis*** for concluding that the performance standards specified in the rule are achievable, regardless of the amount of resources industry “invests” in the effort. The question that DTSC needs to ask and answer in the EFIA is this: Given that the proposed rule mandates--- contrary to all prior experience in thermostat collection across the United States and contrary to all experience with other recycling programs --- that thermostat manufacturers increase their California collections of spent thermostats from 18,000 units in 2011 to 65,100 units in 2013 (a 250% increase of 47,000 units in one year), and that manufacturers also increase their collection in 2014 to 95,400 units (an additional 46% increase of 30,300 units in the second year over the first year), rising to 147,000 in 2017, what is the cost to achieve that kind of rapid, incremental increase? DTSC has not asked that question in the EFIA and the EFIA provides no clue to its answer, yet it is the question that has to be asked and answered in order to obtain a description of all cost impacts that a representative business would necessarily incur in reasonable compliance with the proposed rule. *Cal. Government Code* §11346.5(a)(9). The EFIA discusses a number of other costs, but mysteriously ignores the fact that costs are driven by setting performance requirements, and DTSC has made no meaningful effort to study that fact.⁴

- **DTSC Erroneously Estimates Constant Costs Per Unit For Each Year Throughout the Regulatory Period, When Everything About The Proposed Rule Says Units Costs Will be Rising**

In the case of thermostats, these costs include increased outreach and incentives provided to wholesalers, distributors, and contractors – all of whom must meet their obligations under the law if the program is to succeed. Regular site visits to these stakeholders as well as other “on-the-ground” activities by NEMA members and other manufacturers aimed at stimulating collection and return of thermostats will grow exponentially as the program strives to reach the unattainable, mandatory targets. As it is based in the Washington, DC area, the TRC would need to travel more frequently to trade shows and other industry events in CA and hire staff or consultants in the state to help spread awareness of the program, encourage participation, and inform stakeholders of the statutory requirements.

thermostat collection performance requirements. DTSC has not explained the similarities between recycling used thermostats and other products, and in fact the programs, channels, and means of collecting are radically different as NEMA previously noted. Furthermore, the recovery of raw material from recycled product has re-use value to those industries, which is not the case for mercury thermostats. The fundamental point made by NEMA in its previous comment remains valid: “improvements in recycling behavior generally do not take place in large, annual, stepwise jumps over a handful of years such as those proposed by DTSC.”

³ We incorporate these remarks by reference. NEMA Comments on Proposed Regulations: DIVISION 4.5, TITLE 22, CALIFORNIA CODE OF REGULATIONS - CHAPTER 24. MERCURY THERMOSTAT COLLECTION AND PERFORMANCE REQUIREMENTS: Department Reference Number: R-2010-03, submitted 10/02/2012

⁴ We observe only that DTSC acknowledges that manufacturers and “TRC will be required to invest some additional resources to meet collection rate goals established in these regulations,” EFIA at 4 and 9, but this general observation is not the same as assessing the potential adverse impact, which NEMA submits that DTSC is required to do under the California Government Code provisions.

There is no doubt that costs would *rise* dramatically each year as a result of the proposed rule. In contrast, DTSC has assumed, without explanation and contrary to all expectation, that unit costs will be constant each year: the unit cost per thermostat collected -- specifically stated at pg. 6 of the EFIA to be a **constant** \$2.37 per thermostat each year throughout the regulated period. In short, DTSC has failed to recognize the rising unit costs of the incremental effort required to capture an increasing number of spent thermostats that is, quite frankly, chimerical -- beyond the reach of what is feasible. It is obvious and unavoidable, given the performance standards that DTSC has proposed, that this cost is going to be rising each year quite rapidly --- it will never be constant at \$2.37 per unit or constant at any price throughout the regulated period under the proposed rule. Given this deficiency in the analysis, no one can have any confidence in the Economic Impact Analysis that DTSC has presented or the conclusion that the impact will be "modest," EFIA at 9, the Department must look at this subject afresh from an entirely different perspective that accurately assesses the true economic impact of the regulation so that it rests on more than a speculative belief. This conclusion ties back to the fact that DTSC has neither asked nor answered the most salient question that we have posed above.

- **DTSC's comparison to other state programs is incomplete and misleading**

The EFIA characterizes the rule's performance standards as "*considerably more modest*" than the industry's purported collection rates in "*several small states*," presumably referring to Maine and Vermont. DTSC's preferred metric for program performance is number of thermostats collected per 100,000 population.

NEMA explained at length in its 2012 comments why state comparisons based on this *per capita* metric are inappropriate. If DTSC believes it is a valid approach, it must analyze all the demographic, legal, governmental and marketplace similarities and differences that justify or do not justify the benchmark comparison with those other much smaller states in order to support this method of analysis. The EFIA does not do this, and hence the justification for the cost estimates based on DTSC's per capita metric is merely speculative belief.

Maine and Vermont are very expensive programs. DTSC does not acknowledge that. Maine and Vermont both require manufacturers to provide financial incentives (*i.e.*, "bounty" payments) to contractors to encourage them to recycle thermostats. The programs are expensive, administratively complex, vulnerable to fraud and abuse, and despite claims to the contrary, have not been show to effectively motivate recycling behavior. Furthermore, and importantly, the State agencies have invested significant resources in educating and working with the channel about their legal obligations to collect and dispose, and there is no indication that California has budgeted anything toward that end. Nor has DTSC analyzed whether it can even devote similar resources with the same impact given that California is a larger state with more population centers that inevitably lead to state resources being spread thin.

The costs and complications that manufacturers have encountered in these “small states” would be magnified enormously in California. The administrative burden alone would be sufficient to ensure the cost per thermostat collected does not stay constant, but will rise steadily each year to chase the unattainable goal that the EFIA erroneously assumes is attainable.

Thank you for your consideration to our comments.

Sincerely,

A handwritten signature in black ink that reads "Kyle Pitsor". The signature is written in a cursive, flowing style.

Kyle Pitsor,
Vice-President, Government Relations



NATURAL RESOURCES DEFENSE COUNCIL
THE EARTH'S BEST DEFENSE



**Mercury
Policy Project**



February 19, 2013

Debbie Raphael, Director
Department of Toxic Substances Control
1001 I Street
Sacramento, CA 95814

Regarding: Notice of Document Availability and DTSC Post-hearing Changes to Regulations for Mercury Thermostat Collection and Performance Requirements

Dear Director Raphael,

On behalf of the above-signed organizations, we submit these comments in support of the Department of Toxic Substances Control (DTSC) proposed post-hearing changes to regulations on mercury thermostat collection. Overall, these changes are an improvement to the regulations as originally proposed, and will contribute to the effectiveness of California's thermostat collection program.

Before addressing specific aspects of the post-hearing changes, it bears repeating from our prior comments that this rulemaking is a critical means of bringing transparency and

accountability to the poorly performing manufacturer-sponsored collection program administered by the Thermostat Recycling Corporation (TRC). This importance is further demonstrated in one of the new documents added to the rulemaking file, the Supplemental Economic and Fiscal Analysis.

In California, TRC collected 19,297 thermostats in 2011 (the most recent year for which collection data are available), representing 4.1–8.5% of the thermostats becoming waste in the state that year. TRC's poor program performance reflects the relatively meager resources manufacturers devote to the program, both in California and nationally. Below are the TRC annual national program costs for 2009-2011, as provided in the supplemental Economic and Fiscal Impact Analysis for this rulemaking.¹

TRC 3-YR NATIONAL PROGRAM COST

	Activities	2009	2010	2011
Direct Costs	TRC - Staff and Administration	\$248,066.00	\$231,757.00	\$255,617.00
	Recycling Costs	\$222,755.00	\$300,096.00	\$299,877.00
	Insurance	\$18,706.00	\$17,771.00	\$13,945.00
	New Collection Containers	\$18,130.00	\$18,219.00	\$18,859.00
	Marketing & Outreach	\$96,867.00	\$76,696.00	\$123,221.00
Other	Travel	\$16,105.00	\$28,809.00	\$28,108.00
	Legal	No-Report Cost	No-Report Cost	\$93,272.00
	Statutory Incentive Payments (not in CA)	\$27,496.00	\$40,380.00	\$37,860.00
Number of Thermostat Collected		155,733	200,064	300,000
Totals		\$648,125.00	\$713,728.00	\$870,759.00

As this table indicates, TRC spent on average less than \$100,000 per year for education and outreach to cover the entire country during this three year period. With this meager expenditure of resources, the TRC program results in California (or nationally) are not surprising. Perhaps what is surprising is that TRC has been able to squeeze by with so little financial investment for so long. Without the meaningful performance standards provided for in this rulemaking, the easy and cheaper road will remain available to TRC, and the mercury thermostat collection capture rate in California will continue to be pathetically small.

Methodology for Determining Number of Mercury Thermostats Becoming Waste

¹ <http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Attachment-to-399-Economic-and-Fiscal-Impact-Analysis-2.pdf>, p. 5.

The post-hearing proposed regulations continue to rely appropriately upon a study submitted by TRC as the basis for determining the number of mercury thermostats becoming waste in California annually.² As we noted in our previous comments, TRC submitted this study in response to a statutory mandate, since the Legislature anticipated it would be used for this express purpose. Accordingly, the DTSC methodology is fully consistent with the statutory framework.

We have reviewed the two external peer reviews of the TRC 2009 Waste Flow Report, and find nothing in these reviews which warrants a different approach. Indeed, to the extent the peer reviewers find technical flaws in the TRC study, those flaws appear to involve mercury flows from commercial entities and other issues which result in the potential underestimation of the number of mercury thermostats becoming waste.³ Accordingly, the peer reviews further reinforce the very conservative nature of DTSC's proposal to rely upon the low end estimates in the TRC 2009 Waste Flow Report.

We support the proposed post-hearing changes providing for a 2013 pro rata value, in the event the rules become effective in July of this year. These regulations are already long overdue, and should become effective in 2013 to the maximum extent possible, even if only for half the year.

We also support the changes to section 66274.4(b) related to the submission of additional data on the number of thermostats becoming waste in California, in particular the mechanism for submitting the plan or methodology for collecting the data at least six months in advance of actual data collection to facilitate DTSC (and presumably stakeholder) review. However, as articulated in our earlier comments, we believe the plan or methodology submission should be a mandatory obligation, and not left to the discretion of the entity intending to submit the data. While it is true the entity proceeds at its peril by collecting the data before thoroughly vetting the plan or methodology with DTSC and others, we also consider the potential waste of DTSC and stakeholder resources that may occur in forcing "after the fact" changes to a study inadequately undertaken in the first instance. It is best for everyone involved if the plan is adequately vetted before the time and expense associated with data collection are incurred.

Annual Collection Rate Performance Requirements

The post-hearing changes to the regulations maintain the performance standards as originally proposed. We continue to find these performance standards too conservative, particularly given the likely underestimation of the number of thermostats becoming waste. As illustrated in the new Economic and Fiscal Impact Analysis, the per capita collection rates in the early years of

² Mercury Containing Thermostats: Estimating Inventory and Flow from Existing Residential & Commercial Buildings, prepared for TRC by Skumatz Economic Research Associates (SERA), dated December 28, 2009 (hereafter "TRC 2009 Waste Flow Report").

³ <http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Mercury-Peer-Review-Crespi.pdf>, p. 2;
<http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Mercury-Peer-Review-Jewel.pdf>, p. 9.

the California program as proposed (2013-2014), are less than half of the currently achieved Maine and Vermont per capita collection rates.⁴ The early years of the program are of greatest concern because this is when the numbers of mercury thermostats becoming waste are the largest, since the number of thermostats with mercury remaining in use is declining over time, California has many consumer product recycling programs that achieve recycling rates in excess of what is proposed for mercury thermostats.⁵ As we have noted previously, we believe a higher final collection rate of thermostats containing mercury is achievable and appropriate, yet given these rules are already overdue, we prefer this program begin without further delay and stronger performance standards for the later years promulgated sometime in the future.

Annual Reporting Requirements

We support the proposed post-hearing changes to the reporting requirements, particularly the changes to 66274.8(i) related to providing mercury thermostat collection numbers from other states. DTSC has the authority to require this information, and it will be critical for DTSC to have this information to assess both the quality of California's program versus programs in other states, and the measures DTSC might pursue in California to improve program performance.

DTSC's authority to require such reporting can be found in §§ 25214.8.20 and 25214.8.17 of the statute. Section 25214.8.20 of the statute specifies that the intent of the law is to "provide for the collection and recycling of the maximum feasible number of out-of-service mercury-added thermostats." Accordingly, Section 25214.8.17(a) provides DTSC with broad authority to order a manufacturer to "revise its program and undertake actions to comply with this article." In addition, § 25214.8.17(b) requires the agency to adopt regulations "to develop performance requirements that specify collection rates expressed as a percentage of out-of-service mercury-added thermostats becoming waste annually."⁶

Together, these provisions authorize DTSC to require reporting on other state collection programs as needed to facilitate the development (and potential revision) of appropriate performance requirements, and to facilitate the continual achievement of the statutory goal of maximum feasible collection of out-of-service mercury-added thermostats. Such information will

⁴ <http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Attachment-to-399-Economic-and-Fiscal-Impact-Analysis-2.pdf>, p. 4.

⁵ For example, the record now includes several CalRecycle reports with the following information.

- In 2011, 84% of all beverage containers were recycled.
- In 2010, 81% of tires were diverted from landfills.

<http://www.calrecycle.ca.gov/Tires/Overview.htm#TireDivDis>

<http://www.calrecycle.ca.gov/BevContainer/Rates/BiannualRpt/12MonPeriod.htm>

Similarly, a BCI report finds the recycling rate for lead-acid batteries in the U.S. for the years 2007 – 2011 to be 98.7%. Battery Council International, National Recycling Rate Study, Prepared by: SmithBucklin Corporation, Statistics Group, Chicago, Illinois, May 2012; Page 1.

⁶ In the proposed post-hearing changes to the regulations, DTSC expressly preserves its discretion to revise the performance requirements for calendar years 2018 and beyond.

certainly be needed to revise the California performance requirements if DTSC elects to do so, so that DTSC can readily compare California's rates with the best performing state programs elsewhere in the country. Similarly, the collection numbers from other states will be critical for DTSC in discharging their ongoing obligation to revise the California TRC program if the program is not meeting the required performance requirements, since information from other states' collection programs is the best means of identifying successful measures in other states achieving significant program results. As discussed further below, unless DTSC requires this reporting, the necessary information on other state collection programs needed to determine and evaluate the experience in other states, and thereby ensure collection of the maximum feasible number of out-of-service mercury-added thermostats, will not be available to DTSC.

Left to its own devices, TRC will continue to obscure its poor performance in two significant ways. First, beginning with the 2009 performance results, TRC ceased to release actual state-by-state thermostat collection numbers, except in states where they are required to do so by law. Limiting the data availability in this way blocks any meaningful level of accountability.

Second, TRC uses increases in collection numbers from year to year as its measure of success, even where it's clear only a small fraction of mercury thermostats are still being recycled. In its 2011 Progress Report, TRC describes the Texas program as a huge success story, because collections are up 400% since 2009, largely due to the actions of one wholesale company.⁷ However, TRC fails to note that very few mercury thermostats were collected in 2009 and before. Using previously released data from TRC, only 344 mercury thermostats were collected in 2007, the base year for TRC's new measure of program success.⁸ In 2008, 1,820 thermostats were collected, again based on data TRC previously released. From these data and the TRC Progress Report, it is clear the Texas program results were worse for 2009 than 2008; we estimate about 960 thermostats were collected given the magnitude of decline versus 2008. So the increases TRC touts are measured off a Texas program that was collecting fewer than 1,000 thermostats, in a state with a population in excess of 25 million.

Therefore, even after the increases in 2010 and 2011, we estimate the Texas program still collected less than 5,000 thermostats in 2011, as compared to the Maine program which collected over 1,500 more thermostats in the same year with a population 20 times smaller. Or to put it another way, given the size of the Texas population, the TRC program is still not collecting the vast majority of mercury thermostats becoming waste in Texas. Similarly, Georgia is ranked first according to the TRC's year-to-year improvement index, but still collected only an estimated 1,655 thermostats in 2011 statewide, and thus ranks near the bottom in state per capita collection rates.⁹ We note the Georgia and Texas programs are not mandated by state

⁷ Keeping Mercury Out of the Waste Stream – One Thermostat At A Time, TRC 2011/2012 Progress Report (hereafter "TRC Progress Report"), p. 5. <http://www.thermostat-recycle.org/files/media/20120808125856.pdf>.

⁸ Turning Up The Heat, Exhibit 5, available at <http://mercurypolicy.org/wp-content/uploads/2010/02/turning-up-the-heat-3.pdf>

⁹ TRC Progress Report, p. 13. <http://www.thermostat-recycle.org/files/media/20120808125856.pdf>.

law, thus the post-hearing changes to 66274.8(i) are necessary to ensure the necessary collection numbers on all state programs would be provided.

The post-hearing changes to the proposed rules in this subsection could be further improved by requiring manufacturers to provide data on other state programs during 2009-2012, to coincide with the period of time TRC refused to release its state-by-state thermostat collection data. We note TRC routinely collects the data on the number of thermostats collected in order to create the TRC Progress Report. Therefore, the reporting obligation in the post-hearing changes, and any reporting for previous calendar years DTSC might include in response to these comments, poses no increased burden upon those manufacturers participating in the TRC program.

We Urge DTSC to Move Forward to Finalize this Important Regulation as Swiftly as Feasible.

We are grateful for the hard work of many DTSC staff on these regulations, including the agency's efforts to engage in an extensive and thorough stakeholder input process. We urge a swift conclusion to the rulemaking so that greater numbers of mercury thermostats are collected and properly disposed of. Thank you for your consideration.

Sincerely,

David Lennett, Senior Attorney
Natural Resources Defense Council

Michael Bender, Executive Director
Mercury Policy Project

Heidi Sanborn, Executive Director
California Product Stewardship Council

Abby King, Toxics Policy Advocate
Natural Resources Council of Maine

Bob Wendelgass, President and Chief
Executive Officer
Clean Water Action

Laura Haight, Senior Environmental
Associate
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Amber Meyer Smith, Director of Programs
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Product Stewardship Institute

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Annie Pham, Policy Advocate
Sierra Club California

February 18, 2013

VIA EMAIL

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Re: DTSC's "Mercury Thermostat Collection and Performance Requirement (February 2013) Division 4.5, Title 22, California Code of Regulations, Chapter 24"

Dear Ms. Wood:

Thermostat Recycling Corporation (TRC) appreciates the opportunity to provide comments on the revised text of the proposed Mercury Thermostat Collection and Performance Requirement (August 2012) Division 4.5, Title 22, California Code of Regulations, Chapter 24 (hereafter referred to as the "Proposed Regulations"). We ask that TRC's comments and all of our attachments that accompany these comments be included in the rulemaking file, along with all other comments, in accordance with Government Code §11347.3(b)(6).

TRC is a non-profit membership organization that facilitates the collection and proper disposal of mercury-added thermostats. Today thirty-one manufacturers support the program nationally. TRC's collection network includes over 3,000 HVAC wholesale distributors, HVAC contracting businesses, local governments, and thermostat retailers. Nationally, TRC has recovered over 1,500,000 mercury thermostats, keeping over seven tons of mercury out of solid waste. On behalf of its members that historically branded mercury-added thermostats sold in California, TRC has been and continues implementing the collection program required of them to comply with the Act.

TRC is pleased that DTSC made a number of changes in the proposed regulations in response to our comments. Regrettably other aspects of the regulation remain unchanged and TRC will again assert that the regulation proposed by DTSC will not enhance its program in California and some aspects of the proposed regulation will in fact have a deleterious effect on recycling of mercury thermostats in California.

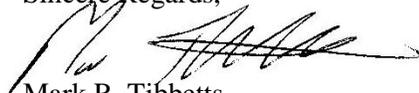
- First, TRC has advised its members that the proposed performance requirements are unrealistic and unattainable and manufacturer non-compliance is probable within the first year of the regulation's enactment. TRC notes DTSC included within the record data on the performance of other recycling programs. TRC is familiar with aspects of those programs and urges DTSC to demonstrate the relevance to the manufacturers' performance requirements under this proposed regulation.

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- Second, TRC reiterates its concerns that the reporting requirements in the proposed regulation will deter desired recycling behavior and likely lead to greater non-compliance with both the disposal ban and contractor requirement to recycle.
- Third, the reporting requirements lack clarity, seek data outside DTSC's authority, and are inconsistent with the statute.
- Finally, the economic impact analysis is faulty as it grossly underestimates the cost impact of the regulation.

Please feel free to contact me (mark.tibbetts@thermostat-recycle.org) if you have any questions or require clarification on any areas of our comments.

Sincere Regards,



Mark R. Tibbetts
Executive Director
Thermostat Recycling Corporation

Attachment: Specific Comments of Thermostat Recycling Corporation (TRC) on DTSC's Mercury Thermostat Collection and Performance Requirement (February 2013) Division 4.5, Title 22, California Code of Regulations, Chapter 24"

Attachment 1

Specific Comments of Thermostat Recycling Corporation (TRC) on “Mercury Thermostat Collection and Performance Requirement (February 2013) Division 4.5, Title 22, California Code of Regulations, Chapter 24”

I. Concerns with Reporting Requirements Imposed on Manufacturers, HVAC Wholesale Distributors, HVAC Contractors, and Demolition Contractors

A. Section 66274 Identification Requirements When Delivering Mercury Thermostats to a Collection Location

TRC previously raised issues about provisions in this section as they were not well conceived and likely be counter-productive. The regulation remains ambiguous on the practical aspects of implementing this reporting scheme. The regulation merely states the contractor or employee of the contractor would provide the license number at the time of drop-off. TRC notes that while manufacturers have the obligation to report these numbers, there is no similar obligation on the business collecting waste thermostats to provide those numbers to manufacturers (or their program).

B. Section 66274.8 Annual Reporting Requirements

TRC was pleased to see DTSC acknowledged many of the concerns with the manufacturer reporting requirements. However, a number of significant issues remain. TRC’s concerns are driven by the lack of clarity in the regulation and practical considerations. DTSC has also exceeded the scope of its authority and the regulation is inconsistent with the statute.

TRC highlights areas of the reporting requirements that are ambiguous or redundant:

- Section 66274.8 (a)—It is not possible to provide the names of manufacturers participating in its program that sold mercury-added thermostats in California. It is important to recognize that manufacturers may not have sold thermostats in California. It is more likely manufacturers sold mercury-added thermostats to others outside of California who subsequently re-sold them to their customers in California. TRC can identify the names of member manufacturers that own or owned the brand(s) of thermostats recovered from TRC collection locations in California but does not have information on the manufacturer of the brands that were historically sold in the state.
- Section 66274.8 (b)(1) and (b)(2)—As revised these two requirements are redundant. TRC notes the statute requires the reporting of the names and locations of wholesalers *participating* in the program. Paragraph (1) was revised to require the reporting of names with other data for each location at which out-of-service mercury thermostats were collected in bins provided by the manufacturer (program). Paragraph (2) requires reporting of the locations from which bins were returned and the date of each return. TRC fails to see the difference between these two requirements. Unless a bin or bins are

returned from a location TRC has no way of knowing if thermostats are (were) collected at the location. Logically if thermostats were collected from a location then the location would be included in data required in Paragraph (2).

- Section 66274.8 (2)—TRC raises concerns with the requirement to specify the counts of thermostats produced by manufacturers that are no longer in business and a count of thermostats whose manufacturer is indeterminate. TRC’s current practice is to record receipt of all thermostats recovered from 1) non-participating manufacturers, 2) defunct manufacturers, or 3) thermostats of indeterminate manufacturer under the category NOM (Not Our Manufacturer). TRC fails to see any compelling public policy benefit in requiring the additional data collection. Requiring TRC to do so would be burdensome on the program as it would require updates to its data management program and additional data entry.

TRC also notes DTSC failed to include a category for counts of thermostats produced by manufacturers that are not participating in the program. It is evident from this revision and the Economic and Fiscal Impact Analysis that DTSC is wrongly assuming all mercury-added thermostat manufacturers are currently in compliance with California law. This is not the case.

- Section 66274.8 (F)—This requirement, as revised, is ambiguous and redundant. TRC highlights the inclusion of the word “*participating*” in the revised regulations. TRC respectfully suggests a “participating” location would have returned a bin(s) within 18 months and if a location failed to return a bin in a year and half one may rightfully assume the location is no longer participating in the program. This begs the question, should the location be included or not included in the report? Also note manufacturers are required to provide data on the location and the date bin(s) are returned. As such this provision seems redundant as TRC assumes DTSC, as part of its compliance/enforcement efforts had developed and maintains a master list of all facilities with obligations under the Act. As such, bin receipt data provided elsewhere would be sufficient to assess the level of activity (e.g. compliance with mandate to collect) to facilitate DTSC compliance/enforcement efforts.
- Section 66274.8 (h)(2)(1)— TRC also notes DTSC added the requirement for manufacturers to provide data on programs in states other than California. TRC is surprised by the inclusion of this requirement in a California specific regulation. TRC currently offers its free recycling program in 48 states (Federal transportation regulations preclude offering the program in Alaska and Hawaii). In all states but California, Iowa, Illinois, Maine, Montana, New Hampshire, Pennsylvania, Rhode Island, and Vermont there is no obligation to participate in TRC’s mercury thermostat collection program and the program remains 100% voluntary for contactors and HVAC distributors. Moreover, according to TRC’s research less than fifteen states (including the nine that mandate mercury thermostat recycling programs) prohibit the disposal of mercury-added thermostats in solid waste and/or require HVAC contractors to recycle mercury thermostats removed from service. TRC brings this to DTSC’s attention in an effort to establish a rationale for data on such dissimilar program(s) to the one operated in

California. TRC fails to see the utility this data provides in assessing the manufacturers' program performance in California against dissimilar programs in other states. Data on similar programs, as noted in previous comments, are public records in states where they are operated and available to DTSC and others.

TRC believes the legislature understood this fact and as such this provision exceeds DTSC's authority, being inconsistent with statute, and being unnecessary. There is nothing in the statute that evinces a clearly expressed intent that this statute would have extraterritorial application. In fact, every provision of the statute reveals only an intent to have application within California, including the reporting requirements. *Cal. Health & Safety Code* §25214.8.13(i). Certainly, California would have no authority to collect data for other states and share that data with anyone. While the statute requires manufacturers to include certain information in annual reports, *id.*, it does not provide DTSC discretionary authority to impose any additional requirements.

II. Inadequacy of Economic and Fiscal Impact Analysis

TRC has been operating a national recycling program since 2002 and also implements "mandatory" programs on behalf of its members in nine states including California. Since that time TRC has recovered over 1.5 million thermostats. TRC has significant experience with the costs associated with operating and promoting the collection of waste mercury thermostats.

It is with this experience that TRC respectfully urges DTSC to revisit and update its estimates of the economic and fiscal impact of the regulation as the analysis fails to account for costs associated with manufacturer efforts to comply with regulation—in particular the Performance Requirements.

This is due to the fact that DTSC's qualitative analysis was inadequate and went no further than to contrive a constant cost to TRC for each thermostat recovered by year. From that figure DTSC extrapolated future costs by simply multiplying the performance requirement against the most recent average cost.

The fact is TRC's average cost to recycle thermostats is *increasing* not decreasing and California's infeasible performance requirements that contemplate huge stepwise or incremental increases in collections that have no basis in experience will drive both average and marginal costs up significantly.

The key point is that TRC saw significant but unique increases in collections in 2009 and 2010 that were disproportionate to the increases in expenses. The opposite has incurred more recently when the unique driver for those increases abated. The cost per thermostat recovered in 2010 was lower because TRC benefited from the utility demand response thermostat replacement program in Maryland. TRC recovered over 36,000 units in 2009 and 43,000 in 2010 from

Maryland. In 2010 32,624 alone came from a single contractor operating out of single location. TRC's incremental cost of capturing these units in this unique situation was relatively low¹.

Given that California will be doing nothing of a similar nature, the more likely outcome is the typical cost scenario of rising average costs. Please note, when Maryland's collections declined by 20,000 units TRC offset that collection decline with substantial increases in collections from the other states— but at a substantially increased cost. Using DTSC's own figures, TRC's marketing costs increased by 61% in 2011 to achieve the same overall result in 2010.

This is where DTSC's fiscal and economic impact analysis most glaringly fails. If the current effort yields 18,000 units then it seems logical that to achieve a 717% increase in the number recovered within six years will require substantial additional effort (e.g. substantially increased costs) in addition to the costs associated with transporting and disposing of the additional units. By simply using 2011 average costs DTSC made no effort to estimate the costs of increasing collections from the current (2011) base of approximately 18,000 units to the maximum rate of 147,000 units in 2017 (6 years).

¹ See table 1.1 in TRC's previous comments for data on the Maryland program