

Comments and Questions from the Public Workshop on Mercury Thermostat Recovery Draft Regulations Held June 10, 2011:

[Comments and Questions from Workshop Attendees and Internet Viewers](#)

Submitted Comments:

[California Product Stewardship Council \(CPSC\)](#)

[Bay Area Stormwater Management Agencies Association](#)

[CalRecycle](#)

[California Association of Sheet Metal and Air Conditioning Contractors' National Association, California Legislative Conference of the Plumbing, Heating and Piping Industry, and Air Conditioning Sheet Metal Association](#)

[Sierra Club California, Clean Water Action California, Californians Against Waste](#)

[San Luis Obispo County Integrated Waste Management Authority](#)

[Paul, Hastings, Janofsky, & Walker LLP on behalf of the Thermostat Recycling Corporation](#)

[Multi-State Mercury Products Campaign Comments on Draft Mercury Thermostat Collection Rate Requirements](#)

[Clean Water Action, Clean Wisconsin, Coalition for a Safe and Healthy Connecticut, Green Purchasing Institute, Mercury Policy Project, Michigan Environmental Council, Natural Resources Council of Maine, Natural Resources Defense Council, and New York Public Interest Research Group](#)

**Comments and Questions from Public Workshop on
Mercury Thermostat Recovery Draft Regulations
June 10, 2011**

Comments and Questions from Workshop Attendees and Internet Viewers

- Comment 1.** We urge that DTSC consider increasing the target goal for the first year.
- Comment 2.** We support the main points of the draft, especially recycling rates, methodology for calculating number of waste thermostats, reporting requirements and enforcement – including financial incentive. We will suggest some improvements.
- Comment 3.** We noticed that the THHWCF variable includes numbers from Form 303(b). Is there a reason that numbers from Form 303(a) are not included as well?
- Comment 4.** What are the opportunities, if any, for environmental organizations or other stakeholders to participate in the consent agreement process? Since important issues would be negotiated, such as the amount and other details related to the financial incentive, wouldn't it be appropriate to involve other stakeholders in the process?
- Comment 5.** I have been watching the webcast of the Public Workshop on Mercury Thermostat Collection from Boston, Massachusetts. Thank you for making the technology available to do so. As Massachusetts moves towards passing legislation to improve thermostat collection, we are closely watching the progress in other states that are leading the way on this, such as California.

Clean Water Action Massachusetts supports the proposed regulations as presented in this presentation. If the program is implemented as it was outlined today, it has the potential to be an excellent model for other states that are also looking to achieve mercury pollution reduction. In particular, we encourage California to do all that you can to accomplish the goal setting the bar for mercury thermostat collection rates at 80%. This is a high bar, but we believe that it is achievable and will set a good precedent for the rest of the country to follow. From what has been seen in other states, however, the most effective way to achieve such a collection rate is through instituting financial incentives for those turning in thermostats. We urge the Department to be as aggressive in this regulation as statute allows with employing the tool of financial incentives as early in the process as possible.

We would also like to support the comment made by Bill Magavern that having a place for ongoing public involvement in the consent agreement process written into the regulations is key to ensuring an ongoing, balanced dialogue. And it is critical that such involvement not be a pro forma addition after the negotiations are finished, but a meaningful chance to make our views known as negotiations proceed. The size and details related to the financial incentive are important issues on which the Department would benefit from the input of environmental groups and others.

Comment 6. Part of the reason for limited participation in the TRC program from wholesalers is because the manufacturers take back mercury thermostats from us for free.

Comment 7. Thank you for this opportunity to monitor your public workshop on Mercury Thermostat Collection Requirements.

Comment 8. The Multi-State Mercury Products Campaign represents advocates in 21 states working to reduce exposure to mercury from products. We are supportive of your draft rule's commitment to create a substantial and effective approach to ensure that mercury thermostats are safely collected and recycled.

As we have studied the progress among states, we have found that the states with a financial incentive achieve significantly higher per capita collection rates.

If TRC does not achieve a collection goal, how soon would the financial incentive requirement begin? We will submit more detailed comments in the coming weeks.

Comment 9. Is there any opportunity for the public to comment on the proposed regulations and negotiations?

Comment 10. It's essential for the regulations to provide for public participation. So, we don't end in closed negotiations between the govt. and the contractors.

Comment 11. I agree that financial incentives are very effective and are the key. Is there something in the statute that decides these financial incentives or is left to the consent negotiations?

Comment 12. Concern on Mercury harming the human health and environment and that is why Sierra is sponsoring the Bill. But, there is still so much mercury is not being collected and going to landfill. We need to step

up the collection process so more is collected in first few years may be 20% by next year. Your proposal has many important steps. What you are asking from the contractors is minimal and we know the universe. The financial assurance is important aspect. The law does contemplate this as one of the tools. So, it's important to use these as a fall back option.

- Comment 13.** The local governments are very excited. 1) We need to get mercury out of landfills. 2) We do not want to pay for it. A statewide workshop was conducted. Provided info to TRC. We have done everything to make this work.
- Comment 14.** National statewide collection data be posted online. We'll talk to TRC. It is important to know what is going in other states.
- Comment 15.** The investment is being made in California. The results should be shared with others so we all benefit.
- Comment 16.** Comments by Mark Tibbets: We will submit formal comments later, but want to let you know that we have opened open dialogue. We are deeply concerned about the numbers that are not feasible and want DTSC to develop achievable regulations. Our outreach program is reaching the audience. We have a MOU with the distribution channel and it's going good. There is a misunderstanding in terms of goals. Check slide 22 on page 11. Iowa never implemented the collection program. New Hampshire has a program something similar to CA but not as complex. They compared the data from other two states and then picked out the number. Pennsylvania also picked a number of 9500. Rhode Island had a statutory goal. Vermont also had a statutory goal. CA is the only state to go this route.
- Comment 17.** The page 2, 3rd bullet: what is the difference between the numbers?
- Comment 18.** Where did the 1329 number come from? Is it from the wholesalers or participating in the program?
- Comment 19.** Comments from Heidi: We started program steward. We got one application. They are running a "Cash for Clunkers." We are dealing with mercury and are running out of time, we are losing mercury every day.
- Comment 20.** Comments by Bill Magavern: There are many programs for financial assistance. Given the threat that mercury pertains, an incentive of \$10.00 is very powerful. Let's be specific about the financial incentives

if they fail to meet goals. This will motivate the industry to comply with goals.

- Comment 21.** What does a contractor need to report and how if they are a licensed contractor?
- Comment 22.** Household hazardous waste—on electronic reporting, do they need to specify where they submitted the waste?
- Comment 23.** I am concerned about the quality of the data that DTSC will receive for the first few years. I suggest we develop a fall back for the 3rd and 4th year. Use the Skumatz number. If the Skumatz number is high than your formula. Then stick to that number.
- Comment 24.** Why was the number available lowered from 2012 to 2013? This seems contrary to all the data and the Skumatz study.
- Comment 25.** I liked the fact that the proposed regs require contractors to be accountable but wondered how that would be implemented. What a huge undertaking!
- Comment 26.** The financial incentive is not spelled out and what TRC proposed before was \$1 or so off the price of a new thermostat. This may help the contractor company but we thought it did not encourage or benefit the technician who actually makes the decision at the job site to recycle or toss. It also may limit the customer's choice of replacement thermostats.
- Comment 27.** If (or when) an incentive program is implemented be very careful of the discussion over federal taxes due to someone who turns in >\$600 of thermostats. I had a decision from the IRS that this would not be a taxable activity but TRC argued it and we was never really resolved it.
- Comment 28.** Again, if an incentive program is implemented I now think there are much better ways to implement it than at the wholesalers. If and when you get to that point, let's talk.
- Comment 29.** Who determines the % of thermostat removals in the formula that is attributed to HVAC contractors?
- Comment 30.** Determining each manufacturers or groups responsibility for collection based on current sales information or previous year information won't really reflect what went on in the past. Looking at sales from 5, 10, 15 and 20 years ago may fairly assign responsibility or looking at the recovery of thermostat brands and assigning responsibility by each manufacturers relative % is how TRC does it now. For example,

Honeywell, White-Rodgers and GE historically made about 97% of what was marketed until the last decade or so. These are the ones being switched out now so shouldn't they bear the responsibility for them? Should companies that didn't market Hg thermostats in the past be responsible for historic ones they didn't make based on their last year's sales data? Is that sales data for just Hg t-stats or all t-stats?



June 24, 2011

Ed Benelli
Office of Pollution Prevention and Green Technology
Department of Toxic Substances Control
Sent Via E-mail: thermostats@dtsc.ca.gov

Subject: Comments on Draft Thermostat Regulations

Dear Mr. Benelli:

The California Product Stewardship Council (CPSC), a co-sponsor of the Mercury Thermostat Collection Act of 2008 (Act), appreciates the work that department staff have put into the draft regulations to implement the Act. We believe that the draft closely follows both the letter and intent of the law, and we support its structure and primary elements. This letter will detail our position, and include recommendations that we believe would improve the draft regulations.

CPSC participated directly in the legislative negotiations and has gone into the implementation phase of the Act in acknowledgement of a shared responsibility system with the retailers and producers. Here is a short list of the support and partnership CPSC has provided:

- Facilitated and funded a statewide webinar December 16, 2009 to educate the local governments and other parties about the new program and included presentations by thermostat producers;
- In several counties including Yolo and Napa, conducted site visits and reported back to producers when wholesalers did not have bins or public education materials and encouraged them to sign-up;
- Forwarded information to producers when we were made aware of opportunities for public education or when the website was not accurate;
- Published TRC information on the CPSC website;
- Promoted the TRC program at multiple presentations and venues; and,
- Wrote an article which we submitted to the Contractors State Licensing Board and they put in their newsletter to the 11,000 HVAC contractors about the law.

In short, we feel that we have done all we can to support the producers to be successful.

The hazards posed by mercury are well-documented so we will not get into those details. In addition, mercury thermostats are 100% banned from landfill disposal creating an unfunded burden on local governments and waste haulers. At the workshop on the draft regulations, DTSC stated that “first year collection totaled 3.2% of what the Skumatz study estimated would be generated.” The fact is that thermostats contain a potent neurotoxin that is banned from landfill disposal and we currently do not have an effective collection program. These facts can lead to the assumption that an estimated 96% of the mercury thermostats are going into landfills and creating a liability for local governments and

taxpayers, not to mention the resulting health and environmental impacts that can occur from mercury releases.

To say we are disappointed with this performance is an understatement.

The Act established an Extended Producer Responsibility (EPR) system for mercury thermostats, and delegates to the Department of Toxic Substances Control (DTSC) the task of setting recycling rates and methodology. The Act also directed the manufacturers to “present to the department a survey plan and methodology for a survey to provide statistically valid data on the number of mercury-added thermostats that become waste annually in California.” The Thermostat Recycling Corporation (TRC) fulfilled this responsibility with the December 2009 study by Skumatz Economic Research Associates. The study found that between 5.1 million and 10.6 million mercury-containing thermostats remain in use in California.

Because the highest numbers of thermostats will become waste during the earlier years of the program, as the Skumatz study found, recovering most of those thermostats should be an urgent priority for DTSC. Therefore, we believe the first year recycling rate of 20% is achievable, especially considering that the law was enacted in 2008, providing years of notice to the manufacturers that they would need to ramp up recycling efforts.

Each mercury thermostat that goes into a landfill represents a violation of California law and an addition to the build-up of a potent neurotoxin in our environment. Therefore, the recycling rate of 80% for 2015 and beyond is fully justified.

Similarly, the contractor reporting requirements in the draft are necessary to prevent waste thermostats from going into landfills and to bridge the gap between waste generators and thermostat manufacturers. The reporting can be easily carried out by contractors using the tools DTSC provides.

Enforcement will be vital to implementing the Extended Producer Responsibility requirements. Retaining the back-up requirement for financial incentives is vital in the event that manufacturers fail to meet the collection goals or do not quickly propose program changes to achieve those goals. The Act specifically lists “provides incentives” as one of the means manufacturers must use to encourage return of thermostats, and it also authorizes DTSC to order manufacturers to revise their programs and undertake actions to comply with the law, so DTSC has the authority to require incentives if they become necessary.

Financial incentives have proven to be the best way to raise recycling rates especially in a short period of time. In California, we have a long history of using financial incentives to ensure products are returned for proper management including programs for beverage containers, oil, and most recently, for small containers of automotive refrigerant which became effective January 1, 2010. A recent e-mail sent to the interested parties from the Air Resources Board explained the program as follows:

At the time of purchase, the DIY consumer pays a \$10 refundable deposit to the retailer for each container. In order to get the refund, consumers are required to return the used, undamaged container(s) within 90 days with a receipt. Retailers and distributors collect the used containers for return to a recycling

facility with the assistance of the product manufacturer. The target recycle rate is initially set at 90%, and rises to 95% beginning January 1, 2012.

So, we would argue that if we use financial incentives for bottles and cans which are a litter problem and have no health impacts, and for oil and most recently, the ARB imposed a \$10 per can deposit on refrigerants with a first year goal of 90% and target recycling rate of 95% two years later, that in balance it is just as important to protect the environment from climate change as it is to protect the public from the long-term health and economic impacts from mercury releases.

With that said CPSC is also a supporter of having business determine how to meet performance goals and hopes that thermostat manufacturers will quickly admit that 3.2% is an inadequate collection rate and propose significant and immediate changes to the program to dramatically improve the collection rate in California. Defending the existing program is not taking responsibility for the performance outcome.

In Section 67388.6, we recommended the regulations should be strengthened with transparency provisions. The regulations should provide that, when the enforcement process involves a consent agreement between DTSC and the manufacturers, the public has a right to participate in that process. Local governments, health and environmental groups, and other interested parties should be able to be heard, and the agreement should not be negotiated behind closed doors by the manufacturers and DTSC.

Also, in section 67388.7, in the interest of transparency, the regulations should require the manufacturers to submit to DTSC the following:

- Administration costs of the program in California;
- As part of their annual reports, state-by-state data on thermostat collection. This will allow California to use other states' programs as benchmarks, and to learn from best practices such as those in Maryland that are achieving better collection rates; and,
- Ongoing annual expenses for program operations in California.

It is not clear to us that any real investment has been made in California as there are no staff present here or consultants working in California. We feel to effectively provide oversight in a state as large and diverse as California, dedicated staff should be provided.

To summarize, CPSC has worked diligently for years to assure this first EPR program in California was a success. We are very disappointed with the lack of focus and investment in California to make this program even marginally successful. We sincerely hope that TRC and the industry realizes that what is happening is indefensible and they reach out to work with us again to design and implement a program that meets the intent of law – "Provide for the collection and recycling of the maximum feasible number of out-of-service mercury thermostats."

Thank you for your consideration of our suggestions.

Sincerely,


Heidi Sanborn, Executive Director



B A S M A A

Alameda Countywide
Clean Water Program

Contra Costa
Clean Water Program

Fairfield-Suisun
Urban Runoff
Management Program

Marin County
Stormwater Pollution
Prevention Program

Napa County
Stormwater Pollution
Prevention Program

San Mateo Countywide
Water Pollution
Prevention Program

Santa Clara Valley
Urban Runoff Pollution
Prevention Program

Sonoma County
Water Agency

Vallejo Sanitation
and Flood
Control District

June 24, 2011

Ed Benelli
Office of Pollution Prevention and Green Technology
Department of Toxic Substances Control

Subject: Comments on Draft Mercury Thermostat Collection Rate Requirements

Dear Mr. Benelli:

On behalf of the members of the Bay Area Stormwater Management Agencies Association (BASMAA)¹, I am writing to express our strong support for the Department of Toxic Substance Control drafting regulations to implement the Mercury Thermostat Collection Act of 2008 (Act) in a way that will result in very significant increases in the collection and proper disposal of mercury thermostats by manufacturers. These regulations represent a critical step to prevent a significant source of mercury pollution to our waterways.

Under the Clean Water Act, the San Francisco Bay Regional Water Board has listed San Francisco Bay as impaired by mercury, and the State's Office of Environmental Health Hazard Assessment has issued a fish consumption warning for Bay fish with high levels of mercury. As a result, the Water Board is requiring local governments to reduce discharge of mercury via urban runoff to San Francisco Bay by almost 50%.

Control of mercury from thermostats at the source through collection is the most cost-effective means for reducing mercury from this source. In fact, source control may be the only practical means of compliance with the mercury reduction requirements, since treating mercury out of urban runoff would likely cost millions or billions, if it were feasible at all.

Therefore, we strongly encourage DTSC to write collection rate requirements for manufacturers that are as substantial as possible.

Please contact me (510) 670-6548 or our Executive Director, Geoff Brosseau (650) 365-8620 if you have any questions or would like to discuss our support further.

Sincerely,

James Scanlin
Chair, Bay Area Stormwater Management Agencies Association

cc: Thomas Mumley, Asst. Exec. Officer – San Francisco Bay Regional Water Board
Debbie Raphael, Director – DTSC

Bay Area

Stormwater Management
Agencies Association

P.O. Box 2385

Menlo Park, CA 94026

510.622.2326

info@basmaa.org

¹ BASMAA is a 501(c)(3) non-profit organization comprised of the municipal stormwater programs in the San Francisco Bay Area representing 96 agencies, including 84 cities and 7 counties. BASMAA is focused on regional challenges and opportunities to improving the quality of stormwater that flows to our local creeks, San Francisco Bay and Delta, and the Ocean.



From: "Wang, Emily" <Emily.Wang@CalRecycle.ca.gov> 6/22/2011 10:33 AM
To: thermostats@dtsc.ca.gov thermostats
CC: Bob Fujii; Edward Benelli
Subject: Comments on Proposed regulations for Hg Thermostats

Hello,

First, I want to say you guys did a great job on the June workshop, and thanks again for the one-on-one time to discuss. Below are our comments on your proposed regs - overall I think you did a really good job, and I'm looking forward to having another EPR program up and running!

Best,
Emily

CalRecycle staff believes the proposed regulations are largely consistent with CalRecycle's adopted producer responsibility framework, and supports DTSC's inclusion of strong recycling rate goals in the proposed regulations, as goals can be a key driving element to the success of a product stewardship program.

Staff suggests two adjustments to the proposed methodology for calculating the number of out-of-service mercury-added thermostats:

- Modify the term T(HHWCF) so that it includes data from both the CalRecycle Form 303a and CalRecycle Form 303b, instead of just the Form 303b alone.
- Add language to the definitions for T(HVAC) and T(D) to clarify that these terms will exclude any thermostats that these contractors have taken to Household Hazardous Waste Collection facilities, in order to avoid "double-counting" those thermostats.



CAL SMACNA



California Legislative Conference of the
Plumbing, Heating and Piping Industry

MEMORANDUM

To: Mr. Ed Benelli, Department of Toxic Substances Control (DTSC)

From: California Association of Sheet Metal and Air Conditioning Contractors'
National Association (CAL SMACNA)
California Legislative Conference of the Plumbing, Heating and Piping
Industry (CLC)
Air Conditioning Sheet Metal Association (ACSMA)

Date: June 24, 2011

Re: Proposed Regulations Related to Mercury Thermostats

On behalf of thousands of state licensed contractor small businesses, the organizations listed above wish to provide comment to the proposed regulations on mercury thermostats.

First, we support the goal of reducing and eliminating mercury from landfill disposal. As such we support the collection and recycling of the maximum feasible number of out-of-service mercury-added thermostats. However, the proposed regulation places an unwarranted burden on small businesses who are essential to this program's success.

While our contractors have no choice but to follow the laws of this state, there are those who will choose to take another path. Our experience in the industry informs us that there is indeed a correlation between rates of compliance and associated burdens and costs of compliance. The more inconvenience associated with mercury switch recycling the greater the risk of non-compliance by those who will choose to keep their overhead cost structures low. This means compliant contractors not only suffer the higher costs and inconvenience associated with this regulation but will also suffer from the unfair competition from their non-compliant competitors.

As contractors involved in work with an HVAC scope, we collect and properly recycle mercury thermostats today (see attached picture). When AB 2347 was introduced by Assemblymember Ruskin in 2008 we worked directly with his office to ensure his bill would further promote responsible behavior by manufacturers and wholesalers to encourage a higher level of recycling. As "contractors" we were encouraged by the

manner of the priorities established in the bill and were repeatedly assured that contractors who recycled would not have any added liabilities nor be required to handle thermostats any differently than their existing recycling practice(s).

This regulation, however, deviates from this assurance and places a great burden on small businesses by making them responsible for detailed reporting requirements that were not discussed in the bill nor statute. These requirements include:

- (b) Beginning January 1, 2013, each HVAC and demolition contractor shall submit, to the department, an annual report for the period beginning January 1 and ending December 31 of each calendar year for the previous year.
- (c) Annual reports shall be submitted in an electronic format provided by the department within 30 days of the end of each reporting period. Each annual report shall include the following:
 - (1) The business location's name and mailing address;
 - (2) Contractors State Licensing Board Identification Number;
 - (3) Name, address and telephone number of the person who should be contacted regarding the business' out-of-service mercury-added thermostat removal activities;
 - (4) The number of contractors that work from that business location;
 - (5) The number of mercury-added thermostats removed by the contractors and technicians that work from that business location;
 - (6) The business location's service area; and
 - (7) Names and addresses of the wholesaler, retailer or household hazardous waste collection facility where the business location takes the out-of-service mercury-added thermostats to be collected.
- (d)(1) Notwithstanding the exemption provided for by 22CCR66273.8, an HVAC or demolition contractor's business location shall keep a record of annual reports on site for three years.
- (2) In addition to the reporting requirements in sub-section (c), HVAC and demolition contractors shall keep written records on site of the following information:
 - (A) The date when each out-of-service mercury-added thermostat was removed;
 - (B) The location where each out-of-service mercury-added thermostat was removed;
 - (C) The date when each out-of-service mercury-added thermostat was disposed; and
 - (D) The location where each out-of-service mercury-added thermostat was disposed.

Please know that as small businesses in this state we are already required to provide numerous reports and filings to comply with the law (see attached partial list). We do not want nor can afford additional reporting requirements.

The reporting requirements proposed in this new regulation are exhaustive, costly and if not completed or properly followed could result in fines and penalties against California small businesses of up to \$25,000 per citation per day under Chapter 6.5. This regulation creates a new and extraordinary liability for business owners. The cost of recycling mercury switches for small businesses will be increased dramatically due to the time and labor associated with compliance.

Based upon our conversations with Assemblymember Ruskin's office during the legislative process of AB 2347, our interpretation of the creation of Health and Safety Code Section 25214.8.15 was that we could expect regulations that would essentially formalize our existing handling practices of mercury switches and recycling efforts. In fact, the section reads:

A contractor who installs heating, ventilation, and air-conditioning components and who removes a mercury-added thermostat shall handle the thermostat in accordance with the regulations adopted pursuant to this chapter, and take the out-of-service mercury-added thermostat to a location with a collection bin operating in accordance with those regulations.

This section was always interpreted to mean that contractors could expect regulations detailing the preferred “handling” of the mercury itself, *i.e. how to remove, how to store, what kind of jars or containment systems should be used to place the switches in, etc.* Detailed reporting requirements for contractors, under penalties of up to \$25,000 per occurrence, were never mentioned in conversation related to this bill nor in the text of the proposed statute.

The opposite is true for manufacturers. In Section 25214.8.13 the statute explicitly requires manufacturers to produce written reports with specified elements. Furthermore, this particular reporting requirement for manufacturers was discussed with respect to the legislation. Again, this wasn't the case for contractors.

CAL SMACNA, CLC and ACSMA believe that if the Legislature had intended for small business contractors to provide written reports with specified elements that they would have included this explicit requirement in the section discussing contractors' responsibilities in the bill. The requirement for written reports were included in the bill for manufacturers but not contractors. We therefore, challenge the interpretation and statutory authority cited by DTSC to now require through regulation that contractors be mandated to engage in new reporting requirements associated with the collection and recycling of mercury switches.

If you should need more information or have any questions about our concerns, please do not hesitate to contact either Chris Walker at (916) 442-8888 or Eddie Bernacchi at (916) 444-3770.



Thermostats containing mercury are collected by the HVAC workers from the customers structure. The device is brought back to the small business. The mercury switch is removed from the thermostat. The switches are then placed into a non-breakable jar that provides containment for the mercury. When these jars are full they are physically taken to an approved collection site for mercury.

PARTIAL LIST OF EXISTING REPORTING REQUIREMENTS FROM ONE SMALL HVAC BUSINESS

- Hazardous Material Business Plan & Inventory for Fresno Co.
- Hazardous Material Business Plan & Inventory for Sacramento Co.
- 2011 EPA ID Number Verification Questionnaire & Manifest Fee Calculation.
- Cal OSHA Permits for trenching, excavation and fall protection.
- DOL census reporting - Monthly
- Equal Employment Opportunity survey - Annual
- Employment Construction Utilization report - Quarterly
- Labor compliance forms
- DAS 140 Public Works Contract Award Information
- DAS 142 Request for Dispatch of Apprentice
- DAS 7 Agreement to Train Apprentices
- CAC 2 Training Fund Contributions
- Certificate of Understanding and Authorization
- U.S. Department of Labor – Apprenticeship Certification
- Fringe benefit Statement



Ed Benelli
Office of Pollution Prevention and Green Technology
Department of Toxic Substances Control
1001 I Street
Sacramento, CA 95814

June 24, 2011

Sent Via E-mail: thermostats@dtsc.ca.gov

Re: Comments on Draft Thermostat Regulations

Dear Mr. Benelli:

The undersigned groups appreciate the careful work that DTSC staff have put into the draft regulations to implement the Mercury Thermostat Collection Act of 2008. We believe that the draft closely follows both the letter and intent of the law, and we support its structure and primary elements. This letter will detail our position, and include recommendations that we believe would improve the draft regulations.

The hazards posed by mercury are well-documented. As the Mercury Thermostat Collection Act found: “Mercury that is released into the atmosphere can be transported long distances and deposited in aquatic ecosystems, where it is methylated to methylmercury, the organic and most toxic form of mercury...Methylmercury bioaccumulates and biomagnifies in animals, including fish and humans... Methylmercury is a known neurotoxin to which the human fetus is very sensitive.”

The Act also noted the importance of capturing the mercury found in legacy thermostats: “As of January 1, 2006, state law banned the sale of new mercury-added thermostats for most uses, but the long lifetime of thermostats means that many of them are still in use...State law bans the disposal of mercury-added thermostats in solid waste landfills, but according to an estimate by the Department of Toxic Substances Control, less than 5 percent of the mercury-added thermostats removed from buildings in the state are turned in to the Thermostat Recycling Corporation (TRC) collection program.”

To address this problem, the Act established an extended producer responsibility system for mercury thermostats, and delegates to DTSC the task of setting recycling rates and

methodology. The Act also directed the manufacturers to “present to the department a survey plan and methodology for a survey to provide statistically valid data on the number of mercury-added thermostats that become waste annually in California.” The Thermostat Recycling Corporation fulfilled this responsibility with the December 2009 study by Skumatz Economic Research Associates. The study found that between 5.1 million and 10.6 million mercury-containing thermostats remain in use in California.

Because the highest numbers of thermostats will become waste during the earlier years of the program, as the Skumatz study found, recovering most of those thermostats should be an urgent priority for DTSC. Therefore, we believe the first year recycling rate of 20% is way too low, especially considering that the law was enacted in 2008, providing years of notice to the manufacturers that they would need to ramp up recycling efforts.¹

Each mercury thermostat that goes into a landfill represents a violation of California law and an addition to the build-up of a potent neurotoxin in our environment. Therefore, the recycling rate of 80% for 2015 and beyond is fully justified.

Similarly, the contractor reporter requirements in the draft are necessary to prevent waste thermostats from going into landfills and to bridge the gap between waste generators and thermostat manufacturers. The reporting can be easily carried out by contractors using the tools DTSC provides.

Enforcement will be vital to implementing the extended producer responsibility requirements, and retaining the back-up requirement for financial incentives is vital in the event that manufacturers fail to comply with the recycling requirements. The Act specifically lists incentives as one of the means manufacturers must use to encourage return of thermostats, and it also authorizes DTSC to order manufacturers to revise their programs and undertake actions to comply with the law, so DTSC clearly has the authority to require incentives if they become necessary. We also note the anemic performance of TRC’s recycling program to date, as documented by the Office of Criminal Investigation’s “Assessment and Survey Results of Wholesaler Participation in TRC Recycling Program, January 2011,” which found that “First year collection totaled 3.2%” of the waste projected by the Skumatz study.

Financial incentives have proven to be the best way to raise recycling rates. California has direct experience with the success of such programs.

¹ Indeed, based upon the experiences of the more mature program in Maine, we need to intercept above 40% in the early years.

- This has been the case with beverage containers where consumers can recover their 'deposit' when they recycle the cans. The recycling rate jumped from 56% to 70% when the deposit increased from 1 cent to 2.5 cents. It jumped again in 2006 when the deposit became a nickel and now CA enjoys an 82% recycling rate.
- California has one of the best e-waste recycling laws in the nation in terms of per capita and collection volume because it offers collectors and recyclers an e-waste payment of \$0.16/lb for collectors and \$0.23/lbs for recyclers.
- Since 1991, through the California Oil Recycling Enhancement Act, California provides a recycling incentive to entities that collect used oil and transport it to a used oil recycling facility. This program has substantially increased collection of used motor oil.

When you provide a monetary value to waste, it becomes a commodity.

The proposal should be strengthened with transparency provisions. The regulations should provide that, when the enforcement process involves a consent agreement between DTSC and the manufacturers, the public has a right to participate in that process. Local governments, health and environmental groups, and other interested parties should be able to be heard, and the agreement should not be negotiated behind closed doors by the manufacturers and DTSC.

Also in the interest of transparency, the regulations should require the manufacturers to submit to DTSC, as part of their annual reports, state-by-state data on thermostat collection. This will allow California to use other states' programs as benchmarks, and to learn from best practices.

Thank you for considering our views.



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Clean Water Action
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San Luis Obispo County Integrated Waste Management Authority

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June 21, 2011

Edward Benelli
Department of Toxic Substances Control
P.O. Box 806
Sacramento, CA. 95812-0806

Subject: DTSC: Mercury Thermostat Collection Rate Requirements: R-2010-3

Dear Mr. Benelli,

The San Luis Obispo Integrated Waste Management Authority appreciates the opportunity to provide comments on the draft regulations implementing California's Mercury Thermostat Collection Act of 2008. This law represents California's first attempt at implementing "producer responsibility" legislation. As such, the success or failure of this program will represent an important benchmark in evaluating the efficacy of the producer responsibility approach to end-of-life management of difficult to handle products. As we approach the two year anniversary of the effective date of this legislation, the results, so far, cannot be viewed as a ringing endorsement of the producer responsibility approach. Based upon TRC's Annual Report, they recovered 13,340 intact mercury thermostats and mercury switches from California collection locations in 2010. While this is an increase of 77% over the previous year's collections, **it also means that an estimated 219,660 mercury thermostats were improperly managed** based upon the second year low estimate of annual flows from the industry sponsored study.

The results of the Department's "Assessment and Survey of Wholesaler Participation in the TRC Recycling Program" present compelling evidence of an inadequately resourced effort. Without firm goals, real and predictable consequences for failure to meet those goals manufacturers have no incentive to do anything other than a minimum effort. The draft regulations represent an important step in that direction. The Authority would, however, respectfully submit that the regulations can and should be strengthened in several areas. Specifically, we have concerns with and would recommend changes to the following two Sections of the draft regulations:

- **§67388.4 Methodology for Calculation of Number of Out-of-Service Mercury Added Thermostats Becoming Waste Annually**

The proposed formula for calculation of the number of out-of-service mercury added thermostats becoming waste annually is theoretically sound but the results will nonetheless be no better than the quality of the input data. Most of the input data will be derived from new reporting requirements imposed by these regulations. Typically, there are inevitable problems with the quality of data received under any new reporting requirements in the early years. We are also concerned whether or not DTSC will have the necessary resources to ensure the quality of this input data.

We would therefore recommend that language be added to this section that creates a “safety valve” allowing the Department at its discretion to use the data from the industry sponsored study to calculate the number of out-of-service mercury added thermostats becoming waste annually for calendar year 2014 in the same manner as the calculations for Calendar years 2012 and 2013. We would propose the following two triggers for the exercise of that discretion;

1. the number of annual reports filed by licensed HVAC contractors is less than 65% of the number of HVAC contractors as reported by the California State Contractors License Board;
2. The number resulting from the formula calculation varies by more than 100,000 units from the mean of the high and low end estimates from the industry study for that year.

- **§67388.6 Manufacturers’ Compliance Requirements**

We applaud the Department for including a requirement for the provision of financial incentives in the program if the manufacturers fail to meet the specified collection rates. We strongly recommend that the regulations specify a minimum level of financial incentives. We propose \$10 per unit for each unit returned for recycling. This would send a strong and powerful message to the industry that they must commit the financial resources necessary to make this program successful.

At the June 10th workshop, Mark Tibbets, Executive Director of TRC, argued that financial incentives were not a particularly effective strategy. The NEWMOA 2008 Review and Assessment of Thermostat Recycling contains ample evidence suggesting that financial incentives do work. A pilot program in Kings County, Washington found that the suppliers participating in the cash incentive project collected approximately 10 times more thermostats than the nonparticipating suppliers, suggesting that the financial incentive was important in increasing thermostat collection.

Mr. Tibbets also argued that there are more cost-effective strategies than financial incentives. We would note that TRC has the opportunity to implement those strategies. If they can achieve the modest collection rate goals, they can avoid the mandatory financial incentives.

Sincerely,



William A. Worrell
Manager

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June 24, 2011

78166.00002

VIA E-MAIL THERMOSTATS@DTSC.CA.GOV

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

Re: Comments on Proposed Regulations Implementing the Mercury Thermostat
Collection Act of 2008

Dear Director Raphael:

On behalf of the Thermostat Recycling Corporation (“TRC”), we respectfully submit the following comments on the draft regulations to implement the Mercury Thermostat Collection Act of 2008 (the “Act”) that the Department of Toxic Substances Control (“DTSC”) recently circulated for informal review.

TRC is a non-profit manufacturer member based organization that facilitates the collection and proper disposal of mercury-added thermostats. Today 31 manufacturers support the program. TRC has a network of over 3,000 collection sites in 47 states. TRC’s program includes Heating, Ventilation, and Air Condition (“HVAC”) wholesale distributors, HVAC contractors, household hazardous waste collection sites and thermostat retailers. Nationally, TRC has collected over 1,200,000 mercury-containing thermostats and kept over 5.5 tons of mercury out of solid waste landfills and waterways. TRC shares DTSC’s goal of keeping mercury out of the waste stream in order to protect public health and the environment. On behalf of its members that historically branded and distributed mercury-added thermostats in California, TRC is implementing the collection program required to comply with the Act.

TRC appreciates the opportunity to provide comments on the draft regulations prior to the initiation of the official public comment period. To the best of our knowledge, TRC has the only collection program for mercury-added thermostats in California. Thus, for all practical purposes, the proposed regulations are principally directed at TRC and its members. Consequently, it is critical to TRC that the regulations establish a practical, properly targeted regulatory program with meaningful yet credible metrics. The proposed regulations do not meet that mark. We therefore regret that we must strongly object to the proposed approach. We are confident that the proposed regulations can be re-crafted to address the fundamental concerns we present below, which we hope will establish a

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collaborative and practical approach to this issue that is so critically important to all concerned parties.

I. DTSC's proposed collection rates are arbitrary and capricious.

A. DTSC's proposed collection rates are unrealistic and inconsistent with the statutory mandate.

DTSC's proposed collection rates are inconsistent with the mandate of Health and Safety Code section 25214.8.20. As specified in section 25214.8.20, it is the intent of the law to provide for the collection and recycling of the maximum feasible number of out-of-service mercury-added thermostats. The Department has no substantial evidence to support the feasibility of the rates proposed in the draft regulations. Based on the recovery efforts taken by manufacturers to date and the results produced, there is no reasonable basis upon which to base the proposed rates.

A thorough review of other recycling collection regimes shows that the proposed collection rates are not feasible. In 2006, the European Union ("EU") directed its members to implement mandatory recycling obligations on manufacturers of portable batteries. Target collection rates were set at 25% by 2012 and 45% by 2016, taken against a baseline of the previous three-year sales of portable batteries. In the first year after this directive became effective, the collection rate across the EU 15 states was 14.7%. Some EU 15 states have had mandatory programs dating back to 1989 and while these states enjoy relatively high recycling rates, it is important to recognize that it took nearly 20 years to achieve these rates. Significantly, EU 15 members project that they will not be able to increase battery collections to meet the 25% collection goal by 2012, and the 45% goal for 2016 is even more unrealistic. Portable batteries enjoy a key collection advantage over mercury-added thermostats in that some end-of-life batteries retain economic value from their constituent rare metals, while the mercury in thermostats has a negative value. Given that the EU deems it unlikely to achieve its collection goals for a more valuable end-of-life product, DTSC's more aggressive proposed collection rates for mercury-added thermostats are unrealistic and unreasonable.

Lead-acid batteries enjoy the highest collection rate for recycling of any analogous regime, but the high collection rate for lead-acid batteries derives in large part from certain advantages lead-acid batteries enjoy that items such as mercury-added thermostats do not. For example, lead-acid batteries are replaced by or for consumers who are incentivized to exchange them at the time of replacement. Distributors and recyclers are similarly incentivized to collect lead-acid batteries because the lead contained therein retains economic value at end-of-life, whereas the mercury in thermostats has a negative value. Also, the physical nature of lead-acid batteries – their sheer size and bulk – makes them significantly harder to illegally dispose than mercury-added thermostats. Because of these important differences, DTSC cannot look to the lead-acid battery collection context as evidence to support its unrealistic mercury-added thermostat collection rates.

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B. Steps TRC has taken to encourage wholesaler participation.

TRC has already implemented a multi-faceted effort to increase recycling. The collection rates proposed by DTSC fail to recognize efforts taken to date. The proposed collection rates are not based on any substantive evidence that they are feasible. Indeed, there is no basis for the rates proposed in the DTSC proposal and thus the proposal fails to meet basic standards for rulemaking in California. A brief review of actions already taken by TRC demonstrates that the rates proposed by DTSC are not feasible.

TRC has recruited wholesalers at trade shows and industry meetings, reached out directly to distributors, earned media coverage through industry trade press, and purchased advertising. TRC has employed and continues to undertake numerous strategies to elicit wholesaler participation in the program in California. Marketing efforts include, but are not limited to:

- Direct mail to managers of facilities in California and corporate headquarters.
- Earned media on the legal obligation to collect waste thermostats in California and other states.
- Direct appeals to both local and senior management of wholesale distributors with facilities in California.
- Engagement with regional and national trade associations to assist them in advising members on legal obligations in California and other states.
- Attending regional and national HVAC trade shows to provide information to raise awareness of the recycling obligations and TRC's program.

In October of 2010, TRC entered into a formal agreement with the Heating Airconditioning Refrigeration Distributors International ("HARDI") trade association to promote the TRC program to HARDI members, which comprise approximately 80% of the domestic wholesale market for HVAC equipment. Pursuant to this agreement, TRC notified all 450 HARDI members of their collection obligations and encouraged them to participate in the TRC program. Similarly, TRC joined the Institute of Heating and Air Conditioning Industries, which is the largest HVAC trade association in California, and used its membership status as a means to contact contractors and distributors actively engaged in HVAC work in California. TRC has corresponded with at least five additional trade organizations, informing them of wholesalers' collection obligations and encouraging them to participate in TRC's program.

In October of 2010, TRC launched its new website, www.thermostat-recycle.org. The new website contains updated content and has been reorganized to be more user-friendly for the public and wholesalers. Concurrent with the new website launch, TRC posted high-resolution versions of a number of its promotional toolkit items, including a poster, bill stuffer, invoice template, cling sticker, banner, postcard, and print advertisement. These items were developed specifically for wholesalers, and are available at no cost to

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TRC collection locations and may be freely reproduced to assist them in promoting the program to their customers.

Through these varied outreach activities, 350 California wholesalers have decided to participate in the TRC program to date. Collections have increased significantly as a result of these efforts. Despite the meaningful growth of thermostat collections in 2010 over 2009, the collection rate for 2010 still remained below 6% of the low-end estimates identified in the study conducted by Skumatz Economic Research Associates (“SERA”) [http://www.dtsc.ca.gov/HazardousWaste/upload/TRC_Plan.pdf]. Assuming 2010’s 77% annual growth rate continued through 2012, which growth level has not continued on a year upon year basis in any other state with collection obligations, the 41,793 thermostats collected in 2012 would represent less than 14% of DTSC’s proposed baseline for that year and would place manufacturers into an enforcement context immediately. DTSC has provided no explanation for how it has determined that TRC could feasibly achieve even the 20% goal, let alone the 40, 60, and 80% collection rates. Given that TRC’s program is already available at virtually no cost to wholesalers, and TRC has taken meaningful measures to publicize that program in the industry, DTSC’s arbitrary collection rates are unrealistic.

- C. DTSC’s proposed enforcement regime is arbitrary and capricious because it anticipates that manufacturers will be in an enforcement context almost immediately because they cannot satisfy the unrealistic collection rates.

Given the challenges inherent in collecting mercury-added thermostats and TRC’s efforts to date, it is clear that actions by the manufacturers alone cannot meet the collection rates proposed in the draft regulations. DTSC is aware of the limitations. Nevertheless, the proposed regulations fail to recognize those limitations and instead anticipate forcing the manufacturers into an enforcement context within a year. This approach is inconsistent with the intent of the statute, which is explicitly based on feasibility. DTSC’s approach of setting unachievable collection rates with the expectation of immediate non-compliance is fundamentally arbitrary and capricious because it imposes unsupported requirements on manufacturers and then sets them up for penalties that exceed the grant of authority contained in the Act. Specifically, proposed regulation section 67388.6(b) contemplates that DTSC will enter into consent decrees with manufacturers that do not meet the proposed collection rates. TRC understands that DTSC fully expects the program to be based on the compliance schedule of such a consent decree. Such a system merely defers to a later date the discussion of what exactly manufacturers will be required to do given the infeasibility of the proposed collection rates. Instead, TRC urges DTSC to engage in constructive discussion now about what is feasible and to promulgate regulations that meet the statute’s intent. An approach of planning for immediate failure fails to meet both the “Necessity” and “Clarity” standards of Government Code sections 11349 and 11349.1.

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In addition, DTSC's explicit proposal to assess administrative penalties for failure to meet metrics is clearly ultra vires and inconsistent with the statutory scheme. The statute requires manufacturer compliance with the standards specified in Health and Safety Code section 25214.8.13. Those standards do not include meeting specific collection rates. The collection rates referenced in the statute are intended to serve as goals to shape the actions to be taken by manufacturers, not as a basis for penalties. DTSC's only arguable legal remedy for failure to meet performance metrics would be to make an attenuated finding that failure to meet metrics would constitute non-compliance with the statute. Such a determination could then serve as a basis for banning future sales, which is the only remedy provided for in the statute. However, the metrics are not requirements of the statute and it is not rational to assert that a ban of sales by otherwise compliant manufacturers is the intent of the statute.

Instead, as specified in Health and Safety Code section 25214.8.17, any prospective DTSC orders must be limited to requiring program revisions or to otherwise require compliance with the statutory standards. A manufacturer's full compliance with such an order would preclude penalties regardless of the number of thermostats collected. For these reasons, the penalty provision in proposed section 67388.6(b)(2) exceeds DTSC's legal authority under the Act.

Similarly, DTSC's proposal in section 67388.6(c) to ban sales by listing non-compliant manufacturers on its website if they "do not satisfy the requirements in subsection (b)" is also ultra vires and inconsistent with the statute. As noted, the statutory sales ban is limited to non-compliance with the requirements of the statute, not additional regulatory requirements.

D. DTSC's proposal appears motivated at least in part by factual misunderstandings as reflected in the Office of Criminal Investigations assessment of TRC's California activities to date.

It appears that DTSC may be contemplating the aggressive collection rates and an explicit penalty mechanism at least partially in response to a perceived lack of effort on the part of the manufacturers. This suggestion is purportedly bolstered by DTSC's Office of Criminal Investigations' ("OCI") recent assessment and survey results regarding TRC's efforts through May 2011 to encourage wholesaler participation in its recycling program. TRC wishes to take this opportunity to correct several misunderstandings upon which OCI (and perhaps the rule drafters) relied in concluding that TRC has not lived up to its obligations.

First, OCI asserts that collection totals to date have been low. Specifically, OCI stated that first year collection totals represented only 3.2% of the 237,000 thermostats that the SERA study estimated would be collected, and only a 7% increase from the preceding year when the Act was not in force. In addition to reiterating the comments made above regarding the limitations of using the SERA study as conclusive evidence, TRC wishes to

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point out that the modest growth in collections in 2009 was followed by marked growth in collections in 2010. In 2010, TRC collected 13,340 thermostats, representing a 77% increase over 2009 collections.

Second, OCI complained that TRC's website listed contact information for only 270 of "the 1,329 HVAC wholesaler collection locations, provided to the Department by TRC." TRC wishes to point out that OCI mischaracterized the information provided by TRC. The list of 1,329 entities provided by TRC was a list of thermostat purchasers from TRC constituent manufacturers. Accordingly, the list represents *potential* collection locations, not necessarily a definitive list of "wholesalers" subject to the Act. At the time OCI visited the TRC website, only 270 wholesalers had taken advantage of TRC's recycling program by responding to TRC's outreach and ordering a collection bin, but that number has since grown to 350. The information on the collection sites reflects what is provided to TRC at the time the bins were ordered or as updated at the request of the collection location.

Third, OCI asserted that certain contact information for the participating wholesaler collection locations was outdated on the website. TRC wishes to point out that the accuracy of the contact information is dependant upon the information that the wholesalers provide to TRC in the first place. TRC posts contact information for wholesaler locations exactly as it is received directly from the wholesaler.

Next, OCI asserted that certain wholesalers did not appear to be educated about their responsibilities or the TRC resources available to them. TRC recognizes that it has a role to play in educating wholesalers. TRC has always provided instructions with its collection containers. In 2010, TRC began affixing these instructions and the pre-paid shipping label in a separate pouch on the inside of collection bins shipped to all locations to make them more visible to site personnel. TRC also maintains detailed collection and return information on its website for access by wholesalers and other program participants.

Finally, OCI appeared concerned that only 216 of the 270 participating wholesalers confirmed having collection bins onsite. This fact underlies a reality that TRC wishes to emphasize in the context of this rulemaking. While OCI records show that TRC shipped collection bins to 270 (and has now shipped to a total of 350), and that only 216 were utilizing the bins, this only highlights the lack of control that manufacturers have over the people with direct responsibility and ability to recycle mercury-added thermostats. TRC has no ability to ensure cooperation or full participation in the program.

E. DTSC's regulations must apportion responsibility according to the mandates of the Act.

The Act anticipates that regulations will apply to contractors, but the proposed regulations fail to include any specific standards for the management of thermostats by contractors. Health and Safety Code section 25214.8.15 states that "[a] contractor who installs heating, ventilation, and air-conditioning components and who removes a mercury-added

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thermostat shall handle the thermostat in accordance with the regulations adopted pursuant to this chapter, and take the out-of-service mercury-added thermostat to a location with a collection bin operating in accordance with those regulations.” (emphasis added). However, the proposed regulations do not set management requirements as referenced in the statute or even address DTSC enforcement of the mandated take-back requirement. DTSC must consider imposing effective standards on contractors to ensure that the flow of thermostats actually reaches wholesalers and manufacturers. In order to meet the Act’s standard of achieving “maximum feasible” collections, this rulemaking must consider the realities stemming from the contractors’ role in the program and impose reasonable requirements on contractors as contemplated in the Act.

In addition, illegal contracting work undermines manufacturers’ ability to meet collection rates. Stings conducted by the California State License Board in 2010 and targeted at illegal HVAC contracting work suggest that this is a widespread problem in California. Stings conducted in seven cities during January 2010 discovered that more than half of the HVAC contractors contacted were engaged in illegal contracting work. The second set of stings conducted in five cities in September 2010 discovered that seventy-five percent of those contractors were engaged in illegal work. In fact, HVAC is one of the top-five industries prone to underground economy violations, and several California agencies (including the California State License Board, Employment Development Department, Division of Labor Standards Enforcement, and the Department of Insurance) are planning to launch a three-year pilot program to measure the underground economy and determine how much revenue the California general fund loses as a result. No incentive from the manufacturers will motivate unlicensed contractors to self-report illegal activity or to turn in illegally-obtained thermostats. Accordingly, the baseline methodology must account for the fact that illegally-removed thermostats are effectively unrecoverable.

- II. DTSC’s proposed methodology for calculating the baseline number of mercury-added thermostats is ultra vires and arbitrary.
 - A. DTSC exceeded its authority under the Act by prescribing the baseline waste thermostats for 2012 and 2013.

As a threshold matter, the Act does not authorize DTSC to prescribe by regulation the exact number of mercury-added thermostats entering the waste stream. Instead, the Act directs DTSC to create a methodology for calculating the waste thermostat baseline. Even though it has proposed a methodology for 2014 and beyond, DTSC exceeded its authority under the Act when it prescribed exact numbers of waste thermostats for 2012 and 2013. Even if DTSC possessed the authority to dictate the number of waste thermostats, it should not dissociate the baseline number from the facts. Here, DTSC has not identified from where it derives its estimate of 313,400 mercury-added thermostats

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entering the waste stream in 2012 and 306,500 in 2013. Prescribing such numbers without any explanation represents arbitrary rulemaking and is not legally defensible.¹

B. DTSC's proposed long-term methodology for calculating the waste thermostat baseline would constitute arbitrary rulemaking.

In addition to exceeding its statutory authority and dictating an arbitrary waste thermostat baseline for 2012 and 2013, DTSC has proposed an unclear long-term methodology for calculating the baseline. Specifically, the methodology contemplates determining an “average” number of thermostats collected, based upon self-reporting requirements to be imposed upon contractors. The methodology does not explain if or how non-reporting contractors will factor into the waste thermostat baseline calculation in future years. Due to its vagueness, the methodology could be interpreted in several different ways. For example, non-reporting contractors might be considered as collecting zero thermostats and then remain in the pool of licensed contractors against which the average is multiplied. Alternatively, non-reporting contractors might be considered as simply “not collecting” thermostats and therefore excluded from the pool of licensed contractors. These two approaches would result in vastly different waste thermostat baselines, and therefore manufacturers would be unable to calculate exactly what their collection requirements will be in the future. Reliance by DTSC on “averages” in its baseline methodology without further explanation would constitute arbitrary rulemaking that fails to satisfy the fundamental standards of the Administrative Procedures Act.

The methodology further suffers from several inaccuracies. TRC's experience in California and other states indicates that the realities of the thermostat industry are more complex than DTSC's proposed methodology contemplates.

First, the methodology overestimates the waste thermostat stream by failing to take into account legal behavior that should not otherwise be covered by the regulations. Specifically, the methodology multiplies the “average” number of removed thermostats by the “[n]umber of licensed HVAC contractors” and “[n]umber of licensed demolition contractors” as reported by the California State Contractors Board. This fails to consider that many licensed HVAC and demolition contractors do not actively remove mercury-added thermostats. As a result, the methodology will overestimate the number of waste thermostats that manufacturers will be able to collect.

Second, the methodology does not explain how illegal contracting work or “do-it-yourself” thermostat removal will be treated. DTSC seems to give insufficient consideration to the reality that a considerable amount of thermostat removal work done in California is completed either by unlicensed professionals or individuals. The only place in the current methodology where this reality might be reflected is in the P_{HVAC} , which contemplates expressing the work completed by “HVAC contractors” as a fraction

¹ For reasons explained below, even if these numbers were taken from the median figures presented in the SERA study, it would be unreasonable for DTSC to adopt them as a definitive regulatory baseline.

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of the whole. However, the draft regulations do not specify whether this fraction would consist of only licensed contractors and does not mention demolition contractors. The methodology begs the question how such a fraction would be calculated and only increases the ambiguity facing manufacturers, resulting in a regulatory regime that is arbitrary and fails to meet the “Clarity” standard of Government Code section 11349.1.

C. Additional data collection is key to creating a feasible and legally-defensible methodology.

TRC wishes to emphasize that the root problem underlying the methodology’s vagueness is a current lack of accurate data, and that additional data collection is a necessary precursor to a feasible and legally defensible methodology. As part of the data collection process, TRC commissioned the SERA survey. While the SERA survey provided DTSC with statistically valid data regarding estimated numbers of mercury-added thermostats entering the waste stream, it appears that DTSC has unreasonably relied on this single study as definitive data upon which to impose far-reaching regulations on manufacturers. DTSC cannot rely solely on the SERA study as definitive because the study itself identified numerous survey problems that resulted in waste stream estimates that may not provide a useful basis for larger extrapolations.

The key to creating an accurate and legally-defensible baseline methodology and collection rate depends on additional data collection to determine the realities on the ground. DTSC has proposed collecting substantive data from HVAC and demolition contractors in California. To achieve a high collection rate a viable enforcement regime is necessary and in the absence of a viable enforcement regime, collection goals must reflect the reality that many thermostats continue to be disposed of illegally as there is no real consequence for violating the disposal ban. The contractor reporting component appears to be part of an effort to develop an enforcement scheme. TRC looks forward to working with DTSC and others within the industry to ensure that responsibility is shared consistent with the statute.

III. Proposed solutions.

A practical and legally defensible approach is for DTSC to adopt a clearly-defined baseline methodology that recognizes the interim informational uncertainty and undertakes the additional data collection necessary to create an effective long-term methodology. While the necessary data is being collected, manufacturers should be obliged to take specific and meaningful actions to continue to increase collections against the baseline collections to date. In addition, the regulations could be crafted to address some of the issues raised in the OCI report.

While TRC hopes that it has helped clarify information and address concerns identified in the OCI report, TRC acknowledges that it can take additional steps to encourage thermostat recycling. Accordingly, TRC is willing to continue to collaborate with DTSC to take additional agreed upon actions. TRC is already taking actions to address OCI’s

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“Recommendations After Assessment and Survey Results of TRC Wholesaler Participation.” By the end of next week, TRC will finish updating the instructions provided with each bin to include specific guidance on the one-year time limits for storage of waste thermostats before returning the bins. TRC is also adding language on the standard labeling on the outside of the containers; and providing a label with the containers on which the accumulation start date may be recorded. These changes will be implemented by mid-July.

TRC will continue to improve the quality and ease of use of its website, for the benefit of both those who are seeking collection locations and to support wholesaler participation. To this extent, TRC has already overhauled the search tool on the website and continues efforts on improving its ability to manage collection location and other data. By the end of the third quarter of 2011, TRC’s data base will be fully integrated into its website enabling it to reflect the most current contact information available for all collection locations.

IV. Conclusion.

On behalf of TRC, we appreciate your consideration of the comments presented here and we request that you address them in another draft of the regulations before the regulations are made available for formal public review and comment. TRC was voluntarily established by leading thermostat manufacturers to facilitate the collection and proper management of waste mercury-added thermostats. This commonality of interest with DTSC should form the basis for a concerted effort to draft meaningful, practical and legally defensible regulatory standards. Again thank you for providing the opportunity to participate in the recent workshop and to comment on the draft regulations. We look forward to working together on the next draft of the regulations.

Sincerely,



Robert P. Hoffman
for PAUL, HASTINGS, JANOFSKY & WALKER LLP

RPH

cc: Mark Tibbetts, Thermostat Recycling Corporation



MERCURY POLICY PROJECT

Promoting policies to eliminate mercury use and reduce mercury exposure

Multi-State Mercury Products Campaign Comments on Draft Mercury Thermostat Collection Rate Requirements

June 23, 2011

Ed Benelli
Office of Pollution Prevention and Green Technology
Department of Toxic Substances Control

Dear Mr. Benelli,

On behalf of the Multi-State Mercury Products Campaign, we are writing to applaud the work of the Department of Toxic Substance Control in drafting regulations to implement the Mercury Thermostat Collection Act of 2008. These regulations represent a critical step to prevent a significant source of mercury pollution. In order to strengthen the effort, we offer the following recommendations: 1) increase the first year collection rate to 40%, 2) improve the basis for estimating the number of thermostats becoming waste in the first three years, 3) require manufacturers to report program collection results from all states as well as California, and 4) promote an open and transparent process for the development of the Consent Agreement by encouraging public participation. Our proposed language changes to the draft rules reflecting the recommendations accompany these comments.

Throughout the United States, mercury poses a severe threat. Even in small quantities, mercury can cause significant health and environmental problems. Mercury released into the atmosphere can be transported long distances and deposited in aquatic ecosystems, where it converts to methyl mercury, the most toxic form of mercury.

Mercury is a danger to the development of the human fetus and young children. The federal Centers for Disease Control and Prevention estimate that between 300,000 and 630,000 infants are born in the United States each year with mercury levels that are associated, at later ages, with

the loss of IQ. Evidence indicates that methyl mercury exposure may also increase the risk of cardiovascular disease in humans, especially adult men.

According to TRC's own calculations, in California alone 341,000 out-of-service mercury-added thermostats will become waste in 2012. With an average of 4 grams of mercury per thermostat, these thermostats contain a combined 1.5 tons of mercury. Any source of mercury pollution of that magnitude should have a substantial regulatory program to address this preventable threat to human health and the environment. These draft regulations, particularly with the revisions we propose, put California on that path.

Additionally, these regulations are essential because the current voluntary collection program operated by the manufacturers, the Thermostat Recycling Corporation (TRC), has proven to be vastly inadequate to meet the needs for preventing mercury releases to the environment. TRC collection data indicates that their voluntary program has failed to collect the majority of mercury thermostats coming out of service. From 1999 to 2008, TRC collected 3.65 tons of mercury. During that same period, the EPA conservatively estimated 70-100 tons of mercury in thermostats came out of service. Over the past decade, TRC has collected less than 5% of what EPA estimated came out of service. We attach a copy of our recent report, *Turning Up the Heat*, discussing in more detail the shortcomings of the existing TRC program throughout the country.

These same data indicate the TRC program results are much better when financial incentives are included. In 2006, Maine enacted the nation's first comprehensive mercury thermostat collection law and has the highest per capita mercury thermostat collection rate in the country. Among other requirements, the law obliges thermostat manufacturers to collect mercury thermostats and provide a \$5 financial incentive to encourage professionals and homeowners to recycle thermostats. A project in Vermont and a nationwide review of collection programs also found a financial incentive to be a critical factor for motivating program participation. The Vermont report to the legislature is available at this link: <http://www.leg.state.vt.us/reports/2008ExternalReports/228981.pdf>. The report from the Northeast Waste Management Officials' Association is available here: <http://www.newmoa.org/prevention/mercury/ThermostatRecyclingReport2008.pdf>.

At the hearing and elsewhere in the country, TRC attempts to obfuscate the data by pointing to increases in collection numbers from year to year as a measure of success. However, when you start from the depths of failure where the TRC program is in many states, large percentage increases are easy to obtain with minimal effort. Going from collecting 100 to 200 thermostats is a 100% increase, but hardly makes a dent in preventing mercury releases into the environment. DTSC must also bear in mind the TRC program has been operating for a decade nationally, and longer than that on a regional basis in the Midwest. Moreover, the thermostat collection law in California passed three years ago. TRC has had ample opportunity to demonstrate it can achieve acceptable collection rates in California and elsewhere. TRC promises now to do better as justification for California to weaken its collection rules should be viewed with appropriate skepticism, because there is little evidence that TRC can achieve the level of performance required without the legal framework contemplated in the draft rules.

Improve Performance Standards

Because Maine has the longest operating and most effective mandatory collection program in the country, it should serve as the model for developing an appropriate first year collection rate for

the California program as these regulations begin to come into force.

Using Maine's per capita collection rate according to the public workshop presentation and comparing that by population to California reveals that the draft proposal's 20% collection rate in 2012 would represent a standard at less than one-third of the effectiveness of the Maine program. Because of the enormity of the volume of mercury at stake, it is essential that the first year rate be set at the highest achievable level to address the environmental health threat. We recommend a minimum collection rate of at least 40% for 2012. This rate would still be well below Maine's 2010 collection rate, but would capture substantially more mercury than the currently proposed rate and provide an appropriate benchmark to measure the collection program's results.

Estimating Number of Mercury Thermostats Becoming Waste

In the draft proposal, DTSC utilizes two methods for estimating the number of mercury thermostats becoming waste each year in California. For calendar years 2012 and 2013, the number is derived by taking the mid-point of the Year 3 and 4 low-end and high-end estimates as provided in Table 1.5 of the report prepared for TRC by Skumatz Economic Research Associates.¹ For subsequent years, a formula is presented which relies heavily upon reported data by HVAC and demolition contractors.

We propose two modifications to the proposal which we believe will produce more accurate and easily implemented results. First, in using the TRC data prepared by Skumatz, we note that the high-end values utilized by DTSC did not reflect the true high-end values in the study. Skumatz undertook verification efforts to confirm the accuracy of the survey results upon which the data were based, and discovered a pattern of underreporting. Specifically, underreporting was detected in 12% of the sites visited, resulting in thermostat undercounting of about 13.5% in the survey results.² Accordingly, a 13.5% validation adjustment factor was added to the high-end value to account for the underreporting in the survey results.³

Yet DTSC did not use the adjusted high-end value to compute the mid-point estimates for 2012 and 2013. As a result, the high-end values used by DTSC do not reflect the significant underreporting found in the TRC report. We recommend that DTSC use the adjusted high-end estimates to calculate the true mid-point values.⁴ Using the adjusted high-end values would result in revised values for mercury thermostats becoming waste of 341,000 for 2012 and 333,000 for 2013.

¹ Mercury-Containing Thermostats: Estimating Inventory and Flow from Existing Residential and Commercial Buildings, prepared for TRC by Lisa Skumatz, December 28, 2009.

² *Id.* at 2.

³ *Id.*, Table 1.5.

⁴ We note that another significant reason for undercounting in the TRC report – underreporting by large facilities – was not taken into account through this adjustment factor. *Id.* at 17. Accordingly, even with this change, the estimated number of thermostats becoming waste is still quite conservative.

A second related change we propose is to utilize the TRC report as the basis for deriving the value for calendar year 2014 as well. Given the number of contractors newly required to report thermostat collection data under the rules (11,500 HVAC contractors, 1,600 demolition contractors), we think it wise for DTSC to build in sufficient time to ensure the reporting data will be sufficiently accurate and comprehensive to use for this purpose. The extra year we propose to make the methodology transition will allow for greater education, training, and enforcement efforts that may be required to base the methodology on the reporting data.

With the adjustment factor provided above, the TRC report provides a sufficient basis for 2014 value derivation purposes, thus the collection program will not suffer if the contractor reporting data were not sufficiently robust for use that year. In fact, DTSC might benefit from additional time during which DTSC could calculate the number that would be derived using the formula, compare it to the TRC report mid-point, determine if there are significant differences in the two estimates and, if there are any, attempt to determine why they occurred. Under our proposal, using the adjusted high end value in the TRC report, the number of mercury thermostats becoming waste in California during 2014 is 325,500.

Manufacturer Reporting Requirements

The draft rules appropriately request data from the manufacturers regarding the collection program in California, but fail to request data regarding the collection program in other states. Until about two years ago, this would not have presented a problem, because TRC provided annual state-by-state collection data, and posted it on its website. However, TRC no longer provides the historic collection data on its website, and for 2009 and 2010, has not released the state-by-state program collection data. The annual report TRC just released for 2010 continues to include only the selected state data it believes will place the program in its most favorable light.⁵

DTSC will need the state-by-state collection data for a variety of reasons. The data will be useful to identify the best performing state programs, identify favorable or unfavorable trends in state collection programs, ascertain which programs have achieved substantial improvements and why, and evaluate the effectiveness of financial incentives and other initiatives to improve collection results. Indeed, DTSC staff presentations at the workshop demonstrated both the importance of having the data for comparison purposes, and staff's inability to easily access the data needed, since staff prepared state comparison slides to illustrate a variety of points about the California program, but were unable to obtain 2010 collection data for Rhode Island and Illinois. We recommend DTSC include within its regulations a requirement for state-by-state collection reporting. TRC collects these data anyway, thus no additional burden is imposed upon TRC for requiring it to be submitted. Even if TRC now reversed course and offered to provide California with these data voluntarily, there is no guarantee this commitment would continue indefinitely, and there would be no assurances other stakeholders in California would have similar access to the data to facilitate their participation in the California collection program.

We recommend the reporting requirement apply to the three previous calendar years, to ensure state-by-state data for calendar years 2009 and 2010 are provided, and to ensure trends in individual states can be easily identified.

⁵ See <http://www.thermostat-recycle.org/files/media/20110510094455.pdf>

Public Participation in the Consent Agreement Process

The draft rules provide that if the state performance goals are not achieved, DTSC would initiate an enforcement process ultimately resulting in program changes implemented through a Consent Agreement. The potential program changes include the parameters of a financial incentive (such as the amount, how it is provided and to whom, etc.), improved education and outreach, and other fundamental changes to the manufacturer collection program. As such, the Consent Agreement process will be the forum where fundamental policy issues regarding the future shape of the collection program may be made.

As noted by many participants at the Workshop, the current draft of the rules fails to ensure other stakeholders beside the manufacturers will have the opportunity to present their concerns to DTSC, offer suggestions for program improvements, and respond to proposals under consideration in the Consent Agreement process. This failure is perhaps the most troubling aspect of the proposed rules from the environmental community's prospective, given its role in the adoption of the mercury collection law and continued interest in its implementation, our experience in California and around the country on this issue, and the significance of the mercury loss to the environment if the TRC continues to underperform in California and elsewhere. In the attachment to these comments, we propose regulatory language obligating DTSC to consult with stakeholders during the Consent Agreement process, and to seek comment on particular proposals under consideration. We urge DTSC to adopt this language and commit to an open and transparent Consent Agreement process.

Thank you again for your leadership in addressing this critical source of mercury pollution. We appreciate your consideration of these recommendations for your draft regulation.

Sincerely,

The Multi-State Mercury Products Campaign

David Lennett
Natural Resources Defense Council

Michael Bender
Mercury Policy Project

Amber Meyer-Smith
Clean Wisconsin

Laura Haight
New York Public Interest Research Group

Sheila Dormody
Clean Water Action

Enclosures

- Proposed language changes for draft regulations
- *Turning Up The Heat: Exposing the manufacturers' lackluster mercury thermostat collection program*, Report from the Multi-state Mercury Products Campaign

Amend Appendix XII of the California Code of Regulations, title 22, division 4.5, chapter 11. Insert, in numerical and in alphabetical order within the existing section to read as follows:

(a) Subdivisions (b) and (c) of this appendix establish the California Hazardous Waste Code Numbers assigned to wastes which have been identified as hazardous wastes pursuant to the characteristics of hazardous waste as set forth in article 3 of this chapter or pursuant to the lists of hazardous wastes in article 4 of this chapter. These Waste Code Numbers shall be used in complying with the notification requirements of Health and Safety Code section 25153.6 and, where applicable, in the recordkeeping and reporting requirements under chapters 12 through 15, 18, and 20 of this division.

(b) List of California Hazardous Waste Codes arranged in numerical order:

614 Treated wood waste

615 Out-of-service mercury-added thermostats

(5) California Restricted Wastes:

711 Liquids with cyanides \geq 1000 mg/l

(c) List of California Hazardous Waste Codes arranged alphabetically within each numbered category in this subdivision:

551 Laboratory waste chemicals

615 Out-of-service mercury-added thermostats

512 Other empty containers 30 gallons or more

541 Photochemical/photoprocessing waste

(5) California Restricted Wastes:

721 Liquids with arsenic $>$ 500 mg/l

NOTE: Authority cited: Sections 25150 and 58012, Health and Safety Code. Reference: Sections 25117.9, 25122.7, and 25150, Health and Safety Code.

Chapter 35 Mercury Thermostat Collection Rate Requirements

§67388.1 Scope

(a) This chapter establishes the performance requirements that specify collection rates and a methodology for the calculation of out-of-service mercury-added thermostats becoming waste annually.

(b) Nothing in this chapter is a limitation on the power of any other governmental agency to adopt or enforce additional requirements related to the management of the mercury-added thermostat materials.

Authority: Section 58012 and 25150, Health and Safety Code. Reference: Section 25214.8.17, Health and Safety Code.

§67388.2 Applicability

Effective January 1, 2012 the requirements of this chapter shall apply to

(a) Manufacturers as described in section 67388.3.

(b) HVAC contractors as described in section 67388.3.

(c) Demolition contractors as described in section 67388.3.

Authority: Section 58012 and 25150, Health and Safety Code. Reference: Section 25214.8.17, Health and Safety Code.

§67388.3 Definitions

The definitions set forth in section 66260.10 of this division shall apply unless otherwise defined. The following terms shall apply to the definitions used in this chapter. The definitions of the following terms are stated the Health and Safety Code sections unless otherwise noted.

“Collection Rate” means the number of out-of-service mercury added thermostats collected, as reported by a manufacturer or group of manufacturers divided by the calculated number of out of service mercury added thermostats becoming waste annually, as defined in section 67388.4, expressed as a percentage.

“Demolition contractor” has the meaning of a C-21 contractor as defined in Cal. Code Regs., title 16, section 832.21.

“Household hazardous waste collection facility (HHWCF)” has the meaning of a facility as defined in Health and Safety Code, section 25218.1(f).

“Heating, ventilating and air-conditioning (HVAC) Contractor” has the meaning as defined in Cal. Code Regs., title 16, section 832.20.

“Manufacturer” has the meaning as defined in Health and Safety Code, section 25214.8.11(a).

“Mercury-added thermostat” has the meaning as defined in Health and Safety Code, section 25214.8.11(b)

“Out-of-service mercury-added thermostat” has the meaning as defined in Health and Safety Code, section 25214.8.11(c).

“Program” has the meaning as defined in Health and Safety Code, section 25214.8.11(d).

“Retailer” has the meaning as defined in Health and Safety Code, section 25214.8.11(e).

“Thermostat” has the meaning as defined in Health and Safety Code, section 25214.8.11(f).

"Wholesaler" has the meaning as defined in Health and Safety Code, section 25214.8.11(g).

Authority: Section 58012 and 25150 Health and Safety Code. Reference: Section 25214.8.11 and 25218.1, and 25214.8.17 Health and Safety Code. Reference: Cal. Code Regs., tit. 16, §832.20 and 832.21.

§67388.4 Methodology for Calculation of Number of Out-of-Service Mercury Added Thermostats Becoming Waste Annually

(a) For the purpose of the calculation in section 67388.5 the number of out-of-service mercury-added thermostats becoming waste are ~~341,000~~ for the 2012 calendar year, ~~333,000~~ for the 2013 calendar year, ~~and 325,500 for the 2014 calendar year.~~

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(b) Beginning on March 1, 2015, the department shall post the number of out-of-service mercury-added thermostats that became waste for the previous year based on the following methodology:

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T_{AW} - Number of out-of-service mercury-added thermostats that become waste annually

T_{HVAC} - Average number of mercury-added thermostats removed per HVAC contractor, as reported annually by HVAC contractors

N_{HVAC} - Number of licensed HVAC contractors, as reported by the California State Contractors License Board

P_{HVAC} - Percent of thermostat work attributable to HVAC contractors, expressed in decimal form

T_D - Average number of mercury-added thermostats removed per demolition contractor, as reported annually by demolition contractors

N_D - Number of licensed demolition contractors, as reported by the California State Contractors License Board

T_{UHWM} - Number of out-of-service mercury-added thermostats reported on Uniform Hazardous Waste Manifests under California Waste Code 615

T_{HHWCF} - Number of out-of-service mercury-added thermostats reported in the California Household Hazardous Waste Collection Facilities Form 303(b). When necessary, the department may calculate the number of out-of-service mercury-added thermostats that are reported by weight based on the following formula:

T - Number of out-of-service thermostats collected

T_{lbs} - Weight of out-of-service thermostats collected

k - Conversion factor for weight of thermostat = 100 grams per thermostat

Authority: Section 58012 and 25150, Health and Safety Code. Reference: Section 25214.8.15, 25214.8.16 and 25214.8.17 Health and Safety Code.

§67388.5 Manufacturers' Annual Collection Rate

(a) The manufacturer or group of manufacturers shall meet or exceed the annual collection rate established by the department. The collection rates for out-of-service mercury-added thermostats are:

2012 – ~~40%~~

2013 – 40%

2014 – 60%

2015 – 80%

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(b) After 2015 the collection rate will be 80%.

(c) In the case of multiple manufacturers operating individual programs, the department shall assign a percentage of the collection rate to each manufacturer or group of manufacturers based upon: (1) Each manufacturer or group of manufacturers providing current market sales data to determine their percentage of thermostats sales compared to the total sales of thermostats by all manufacturers or group of manufacturers; or

(2) The department will determine the proportion of thermostats attributed to each manufacturer or group of manufacturers based on previous annual reports pursuant to Health and Safety Code 25214.8.13(i).

(d) On July 1 and January 1 of each calendar, the department shall post a notice on its Internet Web site listing each manufacturer or group of manufacturers that is not in compliance with this chapter and Health and Safety Code..25214.8.12

Authority: Section 58012 and 25150, Health and Safety Code. Reference: Section 25218.8.13 Health and Safety Code.

§67388.6 Manufacturers' Compliance Requirements

(a) The department may order a manufacturer, or group of manufacturers operating a program to revise its program and to undertake actions to comply with section 67388.5 and Health and Safety Code sections 25214.8.12, 25214.8.13 If a manufacturer or group of manufacturers is deemed by the department to be out of compliance with the collection rate in section 67388.5, then the department shall require the manufacturers to follow the steps in subsection (b) to increase their collection rate to achieve the required collection rate in

section 67388.5.

(b) If a manufacturer's collection is:

(1) less than the collection rate, then: a. Implement a financial incentive program for the recycling of each mercury added thermostat collected by a manufacturer or group of manufacturers.

b. The manufacturer or group of manufacturers shall revise its program to undertake actions to comply with the collection rate of this chapter by entering into a Consent Agreement with the Department that specifies the revisions to the program and the actions the manufacturers will undertake.

c. Should a manufacturer or group of manufacturers fail to revise its program to undertake actions to comply with this Chapter, the Department may issue an order pursuant to Health and Safety code sections 25187 and/or 25214.8.17

(2) less than 50% of the collection rate, then: a. The manufacturers or group of manufacturers shall comply with the requirements of subsection (b)(1).

b. The department may issue an order pursuant to Health and Safety Code section 25187 that imposes an administrative penalty.

(c) If a manufacturer or a group of manufacturer do not satisfy the requirements in subsection (b) then the department will post on its website the manufacturer or group of manufacturers that have failed to meet the requirements of this chapter.

(d) In determining the revisions to the program and the actions the manufacturers will undertake under subsection (b)(1), the department shall consult with other stakeholders prior to and during the Consent Agreement negotiation process, and shall provide opportunities to offer and comment on program revisions and actions that may be included in the Consent Agreement.

Authority: Section 58012, 25150, Health and Safety Code. Reference: Section 25180, 25187, 25189.2, 25218.8.13 and 25214.8.17 Health and Safety Code.

§67388.7 Reporting Requirements

(a) Including the requirements pursuant to Health and Safety Code 25214.8.13(i), each manufacturer or group of manufacturers' annual report submitted to department shall include the following information:

(1) Household hazardous waste collection facility, retailer or wholesaler bin identification number,

(2) Household hazardous waste collection facility, retailer or wholesaler name and site address of the bins collected,

(3) Contact person's name, mailing address, telephone number,

(4) The date that the manufacturer or group of manufacturers receives the bins from the household hazardous waste collection facility, retailer or wholesaler,

(5) The number of mercury thermostats collected during the previous calendar year listed by each brand name in California, and

(6) The number of mercury thermostats collected in each state other than California during the previous three calendar years.

(b) Beginning January 1, 2013, each HVAC and demolition contractor shall submit, to the department, an annual report for the period beginning January 1 and ending December 31 of each calendar year for the previous year.

(c) Annual reports shall be submitted in an electronic format provided by the department within 30 days of the end of each reporting period. Each annual report shall include the following:

(1) The business location's name and mailing address;

(2) Contractors State Licensing Board Identification Number;

(3) Name, address and telephone number of the person who should be contacted regarding the business' out-of-service mercury-added thermostat removal activities;

(4) The number of contractors that work from that business location;

(5) The number of mercury-added thermostats removed by the contractors and technicians that work from that business location;

(6) The business location's service area; and

(7) Names and addresses of the wholesaler, retailer or household hazardous waste collection facility where the business location takes the out-of-service mercury-added thermostats to be collected.

(d)(1) Notwithstanding the exemption provided for by 22CCR66273.8, an HVAC or demolition contractor's business location shall keep a record of annual reports on site for three years.

(2) In addition to the reporting requirements in sub-section (c), HVAC and demolition contractors shall keep written records on site of the following information:

(A) The date when each out-of-service mercury-added thermostat was removed;

(B) The location where each out-of-service mercury-added thermostat was removed;

(C) The date when each out-of-service mercury-added thermostat was disposed; and

(D) The location where each out-of-service mercury-added thermostat was disposed.

Authority: Section 58012 and 25150, Health and Safety Code. Reference: Section 25214.8.13, 25214.8.15, 25214.8.16 and 25214.8.17 Health and Safety Code.

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Clean Water Action • Clean Wisconsin • Coalition for a Safe and Healthy Connecticut • Green Purchasing Institute • Mercury Policy Project • Michigan Environmental Council • Natural Resources Council of Maine • Natural Resources Defense Council • New York Public Interest Research Group

November 23, 2011

Debbie Raphael, Director
Department of Toxic Substances Control
1001 I Street
Sacramento, CA 95814-2828

Re: DTSC Mercury Thermostat Collection Rate Requirements

Dear Ms. Raphael:

On behalf of Clean Water Action, Clean Wisconsin, Coalition for a Safe and Healthy Connecticut, Green Purchasing Institute, Mercury Policy Project, Michigan Environmental Council, Natural Resources Council of Maine, Natural Resources Defense Council (NRDC), and the New York Public Interest Research Group, we are writing to urge the Department of Toxic Substance Control (DTSC) to move forward quickly and effectively with the legally-required regulations to implement the Mercury Thermostat Collection Act of 2008. According to the Thermostat Recycling Corporation (TRC)'s own calculations (and adjustment factors), 341,000 out-of-service mercury-added thermostats will become waste in 2012. With an average of 4 grams of mercury per thermostat, these thermostats contain a combined 1.5 tons of mercury. This enormous source of mercury generates urgency to move forward with strong regulations to recapture as much of this toxic chemical as possible from the waste stream.

Other states and national governments are also moving forward with thermostat recycling efforts, and these entities are seeking effective models to emulate. For example, in the coming years, Illinois and Rhode Island among others must establish appropriate performance standards for the TRC collection programs, and as needed, program enhancements. California's regulations have the potential to be a model for these states.

In addition, in February 2009, at a meeting of the United Nations Environment Program (UNEP) Governing Council, an agreement was reached to pursue a global treaty to reduce mercury pollution. This treaty is expected to include measures that will reduce global mercury supply and trade as well as mercury emissions from industrial sources and waste management. As a first step toward addressing emissions from waste management, the Basel Convention Conference of the Parties just adopted technical guidelines on the management of elemental mercury and mercury containing wastes.¹ These guidelines include the use of extended producer responsibility (EPR) programs such as the California

¹ http://www.basel.int/Portals/4/Basel%20Convention/docs/meetings/cop/cop10/BC10_TechnicalGuidelinesESMMercuryWastes.pdf

thermostat collection legislation.² It is expected the mercury treaty, to be finalized by February 2013, will build from these Basel technical guidelines and establish mercury waste management requirements or BMPs. A strong California EPR model on mercury-containing waste collection would also be helpful in the international context.

We urge DTSC to take a strong stand in improving the measurement of flow (the number of thermostats becoming waste in future years), maximizing the collection rate to achieve the best rate in-state and nationally, and strengthening enforcement to assure compliance.

The DTSC regulations are essential because the current voluntary collection program operated by the TRC has proven to be vastly inadequate to meet the needs for preventing mercury releases to the environment. TRC collection data indicates that their voluntary program has failed to collect the vast majority of mercury thermostats coming out of service. Over the past decade, TRC has collected less than 5% of the thermostats EPA estimated came out of service. California's collection rate is currently worse than the national average, even though many other states have no collection programs. This is a dismal record and needs to be corrected as quickly as possible. Maryland and Maine currently have the best collection rates in the nation, but we believe that California can and should set a model and should strive to exceed the collection rates achieved in these two states. It is now clear, based on the models in Maine and Maryland, that collection rates in excess of 65% are achievable, and we believe that an even higher collection rate can be achieved after the first couple of years. Accordingly, we urge DTSC to take the bold and important step of striving for an 80% collection rate by 2015. A collection rate of 80% in 2015 would recapture one ton of mercury, which would significantly reduce mercury pollution in California's waste stream, air, and water.

As noted above, the enabling statute for these regulations passed over three years ago. In the intervening three years, the TRC program has not materially improved, notwithstanding their acknowledgement that hundreds of thousands of mercury thermostats are becoming waste in California each year. This TRC record demonstrates, absent aggressive and enforceable capture rates, TRC will not expend the necessary resources and respond to the legislative mandate. Accordingly, DTSC must seek an immediate and dramatic transformation of the program, both to capture as much of the mercury in the waste as possible before it is released, and to enable the 80% performance level by 2015 to be achieved. Accordingly, we urge DTSC to set a **more environmentally protective standard for 2012** than the 20% DTSC had included in the pre-proposal draft. This 20% represents less than one-third of the effectiveness of the Maine program. Surely, California should do better than this.

These targets may be ambitious relative to TRC's dismal record in California to date, but we believe they are achievable and necessary to protect public health and the environment. In addition, we believe that California's leadership on this issue will provide an important model to other states and national governments that are seeking to reduce mercury waste. California can and should exceed the collection rates of Maine and Maryland, and should accompany strong targets with a strong compliance program, to dramatically reduce mercury in the waste stream.

² http://www.basel.int/Portals/4/Basel%20Convention/docs/techmatters/mercury/guidelines/UNEP-CHW-10-6-Add_2_rev_1.pdf, par 102-106.

Thank you for considering this additional input into your process.

Sincerely,

Clean Water Action

Lynn Thorp, National Campaigns Coordinator
Susan Eastwood, Connecticut Mercury Coordinator
Cindy Luppi, New England Director
Andria Ventura, California Program Manager

Clean Wisconsin

Amber Meyer Smith, Director of Programs and Government Relations

Coalition for a Safe and Healthy Connecticut

Anne Hulick, Coordinator

Green Purchasing Institute

Alicia Culver, Director

Mercury Policy Project

Michael Bender, Executive Director

Michigan Environmental Council

Tina Reynolds, Health Policy Director

Natural Resources Council of Maine

Pete Didisheim, Senior Director of Advocacy

Natural Resources Defense Council

Gina Solomon, MD, MPH, Senior Scientist
David Lennett, Senior Attorney

New York Public Interest Research Group (NYPIRG)

Laura Haight, Senior Environmental Associate

CC: Edward Benelli – ebenelli@dtsc.ca.gov



NATURAL RESOURCES DEFENSE COUNCIL
THE EARTH'S BEST DEFENSE



CPSC
California Product
Stewardship Council SM



 CLEAN WATER ACTION
Mercury Policy Project
Promoting policies to eliminate mercury use
and reduce mercury exposure



 cleanwisconsin
your environmental voice since 1970

January 27, 2012

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

Dear Director Raphael:

Thank you for the opportunity to comment on the Department's December draft mercury thermostat collection regulations. We represent a broad coalition of environmental and public interest groups seeking a California program which provides for the maximum feasible number of mercury thermostats collected, consistent with the Legislature's intent. As discussed below, we believe significant improvements to the draft rules are necessary to meet this statutory objective. We look forward to working with you and your staff to make these improvements, issue the regulations, and then achieve an effective program in California.

Calculating the Number of Mercury Thermostats Becoming Waste Annually

In the pre-proposal June 2011 draft regulations, DTSC proposed two approaches for calculating the number of mercury thermostats entering the California waste stream each year. For calendar years 2012 and 2013, DTSC proposed to rely upon the data in a report submitted by TRC in December 2009, as discussed further below.¹ For calendar year 2014

¹ Mercury Containing Thermostats: Estimating Inventory and Flow from Existing Residential & Commercial Buildings, prepared for TRC by Skumatz Economic Research Associations (SERA), dated December 28, 2009 (hereafter "TRC 2009

and beyond, DTSC proposed to rely upon contractor reporting obligations to generate this estimate.

In our comments on the June draft rules, we observed the DTSC estimates for 2012 and 2013 were too low, because DTSC did not use the correct data from the TRC 2009 Waste Flow Report. We also recommended that DTSC rely upon the data in the TRC 2009 Waste Flow Report for 2014 as well, since achieving the necessary compliance with the proposed contractor reporting obligations could pose a challenge for the Department.

Unfortunately, DTSC in its latest draft chose to weaken rather than strengthen this aspect of the rules. In the December 2011 draft rules, DTSC proposes to lower the number of mercury thermostats coming out of service in 2012 by almost 30%, from 313,500 to 222,000. And for 2013, DTSC proposes a similar reduction of 29%, from 306,500 to 217,000 mercury thermostats. **The effect of these reductions is to drastically reduce the number of thermostats TRC must collect in 2012 and 2013.** Under the collection rates DTSC proposes to require in its latest draft rules (which are too low as explained further below), **DTSC would allow an additional 161 pounds of mercury in 18,300 thermostats to go uncollected in 2012 through this weakened aspect of the proposal alone.** Moreover, DTSC continues to propose use of the contractor requirements for estimating the number of mercury thermostats becoming waste in 2014 and beyond.

In this portion of the comments, we will address TRC's arguments against relying upon its 2009 Waste Flow Report as the basis for calculating the number of mercury thermostats becoming waste in California, and the proper incorporation of data in that report for use in this rulemaking. Building on this discussion, we will then address why the December 2011 draft rules are unsupportable.

First, DTSC must consider the statutory context for both the TRC report and the instant rulemaking. Under Health and Safety Code section 25214.8.17(b), DTSC is required to adopt regulations which establish a methodology for calculating the number of out-of-service mercury thermostats becoming waste in California annually, and using this number as the denominator, develop collection rate performance requirements for the TRC program. In anticipation of this rulemaking, the Legislature required TRC to develop and then implement a survey to provide "statistically valid data" on the number of mercury thermostats becoming waste in California. See section 25214.8.18 of the Health and Safety Code. **The TRC 2009 Waste Flow Report is the statutorily mandated report containing the very data the Legislature required TRC to provide for the instant rulemaking.** As such, use of the data in the report by DTSC is not only reasonable under the circumstances, but was expected by the Legislature.

Waste Flow Report"), available at http://www.dtsc.ca.gov/HazardousWaste/upload/TRCThermostat-Report-12_09.pdf.

Incredibly, TRC now seeks to discourage DTSC use of the Report, notwithstanding the statutory construct. TRC's argument is twofold. First, TRC contends DTSC is barred from actually estimating the number of thermostats in the regulation itself, because the statute calls for the regulation to "establish a methodology" rather than calculating an actual number.²

This claim is absurd, since the purpose of the regulation is to produce a collection rate that specifies, in part, the number of mercury thermostats becoming waste in California as the denominator. The rule must produce a number, not just a methodology. In any case, even if this argument had merit, DTSC could simply reference the TRC survey methodology and report, required by statute, as the "methodology".

Secondly, and perhaps more importantly, TRC now seeks to distance itself from its own Report, by admitting the Report provided "statistically valid data", but contending these data alone are insufficient for DTSC to rely upon. According to TRC, its Report identified "numerous survey problems" so it cannot be used as a basis for larger extrapolations.³

This dance TRC attempts to do, by claiming the Report satisfies the statutory requirement of providing statistically valid data but not a sufficient basis for the rulemaking defy both statutory logic and the language in the Report itself. That TRC was required to submit a survey plan and methodology to DTSC for its review, prior to the preparation of the Report, is further evidence that the Legislature expected DTSC to rely on this Report for the rulemaking. See section 25214.8.18 of the Health Safety Code. Why else would the Legislature demand "statistically valid data" in the Report?

Moreover, the language in the Report itself belies TRC claim the Report is somehow flawed because it contains numerous problems. The introduction of the Report reads, in pertinent part:

*The State of California requires delivery of a "study" that provides estimates of the number of thermostats potentially available for disposal/recycling/management. This chapter describes the approach we used to produce **high quality, defensible estimates** of –*

- *The inventory or "count" of thermostats in place in California households and businesses; and*
- *The annual "flow" of this equipment out of the buildings, potentially subject to capture through a thermostat recycling program.⁴*

² Comments from Robert Hoffman, Paul, Hastings, Janofsky, & Walker LLP to DTSC, June 24, 2011, p. 7.

³ *Id.*, p. 9.

⁴ TRC 2009 Waste Flow Report, p. 8 (emphasis added).

Indeed, the only aspect of the Report where significant uncertainty is expressed concerns the percentage of thermostats coming off the wall which contain mercury. In that regard, the study provides a range based upon sampling site visits and other data collected. The computed range for commercial buildings is 22-46% for commercial buildings, and 27-47% for residential buildings.⁵ Therefore, the only real question facing DTSC is whether this range provides a reasonable basis for calculating the denominator, and if so, what is the most reasonable value to select within this range.

Even TRC acknowledges that for 2012 at least, use of the computed range is a reasonable choice for TRC. In its proposed changes to the rules submitted to DTSC in October 2011, TRC proposed using 222,000 thermostats as the denominator for 2012. **The sole basis for this number is the low end of the range for year 3 in the TRC Report.**⁶ So even for TRC it is not a question of whether the Report can be used to set the denominator, but which values to use.⁷

As noted above, the low end denominator value TRC recommended and DTSC has now included in its December draft regulations assumes only 22% of thermostats in commercial buildings coming out of service, and 27% of thermostats in residential buildings coming out of service, contain mercury. Significantly, no justification has been provided from either TRC or DTSC for choosing the lowest possible value in the Report or the underlying percentages of thermostats containing mercury.

In contrast, when Maine calculates the denominator based upon its experience, it uses percentages ranges from 60-80% for the percentage of out-of-service thermostats containing mercury.⁸ While we acknowledge Maine's percentages may be higher than California's due to California's longer-standing restrictions on mercury thermostat installation in new construction, the discrepancy is too large to be ignored, particularly without any rationale within the TRC report or otherwise.

Without justification for using the lowest value in the TRC Report, given comparable percentages used in other jurisdictions, and given the statutory intent of the legislation to provide for the collection and recycling of the "**maximum feasible number of out-of-service mercury-added thermostats**" (section 25214.8.20 of the Health and Safety Code), we ask that DTSC at a minimum return to the mid-point values in the TRC Report previously relied upon in the June 2011 pre-proposal draft rules. This would return the 2012 denominator to 313,500 thermostats and the 2013 denominator to 306,500

⁵ TRC 2009 Waste Flow Report, pp. 1-2.

⁶ TRC 2009 Waste Flow Report, Table 1.5.

⁷ Since the statute required TRC to provide valid data on the number of "mercury-containing thermostats" becoming waste annually, the TRC Report must provide a defensible means of estimating the percentage of thermostats becoming waste which contain mercury.

⁸ Telephone conversation with Ann Pistell, Maine DEP, January 18, 2012.

thermostats. Even more accurately, as we stated in our earlier comments, DTSC should use the adjusted mid-point values to account for underreporting in survey results, which would result in a 2012 denominator of 341,000 and a 2013 denominator of 333,000 thermostats.

For 2014 and beyond, we continue to believe use of the TRC report remains a viable option for the Department, rather than requiring annual contractor reporting. If TRC is uncomfortable with this approach, TRC can supplement the survey data with additional information on the percentages of thermostats containing mercury, and then petition the Department to revise its rules. While TRC is not under a statutory obligation to do this work, it had a statutory obligation to provide valid data for use in this rulemaking by the end of 2009. Accordingly, if TRC now believes the data originally provided can be improved upon, TRC can undertake this work. In the meantime, DTSC bears no legal obligation to supplement the TRC Report. In any case, if DTSC elects to gather more data, DTSC should consider relying upon the TRC Report for estimating the flow of thermostats becoming waste generally, and undertaking a more limited, one-time survey of contractors, targeted to estimate the percentage of waste thermostats containing mercury.

Manufacturer Reporting Obligations

In our comments on the June 2011 draft rules, we urged DTSC to require manufacturers (TRC) to provide data regarding the performance of their collection program in other states. The December 2011 draft rules do not incorporate this reporting requirement. We have been told by DTSC staff that these obligations were not included in the current draft because of TRC objections, but there are no TRC objections on the record to which we can respond.

TRC no longer provides historic state-by-state collection data on its website, and for 2009-2011, has not released the state-by-state program collection data. Therefore, if these data will be useful in the future to DTSC and other stakeholders in California, DTSC should require the reporting of these data through the instant rulemaking.

DTSC will need the state-by-state collection data to determine and achieve maximum achievable collection rates. The data will be useful to identify the best performing state programs, identify favorable or unfavorable trends in state collection programs, ascertain which programs have achieved substantial improvements and why, and evaluate the effectiveness of financial incentives and other initiatives to improve collection results. Indeed, DTSC staff presentations at the June 2011 workshop demonstrated both the importance of having the data for comparison purposes, and staff's inability to easily access the data needed, since staff prepared state comparison slides to illustrate a variety of points about the California program, but were unable to obtain 2010 collection data for Rhode Island and Illinois.

While reporting on other state collection programs is not expressly included within the manufacturer obligations specified in section 25214.8.13, nothing in the statute specifies this list is exclusive, particularly as it relates to reporting obligations.⁹ The statute's intent to provide for "maximum feasible" collection and recycling of out-of-service mercury-added thermostats, coupled with the Department's authority to "require a group of manufacturers...to undertake actions to comply with this article" (beyond just program revisions) supports a broad reading of DTSC's authorities to require reporting as needed to make the TRC program in California function as effectively as possible. H&S Code § 25214.8.17.

We thus reiterate our recommendation that DTSC include within its regulations a requirement for state-by-state collection reporting. TRC collects these data anyway, thus no additional burden is imposed upon TRC for requiring it to be submitted. Even if TRC now reversed course and offered to provide California with these data voluntarily, there is no guarantee this commitment would continue indefinitely, and there would be no assurances other stakeholders in California would have similar access to the data to facilitate their participation in the California collection program. We recommend the reporting requirement apply to the three previous calendar years, to ensure state-by-state data for calendar years 2009-2011, and to ensure trends in individual states can be easily identified.

The draft rules also lack reporting on education and outreach activities implemented by TRC to ensure that contractors and the public are aware of the program and use it, and lack reporting on the financing of the program and administration costs. We continue to be concerned that TRC has not funded even one staff person to administer this program in California and that TRC continues to reference national work instead of work specific to California's program success. The annual reports in producer responsibility systems around the world and in California on carpet and paint are standard in requiring a transparent program on every level from programmatic reporting, to how the program is funded, and how the uses of those funds achieve the performance goals. We ask DTSC to add to the annual reporting requirements that the producers explain their program in detail and provide examples of the outreach materials developed, describe how they were distributed and whether they are effective or will be modified to be more effective, how much financial investment has been made to develop and implement the stewardship program, and how the money was utilized to ensure achievement with performance goals.

Manufacturer Compliance Requirements

In its June 2011 pre-proposal draft regulations, DTSC had laid out a process for

⁹ DTSC apparently agrees the obligations specified in the statute are not exclusive, since its proposal to require contractor reporting to calculate the denominator, as discussed above, is not expressly included in the contractor obligations specified in section 25214.8.15 of the Health and Safety Code.

developing and enforcing program changes necessary in the event TRC fails to meet the thermostat collection performance standards specified during the instant rulemaking. This “Consent Agreement” process, proposed as Section 67388.6 of the June draft regulations, contained critical elements to be considered during these program changes, including incorporation of a financial incentive into the TRC program. In our comments on the June 2011 draft regulations, we supported this provision, but requested that language be added to ensure all stakeholders, including us, would be part of the Consent Agreement program revision development process.

Unfortunately, DTSC has deleted the entire Consent Agreement section from its current draft of the rules, perhaps in response to TRC objections. We find the TRC objections without merit, as explained below, and thus request DTSC to retain the Consent Agreement provisions of the draft regulations released in June 2011, with our proposed revisions ensuring stakeholder involvement. We believe specifying in regulation the process and incentive component of potential program revisions is the best means for achieving the goals of the Mercury Thermostat Collection Act of 2008.

TRC argued the Consent Agreement portion of the June 2011 draft rules sets TRC up to fail, and as a consequence, fails to specify the program revisions DTSC will eventually require in violation of the “Necessity and “Clarity” standards of California law.¹⁰ This is a bogus argument since the June 2011 draft rules merely tracked the statutory construct of revising programs once performance standards are not met. DTSC cannot specify the program revisions required without knowing the extent of failure, and what areas TRC performs inadequately in 2012 which may have contributed to the failure. Moreover, to the extent TRC anticipates failure, this is a consequence of running an ineffective program in California, refusing to devote meaningful resources, and steadfastly resisting a financial incentive we know has been proven to greatly improve program performance. In any case, TRC’s claim lies with the 2012 performance standard, not with the Consent Agreement portion of the rules.

As noted above, the intent of the Mercury Thermostat Collection Act of 2008 is to require the collection and recycling of the “maximum feasible” number of out-of-service mercury-added thermostats. H&S Code § 25214.8.20. To meet this intent, the statute authorizes DTSC to require revisions to manufacturers’ collection programs and to undertake other actions to comply with the article. *Id.* § 25214.8.17. The statute further requires manufacturer collection programs to provide both incentives and education to contractors, service technicians, and homeowners to encourage the return of out-of-service mercury-added thermostats. *Id.* § 25214.8.13(g). Thus, the June 2011 draft rules were consistent with the statute.

¹⁰ Comments of Robert Hoffman, *supra*, p. 4.

The June draft rules were also transparent and provided clear expectations for industry, citizens, and the agency to achieve compliance with performance requirements. Because the contingency steps to achieve compliance when targets are not met are clearly delineated in the regulation, the regulation would allow for expedited consideration of program revisions, including the financial incentive. It would also reduce miscommunication, delays, and disputes at the program implementation stage. We do not seek to bind DTSC to one enforcement mechanism or otherwise limit its enforcement authorities. But we fervently believe it is better to work out disagreements (and possible legal challenges) at the front end of the process about key issues in this rulemaking, such as DTSC's authority to impose financial incentives through program revisions, than dispute them at the implementation stage, disrupting the program and creating further uncertainty.

Manufacturer Annual Collection Rate Performance Requirements

In its June 2011 pre-proposal draft regulations, DTSC had set out annual collection rate performance standards starting at 20% in 2012, 40% by 2013, 60% by 2014, and 80% by 2015. In the December draft regulations, the first year remains at 20% by 2012, but then changes in 2013 to the larger of either 30% or the collection rate achieved in 2012 plus 10%. This two-tiered performance standard approach with 10% annual improvements continues until 2019, when the performance standard is fixed at 85% for that year and beyond.

The December draft performance standards are a dramatic step backwards from the June pre-proposal draft regulations in the collection rates required during the initial years of the program, when we know that more mercury thermostats will be discarded and time is of the essence in retrieving them. For example, under the December proposal, the 2013 performance standard requires 10% fewer thermostats collected, and in 2015, the December draft represents a 30% reduction in the number of mercury thermostats to be collected in that year. These percentages represent huge increases into the amount of mercury not captured by the TRC program, and thus available for environmental release, because they are associated with the time period when more mercury thermostats are coming out of service.

Instead of reducing the performance rates, DTSC should be raising them. As we pointed out in comments on the June proposal, the 20% collection rate proposed for 2012 would represent a standard less than one-third of the effectiveness of the Maine program. Because of the enormity of the volume of mercury at stake, it is essential that the first year rate be set at the highest achievable level to address the environmental health threat. Accordingly, we recommended a minimum collection rate of at least 40% for 2012. This rate would still be well below Maine's 2010 collection rate, but would capture substantially more mercury than the currently proposed rate and provide an appropriate benchmark to measure the collection program's results.

We note lead acid battery recycling rates in the United States exceed 90% and find tragically ironic TRC's arguments that these recycling rates are somehow not instructive for the instant rulemaking. TRC contends this program enjoys "certain advantages" not applicable to thermostats, such as financial incentives to homeowners and economic value to others in the recycling chain.¹¹ We applaud this TRC latent recognition that financial incentives are a crucial ingredient to mercury thermostat collection, and simply note the obvious that if financial incentives and increased economic value are what is needed to achieve comparable recycling rates for thermostats, TRC is compelled by the statute to include these elements in its program rather than attempt to dismiss their applicability. Accordingly, DTSC should consider lead acid battery recycling rates in the instant rulemaking, as an example of a properly incentivized program.

Moreover, as CPSC stated in their letter dated June 23, 2011, it is instructive to compare how the Air Resources Board (ARB) under the same umbrella of CalEPA as the DTSC has approached the recycling of refrigerants. ARB imposed a \$10 deposit on the retail cost of the containers and set a recovery rate at 90% as an initial recycling rate in 2011, followed by a performance standard of 95% in 2012. An e-mail sent to the interested parties from the ARB in early 2011 explained the program as follows:

At the time of purchase, the DIY consumer pays a \$10 refundable deposit to the retailer for each container. In order to get the refund, consumers are required to return the used, undamaged container(s) within 90 days with a receipt. Retailers and distributors collect the used containers for return to a recycling facility with the assistance of the product manufacturer. The target recycle rate is initially set at 90%, and rises to 95% beginning January 1, 2012.

Thus, for refrigerants, CalEPA established aggressive recycling rates as the program performance standard, and recognized a financial incentive was an essential element in reaching the recycling goal. Since mercury impacts on health and food chain contamination rises to a comparable level of importance as refrigerants, we urge DTSC to reconsider its backwards direction in establishing mercury thermostat collection program performance standards.

Section 67388.6 Contractor Requirements

As discussed above, the TRC 2009 report's own language indicates it provides "high quality, defensible estimates" of the number of thermostats becoming waste in California each year. The only significant uncertainty noted in the report is the percent of those thermostats containing mercury. We recommend that instead of relying on annual reporting of contractors for the entire denominator, it would make more sense for TRC (or

¹¹ Comments of Robert Hoffman, supra, p. 2.

DTSC) to do a one-time survey of a **random sample of contractors** to simply get at this data point.

Contractors are small California businesses that do not need the added burden of annual reporting to the State where alternatives would suffice. During AB 2398 deliberations, contractors were assured that in producer responsibility systems, they would not have added administration burdens, as the manufacturers are the primary responsible parties. DTSC should promulgate rules consistent with these understandings, particularly if there is another way to proceed.

To ensure that all contractors know how important it is to identify mercury thermostats and recover them, the Contractors State Licensing Board (CSLB) added three questions to the contractors licensing exam starting on December 16, 2011. This again was the result of work by DTSC, not TRC, so we continue to be disappointed with the TRC's lack of outreach that was discussed at length during the legislative negotiations.

Conclusion

Thank you again for the opportunity to submit these comments. We appreciate your consideration of our comments as you prepare DTSC's formal rulemaking proposal.

Sincerely,

David Lennett, Senior Attorney
Natural Resources Defense Council

Heidi Sanborn, Executive Director
California Product Stewardship Council

Annie Pham, Policy Advocate
Sierra Club California

Michael Bender, Executive Director
Mercury Policy Project

Amber Meyer Smith, Director of Programs and Government Relations
Clean Wisconsin

Elizabeth Saunders, Massachusetts Legislative Director
Clean Water Action



Air Conditioning Contractors of America

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October 19, 2011

Sent Via Email: thermostats@dtsc.ca.gov

Ed Benelli
Department of Toxic Substances Control
1001 I Street
Sacramento, CA 95814

Re: Comments on Proposed Regulations for Mercury Thermostat Collection Act of 2008
(DTSC # R-2010-03)

Mr. Benelli,

The Air Conditioning Contractors of America (ACCA) appreciate the opportunity to provide comments on the draft regulation implementing California's Mercury Thermostat Collection Act of 2008. As the only nationwide association representing the technical, educational and policy interests of businesses that design, install and maintain indoor environmental systems, we take special interest in this issue. ACCA supports the goal of reducing and eliminating mercury from California's landfills with proper recycling of mercury thermostats. However we are disappointed to see that the proposed regulation goes beyond the original intent of the legislature and places an unnecessary and unwarranted burden on contractors and small businesses--the very participants that are essential to the program's success.

Contractors in California already collect and properly recycle mercury thermostats through the TRC (Thermostat Recycling Corporation) program. It was understood in 2008, when the legislation was drafted, that this new regulation would work to further promote responsible recycling behavior and encourage a higher level of participation. Local associations were assured by legislators that contractors who recycle could continue with their current practices without any added liabilities. The current draft regulation does not comply with that original intent. Instead it places a great burden on small businesses by requiring excessive detailed reporting, costly citations and creating new liabilities.

Beyond the inappropriate burden this would put on small businesses, ACCA believes these increased regulations could also have the opposite desired effect. Proper disposal of mercury thermostats is already required by law under the Universal Waste Rules. The majority of our contractors act in accordance with 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

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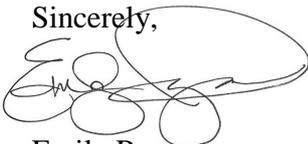
correlation between rates of compliance and the associated burdens and cost of compliance. The more inconvenience associated with mercury switch recycling, the greater the risk for non-compliance by those who will choose to keep their overhead cost structures low—thus harming compliant contractors with not only the higher costs and inconvenience of this new regulation but suffer the unfair competition from their non-compliant competitors.

Given the original intent of the legislation and unintended consequences, we respectfully request that the language requiring contractor record keeping and reporting be removed. And along with CAL CMAA, ACSMA and CLC we challenge the interpretation and statutory authority cited by the Department of Toxic Substances Control to create these new reporting requirements for contractors.

To discuss any of these issues further, please contact me at 703-824-8858 or emily.rogers@acca.org.

Thank you for your considerations of our suggestions.

Sincerely,

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