

**VIA EMAIL and US Mail**

March 1, 2016

Greg Cooper  
Massachusetts Department of Environmental Protection  
1 Winter Street – 7th Floor  
Boston, Massachusetts 02108

Suzi Peck  
Massachusetts Department of Environmental Protection  
1 Winter Street – 7th Floor  
Boston, Massachusetts 02108

Subject: Thermostat Recycling Corporation's 2015 Annual Report

Dear Mr. Cooper and Ms. Peck:

Since 1998, TRC's national program has collected more than **2.1 million thermostats**, diverting more than **10 tons of mercury** from the waste stream. All while TRC continues to increase in size and decrease in average age of employee.

You will find attached TRC's annual collection report for calendar year 2015. TRC would like to highlight some aspects of the 2015 program in Massachusetts:

- The program collected a record of high of **7,881 thermostats in 2015**. This was a 28% increase over the number of thermostats collected in 2014.
- The program **collected 62.96 pounds of mercury** in Massachusetts. Since 2000, the annual pounds of mercury collected in Massachusetts has increased by an average of 37% per year. As a comparison, during the same time period the pounds of mercury collected in the nation increased by 17% per year.
- The counties with the most bins returned in 2015 were **Suffolk (29 bins), Middlesex (21 bins), and Norfolk (17 bins)**.

If the department would like to discuss any of these items in greater detail, please do not hesitate to contact me directly at 571-302-0877.

Sincerely yours,



Ryan L Kiscaden  
Executive Director



**Thermostat Recycling**  
CORPORATION

an industry-funded non-profit

## MASSACHUSETTS ANNUAL REPORT

FY 2015

## TABLE OF CONTENTS

<b>Massachusetts Collections.....</b>	<b>2</b>
<b>Program Education and Outreach .....</b>	<b>5</b>
<b>Total Program Expenses .....</b>	<b>38</b>
<b>2016 Program Implementation .....</b>	<b>41</b>
<b>Evaluation.....</b>	<b>45</b>
<b>Appendices .....</b>	<b>67</b>

# MASSACHUSETTS COLLECTIONS

In Massachusetts, TRC recovered the equivalent of 8,325 mercury thermostats from 7,881 whole mercury thermostats plus 10,155 mercury switches removed from thermostats. A total of 62.95 pounds of mercury was diverted from solid waste.

TRC recovered approximately 54% of collections from HVAC wholesale distributors, 40.3% from HVAC contractors, and 5.7% from Household Hazardous Waste (HHW) locations.

## EXHIBIT 1: 2015 MASSACHUSETTS COLLECTIONS BY BRAND

Brand Holder	Thermostats	Count Switches	Pounds Mercury
Burnham Holdings	22	22	0.14
Carrier	123	187	1.16
General Electric Corporation	25	48	0.30
Goodman Global	19	28	0.17
Honeywell	6,979	8,400	52.08
Hunter Fan	2	2	0.01
Invensys	13	14	0.09
ITT Corporation	1	1	0.01
Lear Siegler	5	20	0.12
Lennox	90	108	0.67
Lux Products	38	38	0.24
Marley-Wylain Company	5	7	0.04
McQuay International	4	7	0.04
Nordyne Corporation	21	21	0.13
PSG Controls	1	1	0.01
Rheem	7	10	0.06
Sears Holdings	11	11	0.07
Taco, Inc.	2	2	0.01
Trane	150	250	1.55
White Rogers	332	399	2.47
York/Johnson Controls	25	29	0.18
----- Non-Member Brands -----			
COMFORT ZONE	1	1	0.01
EFM	1	1	0.01
LEXUS	1	1	0.01
Singer	1	1	0.01
----- NOM (Manufacturer not identifiable) -----			
NOM	2	4	0.02
Loose Bulbs	-	542	3.36
<b>TOTAL</b>	<b>7,881</b>	<b>10,155</b>	<b>62.95</b>

# MASSACHUSETTS COLLECTIONS

## WASTE MERCURY-ADDED THERMOSTAT MANAGEMENT

Bins with waste mercury-switch thermostats are received at the fulfillment/processing center in Golden Valley, Minnesota. The facility is owned and operated by Honeywell International under contract with TRC.

Bins are received at the loading dock and sent to the TRC processing area. The bin and plastic liner are opened and the contents are identified, sorted, and tallied. The following data is recorded for each bin returned and processed: bin number, business name (location name), city, state, zip code, date returned, number of thermostats and mercury switches by manufacturer and any non-conforming material.

The bin is returned to the location that sent it in with a new prepaid address label within 72 hours of receipt. The thermostats are stored and staged in a plastic lined carton in a storage area for final processing. The containers are dated and processed in order received, first in-first out.

The containers are returned from the storage area to the TRC processing area to have the mercury bulbs removed from the plastic housing. Universal Waste Regulations require the disposal of waste within 12 months of generation. TRC's processor requires that the disposal occur within 6 months of generation and TRC follows the more stringent requirement. Small quantities of thermostats are removed from the container, which is then closed again, and placed at the bulb removal workstation on a tray that contains any potential mercury spillage. The bulbs are removed from the thermostats and placed into a 2 quart container at the work station. If a bulb breaks and the mercury spills, the work area is designed to contain the spillage and the operators are trained in the clean-up and disposal of mercury. The TRC processing area is equipped with special mercury vacuum cleaners and the work area is vacuumed at the end of the work day to assure that any spillage is cleaned up and not left to evaporate.

The 2 quart container is emptied into a special 55 gallon drum which is labeled and dated according to regulations. The drum is sealed with a band and is only opened when contents are

## MASSACHUSETTS COLLECTIONS

being added to it. Special negative pressure venting assures any fumes are drawn away and vented when the drum is opened.

The 55 gallon drum is then shipped to Veolia Environmental Services in Port Washington, Wisconsin for final processing of the mercury ampoules (switches) Veolia Environmental Services meets or exceeds all local, state, federal and EPA regulations for the management of the product. Veolia's approvals for mercury recovery/recycling include:

- EPA - identification WIR000130591 (Veolia Environmental Services, Inc.)
- EPA BDAT Requirement - satisfied by all recovery operations
- CERCLA (Comprehensive Environmental Response Compensation and Liability Act)
- Wisconsin Department of Natural Resources

All facilities processing thermostats shipped to TRC follow all EPA guidelines and regulations. TRC has a facility license from Hennepin County Minnesota for the operation of the TRC. Honeywell, Inc. has a Hazardous Waste Generator license from Hennepin County. All persons who handle mercury thermostats as part of the TRC operation receive training in the handling of Hazardous Waste and Universal Waste.

# PROGRAM EDUCATION AND OUTREACH

## DIRECT MAIL

TRC utilized direct mail throughout the year to target collection locations, HVAC contractors/technicians, and household hazardous waste (HHW) facilities.

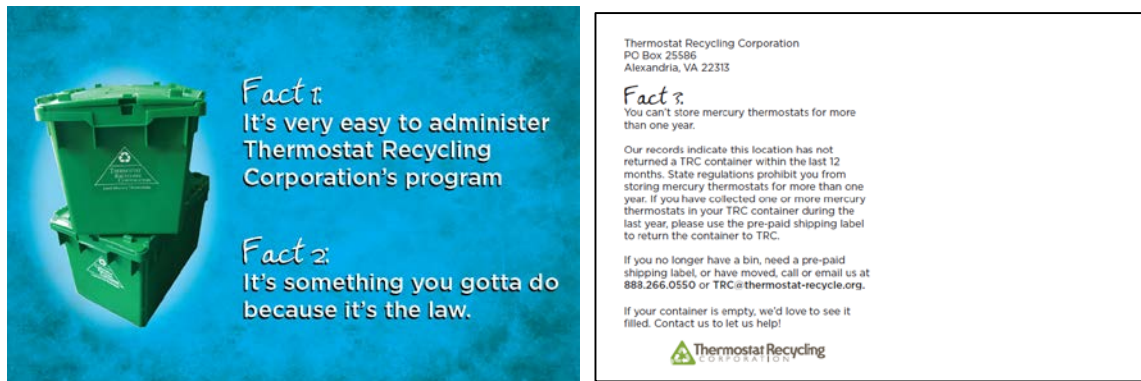
### TRC Collection Locations & Wholesale Distributors

- To encourage collection point participation and to stimulate the timely return of TRC collection containers, TRC mailed reminder postcards (Exhibit 2) to collection points that had not returned a TRC container within the last 12 months (in accordance with Massachusetts' Universal Waste Regulations). TRC mailed 133 reminders in January, 115 in May, and 128 in November.
- On 7/17 TRC mailed a letter to 15 Heating, Air-conditioning & Refrigeration Distributors International (HARDI) member CEOs with headquarters in Massachusetts. The letter encouraged them to conduct an original equipment manufacturer (OEM) Mercury thermostat cleanout at their branches, and included a sample memo for HARDI CEOs to distribute to their collection locations. (Appendix 1)
- On 10/16 TRC sent sales letters to 11 Plumbers Supply locations without bins in the state of Massachusetts. The letter was sent to remind these branches of their lawful obligation to provide a mercury thermostat recycling option to customers and offered free bins to help them meet this obligation. TRC received 3 bin order responses as a result of this letter. (Appendix 2)
- On 10/28 TRC sent sales letters to eight Winsupply wholesale locations without TRC bins in the state of Massachusetts. The letter was sent to remind these branches of their lawful obligation to provide a mercury thermostat recycling option to customers and offered free bins to help them meet this obligation. TRC received one bin order response as a result of this letter. (Appendix 3)



# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 2: REMINDER POSTCARD



## HVAC Contractors/Technicians

TRC purchased all HVAC contractor lists from Hoover's, narrowing the results by SIC codes relating to the HVAC industry.

- TRC mailed an 11x6 sized postcard to 380 HVAC contracting business contacts with 10 or more employees in September and November (Exhibit 3). The messaging targeted on an emotional appeal to fathers, since the industry is predominantly male, coming from their children in an appeal to "Get with the program." The postcard also offered a limited-time free recycling bin.
- In October TRC mailed an 18x24 sized full-color, double-sided poster (Exhibit 4) to 1,278 HVAC contracting business contacts with less than 10 employees. The mailing included a letter (Appendix 4) encouraging them to display the poster and informing them of TRC's program. It also offered a limited-time free bin.
- In December TRC mailed a full color letter to 260 HVAC contracting business contacts with more than 10 employees. (Appendix 5)
- In December TRC mailed a holiday cards to 581 HVAC contractors with 10 or more employees. The card was holiday themed and offered the gift of a free mercury thermostat recycling bin. (Exhibit 5)



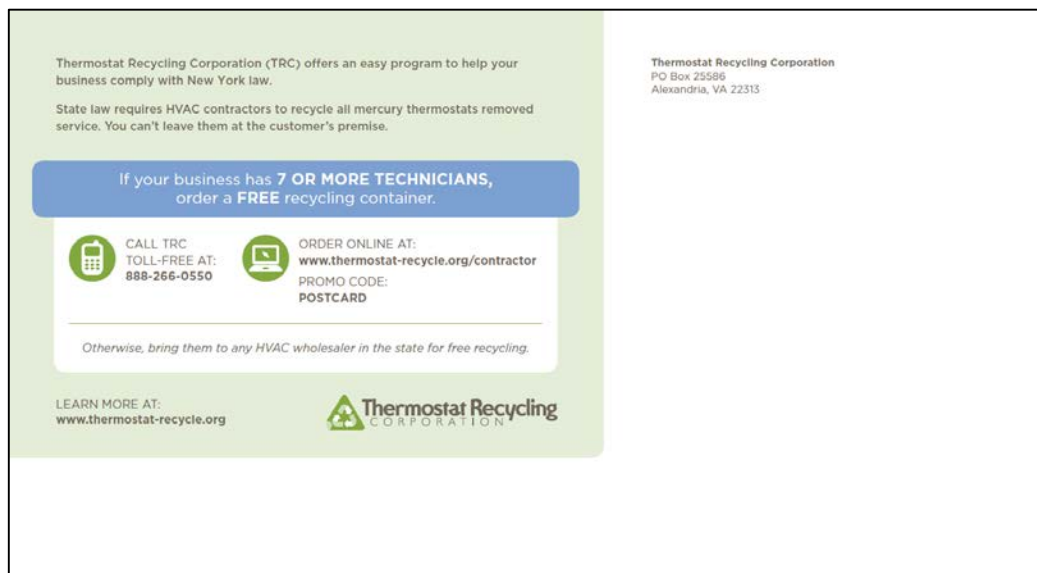
# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 3: 11X6 POSTCARD

### Side 1:



### Side 2:



# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 4: 18X24 POSTER

Side 1:



Side 2:



## EXHIBIT 5: HOLIDAY CARD TO CONTRACTORS

Outside (front and back of folded card):



Inside:



# PROGRAM EDUCATION AND OUTREACH

## ADVERTISING

TRC's two primary advertising targets remain HVAC contractors/technicians and HVAC wholesale distributors. For the contractors/technicians segment, TRC focuses on residential and light commercial contractors because of their relatively high level of hands-on contact with waste mercury thermostats. The second segment of focus is HVAC wholesale distributor locations as they remain the most convenient location for the majority of Massachusetts-based technicians/contractors to purchase replacement thermostats and recycle waste mercury thermostats.

Homeowners remain a secondary market as they represent a small segment of the market (+/- 10%). Since replacing a mercury thermostat is a rare event (if ever) for a consumer, TRC derives the greatest impact/value from its marketing activities by concentrating on the channel segment that conducts the vast majority of repeat thermostat replacements.

TRC's 2015 advertising campaign continued to focus mostly on "easy and free" and "It's the law" messaging (where applicable, as only a limited number of states ban the disposal of mercury thermostats in solid waste and/or require HVAC contractors to recycle all mercury thermostats removed from service).

The purpose of TRC's advertisements were two-fold: 1) continue to build brand/program awareness and 2) increase program participation by raising awareness of specific legal obligations to recycle and the ease of recycling.

## Print Advertising

New advertising in 2015 included:

- ***Plumbing-Heating-Cooling Contractors Association of Massachusetts (PHCC of MA)'s Progress Magazine***, which has a quarterly subscription of 24,000 HVAC contractors in Massachusetts. TRC ran a 1/4 page full-color advertisement in all four issues (Exhibit 6).

# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 6: PHCC OF MA PROGRESS MAGAZINE AD



TRC continued print-based advertisements in the following national/regional HVAC trade publications:

- ***HVAC Insider New England***, a regional publication which has a monthly circulation of 9,000 contractors, technicians, and wholesale distributors in New England, including Massachusetts. TRC ran a 2-color 1/2 page advertisement in the May, June, November and December issues (Exhibit 7).
- ***Johnstone Supply Flyer***, a printed version of their online catalogue that is mailed to more than 300,000 HVAC contractors nationwide. The flyer featured a full page TRC advertisement in their August issue to promote the TRC TV giveaway promotion (Exhibit 9). Johnstone Supply has eight locations in Massachusetts. Johnstone Supply provided this insertion at no-cost to TRC.

## PROGRAM EDUCATION AND OUTREACH

- ***Distribution Center Magazine***, the exclusive publication of HARDI, with more than 11,000 bi-monthly subscribers. TRC ran a full-color 1/4 page advertisement in May and December promoting the Big Man on Planet competition. (Exhibit 10)
- ***HVACR Business Magazine***, a national publication with approximately 34,000 qualified subscribers, of which approximately 1,544 are in New England. TRC ran a full color 1/4 page advertisement in January, March and July. (Exhibit 11)

### EXHIBIT 7: HVAC INSIDER NEW ENGLAND AD





# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 9: JOHNSTONE SUPPLY FLYER AD



## EXHIBIT 10: DISTRIBUTION CENTER MAGAZINE ADS

May:



December:



# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 11: HVACR BUSINESS MAGAZINE AD



## Digital Advertising

TRC continued the use of rotating banner advertisements in 2015, with changes in scheduling and scope and the addition of new outlets.

TRC follows the national trend of analyzing advertisement success by measuring each advertisement's impression and click-through rate. An impression is a measure of the number of times an ad is displayed, and a click-through rate (CTR) is the number of times a click is made on the advertisement divided by the total impressions.

TRC's new advertising in 2015 included:

- *ACHR News'* AHR Wrap Up Enewsletter, sent to 12,000 opt-in subscribers. This is an annual email sent in January at the conclusion of the Air-Conditioning, Heating, Refrigerating (AHR) Exposition, the largest HVAC industry trade show. TRC ran a Medium Rectangle ad within the email that received a 0.72% CTR. (Exhibit 12)



## PROGRAM EDUCATION AND OUTREACH

- *Distribution Center's* Enewsletter, sent to 4,000 weekly opt-in subscribers. TRC ran a Medium Rectangle ad in February, March and June receiving an average CTR of 2.5%. (Exhibit 12)
- NATE Enewsletter, sent bi-monthly to 31,900 opt-in subscribers. TRC ran a text ad that received a 0.14% CTR.

### EXHIBIT 12: ACHR NEWS AND DISTRIBUTION CENTER ENEWSLETTER AD



TRC also continued digital advertisements on the following HVAC industry websites below:

- OESP Dedicated Eblast, a digital piece emailed to oil and energy service professionals predominantly from New York, Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Pennsylvania, Rhode Island, Vermont and Virginia. The email was exclusively about TRC's program and offered a limited-time offer to sign-up for a free TRC bin. The email was delivered to 1,674 subscribers in April, receiving a 3.6% CTR; and to 1,623 subscribers in September, receiving a 1.4% CTR. (Appendix 6).
- OESP Advantage News Brief, a weekly email with the same subscribers listed as above (OESP Dedicated Eblast). TRC ran a sponsored content ad for 13 consecutive weeks October – December which resulted in an average CTR of 0.2%. (Exhibit 14)
- HVACR Business "Ahead of the Curve" Enewsletter, a monthly newsletter that reaches approximately 9,000 opt-in readers each month. TRC ran a banner ad in July, August, November and December (Exhibit 15). The average CTR was 3.0%.

## PROGRAM EDUCATION AND OUTREACH

- HVACRBusiness.com, an HVAC publication website with 14,000 monthly visitors. TRC ran a banner ad in February and July that resulted in 92,848 impressions and an average CTR of 0.9%. (Exhibit 16)
- Contracting Business Magazine's dedicated Email Blast, which was sent twice with different messaging to opt-in subscribers in states with disposal bans, including Massachusetts. The January mailing was sent to 5,980 subscribers and received a 25% open rate and a 0.5% CTR (Appendix 7), while the June mailing was sent to 8,970 subscribers and received a 13% open rate and a 0.5% CTR (Appendix 8).
- ACHRNews.com, a website that assists the decision-makers from all branches of the HVAC industry including contractors, manufacturers, distributors, parts and supply wholesalers, and service companies. More than 241,852 HVACR professionals visit the website every month, totaling more than 308,911 monthly website visits. TRC ran a Topic Sponsorship ad in January, February and September that resulted in an average 0.14% CTR. (Exhibit 17)
- ACHR Newsletter, a weekly email blast with more than 10,000 subscribers. TRC ran a banner ad for four issues in April and four issues in October with an average CTR of 4.7%. (Exhibit 17)
- HVAC-Talk.com, an online forum that averages more than 300,000 monthly visitors. TRC ran a banner ad in February, March and July which resulted in 291,706 total impressions and an average CTR of .03%. (Exhibit 16)

### EXHIBIT 14: OESP ADVANTAGE NEWS BRIEF SPONSORED CONTENT AD

#### SPONSORED CONTENT

Promoted by

- [Thermostat Recycling Corporation makes disposal of mercury thermostats easy and free.](#)
- [Several states prohibit the disposal of mercury thermostats in the trash.](#)
- [Find your nearest mercury thermostat collection site for free disposal.](#)
- [Sign up for Thermostat Recycling Corporation's program to directly participate as a collection site.](#)
- [Learn more about how Thermostat Recycling Corporation's program works.](#)



## PROGRAM EDUCATION AND OUTREACH

### EXHIBIT 15: HVACR BUSINESS “AHEAD OF THE CURVE” ENEWSLETTER AD



### EXHIBIT 16: HVACRBUSINESS.COM AND HVAC-TALK.COM AD



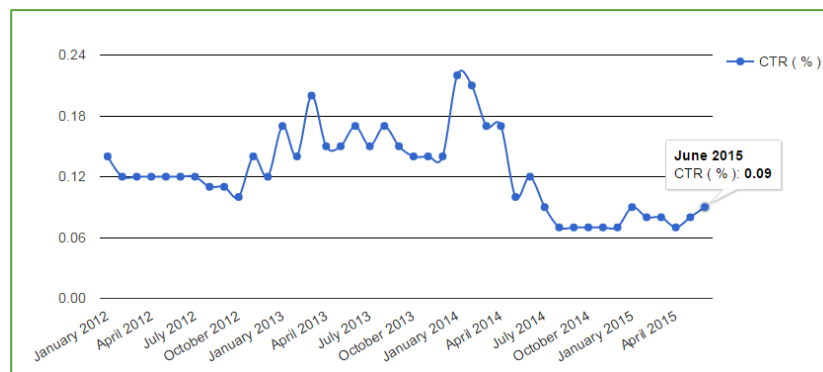
# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 17: ACHRNEWS.COM TOPIC SPONSORSHIP ADS



Exhibit 17 presents benchmark data from Google's Display Benchmarks tool on average digital advertising CTR's in the U.S. by year. It shows that the highest national average CTR in 2015 was 0.09%, so TRC's CTR performance exceeded the national average.

## EXHIBIT 17: GOOGLE DISPLAY'S BENCHMARK TOOL



## PROGRAM EDUCATION AND OUTREACH

Additionally, the current average open rate for emails is 14%, and the average CTR in emails is 1.6%<sup>1</sup>, which TRC generally also exceeds.

### Google AdWords

Since 2011 TRC has deployed a Google AdWord campaign that geo-targets contractors/technicians and consumers (homeowners) in states with mercury thermostat disposal bans, including Massachusetts (Exhibit 18). Advertisements appear on Google search results pages after an individual searches terms related to TRC's mission (E.g. thermostat replacement, contracting recycling regulations, mercury thermostat recycling, programmable thermostats, etc.).

TRC continued this campaign in 2015, running it the duration of the calendar year. This is TRC's preferred option to reach consumers because of the campaign's extensive and targeted reach.

The Massachusetts campaign yielded 413,891 impressions with an average CTR of 0.58%.

---

<sup>1</sup> "M+R Benchmarks 2015." *M+R and NTEN's 2015 Nonprofit Benchmarks Report*. 1 May 2015: 57. Print.

# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 18: GOOGLE ADWORDS LANDING PAGE



## EARNED MEDIA

In 2015 TRC continued to enjoy positive and frequent coverage within the industry trade press, appearing more than 20 times through a variety of publications. TRC issued many media releases that were published, generating additional exposure for the program.

Notably, TRC continued to receive coverage and editorial pieces in industry leading publications such as:

- The Air Conditioning and Refrigeration (ACHR) News (370,378 reach), including a front page editorial article (Exhibit 19)
- Distribution Center (11,000 circulation)
- Contracting Business (40,000 circulation)
- Wholesale distributor's on-hold phone messaging, including Johnstone Supply and Standard Supply
- Johnstone Supply's printed flyer (300,000 circulation)
- HVAC-Talk.com (408,769 monthly unique browsers)

# PROGRAM EDUCATION AND OUTREACH

Additionally, two of TRC's employees, Ryan Kiscaden and Christyn Zehnder, were voted onto HARDI's first 40 under 40 list. The list recognizes the HVAC industry's top performers and rising stars who are younger than 40. The list will be published in the spring of 2016 in Distribution Center Magazine. There were hundreds of eligible HARDI members considered, making this a highly competitive group.

## EXHIBIT 19: ACHR NEWS FRONT PAGE EDITORIAL ARTICLE

Air Conditioning | Heating | Refrigeration

**the NEWS**

THE HVAC CONTRACTOR'S WEEKLY NEWSMAGAZINE SINCE 1926

AUGUST 31, 2015 | \$5.00 | ONLINE AT WWW.ACHRNEWS.COM | A 100 PUBLICATION

### Teaching Greenhorn Techs Green Technologies

Contractors gain a competitive edge through renewable training and education

BY NICK KOSTORA  
THE NEWS STAFF

**T**he renewable energy sector of the HVAC marketplace continues to make strides in acceptance and understanding from consumers, and the proof is in the numbers.

For Waterfurnace Int'l. Inc., more than 1 million geothermal (or ground source) heat pumps are used in U.S. residential, commercial, and government buildings. And, that number is growing as U.S. homeowners install approximately 50,000 more geothermal heat pumps annually. Similarly, both wind and solar installations have risen steadily over the last decade, with solar accounting for 33 percent of the nation's new generating capacity in 2014, beating the efforts of both wind energy and coal for the second consecutive year, per Scientific American.

**PEOPLE OF THE SUN** As renewable energy installations continue to grow in popularity, HVAC contractors are discovering multiple ways to equip their teams with the knowledge necessary to capitalize. PHOTO COURTESY OF WHITE BROTHERS/WHITE BROS. (whitebrothers.net)

### Industry Unites Against Mercury Pollution

Strategic partnerships, contests boost mercury thermostat collection numbers

BY NICOLE KRANKE  
THE NEWS STAFF

**U**nlike in past decades, the dangers of mercury exposure are well known today. According to the Natural Resources Defense Council, mercury is used as a component in many consumer products, like thermometers, batteries, and electronic devices, and can escape as a pollutant when these products are manufactured, broken during use, or, perhaps most importantly, incorrectly handled and disposed of at the end of the product's useful life. Mercury pollution becomes a serious threat when it seeps into oceans and waterways, where it builds up in fish before it's often consumed by people. When mercury enters the human body it acts as a neurotoxin, harming the brain and nervous system. Mercury poisoning has been known to cause memory loss, tremors, and vision loss, and it can adversely affect fertility and blood pressure.

Since 1998, the Thermostat Recycling Corp. (TRC) has worked to collect thermostats containing mercury and properly dispose of the harmful substance by using HVAC wholesalers as collection points for contractors. "It's a simple reverse distribution system," said Mark Tibbitts, executive director, "TRC. Contractors are bringing products back to distributors." TRC's 2014 Mercury Recovery Index (MRI) report showed a 13 percent increase

**FYI HVAC BRIEFS**

**RESIDENTIAL CONTRACTORS**  
Jupiter Tequesta Air Conditioning, Plumbing & Electric Inc., Jupiter, Florida named Greg Angell a/c operator manager.  
Conditioned Air Corp. of Naples (Naples, Florida) has gained an equity position through Gemini Investors (Boston).

**COMMERCIAL CONTRACTORS**  
Muefler Associates Inc. (Baltimore) named Steve Giller vice president.  
Wegmann Associates Inc. (St. Louis) named Nicholas Kandel project manager. He is responsible for managing new and renovation HVAC projects.

**MANUFACTURERS**  
Matsen Products Inc. (Minneapolis, Minnesota) named Timothy Peterson sales leader for HIRAC markets in the U.S. and Canada.

continued on Page 6

Attend this FREE Webinar! [eachmanwebinars.com](http://eachmanwebinars.com)

Changing Seasons: How IAQ Promotes Better Business

SEPTEMBER 10 - 1 PM EST Register for FREE at [webinars.achrnews.com](http://webinars.achrnews.com)

## TRC WEBSITE

TRC's website data is calculated through Google Analytics, and website traffic continued to increase in 2015. TRC increased its total annual visitors by 71% compared to 2014. There was a 51% increase of visitors from Massachusetts and the state ranked 4th among the country in terms



## PROGRAM EDUCATION AND OUTREACH

of its share of visitors to TRC's website. The increase in traffic reflects the impact of paid trade channel advertising, the Google AdWords campaign, and search engine optimization efforts.

In May TRC implemented an automated welcome email for collection sites that sign-up for the program through TRC's website. In November TRC transitioned its current website into a responsive website, meaning it is fully optimized for greater visibility across all devices including mobile and tablets.

TRC's social media presence increased as well. The TRC Twitter account saw a 42% increase in number of followers in 2015, and its Facebook page enjoyed an 83% increase of page "Likes."

## TRADE SHOWS, CONFERENCES AND PRESENTATIONS

TRC staff attended, exhibited and/or presented at the following regional and national shows pertaining to Massachusetts:

- **January 13th: Honeywell International Webinar (NEW)**

Ryan Kiscaden presented a TRC Webinar to Honeywell International to an audience of 15 contractors. The webinar focused on ways for contractors to profit from recycling by using other industry items to increase their profitability.

- **January 25th – 28th: Air-Conditioning, Heating, Refrigerating Exposition.**

*Chicago, IL*

TRC staff attended and exhibited at the AHRI (Air-Conditioning, Heating, and Refrigeration Institute) Expo in Chicago. The show brought in over 2,000 exhibitors and 60,000 HVAC/R professionals, including more than 1,171 in the New England region.

- **February 9th – 13th: Association of Energy Service Professionals (AESP) Trade Show**

*Orlando, FL*

AESP is the premier organization for professionals in the energy efficiency industry. Over 300 industry professionals attend the event including utility professionals and industry advisors/implementers. TRC staff attended this show.

## PROGRAM EDUCATION AND OUTREACH

- **February 12<sup>th</sup>: Product Stewardship Institute Webinar (NEW!)**

TRC staff presented a webinar through the Product Stewardship Institute entitled “Connecting Rural HHW Program Managers to Manufacturer-Funded Take-Back Programs” to an audience of 25 professionals.

- **February 26<sup>th</sup>: AESP Brown Bag Webinar (NEW!)**

TRC staff presented a Brown Bag Webinar to AESP on recycling programs for utilities and utility implementers. The webinar was added to TRC’s YouTube page in April and received 33 views.

- **March 3<sup>rd</sup>-4<sup>th</sup>: Johnstone Supply Member Meeting**

*San Diego, CA*

Johnstone Supply is a cooperative wholesaler distributor of HVAC parts and equipment with over 380 locations nationwide, including eight in Massachusetts. Johnstone’s Annual Membership meeting is invitation only and TRC once again attended and exhibited as part of an ongoing effort with Johnstone to encourage and expand the cooperative’s members’ participation. The event is well attended by owners and senior staff and remains a unique opportunity to engage directly with key decision makers.

- **March 7<sup>th</sup>: PHCC of MA Trade Show (NEW!)**

*Marlborough, MA*

A trade show attended by 200 contractors and business owners in the region. TRC staff exhibited at this show.

- **March 15<sup>th</sup> – 18<sup>th</sup>: ACCA and the IE3: Indoor Environment & Energy Expo**

*Dallas, TX*

Co-presented by Air Conditioning Contractors of America (ACCA), this expo is the largest marketplace for the indoor environmental and energy services contracting industry. TRC staff exhibited and promoted the program to attending HVAC contractors.

- **March 27<sup>th</sup>: YouTube Video Presentation (NEW!)**

TRC created and uploaded a video presentation entitled “Mercury Thermostats: A Historical Overview and Review of Current Legislation” to TRC’s YouTube channel. The video received 39 views in 2015.

## PROGRAM EDUCATION AND OUTREACH

- **March 25<sup>th</sup>: ACCA Town Hall Webinar (NEW!)**

A Town Hall Webinar was presented to ACCA members regarding the TRC Program.

- **April 12<sup>th</sup>-14<sup>th</sup>: HARDI FOCUS Marketing & Sales Conference (NEW!)**

*Charleston, SC*

TRC staff attended this conference where marketing and sales professionals learn from joint sessions that help them align their strategies and improve synergy between departments.

- **May 18<sup>th</sup> – 20<sup>th</sup> OESP Road Show**

*Hershey, PA*

An annual convention with over 2,500 attendees representing close to 300 companies across New England. TRC staff again exhibited at this show.

- **May 28<sup>th</sup>: ACCA Webinar with Dynatemp (NEW!)**

TRC teamed up with Dynatemp, a refrigerant manufacturer and recycler, to present a Webinar on environmental compliance to the ACCA.

- **August 27<sup>th</sup>: Torrco Annual Trade Show (NEW!)**

*Plantsville, CT*

Torrco is an independent wholesale distributor of plumbing, piping, HVAC, kitchen & bath and propane supplies serving Connecticut, western Massachusetts and New York. TRC staff exhibited at the show for the first time.

- **September 14<sup>th</sup> – 16<sup>th</sup>: NAHMMMA National Conference**

*Austin, TX*

TRC staff attended the conference and sponsored the silent auction. The conference facilitated peer-group interaction and exchange of ideas and information relating to hazardous materials management. TRC staff gave a presentation on techniques for marketing to target audiences, which was attended by more than 30 HHW professionals.

- **September 23<sup>rd</sup>-24<sup>th</sup>: GasNetworks Trade Show (NEW!)**

*Randolph, MA*

TRC staff attended and exhibited at GasNetworks Trade Show in Randolph, MA. Staff raffled a Bosch pocket driver from the booth as an incentive for contractors to fill out a

## PROGRAM EDUCATION AND OUTREACH

TRC survey analyzing contractor behavior towards mercury thermostat disposal. The show was attended by over 300 contractors.

- **October 6<sup>th</sup>: EEBA Excellence in Building Conference & Expo (NEW!)**

*Denver, CO*

After joining the association and speaking with their Executive Director, TRC staff attended the show for the first time. The conference focused on ways for both residential/commercial HVAC contractors and home performance contractors to work together.

- **October 7<sup>th</sup>: IFMA World Workplace Conference & Expo**

*Denver, CO*

Held annually, IFMA's World Workplace meets the educational and networking needs of professionals who support the built environment. IFMA promotes World Workplace year-round to more than 23,000 members in 85 countries; plus an additional 200,000 workplace professionals. TRC staff attended for the first time.

- **December 5<sup>th</sup> – 8<sup>th</sup>: HARDI National Conference**

*Orlando, FL*

TRC staff again exhibited and participated in the “Booth Program,” which provides for 1-on-1 sessions with senior executive staff from HARDI member companies. This event targeted representatives of approximately 80% of the wholesale market for HVACR products. TRC also presented its annual “Big Man on the Planet Award.”

## HVAC WHOLESALE DISTRIBUTOR OUTREACH

### Ferguson Enterprises Onboarding

Ferguson Enterprises is the number one wholesaler in the country, owning more than 200 HVAC locations nationwide. Ferguson's corporate made a business decision to engage in both HVAC and blended Ferguson stores regardless of state mandatory programs. As a result of this initiative, Ferguson signed up 90 Ferguson Enterprise stores for the program, 3 of its Lyon Conklin Co.

## PROGRAM EDUCATION AND OUTREACH

stores, and 2 of its Air Cold Supply stores. In addition, Ferguson purchased a current HVAC distributor whom uses the TRC program, Redlon and Johnson.

Ferguson sent an email in July to 15,910 subscribers announcing its partnership with TRC and highlighting the program (Exhibit 20).

Due to these efforts, collections from Ferguson owned distributors increased 37% percent in 2015.

### EXHIBIT 20: FERGUSON NATIONAL EMAIL



## OTHER ENGAGEMENT

In 2015 representatives from the Covanta Semass Resource Recovery Facility located in Rochester, Massachusetts and TRC began discussions on ways to leverage each other services and capture mercury thermostats together. The Semass facility works with approximately fifty contracted communities located in southeastern Massachusetts, Cape Cod, and the Boston metropolitan area.

## PROGRAM EDUCATION AND OUTREACH

As of February 2016, Semass and TRC are currently discussing ways to leverage the MSP program to identify products that contain significant quantities of mercury and disposing of them properly. Co-marketing opportunities may be available utilizing the reach of Semass' "Keep Mercury From Rising" website ([www.keepmercuryfromrising.com](http://www.keepmercuryfromrising.com)) and other outreach mechanisms. In addition, placing TRC recycling bins within Semass' contracted communities is also a possibility. Further discussion will be facilitated in 2016 and a joint plan to be developed further.

### Promotions

TRC implemented several promotions to help incent and influence recycling behavior among HVAC contractors at wholesale distributor locations throughout the state.

#### **Petro Oil**

For the calendar year of 2015, the TRC engaged with the Northeast's largest heating oil provider to offer an incentive campaign. Petro has offices in NJ, NY, CT, RI, and MA. The incentive program was available for up to \$5,000 of incentive categories focused on increasing overall bin shipments, number of mercury thermostats returned, and participation rates from its offices. Petro Oil collected zero thermostats by the end of the year in Massachusetts with no incentive being administered.

#### **Johnstone Supply**

In September, Johnstone Supply launched a 40 inch TV giveaway at 383 of their stores nationwide, including eight in Massachusetts. Each mercury thermostat recycled earned entry into the giveaway. The promotion was in partnership with Honeywell; a customer could earn additional entries by purchasing any new Honeywell thermostat. During the promotion, Johnstone Supply incorporated the TV giveaway promotion into their recorded messaging for customers calling who are put on hold. The message was 45 seconds long and was in rotation with several other messages.

TRC provided Johnstone Supply full color 18x24 posters and a new cardboard header (Exhibit 21)

## PROGRAM EDUCATION AND OUTREACH

for the TRC merchandise display to promote awareness of the program in stores. A 4x6 sized postcard (Exhibit 22) was then sent to all Johnstone locations on 10/15 as a reminder to send in their bins after the TV promotion ended.

### R.E. Michel

In October 2014 TRC launched a gift card promotion at select New England R.E. Michel locations, including branch locations in Auburn and Medford. The promotion offers customers a \$5 Dunkin' Donuts gift card for every five mercury thermostats returned. TRC provided each participating location gift cards and full-color counter cards to promote the program (Exhibit 23). The promotion is ongoing as of March 2016 and will continue until all cards are distributed.

### EXHIBIT 21: JOHNSTONE SUPPLY TV GIVEAWAY POSTER AND MERCHANDISE HEADER



### EXHIBIT 22: JOHNSTONE SUPPLY POSTCARD

Front Side:

Back Side:



## PROGRAM EDUCATION AND OUTREACH



**Help Johnstone Win for the 3rd Year in a Row!**

  
PO Box 25566  
Alexandria, VA 22313

The TV giveaway promotion has ended, but Johnstone Supply is still competing to win Big Man on Planet (BMOP).

If you have bins with mercury thermostats, send them in now using the pre-paid FedEx label that came with the bin. Contact TRC at 888-266-0550 if you need a new shipping label.

Your bin(s) will return in 5-10 business days to support your continued participation in TRC's program.

### EXHIBIT 23: DUNKIN' DONUTS PROMOTION



### Big Man on Planet Competition

TRC partnered with HARDI for the fourth annual Big Man on Planet (BMOP) competition. The competition was restructured to allow for four distributor winners (as opposed to three in 2014) and included a \$500-\$1,000 employee incentive to the top four branch locations within each tier.

## PROGRAM EDUCATION AND OUTREACH

The restructuring was implemented to provide a more fair tiered system, putting distributors with a similar number of branch locations in competition with one another. In April TRC mailed an invitation to the executives of 357 HARDI member principle contacts encouraging their participation in the program (Exhibit 24). The competition ran May 1<sup>st</sup> – October 31<sup>st</sup> and participating locations shipped a total of 432lbs of mercury during the competition.

### EXHIBIT 24: BMOP INVITATION TO HARDI MEMBERS

#### Outside:



#### Inside:

#### Sign Up to Compete:

1. Confirm all your branch locations have a TRC container and are collecting mercury thermostats through TRC's program. If not, contact TRC at 888-266-0550 to enroll in the program and mention "BMOP" for a limited-time free recycling container.
2. Sign up for the Big Man on Planet (BMOP) competition by May 31st at [www.thermostat-recycle.org/bmop](http://www.thermostat-recycle.org/bmop).
3. Market your BMOP participation to customers by using free promotional materials emailed to you after signing up.

#### Why Compete?

BMOP is a competition for HARDI members to see which distributor can recycle the most mercury thermostats. So, why participate?

- Show customers your commitment to the environment by offering them a simple recycling solution.
- Go head-to-head with fellow distributors — don't give your customers a reason to recycle at your competitor.
- Earn bragging rights and the "BMOP Cup" at the 2015 HARDI Annual Conference where 4 winning distributors will be recognized.



Winners will be determined by total pounds of mercury recovered from thermostats received by TRC between 5/1/15 - 10/31/15.

**\$500 Store Incentives Available!**

Visit [www.thermostat-recycle.org/bmop](http://www.thermostat-recycle.org/bmop) for more details.

### Location calls

TRC staff made 25 phone calls to collection locations in Massachusetts that hadn't returned a bin in more than 12 months. Calls reminded locations of the need to stay in compliance with accumulation time limits. TRC staff also offered to replace lost shipping labels, order FedEx Ground pickups for the bins, or provide free promotional materials. See Appendix 9 for a list of locations contacted.

# PROGRAM EDUCATION AND OUTREACH

## Site Visits

A total of 124 Massachusetts collection locations were visited in several key markets. The majority of locations visited were those that had not returned a bin within the past 12 months. Visits were conducted by TRC staff and a third-party, Center for EcoTechnology (CET), to HVAC wholesale distributors to ensure location staff was knowledgeable about the program, prepare the bin and schedule a shipment if applicable, and supply any other necessary materials. CET also represented TRC at PHCC of Massachusetts chapter meetings in Somerville and Middleborough, MA. See Appendix 10 for a complete list of locations visited.

## Merchandise Displays for TRC Bins

In 2014 TRC developed branded merchandise displays for its recycling containers. The purpose of the displays is to enhance the visibility and accessibility of the program to contractors at HVAC wholesale locations. Throughout the year TRC distributed free branded cardboard displays to HVAC wholesale distributor collection locations in Massachusetts to showcase the TRC container (Exhibit 25).

In 2014 when TRC last ran data, the five largest HVAC wholesalers using the TRC merchandise display (Johnstone Supply, R.E. Michel, CC Dickson, Gustave Larson, and US Air Conditioning Distributors) collectively had seen a 25% increase in pounds of mercury recovered and a 45% increase in frequency of TRC bin returns year-to-date. Therefore, TRC plans to continue providing and encouraging the use of merchandise displays at HVAC wholesalers to help increase thermostat collections.

# PROGRAM EDUCATION AND OUTREACH

## EXHIBIT 25: TRC BRANDED CARDBOARD DISPLAY



## HVAC TECHNICIAN SURVEY

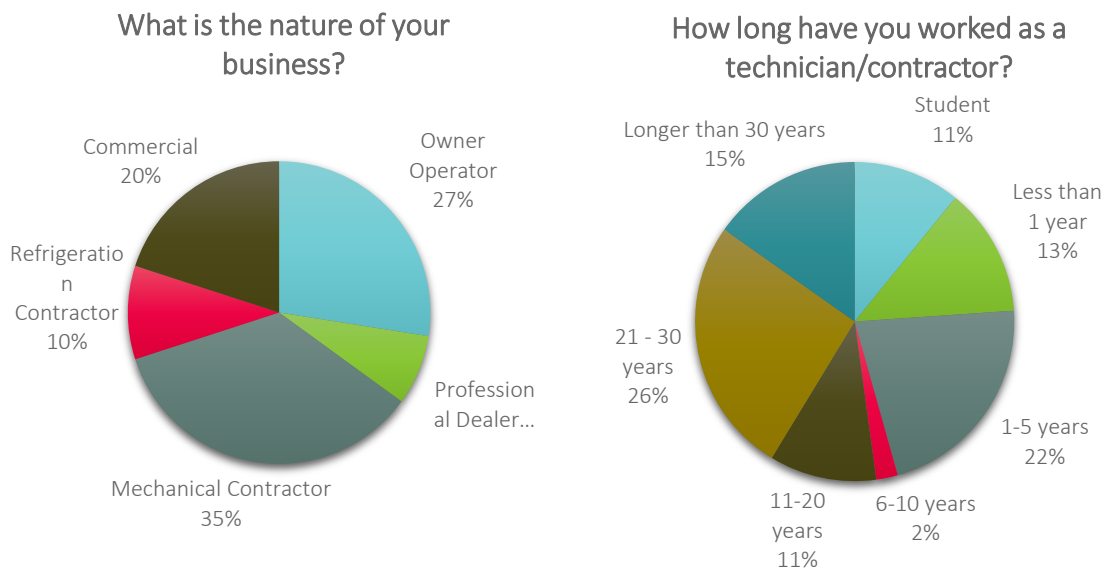
TRC hired a third-party to create a contractor behavior survey to collect first-hand accounts about recycling practices and compliance patterns of technicians as well as company level acceptance/resistance to compliance. The technician survey was conducted in-person by TRC staff and administered via touch screen devices at several HVAC trade shows nationwide, including the Torrco Annual trade show in Connecticut and the GasNetworks show in Massachusetts. The surveys were initiated by asking contractors to take a brief five minute survey regarding recycling behavior for a chance to win a Bosch Tool.

If a technician indicated interest in participating they were handed the survey in the form of a touch-screen tablet which had the survey questions already displayed for convenience. Survey participation was incentivized by entry into a prize raffle for a Bosch tool give-away. The survey had 46 respondents, and while it included contractors from several states, generally contractor behavior tends to be similar nationwide.

# PROGRAM EDUCATION AND OUTREACH

## Demographic

The first questions asked of the technicians were to determine their demographic:



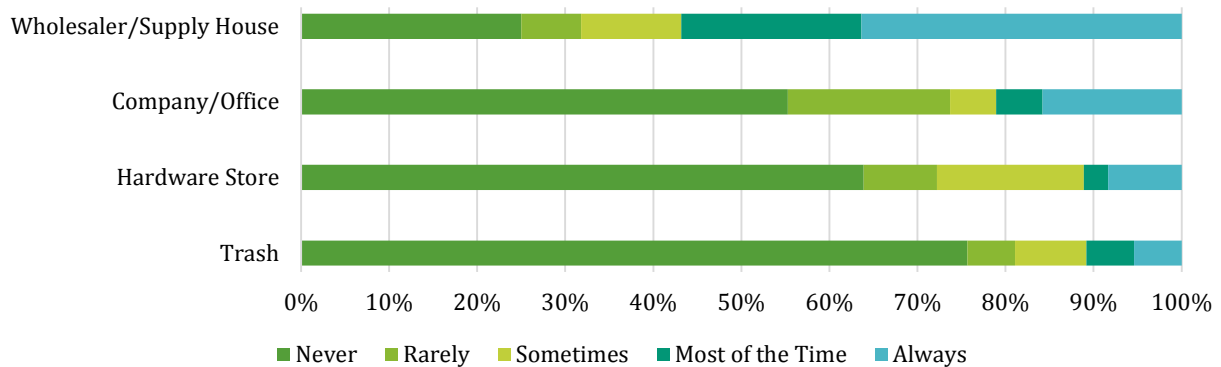
The demographic data shows that there was a widely varied mix of business sectors and experience levels. This means that the findings from the survey can be applied generally without a need for demographic qualifiers. The largest business sector was Mechanical Contractor followed by Owner Operator. These two sectors comprised 62% of the responding technicians. The experience range of the respondents was diverse, reflecting a balance of both new and experienced technicians.

## Disposal

To better understand where technicians dispose of mercury thermostats the following question was posed:

## PROGRAM EDUCATION AND OUTREACH

### Where do you dispose of the mercury containing thermostats you collect?

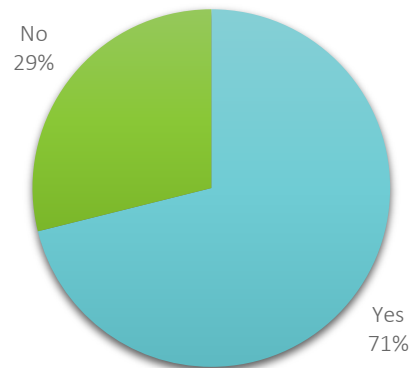


The above chart shows that the main location for the disposal of mercury containing thermostats is at the wholesaler. It also points out that roughly 25% of technicians do at least occasionally throw the thermostats in the trash. The data shows that when technicians do dispose of the mercury containing thermostats that they generally take them to the correct place, the wholesaler, but it also shows that there is room for improvement in keeping the thermostats out of the trash.

The survey then inquired about what internal mechanisms employers might be using to encourage technicians to recycle thermostats:

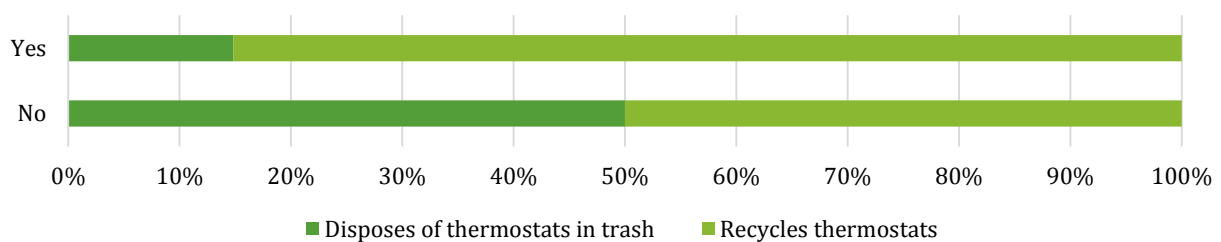
## PROGRAM EDUCATION AND OUTREACH

Are you required by your employer to recycle mercury containing thermostats?



The fact that only 71% of employers require their technicians to recycle mercury containing thermostats might explain why 25% of technicians may occasionally dispose of them in the trash. In order to verify this a cross reference was drawn between whether employers require recycling and technicians that throw away thermostats in the trash.

**Are you required by your employer to recycle mercury containing thermostats?**



The above chart shows that 85% of technicians whose employer requires recycling of mercury containing thermostats actually recycle. By contrast, only 50% recycle without employer requirement. This strongly suggests that employer policies do have a substantive impact on recycling by employees.

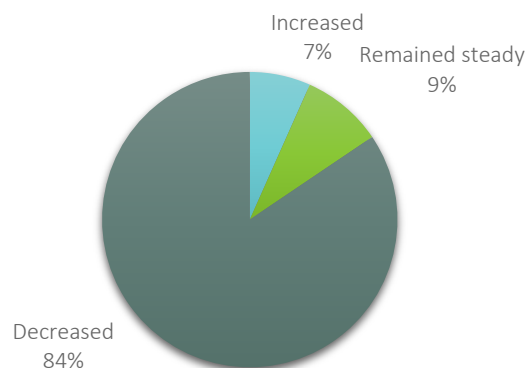


## PROGRAM EDUCATION AND OUTREACH

### Mercury Containing Thermostat Prevalence

In an effort to determine how many mercury containing thermostats are still in use and whether the number in use has significantly decreased the following question was posed:

Would you say that during the time you have worked as a technician/contractor the number of mercury containing thermostats you encounter has...



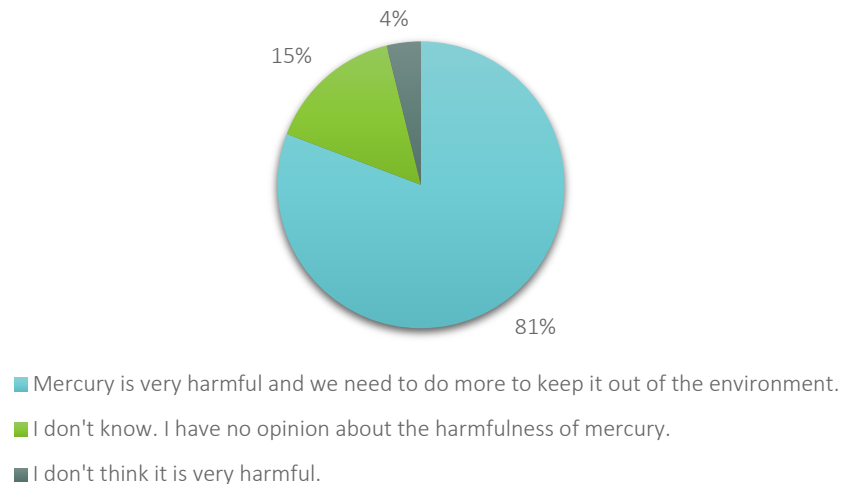
When asked how the number of mercury containing thermostats encountered during their career had changed most technicians felt that there had been a decrease. This leads to the conclusion that the number of available thermostats has also decreased.

### Environmental Concern

To gauge the level of which technicians are concerned about the environment and how mercury plays in to that the following question was asked of technicians.

## PROGRAM EDUCATION AND OUTREACH

Which of the following statements best reflects your personal opinion of the harmfulness of mercury?



The above chart identifies that most technicians feel that mercury is very harmful and needs to be kept out of the environment. This suggests that a campaign that highlights the negative impact that mercury has on the environment and draws the connection to how technician recycling can help reduce these impacts may be an effective way to boost participation.

### Conclusions

The majority of technicians surveyed realize that mercury is harmful and needs to be kept out of the environment. However, 25% of technicians still dispose of mercury containing thermostats in the trash. Through this survey it is also known that over a quarter of technician employers do not require that their technicians recycle mercury containing thermostats. This suggests that TRC should work with employers to educate technicians on the program and encourage employers to require that mercury containing thermostats are disposed of properly. Since most technicians personally believe that mercury is bad for the environment creating an awareness campaign educating technicians on the importance of recovering mercury containing thermostats will aid in increasing participation. See Appendix 13 for survey raw results.

# PROGRAM EDUCATION AND OUTREACH

## HVAC CONTRACTOR OUTREACH

TRC staff helped develop a draft model HVAC contractor environmental policy and shared it with the trade group, ACCA (Appendix 14). TRC's goal is to work with ACCA and other trade groups to provide this template as a service for contractor's employee handbooks.

## HOUSEHOLD HAZARDOUS WASTE FACILITY OUTREACH

In September TRC developed a tri-fold brochure specifically for household hazardous waste (HHW) facilities to target their customers (Exhibit 26). It included information on how to locate HHW facilities nation-wide using TRC's website and information on how to properly prepare to dispose mercury thermostats. The brochure PDF is now available on TRC's website as a promotional toolkit download, and hard copies are available by request.

### EXHIBIT 26: HHW TRI-FOLD BROCHURE

#### Outside:



#### Inside:



## UTILITY PROGRAM/IMPLEMENTOR OUTREACH

The TRC staff engaged with the industry leading company, Cadmus to produce a report identifying current demand response projects. This report was able to show TRC which implementers had current projects of demand response that involved thermostat replacement components. TRC

## PROGRAM EDUCATION AND OUTREACH

focused efforts on these implementers as a source for large thermostat replacement in areas such as low-income and multi-family.

TRC supplied the trade organization, GasNetworks, with marketing material to promote on its website, and attended their annual trade show for the first time.

TRC staff wrote model utility implementer RFP requirements to share with utility companies (Appendix 15). The focus of the model is to help utilities expand environmental compliance requirements for their implementers. This language would essentially be a term of agreement between the utility company and the hired implementer. TRC also began engagement with two non-TRC members interested in the recycling mercury issue, ecobee and NEST, by submitting to them MOU's. All parties involved hope to do more with the TRC program.

# TOTAL PROGRAM EXPENSES

Below is a summary of TRC's national program expenses for 2015. A copy of TRC's 2014 IRS Form 990 is available by request.

## EXHIBIT 27: 2015 PROGRAM ADMINISTRATIVE EXPENSES

Program Component	2014	2015	% Change
TRC Staff and Administration	\$ 593,631	\$ 625,205	5%
Recycling Costs	\$ 356,043	\$ 347,555	-2%
Incentive/Promotional Payments	\$ 47,712	\$ 42,224	-12%
New Collection Containers	\$ 15,108	\$ 10,960	-27%
Travel	\$ 70,120	\$ 81,152	16%
Legal	\$ 40,373	\$ 21,228	-47%
Direct Expense for Marketing & Outreach	\$ 289,347	\$ 277,995	-4%
<b>Total (expenses)</b>	<b>\$1,412,333</b>	<b>\$1,406,319</b>	<b>0%</b>

Compared to last year, variances in these program components were flat. Causes for changes include:

- **Recycling Costs:** A decrease in whole thermostats processed as compared to 2014. Recycling costs are directly related to how many whole thermostats are collected at TRC's processing facility in Golden Valley, MN. The program's collections decreased by a little over 2%.
- **Incentive/Promotional Payments:** Incentive payments in Maine were flat. In Vermont they were up with more Retailers and Wholesalers participating. California incentive expenses were down slightly, and Illinois promotional payments were down significantly due to a large wholesaler choosing not to participate in an incentive program.
- **New Collection Containers:** Orders were down 27%. TRC expects a continued decrease in container orders because the program is operating in a mature collection environment and available new locations to collect are decreasing.
- **Travel:** The Director of National Accounts spent more than 60% of his time attending trade shows, site visits, and attending meetings with key corporate contacts. TRC visited 22 states, up 38% compared to 2014.

## TOTAL PROGRAM EXPENSES

- Direct Expense for Marketing and Outreach:** The category used for Marketing Consulting was down considerably compared to 2014 due to the Director of Marketing and Communications taking on more responsibility. TRC also spent less on retail displays compared to 2014. This is as a result of declining available locations which were willing to accept merchandising displays for their businesses. Lastly, both Advertising and Graphic Design increased as TRC created its new 2016 marketing campaign, “Recycle every mercury thermostat, every time”.

### EXHIBIT 28: 2015 PROGRAM EXPENSES WITH MASSACHUSETTS SPECIFIC COSTS

Program Component	Total Expenses	MA
TRC Staff and Administration	\$ 625,204.88	\$ 6,157.36
Recycling Costs	\$ 347,555.25	\$ 13,791.75
Incentive/Promotional Payments	\$ 42,224.42	\$ 123.82
New Collection Containers	\$ 10,960.00	\$ -
Travel	\$ 81,152.16	\$ 2,384.61
Legal	\$ 21,228.28	\$ 51.37
Direct Expense for Marketing & Outreach	\$ 277,994.50	\$ 23,051.96
<b>Total (expenses)</b>	<b>\$ 1,406,319.49</b>	<b>\$ 45,560.86</b>

- TRC Staff and Administration:** On July 1st 2015, TRC changed policy regarding tracking of employee’s time worked. This procedural change was predicated by state specific statutory regulations for TRC, particularly requirements on TRC to report costs associated with its employee’s time allocated to state specific activities. This policy change was for all TRC employees, including those who were exempt and non-exempt. The procedure was implemented starting in July to offset this requirement. Although not a perfect subset of data, the hours worked (as a percentage) were then mirrored to reflect employee’s time worked for the first half of the year. The decision to mirror time worked was determined due to the inaccuracies of having each employee go back to the start of the year and identify their hours worked by state, particularly for those employees whom were exempt. TRC acknowledges that it may under-estimate the hours worked in the state for 2015.

## TOTAL PROGRAM EXPENSES

However, all new employees after July 1st 2015 and any time entered for 2016 will accurately capture each employee's actual time worked by state.

- **New Collection Containers:** Fulfillment of new collection containers is done annually at TRC's processing facility in Golden Valley, MN. TRC does not currently allocate the costs of new containers to specific states, instead choosing to keep this in one cost center and including any costs from an order for containers in "Recycling Costs". In 2015, Massachusetts ordered 3.63% of all new container orders.



# 2016 PROGRAM IMPLEMENTATION

## 2016 ANNUAL GOALS

TRC again set annual goals for the organization for the calendar year of 2016. The 2016 goals were developed by TRC staff and incorporate each operational area of the organization, including:

- 1) Continue to increase efforts of collecting mercury thermostats by exploring non-traditional avenues
- 2) Steer TRC toward tactical, positive, cohesive messaging while implementing marketing strategies
- 3) Continue fulfilling all members' state specific legal requirements without losing continuity
- 4) Maximize human capital opportunities by utilizing available internal and external resources

Many of the activities which drive TRC's daily functions are captured in the spirit of these goals. Developing a list of high level external goals allows TRC to keep its focus on the ultimate mission of recycling every mercury thermostat, every time.

## COLLECTION LOCATION TOUCH CAMPAIGN

In 2016 TRC will launch a comprehensive location outreach plan that strategically coordinates and schedules outbound phone calls, reminder postcards, and site visits throughout the year. Designed around the year's site visit travel schedule, phone calls have been scheduled to occur within two months of TRC staff physically visiting a state, and postcards have been scheduled to follow up these phone calls within two months. Special attention will be focused on states with mandatory collection programs, including Massachusetts, which will entail up to 120 phone calls to collection locations that have not returned a bin within the past year. States with non-mandatory collection programs will continue to receive up to 60 collection location phone calls in 2016.

Additionally, each state's TRC collection locations which haven't returned a bin within the last year will continue to receive reminder "Miss you" postcards every four months of the year. By strategically coordinating the time of outreach between these three mediums (site visits, phone calls, postcards) TRC hopes to maximize the impact of each initiated contact effort.

# 2016 PROGRAM IMPLEMENTATION

## BRANDING CAMPAIGN

In January TRC placed a full-page color ad in *ACHR News*, one of the industry's leading HVAC publication with a weekly circulation of more than 33,000 (Exhibit 29). The ad appeared during the week of the AHR Expo, which is one of the more popular issues of the magazine. The ad tied TRC's members and affiliates together around the call to action of recycling every mercury thermostat, every time. TRC resized this ad to place a half-page size in the February issue of *HVACR Business Magazine* as well.

### EXHIBIT 29: ACHR NEWS FULL PAGE AD


**AN IMPORTANT MESSAGE TO  
HVAC CONTRACTORS:**

EVERY **MERCURY** EVERY  
**THERMOSTAT** TIME

**Mercury thermostats** contain between  
**3-12 grams of mercury.** As an industry,  
we sold and installed these devices.  
Now, let us work together to **properly  
manage their disposal.**

**JOIN US IN SUPPORTING  
MERCURY THERMOSTAT RECYCLING**

APR Supply Co. | Bard Manufacturing Corporation | Carrier Corporation | C.C. Dickson Co. | Chromalox  
Climate Master, Inc. | Crescent Parts and Equipment | Daikin Applied  
Emerson Electric Co. / White-Rodgers | Empire Comfort Systems | Ferguson  
Gustave A. Larson Company | G.W. Berkheimer | Honeywell International Inc. | Hunter Fan Company  
Ingersoll Rand | Irr Supply Centers | Johnson Controls | Johnson Supply | Johnstone Supply  
Lennox International Inc. | Lux Products Corporation | Nortek Global HVAC  
R.E. Michel Company, Inc. | Rheem Manufacturing Company | Taco Comfort Solutions | Uponor, Inc.  
U.S. Air Conditioning Distributors | Vaillant Corporation | W. W. Grainger

 **Thermostat Recycling**  
CORPORATION  
an industry-funded non-profit

## 2016 PROGRAM IMPLEMENTATION

Additionally in January, TRC launched a new branding campaign: “Recycle every mercury thermostat, every time” (Exhibit 30). The campaign messaging is based off frequent feedback TRC staff receives from contractors, who tend to comment, “What’s the big deal about mercury? I used to play with it in school as a kid.” This new messaging compares mercury thermostats to kids playing with HVAC tools. HVAC tools are safe when used properly, just like mercury thermostats are safe when recycled and disposed of properly.

### EXHIBIT 30: NEW BRANDING CAMPAIGN



The advertisement features a photograph of two children, a boy and a girl, in a room. The boy is holding a blue power drill, and the girl is holding a large orange chainsaw. They are both looking towards the camera. The background is a light-colored wall with some shelves. The advertisement includes the Thermostat Recycling Corporation logo in the top left corner, which consists of a green recycling symbol and the text "Thermostat Recycling CORPORATION". Below the logo, there is a green banner with the text "WOULD YOU LET YOUR KIDS PLAY WITH THESE?". To the left of the children, there is text that reads "You may have played with mercury as a kid, but times have changed." Below this text, it says "RECYCLE EVERY MERCURY THERMOSTAT, EVERY TIME." At the bottom left, there is a green recycling bin. At the bottom right, the website "WWW.THERMOSTAT-RECYCLE.ORG" is displayed.

**Thermostat Recycling CORPORATION**

**WOULD YOU LET YOUR KIDS PLAY WITH THESE?**

You may have played with mercury as a kid, but times have changed.

**RECYCLE EVERY MERCURY THERMOSTAT, EVERY TIME.**

[WWW.THERMOSTAT-RECYCLE.ORG](http://WWW.THERMOSTAT-RECYCLE.ORG)

TRC updated its trade show booth display with the new artwork and messaging, and the campaign will continue throughout the year in print and digital advertising placements, with several different versions featuring different kids with tools.

# 2016 PROGRAM IMPLEMENTATION

## PAID ADVERTISING

Additionally, TRC is currently working to update its Google AdWords campaign to include display ads, which include images versus only text, to enhance the visibility of the ads. TRC also plans to implement Facebook and potentially YouTube advertising in the spring and fall during the HVAC industry's busier seasons when mercury thermostats are more likely to be replaced. Ads will have similar messaging to the Google AdWords campaign and be targeted to states with disposal bans.

Some additional planned advertising and promotion (subject to change) include:

- 1/4pg full-color ad in *Distribution Center Magazine* for three months
- 1/2pg spot-color ad in *HVAC Insider New England* for four months
- Skyscraper banner ad on ACHRNews.com for two months
- Website Topic Sponsorship on ACHRNews.com for three months
- Top leaderboard ad in *ACHR News* newsletter for two months
- *ACHR News* digital edition video spotlight
- *ACHR News* digital edition sponsorship
- Feature leaderboard ad in NATE's bi-monthly newsletter for two months
- Medium rectangle banner ad in *Distribution Center's* weekly newsletter for two months
- Banner ad in AHRI's weekly newsletter for 13 weeks
- *HVACR Business Magazine's* web package for two months, including a video and three different sized ads on their website
- Continue to exhibit at regional and key national industry events.
- TRC plans on continuing efforts to engage larger contractors and HVAC wholesale distributors

# EVALUATION

## PROGRAM ANALYTICS

This section of the report examines the annual performance of the thermostat collection recycling program in terms of bins, thermostats, and mercury collected as well as the year over year progression of the program.

TRC notes, that the mercury auto switch (ELVS) program collections have been trending downward or flat at best in recent years in Massachusetts. According to a recent report<sup>2</sup>, “they have not been placed in vehicles since model year 2003.” Mercury switch thermostats have not been sold since the mid 2000’s nor installed legally in many states. Moreover, many were replaced with non-mercury units because electronic programmable thermostats had become available many years earlier. Thus, given the correlation of neither discontinued product being placed in the market for 10 or more years, TRC results will reflect similar indicators from the mercury auto switch program.

On average, the program has **collected 26.5 pounds of mercury and 3,073 thermostats per year** since 2000. In 2015 the program **collected 62.95 pounds of mercury from 7,881 thermostats**, both record highs. Figure 1.1 displays the total number of bins collected, the total number of thermostats, and the total pounds of mercury collected in the state since the beginning of the program.

---

<sup>2</sup> Maine Department of Environmental Protection. Implementing Product Stewardship in Maine, Jan. 2016. Web. 1 March 2016.

# EVALUATION

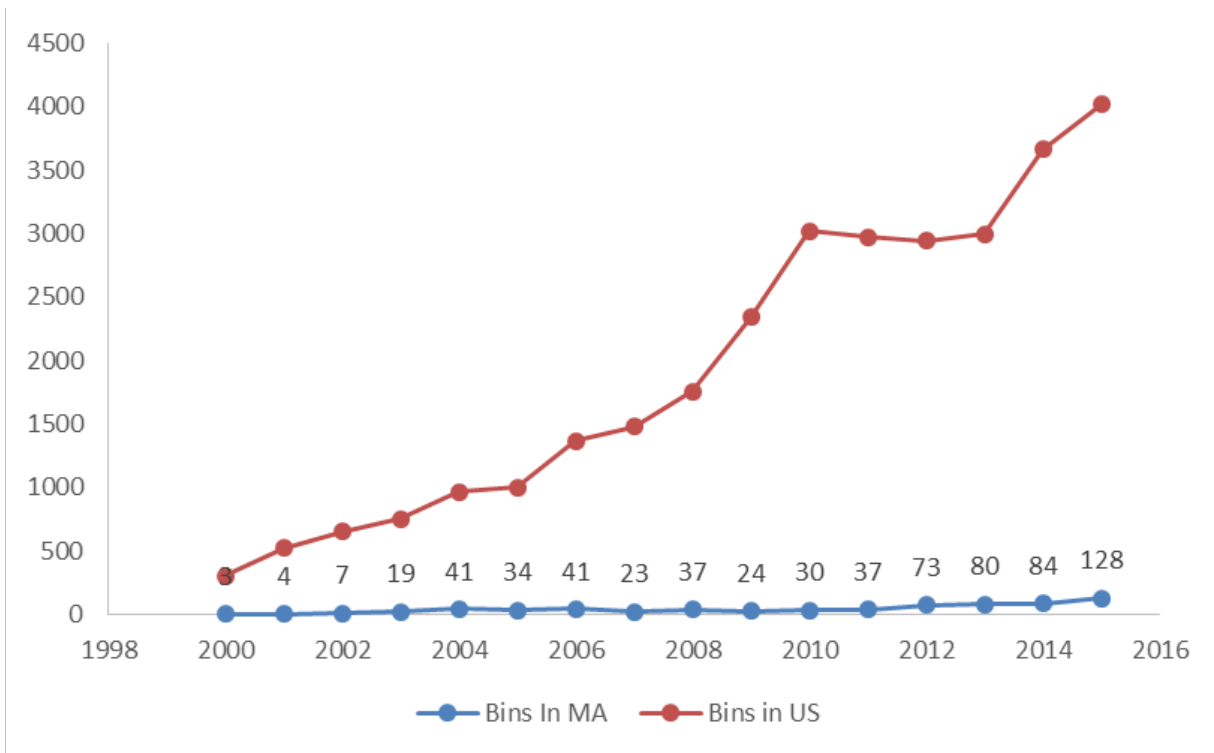
**FIGURE 1.1: PROGRAM PERFORMANCE OVER TIME**

Year	Number Bins	Number Stats	Lbs Mercury
2000	3	219	2.08
2001	4	262	2.72
2002	7	429	3.86
2003	19	1,168	11.56
2004	41	3,242	28.47
2005	34	2,874	28.10
2006	41	3,250	26.48
2007	23	2,024	18.77
2008	37	2,770	30.01
2009	24	1,799	17.39
2010	30	2,211	19.60
2011	37	2,539	25.12
2012	73	5,798	46.08
2013	80	6,549	50.85
2014	84	6,155	49.21
2015	128	7,881	62.96
<i>Average</i>	<i>41.6</i>	<i>3,073.1</i>	<i>26.5</i>
<i>Total</i>	<i>665</i>	<i>49,170</i>	<i>423</i>

Figure 1.2 graphically displays the number of bins collected in the state over time as well as the total number of bins collected in the US over the same time period. The figure shows that the number of bins collected annually has been increasing on a rather consistent basis in Massachusetts as well as the US as a whole.

# EVALUATION

FIGURE 1.2. BINS COLLECTED OVER TIME IN STATE AND NATIONALLY



In Massachusetts, the **pounds of mercury collected in 2015 increased by 28% over 2014 levels**. Since 2000, the annual pounds of mercury collected in Massachusetts has increased by an average of 37% per year. During the same time period, the pounds of mercury collected in the nation increased by 17% per year. Figure 1.3 displays the total number of pounds of mercury collected in the state over time as well as the year over year percent increase (or decrease) in the state and the US as a whole.



# EVALUATION

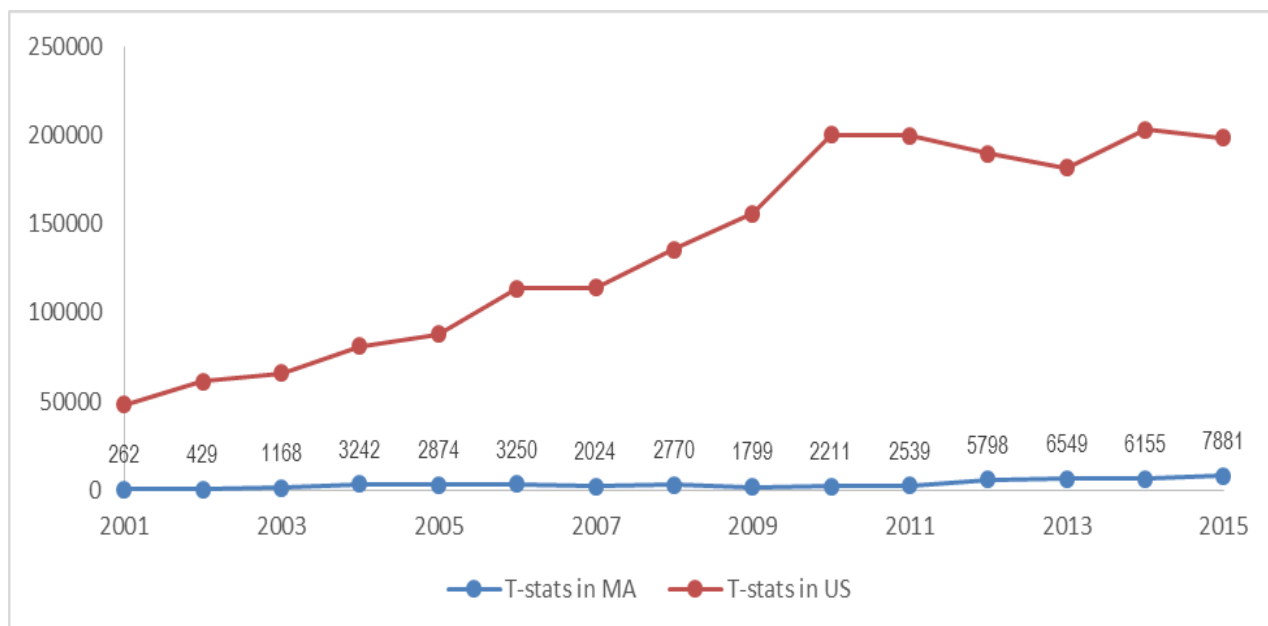
**FIGURE 1.3: POUNDS OF MERCURY COLLECTED IN PROGRAM AND YEAR OVER YEAR CHANGES IN STATE AND US.**

Year	Total Lbs Hg	% Change State	% Change US
2000	2.08	N/A	11%
2001	2.72	30%	89%
2002	3.86	42%	14%
2003	11.56	199%	11%
2004	28.47	146%	17%
2005	28.10	-1%	11%
2006	26.48	-6%	32%
2007	18.77	-29%	2%
2008	30.01	60%	16%
2009	17.39	-42%	16%
2010	19.60	13%	26%
2011	25.12	28%	4%
2012	46.08	83%	-5%
2013	50.85	10%	-5%
2014	49.21	-3%	13%
2015	62.96	28%	13%
<i>Average</i>	<i>26.46</i>	<i>37%</i>	<i>17%</i>

The state of Massachusetts collected a record of high of 7,881 thermostats in 2015. This was **28% increase over the number of thermostats collected in 2014** and a **142% increase in the last decade**. The number of thermostats collected annually in Massachusetts has increased by an **average of 40% every year since 2000**. During the same time period, the number of thermostats collected in the US has increased by an annual average rate of 15%. Figure 1.4 displays the total number of thermostats collected in the state and the nation and figure 1.5 shares the underlying data as well as the calculated year over year percent change.

# EVALUATION

**FIGURE 1.4: NUMBER OF THERMOSTATS COLLECTED OVER TIME STATE AND NATIONAL**



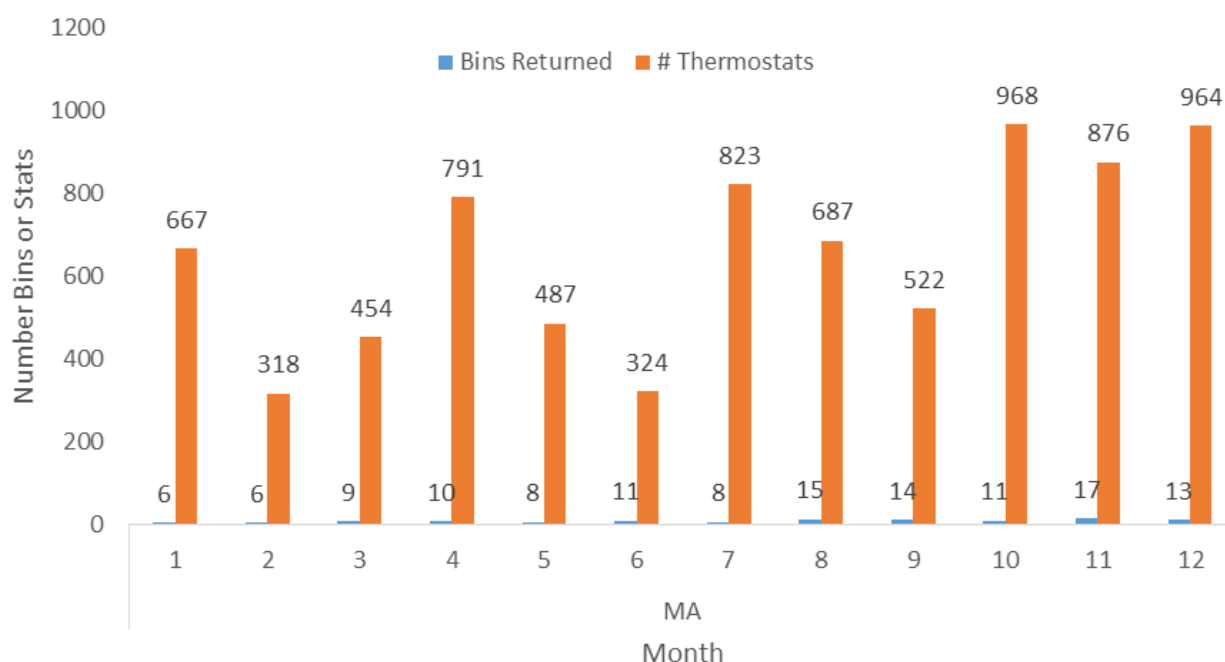
**FIGURE 1.5: THERMOSTATS COLLECTED IN MA AND US OVER TIME AND YEAR OVER YEAR PERCENT CHANGE**

Year	T-stats in MA	T-stats in US	% Change State	% Change US
2000	219	29,637	NA	NA
2001	262	48,350	20%	63%
2002	429	61,422	64%	27%
2003	1,168	65,778	172%	7%
2004	3,242	81,115	178%	23%
2005	2,874	87,754	-11%	8%
2006	3,250	113,658	13%	30%
2007	2,024	114,158	-38%	0%
2008	2,770	135,646	37%	19%
2009	1,799	155,731	-35%	15%
2010	2,211	200,064	23%	28%
2011	2,539	199,918	15%	0%
2012	5,798	189,619	128%	-5%
2013	6,549	181,600	13%	-4%
2014	6,155	203,346	-6%	12%
2015	7,881	198,603	28%	-2%
Average	3,073.1	129,149.9	40%	15%

## EVALUATION

Figure 1.6 displays the monthly distribution of bins and thermostats collected in the state over 2015. The months with both the greatest number of bins and thermostat returned were **October** (11 bins, 968 thermostats), **December** (13 bins, 964 thermostats), and **November** (17 bins, 876 thermostats). Conversely, the months with the least activity in 2015 were February, June, and March.

**FIGURE 1.6. THERMOSTATS AND BINS COLLECTED PER MONTH 2015**



The highest number of thermostats per bin were in **January** (111.2) and **July** (102.9). Figure 1.7 shows the average number of thermostats per returned bin per month for the year.

# EVALUATION

**FIGURE 1.7: AVERAGE THERMOSTATS PER BIN RETURNED PER MONTH**

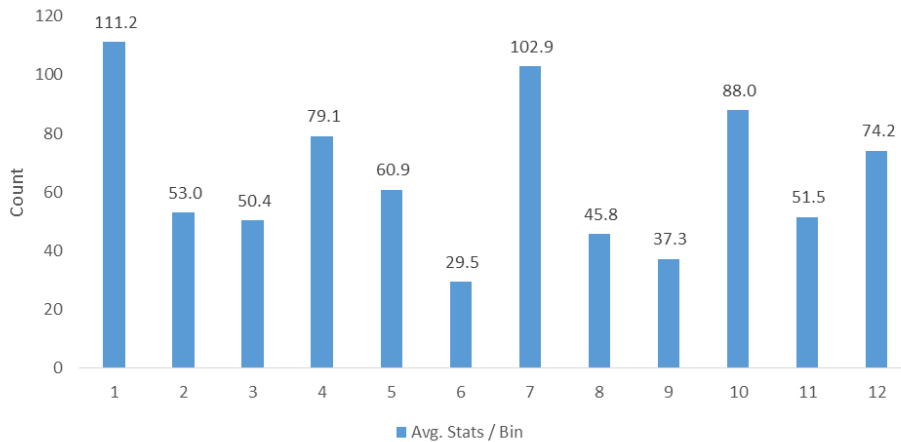
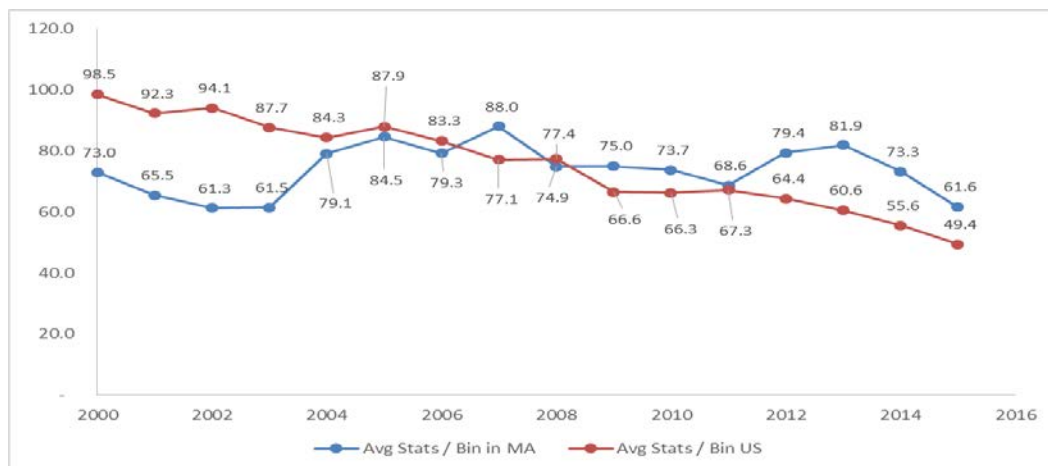


Figure 1.8 displays the average number of thermostats returned per bin in the state and in the US since the beginning of the state program. Nationally, the number of thermostats per bin has been decreasing annually since 2000. In MA the number of thermostats per bin in 2015 (**61.6 thermostats / bin avg.**) was near the lows reported in 2002 (61.3) and 2003 (61.5). The 2015 average was below the 16 year average of 73.8 thermostats per bin.

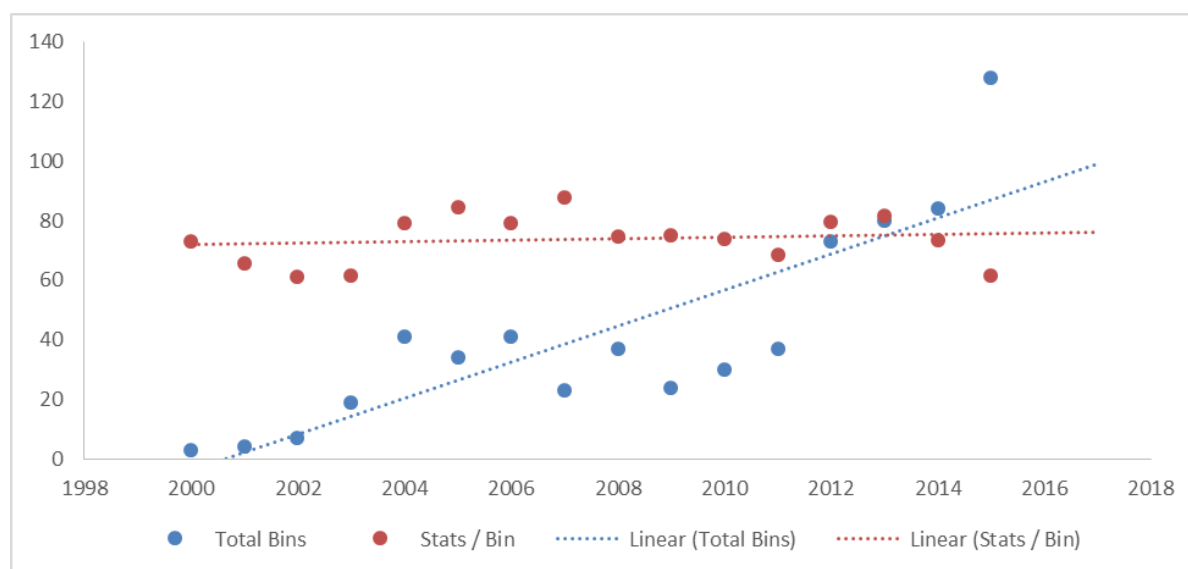
**FIGURE 1.8: AVERAGE NUMBER OF THERMOSTATS PER BIN OVER TIME IN STATE AND NATIONAL**



## EVALUATION

Figure 1.9 plots the total bins returned over time along with the average number of thermostats per bin over the same period to see whether or not there is a relationship between the two. A linear regression found only a weak positive correlation ( $r=.03$ ,  $\text{slope}=.006$ ) between the two variables. This indicates that as more bins are returned, the number of thermostats per bin has not changed significantly.

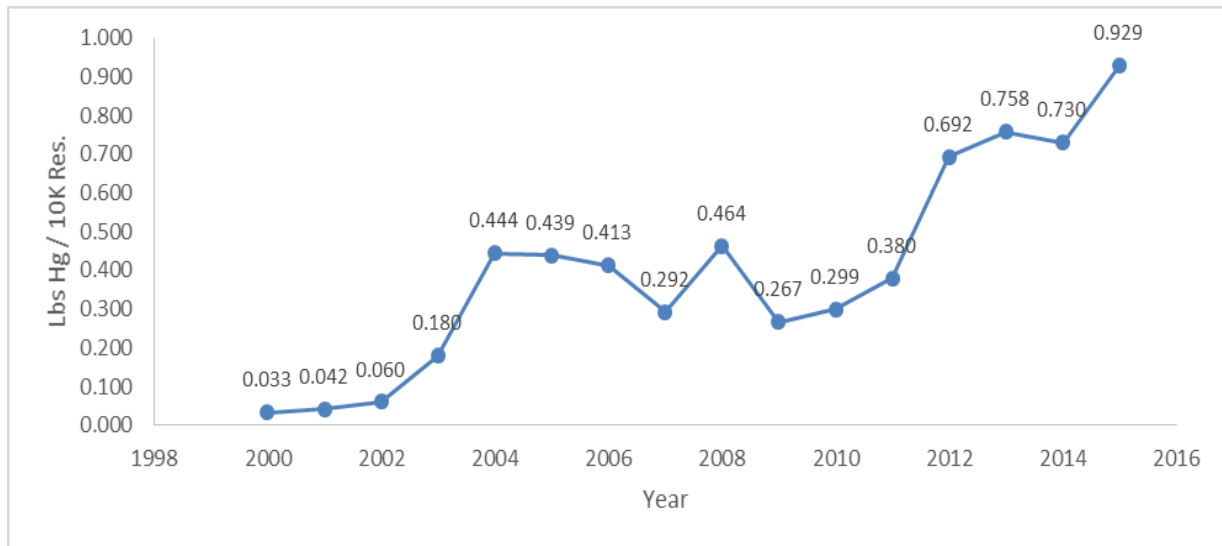
**FIGURE 1.9: TOTAL BINS AND AVERAGE NUMBER OF THERMOSTATS PER BIN OVER TIME**



The **total pounds of mercury collected per 10,000 residents was .93 in 2015**. This is a record high for the state of Massachusetts and is a 27% increase over the 0.73 pounds per 10,000 residents collected in 2014 and more than twice the 0.41 pounds collected per 10,000 residents a decade ago. Figure 1.10 displays normalized data for the total pounds of mercury collected per 10,000 state residents over time.

# EVALUATION

FIGURE 1.10: POUNDS OF MERCURY COLLECTED ANNUALLY PER 10,000 RESIDENTS



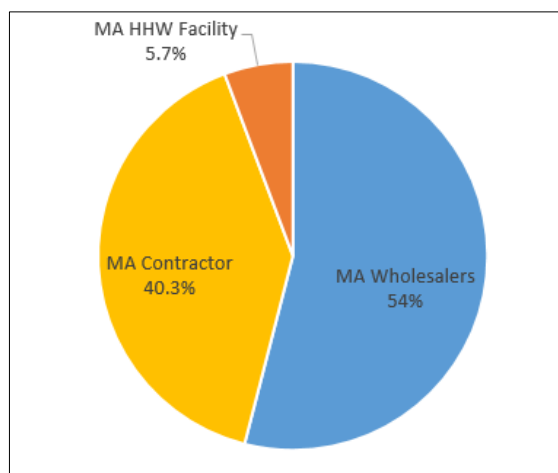
## CHANNEL PARTNER ANALYSIS

Section 2 of the report examines the partner locations in more detail. The majority of thermostats collected in state were through **wholesalers (54%)** followed by closely **contractors (40.3%)**.

Figure 2.1 shows the distribution of thermostat collected by location type in 2015.

# EVALUATION

**FIGURE 2.1: THERMOSTATS COLLECTED BY LOCATION TYPE IN 2015**

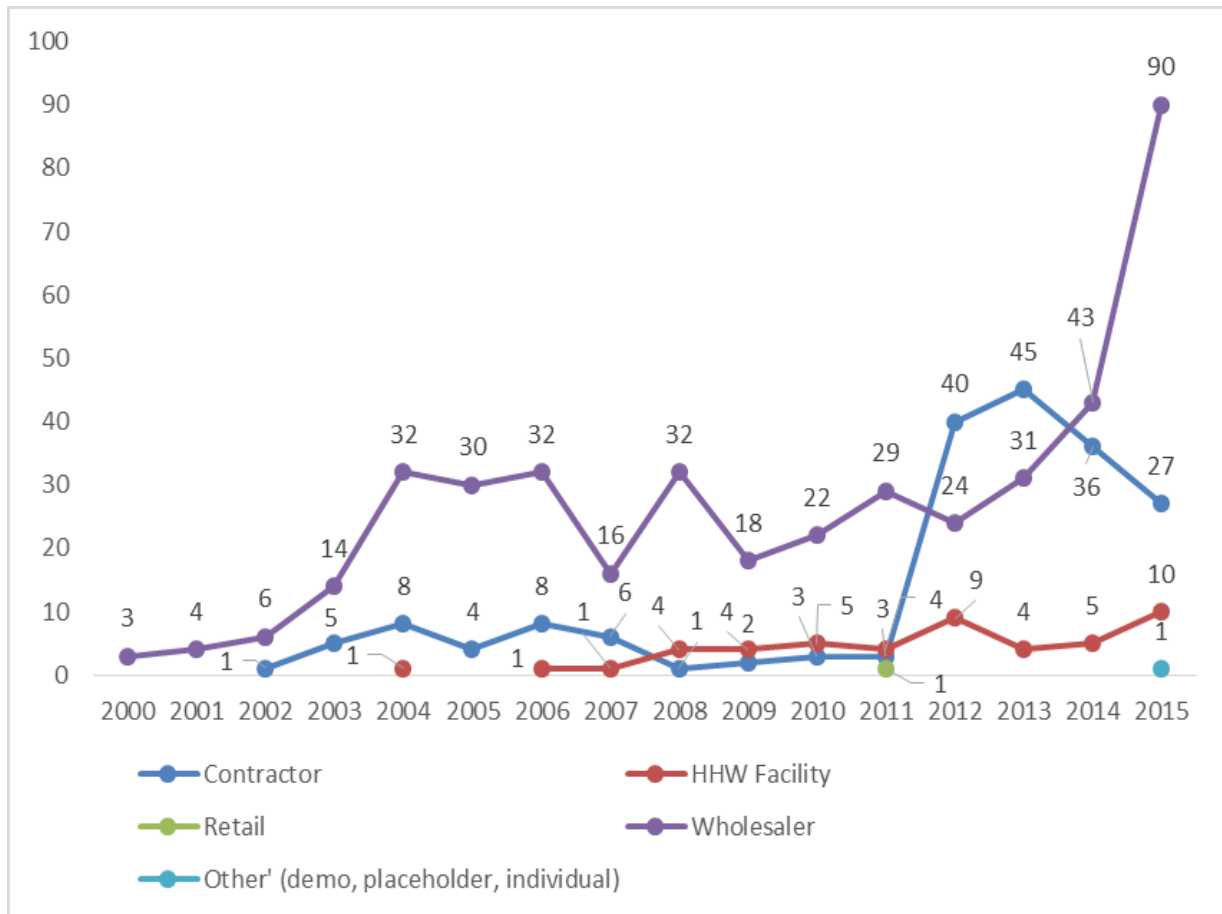


The number of bins returned by wholesalers increased from 43 bins in 2014 to 90 bins from wholesalers in 2015. At the same time, the number of bins returned by contractors decreased from 36 to 27 from 2014 to 2015. Figure 2.2 displays the change in the number of bins returned by thermostat collection type over time in the state.



# EVALUATION

**FIGURE 2.2: THERMOSTAT BIN RETURNS BY LOCATIONS OVER TIME**



In 2015, **31.3% of the locations** that had a bin in the state of MA sent back at least one bin for recycling. The distribution is displayed in Figure 2.3.

## EVALUATION

**FIGURE 2.3: PERCENTAGE OF STORES RETURNING A BIN IN 2015**

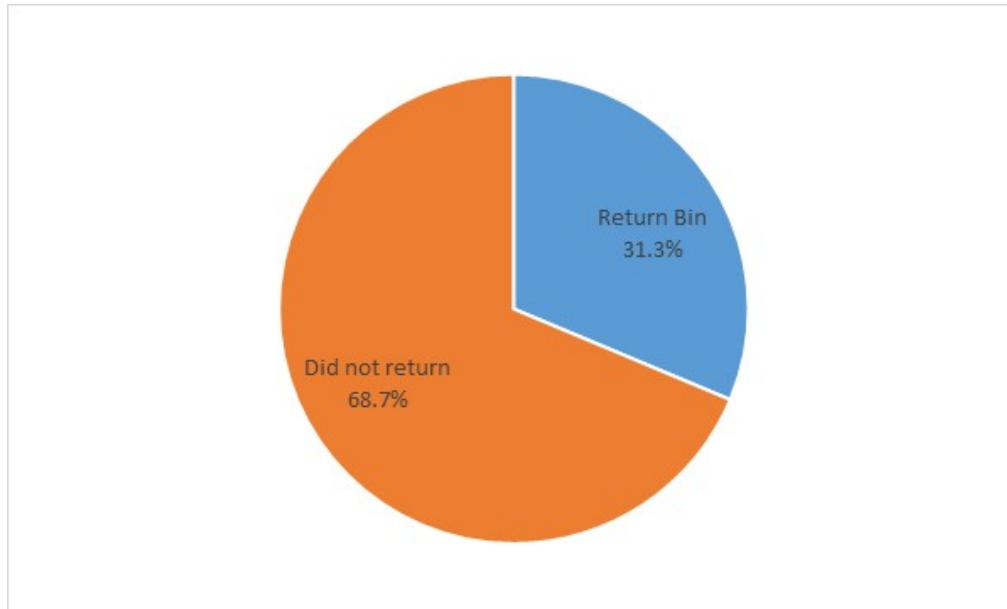
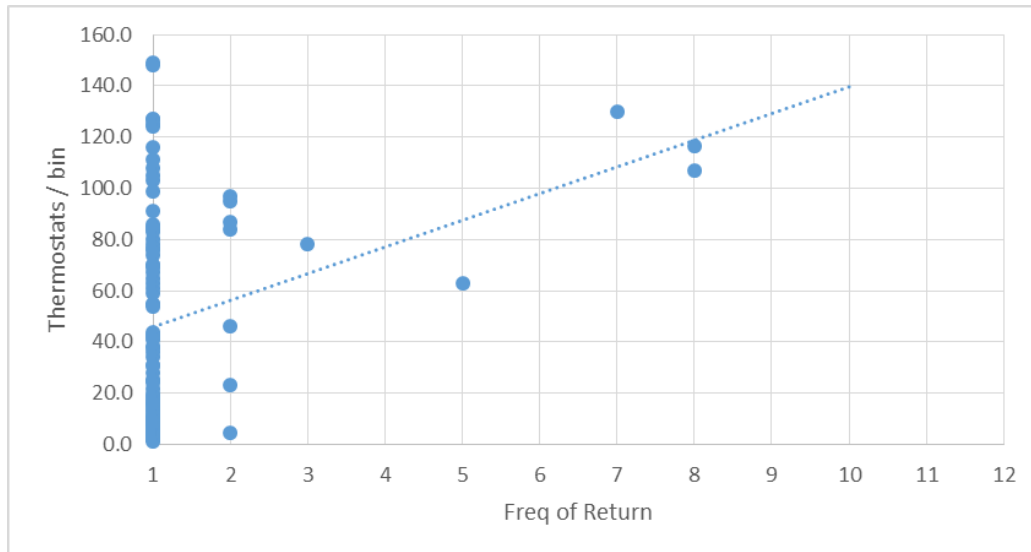


Figure 2.4 is a scatter plot comparing the frequency of bin returns per location and the number of thermostats per bin. The analysis sought to determine whether there was any correlation between the frequency of return and the number of thermostats per bin. While there was only a weak statistical correlation between the two variables ( $r=.32$ ) the scatter data does seem to slightly indicate that bins that were returned more frequently also tended to have more thermostats per bin in Massachusetts.

# EVALUATION

**FIGURE 2.5: CORRELATION OF FREQUENCY OF BIN RETURN AND NUMBER OF THERMOSTATS PER BIN**



An analysis of the top performing counties in terms of total bin returns and total thermostats returned in 2015 was conducted. The counties with the most bins returned in 2015 were **Suffolk (29 bins)**, **Middlesex (21 bins)**, and **Norfolk (17 bins)**. The counties with the most thermostats returned in 2015 were once again **Suffolk (3,198)**, **Norfolk (1,042)**, and **Middlesex (928)**. Figure 2.6 displays the total bins and thermostats returned, by county, in 2015.

# EVALUATION

**FIGURE 2.6: BIN RETURNS AND TOTAL THERMOSTATS RETURNED IN 2015 BY COUNTY**

County	Total Bins	County	Total T-stats
Suffolk County	29	Suffolk County	3,198
Middlesex County	21	Norfolk County	1,042
Norfolk County	17	Middlesex County	928
Bristol County	9	Hampden County	499
Plymouth County	9	Plymouth County	446
Hampden County	8	Hampshire County	439
Worcester County	8	Franklin County	375
Essex County	7	Worcester County	293
Hampshire County	6	Bristol County	261
Berkshire County	5	Essex County	189
Barnstable County	4	Berkshire County	117
Franklin County	4	Nantucket County	65
Nantucket County	1	Barnstable County	29

**Next Step Living Inc. (24 bins)** returned the highest number of bins in the state in 2015 followed by **F.W. Webb Company (14)** and **Johnstone Supply (10)**. Although R.E. Michel Company ran a promotion with ‘5 for \$5 Dunkin Doughnuts’ they did not show up as a top performing partner in 2015 in terms of bin returns or thermostat returns (R.E. Michel returned 1 bin with 55 thermostats in 2015). In addition to the top performers included in the figure, 11 additional program partners returned 2 bins each and 23 returned 1 bin each. Figure 2.7 displays the top performing partners in terms of total bins returned in 2015.

# EVALUATION

**FIGURE 2.7. 20 TOP PERFORMING CHANNEL PARTNERS IN STATE**

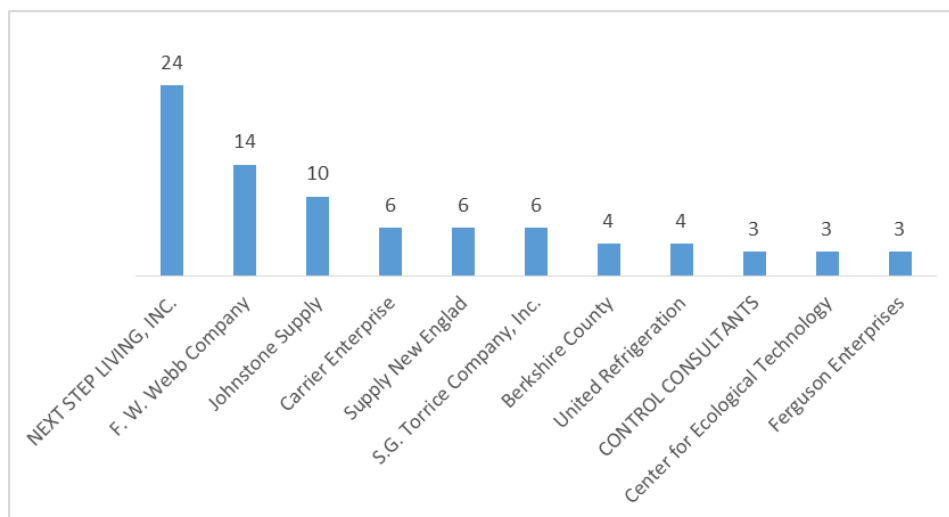


Figure 2.8 looks at the top performers in a more detail. The figure includes the top performers for the year by each of the following categories: total bins returned, total thermostats, and total thermostats per bin.

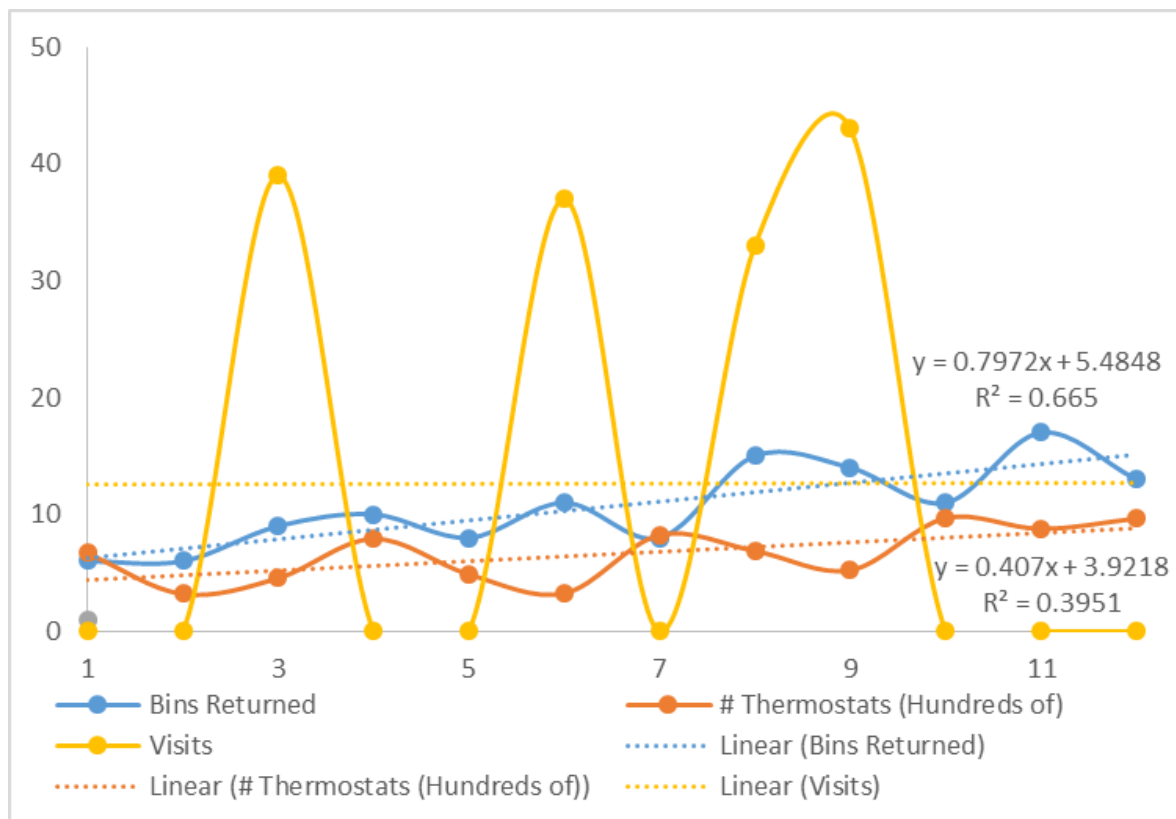
**FIGURE 2.8. TOP PERFORMING PARTNERS BY TOTAL BINS, TOTAL THERMOSTATS, AND THERMOSTATS PER BIN**

Location	Total Bins	Location	Total T-stats	Location	T-stats/bin
NEXT STEP LIVING, INC.	24	NEXT STEP LIVING, INC.	2846	NEXT STEP LIVING, INC.	118.6
F. W. Webb Company	14	Johnstone Supply	661	Supply New Englad	79.0
Johnstone Supply	10	F. W. Webb Company	611	Homeserve	74.0
Carrier Enterprise	6	S.G. Torrice Company, Inc.	378	United Refrigeration	73.3
Supply New Englad	6	Berkshire County Program	325	BELL PUMP CO	67.0
S.G. Torrice Company, Inc.	6	CONTROL CONSULTANTS	274	Center for Ecological Technology	66.3
Berkshire County Program	4	HEATING OIL PARTNERS	252	S.G. Torrice Company, Inc.	63.0
United Refrigeration	4	Sid Harvey Industries	235	HEATING OIL PARTNERS	63.0
CONTROL CONSULTANTS	3	United Refrigeration	220	THE BELL PUMP COMPANY	62.0
Center for Ecological Technology	3	Center for Ecological Technology	199	F. W. Webb Company	61.1
Ferguson Enterprises	3	SOUTH SHORE OIL HEAT SUPPLY	169	Sid Harvey Industries	58.8

## EVALUATION

TRC conducted several activities in 2015 as a way to increase the number of bins and thermostats returned in the state. These activities included site visits and ‘miss you’ calls to collection locations that may not have participated in the program recently. In 2015, a total of 124 site visits were conducted in MA and 25 ‘Miss You’ calls were placed. Figure 2.9 displays the relationship between the number of site visits per month, the bin returns per month, and the number of thermostats (in 100's) returned per month. Although the figure seem to suggest there is a positive relationship between the number of visits and the number of thermostats returned, there was not a statistically significant relationship between the two variables (P-value = .33), likewise, no statistically valid relationship between the number of visits and the number of bins returned was found to exist.

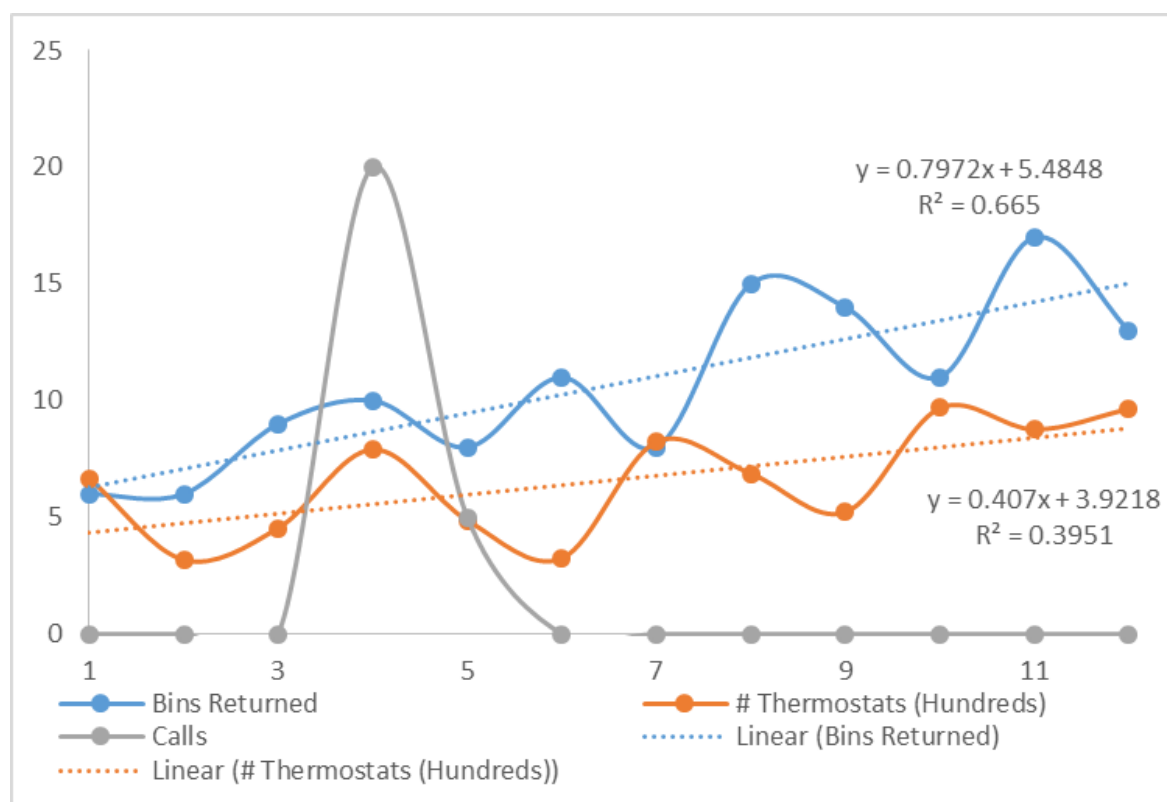
**FIGURE 2.9: RELATIONSHIP BETWEEN SITE VISITS AND BINS AND THERMOSTATS RETURNED PER MONTH**



## EVALUATION

Figure 2.10 displays the relationship between the number of calls per month, the bin returns per month, and the number of thermostats (by 100's) returned per month. Once again a multiple regression analysis found that there was not a statistically significant relationship between the two variables. It should be noted however, that there may be a cumulative impact of both the calls and visits over the year as the trend for the number of bins / thermostats returned per month in the state moved upward during the year.

**FIGURE 2.10: RELATIONSHIP BETWEEN 'MISS YOU' CALLS AND BINS AND THERMOSTATS RETURNED PER MONTH**



## COMPARISONS TO NATIONAL AND OTHER STATE'S DATA

To compare how the state collection partners performed in 2015, the national averages for the number of bins returned per total locations since 2012 was calculated and compared to the state



## EVALUATION

average over the same time period. The average numbers of bins includes locations that did not return any bins in a given year. It should be noted that when making comparisons each state has different regulations, housing stock mix, local policies, and incentives, that may have a significant impact on returns. Overall, the average number of bin returned per location per year was lower in Massachusetts than the US average and the annual averages are shown in figure 3.1.

**FIGURE 3.1: AVERAGE NUMBER OF BINS RETURNED PER LOCATION PER YEAR**

Average number of bins returned per year per location	2012	2013	2014	2015
US total	1.4	1.4	1.6	1.8
MA Average	0.7	0.8	0.6	1.0

Figure 3.2 displays the locations in MA that returned more than one bin in a given year since 2012 and figure 3.3 displays the top 10 partners in the US over the same time period in terms of the number of bins returned. Johnstone Supply, Ferguson Enterprises, and United Refrigeration consistently show up on both the state and the national list.

# EVALUATION

**FIGURE 3.2: PARTNER LOCATIONS IN MA RETURNING MORE THAN 1 BIN PER YEAR 2012-2015**

Location	2012	Location	2015
NEXT STEP LIVING, INC.	23	F. W. Webb Company	14
Honeywell Inc.	16	Johnstone Supply	10
CONTROL CONSULTANTS	6	Supply New Englad	6
Bell Simons Company	4	S.G. Torrice Company, Inc.	6
United Refrigeration	2	Carrier Enterprise	6
THE BELL PUMP COMPANY	2	Berkshire County Program	4
INTERSTATE ELECTRIC EQUIPMENT	2	United Refrigeration	4
Location	2013	Center for Ecological Technology	3
NEXT STEP LIVING, INC.	27	CONTROL CONSULTANTS	3
Honeywell Inc.	18	Ferguson Enterprises	3
United Refrigeration	6	Bell Simons Company	2
CONTROL CONSULTANTS	6	THE BELL PUMP COMPANY	2
Bell Simons Company	3	SIMON'S SUPPLY CO INC	2
THE BELL PUMP COMPANY	3	Distributor Corporation	2
BELL PUMP CO	3	Plimpton & Hills Corp.	2
F. W. Webb Company	2	Dugan Supply Company	2
S.G. Torrice Company, Inc.	2	Sid Harvey Industries	2
Sid Harvey Industries	2	SOUTH SHORE OIL HEAT SUPPLY	2
Location	2014	Avon Supply	2
Honeywell Inc.	11	HEATING OIL PARTNERS	2
Johnstone Supply	8	The Portland Group	2
S.G. Torrice Company, Inc.	6		
NEXT STEP LIVING, INC.	6		
CONTROL CONSULTANTS	4		
Bell Simons Company	4		
United Refrigeration	2		
Sid Harvey Industries	2		
BELL PUMP CO	2		
THE SIMONS COMPANY	2		
R.E. Michel Company	2		
INTERSTATE ELECTRIC EQUIPMENT	2		

# EVALUATION

**FIGURE 3.3: TOP PERFORMING PARTNER LOCATIONS NATIONWIDE IN BIN RETURNS 2012 TO 2015**

Location	2012	Location	2014
R.E. Michel Company	276	R.E. Michel Company	461
Honeywell Inc.	195	Johnstone Supply	460
Johnstone Supply	176	US Air Conditioning Distributors, Inc.	127
United Refrigeration	107	Ferguson Enterprises	119
Ferguson Enterprises	94	United Refrigeration	114
Refrigeration Supplies Distributor	88	Goodman Distribution Inc.	95
County Program	80	Honeywell Inc.	77
Comverge	69	Gustave A Larson Company	67
US Air Conditioning Distributors, Inc.	67	County Program	62
Goodman Distribution Inc.	67	Refrigeration Supplies Distributor	60
Franklin Energy Services	47	Lennox Industries Inc	60
Location	2013	Location	2015
R.E. Michel Company	311	Johnstone Supply	519
Johnstone Supply	298	R.E. Michel Company	336
United Refrigeration	162	Ferguson Enterprises	184
Honeywell Inc.	118	United Refrigeration	176
Ferguson Enterprises	106	County Program	110
US Air Conditioning Distributors, Inc.	102	US Air Conditioning Distributors, Inc.	106
Refrigeration Supplies Distributor	69	Goodman Distribution Inc.	70
Goodman Distribution Inc.	64	Gustave A Larson Company	62
County Program	63	Refrigeration Supplies Distributor	54
Baker Distributing Company	47	Lennox Industries Inc	51

Figure 3.4 displays the total percentage of locations per state and for the entire US with a bin that participated in the program in 2015 (participation is defined as sending back at least one bin). **In 2015, 31.3% of the locations in Massachusetts returned a bin** compared to a **national average of 37.1%**. The state with the highest percentage of locations returning a bin in 2015 was Minnesota (54.5%).

## EVALUATION

**FIGURE 3.3: PERCENTAGE OF LOCATIONS RETURNING A BIN IN 2015**

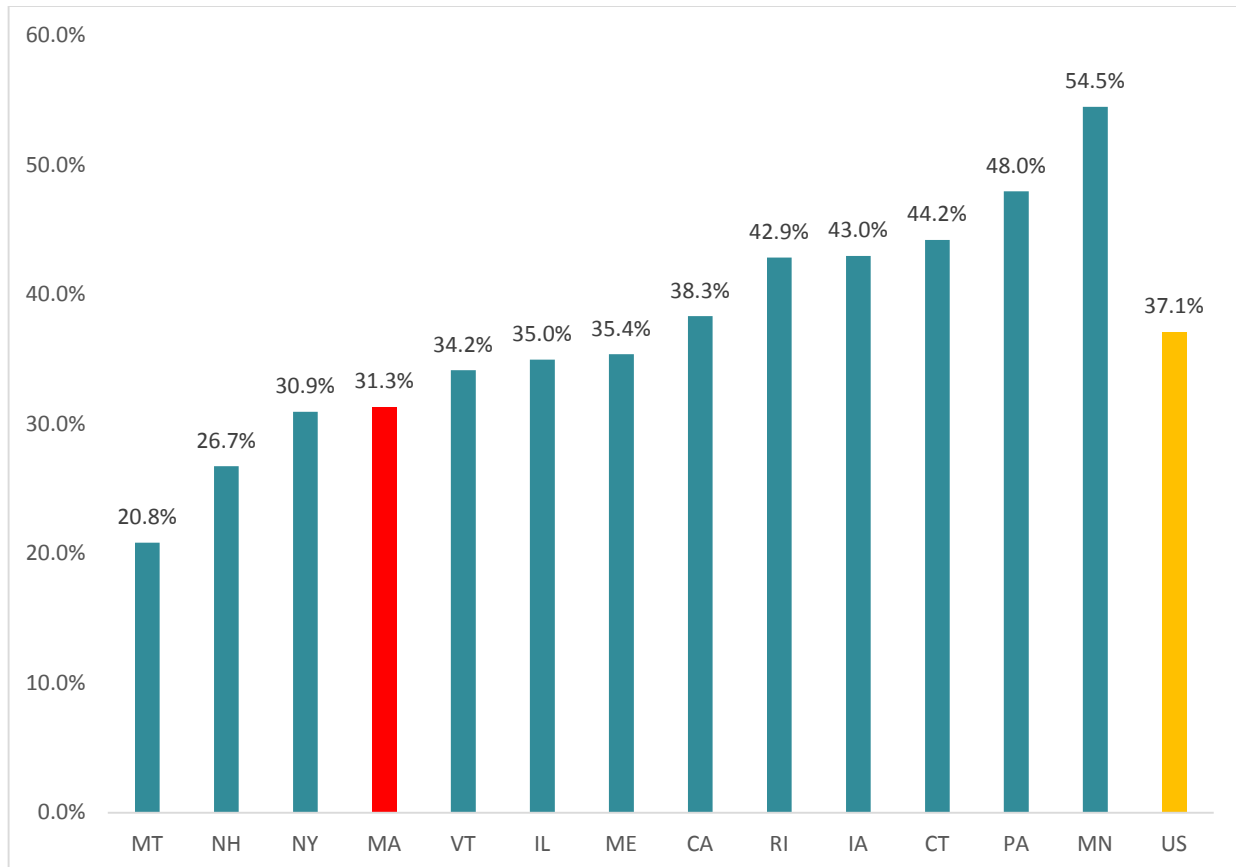


Figure 3.4 compares the state and national rates for a number of analytics in 2015. These include: the total thermostats and bins collected, the number of collection locations in each state per 10,000 residents, the number of thermostats collected by total locations and per participating location, the number of thermostats per bin returned on average in 2015, and the number of thermostats collected in each state and the US per 10,000 residents.

# EVALUATION

**FIGURE 3.4: COMPARISONS OF STATES AND US AVERAGES AMONG SEVERAL CATEGORIES**

State	Total Thermostats	Total Bins	Number locations per 10K Res	Thermostats per total locations	Thermostats per bin (avg.)	Thermostats per location returning a bin	Thermostats per 10K residents
CA	18,260	513	0.19	25.1	35.6	65.4	4.7
CT	3,395	77	0.38	24.6	44.1	55.7	9.4
IA	2,795	63	0.39	23.1	44.4	53.8	9.0
IL	10,193	236	0.41	19.3	43.2	55.1	7.9
MA	7,881	128	0.41	28.0	61.6	89.6	11.6
ME	4,571	112	1.82	18.8	40.8	53.2	34.3
MN	9,864	127	0.26	68.0	77.7	124.9	17.9
MT	229	6	0.23	9.5	38.2	45.8	2.2
NH	2,652	61	1.51	13.1	43.5	49.1	19.9
NY	6,466	201	0.26	12.5	32.2	40.4	3.3
PA	14,338	256	0.29	38.9	56.0	81.0	11.2
RI	2,212	39	0.53	39.5	56.7	92.2	21.0
VT	2,000	83	3.22	9.9	24.1	29.0	31.9
US Avg.	84,856	1902	0.33	23.9	44.6	64.3	7.8

# APPENDIX 1: OEM CLEANOUT LETTER



1765 Duke Street | Alexandria, VA 22314 | [thermostat-recycle.org](http://thermostat-recycle.org)

July 17<sup>th</sup>, 2015



Subject: Free disposal of obsolete/New Old Stock (NOS) or waste mercury thermostats

Dear Mr. Trimbach:

Many thermostats manufactured prior to 2008 contained mercury and the sale of these devices have been banned by many states. Most distributors have written-off stranded inventory of mercury thermostats, but it has come to TRC's attention that many of these units have yet to be disposed of and may remain at either branch or central distribution locations.

Moreover, TRC routinely finds boxes or old TRC containers with waste mercury thermostats at branch locations. Federal regulations prohibit the accumulation of waste mercury thermostats for more than one year. Any waste mercury thermostats that have been at your facilities for more than one year should be shipped to TRC immediately.

Thermostat Recycling Corporation will assist you with the proper disposal of all mercury thermostats at your facilities. It costs over \$3 per pound for the proper disposal of these devices through a hazardous waste handler. Why incur these costs, when TRC will provide **FREE collection bins and pay all transportation/disposal costs to facilitate the proper disposal of these devices.**

Please review your inventory for any NOS mercury thermostats or waste mercury thermostats returned by customers at all of your facilities. Attached is a template of an internal memo to help facilitate this process. Please contact Ryan Kiscaden, TRC'S Director of National Accounts, at 571-302-0877 if you have any questions or need further assistance.

Sincere Regards,

Mark Tibbetts  
Executive Director

P.S. Don't forget any mercury thermostat returned from your branches counts towards the Big Man on Planet Competition.

Enclosed:      Sample Memo  
                     TRC Procedure  
                     HVAC/R Wholesaler Participation Form

## APPENDIX 2: PLUMBERS SUPPLY LETTER



1765 Duke Street | Alexandria, VA 22314 | [thermostat-recycle.org](http://thermostat-recycle.org)

October 16, 2015

D.H. Adams Co.  
Attn: Branch Manager  
100 Thomas Street  
Worcester, MA 1608

Dear Branch Manager,

I am writing you because HVAC Wholesale Distributors in the state of Massachusetts are required to act as collection point for waste mercury thermostats. Otherwise they are prohibited from selling any thermostat. Thermostat Recycling Corporation (TRC) has no record of your branch location participating in its program and as such it seems likely your business is not in compliance with Massachusetts law.

TRC is a non-profit organization funded by thermostat manufacturers. It operates the mandatory collection program in Massachusetts and provides HVAC wholesalers an easy means of complying with the law. Participating wholesale locations are provided with a plastic recycling bin to collect and transport mercury thermostats. This bin contains a liner, instructions, and a pre-paid shipping label to be used to return the bin to TRC.

All that is required from wholesale distributors is to collect waste mercury thermostats from their customers, ship the recycling bin to TRC at least once per year. They also must promote the availability of the program using the provided marketing collateral. Upon receiving the bin, TRC empties it and returns it refilled with the materials repeating the process. There are no recurring fees to participate in the program.

Several Plumber's Supply locations in Massachusetts are already participating. Please complete the attached form to order a container. If you reply within 30 days, TRC will waive the customer \$25.00 participation fee. More information on TRC can be found at [www.thermostats-recycle.org](http://www.thermostats-recycle.org) or please call me direct at 571-302-0877.

Looking forward to speaking,

Ryan L Kiscaden  
Director of National Accounts

ENCLOSED:  
MA State Law  
HVAC/r Wholesale Participation Form

## APPENDIX 3: WINSUPPLY LETTER



1765 Duke Street | Alexandria, VA 22314 | [thermostat-recycle.org](http://thermostat-recycle.org)

October 28, 2015

Worcester Winnelson Co.  
ATTN: Branch Manager  
100 Southbridge St  
Auburn, MA 01501

Dear Branch Manager:

I am writing you because HVAC Wholesale Distributors in the state of Rhode Island are required to act as a collection point for waste mercury thermostats. Otherwise they are prohibited from selling any thermostat. Wholesale distributor locations are bound by this law only if they sell boilers. However, all Winsupply locations should be prepared to meet their customers' needs to properly dispose of waste mercury thermostats by having a recycling bin present. Thermostat Recycling Corporation (TRC) has no record of your branch location participating in its program and as such your business may not be in compliance with Rhode Island law.

TRC is a non-profit organization funded by thermostat manufacturers. It operates the mandatory collection program in Rhode Island and provides HVAC wholesalers an easy means of complying with the law. Participating wholesale locations are provided with a plastic recycling bin to collect and transport mercury thermostats. This bin contains a liner, instructions, and a pre-paid shipping label to be used to return the bin to TRC.

All that is required from wholesale distributors is to collect waste mercury thermostats from their customers and ship the recycling bin to TRC at least once per year. They also must promote the availability of the program using the provided marketing collateral. Upon receiving the bin, TRC empties it and returns it refilled with the materials repeating the process. There are no recurring fees to participate in the program.

Many Winsupply locations nation-wide are already participating. Complete the attached form to order a container. If you reply within two weeks, TRC will waive the customer \$25.00 participation fee. TRC can be found at [www.thermostat-recycle.org](http://www.thermostat-recycle.org) or please call me direct at 571-302-0877.

Looking forward to speaking,

Ryan L. Kiscaden  
Director of National Accounts

ENCLOSED:  
Rhode Island State Law  
HVAC/r Wholesale Participation Form



## APPENDIX 4: LETTER TO CONTRACTING LOCATIONS ACCOMPANYING FREE 18X24 POSTER



1765 Duke Street | Alexandria, VA 22314 | [thermostat-recycle.org](http://thermostat-recycle.org)

October 16, 2015



**Subject: Participation in Thermostat Recycling Corporation's Program**

Dear Mr. Bachand:

Thermostat Recycling Corporation (TRC) is providing you a copy of the enclosed poster in an effort to raise awareness and increase participation in TRC's stewardship program. Massachusetts law requires HVAC contractors and their employees to recycle all mercury thermostats removed service. We encourage you to display this poster to remind your technicians to recycle.

The law also requires all HVAC wholesalers in the state to take mercury thermostats off your hands at no cost. So, on your next trip to your wholesaler, simply bring any mercury thermostats you've removed from service to recycle for free.

To learn more about the benefits of the program, visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org).

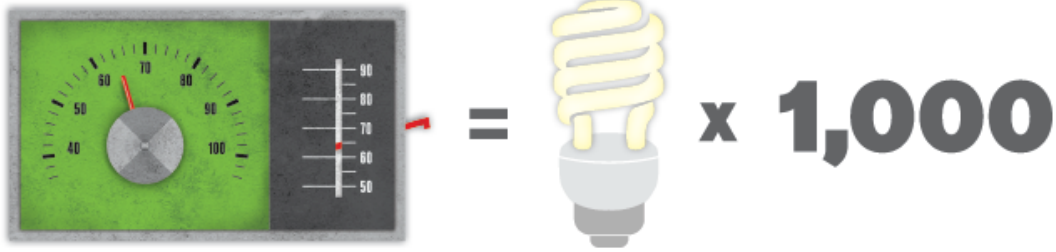
Sincere Regards,

Christyn Zehnder  
Director of Marketing

[www.thermostat-recycle.org](http://www.thermostat-recycle.org) | 888-266-0550

## APPENDIX 5: DECEMBER LETTER TO CONTRACTORS

Did you know?



One mercury thermostat contains approximately **1,000** times more mercury than a CFL bulb.

.....  
TRC runs a program where you can recycle mercury thermostats **for free** at HVAC wholesaler locations.



TRC's program offers a free and simple way to properly dispose of mercury thermostats. Next time you visit a participating HVAC wholesaler location, bring all mercury thermostats you've accumulated to recycle.



Visit [www.thermostat-recycle.org/search](http://www.thermostat-recycle.org/search) to see a full list of participating collection sites near you, or call TRC at **888-266-0550** with any questions.

## APPENDIX 6: OESP DEDICATED EBLAST



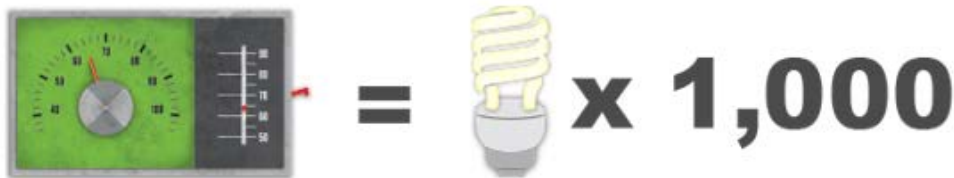
[Thermostat-Recycle.org](http://Thermostat-Recycle.org)  
[TRC@Thermostat-Recycle.org](mailto:TRC@Thermostat-Recycle.org)  
1-888-266-0550

### Every Thermostat, Every Time

#### One Mercury Thermostat Contains 1,000x More Mercury Than a CFL Bulb

Would you throw 1,000 CFL bulbs in the trash? Trashing a mercury thermostat from time to time might not seem very significant, but it is, and they add up.

Not only is it bad for the environment, but disposing of mercury thermostats in the trash is also against the law in several states. Regulated as hazardous waste, failure to recycle could lead to fines up to \$25,000 per violation.



Thermostat Recycling Corporation (TRC) provides an easy way for you and your employees to comply with state law by recycling mercury thermostats at participating HVAC wholesale distributors. Additionally, HVAC contractors with seven or more technicians, or operating in rural communities, are eligible to participate in TRC's program directly.

Sign up online by 10/31 and enter Promo Code OESP to receive a free recycling container that holds approximately 100 mercury thermostats and contains all necessary materials for recurring shipments to TRC at no cost to you.

Visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) to learn more about how easy it is to take advantage of the program.

\*Disposal bans apply in the following states: CA, CT, FL, IA, IL, ME, MA, MN, NY, NH, OR, PA, RI, and VT.

[Sign Up](#)

## APPENDIX 7: CONTRACTING BUSINESS JANUARY EBLAST



Thermostat-Recycle.org  
TRC@Thermostat-Recycle.org  
1-888-266-0550

# Free Mercury Thermostat Recycling

## Stay in Compliance with State Laws

Your state prohibits the disposal of all mercury thermostats in solid waste\*. Many states go further by requiring all HVAC contractors to recycle every mercury thermostat removed from service — prohibiting them to leave them at the customer's premise. **Violations can result in fines up to \$25,000 per day.**

Thermostat Recycling Corporation (TRC) offers a program to help HVAC contractors comply with the law. As a non-profit, TRC provides mercury thermostat recycling containers to your **local HVAC wholesalers** to collect them at no cost to you.



If you are an HVAC wholesale distributor or contracting business with seven or more technicians, you may participate directly in TRC's program by ordering a collection container. **Sign up by 2/13 and enter Promo Code CBEMAIL to receive a free recycling container** that holds approximately 100 mercury thermostats and contains all necessary materials to return the container to TRC at no cost to you.

Visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) to learn more about how easy it is to take advantage of the program.

\*Disposal bans apply in the following states: CA, CT, FL, IA, IL, ME, MA, MN, NY, NH, OR, PA, RI, and VT.

[Sign Up](#)

## APPENDIX 8: CONTRACTING BUSINESS JUNE EBLAST



[Thermostat-Recycle.org](http://Thermostat-Recycle.org)  
[TRC@Thermostat-Recycle.org](mailto:TRC@Thermostat-Recycle.org)  
1-888-266-0550

### Free Mercury Thermostat Recycling

#### Stay in Compliance with State Laws

Your state prohibits the disposal of all mercury thermostats in solid waste\*. Many states go further by requiring all HVAC contractors to recycle every mercury thermostat removed from service - prohibiting them to leave them at the customer's premise. **Violations can result in fines up to \$25,000 per day.**

Each mercury thermostat contains at least 1,000 times more mercury than a CFL bulb. Would you throw 1,000 CFLs in the trash? Make sure to recycle every mercury thermostat, every time.



Thermostat Recycling Corporation (TRC) offers a program to help HVAC contractors comply with the law. The non-profit provides mercury thermostat recycling containers to your local HVAC wholesalers to collect them at no cost to you.

If you are an HVAC wholesale distributor or contracting business with seven or more technicians, you may participate directly in TRC's program by ordering a collection container. **Sign up by 6/30 and enter Promo Code CBEMAIL to receive a free recycling container** that holds approximately 100 mercury thermostats and contains all necessary materials for recurring shipments to TRC at no cost to you.

Visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) to learn more about how easy it is to take advantage of the program.

\*Disposal bans apply in the following states: CA, CT, FL, IA, IL, ME, MA, MN, NY, NH, OR, PA, RI, and VT.

[Sign Up](#)



## APPENDIX 9: COLLECTION LOCATION PHONE CALLS

Date	Collection Location	City
4/1/2015	Center For Ecological Technology-Pittsfield	Pittsfield
4/1/2015	United Refrigeration-Springfield	Springfield
4/1/2015	Westfield Health Dept.	Westfield
4/1/2015	Town Of West Springfield, Dept. Of Public Works	West Springfield
4/1/2015	Sid Harvey Industries-Springfield	West Springfield
4/1/2015	Board Of Health-Palmer	Palmer
4/1/2015	Raynham Transfer Station	Bristol
4/1/2015	Nbswmd Offices	Adams
4/1/2015	South Shore Oil Heat Supply	Brockton
4/1/2015	Department Of Public Works	Williamstown
4/3/2015	United Refrigeration #39	Worcester
4/3/2015	Homans Associates LLC-Braintree	Braintree
4/3/2015	Air Purchases Inc.-Burlington	Burlington
4/3/2015	Alliance Express	Chelsea
4/3/2015	The Bell/Simons Companies-Palmer	Palmer
4/3/2015	Carrier Enterprise - Peabody	Auburn
4/3/2015	Carrier Enterprise-Hyannis	Hyannis
4/3/2015	Carrier Enterprise-Springfield	Springfield
4/3/2015	Delta T Distributing Bridgewater	Bridgewater
4/3/2015	Johnstone Supply Co-Medford	Medford
5/13/2015	Nbswmd Offices	Adams
5/13/2015	Dept Of Public Works-Millis	Millis
5/13/2015	Peabody Supply Co	North Andover
5/13/2015	Oil Express-Falmouth	East Falmouth
5/13/2015	S. G. Torrice Co., Inc.-Wilmington	Wilmington

## APPENDIX 10: COLLECTION LOCATION SITE VISITS

(SORTED BY DATE VISITED, THEN ALPHABETICALLY BY CITY)

Date of visit	Collection Location	City	Zip Code	County
3/3/2015	C.S.G. Supply Co. Inc	Haverhill	01830	Essex County
3/3/2015	The Portland Group	Haverhill	01832	Essex County
3/3/2015	Dugan Supply	Newbury Port	01950	Essex County
3/4/2015	Scanlon Associates	Andover	01810	Essex County
3/4/2015	Delta T Distributing Chelmsford	Chelmsford	01824	Middlesex County
3/4/2015	Grainger-Lawrence	Lawrence	01841	Essex County
3/4/2015	The Granite Group-Lowell	Lowell	01851	Middlesex County
3/4/2015	F.W. Webb Co.-Lowell	Lowell	01857	Middlesex County
3/4/2015	F.W. Webb	Methuen	01844	Essex County
3/4/2015	Bell Simons Co.-Methuen	Methuen	01844	Essex County
3/4/2015	Sid Harvey -Methuen	Methuen	08144	Essex County
3/4/2015	Peabody Supply Co	North Andover	01845	Essex County
3/5/2015	F W Webb	Bedford	01730	Middlesex County
3/5/2015	S. G. Torrice Corp	Franklin	02038	Norfolk County
3/5/2015	Delta T Distributing Providence Franklin	Franklin	02038	Norfolk County
3/5/2015	United Refrigeration #V0	Needham	02494	Norfolk County
3/5/2015	Robinson Supply Co. Inc.-Plainville	Plainville	02762	Norfolk County
3/5/2015	Johnstone Supply-Waltham	Waltham	02451	Middlesex County
3/5/2015	Delta T Distributing Waltham	Waltham	02453	Middlesex County
3/5/2015	Carrier Enterprise-Wilmington	Wilmington	01887	Middlesex County
6/23/2015	Scanlon Associates	Andover	01810	Essex County
6/23/2015	Heating Oil Partners	East Falmouth	02356	Bristol County
6/23/2015	Supply New England (Kitchen/Bath gallery)	Falmouth	02540	Barnstable County
6/23/2015	C.S.G. Supply Co. Inc	Haverhill	01830	Essex County
6/23/2015	The Portland Group	Haverhill	01832	Essex County
6/23/2015	Sid Harvey Industries	Hyannis	02601	Barnstable County
6/23/2015	Air Purchases, Inc	Hyannis	02601	Barnstable County
6/23/2015	Carrier Enterprise-Hyannis	Hyannis	02601	Barnstable County

## APPENDIX 10: COLLECTION LOCATION SITE VISITS

(SORTED BY DATE VISITED, THEN ALPHABETICALLY BY CITY)

6/23/2015	The Simons Company-Hyannis	Hyannis	02601	Barnstable County
6/23/2015	S. G. Torrice Corp-Hyannis	Hyannis	02601	Barnstable County
6/23/2015	Grainger-Lawrence	Lawrence	01841	Essex County
6/23/2015	F.W. Webb	Methuen	01844	Essex County
6/23/2015	Sid Harvey -Methuen	Methuen	08144	Essex County
6/23/2015	Bell/Simons Co-Methven	Methven	01844	Essex County
6/23/2015	Peabody Supply Co	North Andover	01845	Essex County
6/23/2015	Supply New England	Orleans	02653	Barnstable County
6/23/2015	Plimpton and Hills Corp	Pittsfield	01201	Berkshire County
6/23/2015	Pittsfield Plumbing Supply	Pittsfield	01201	Berkshire County
6/23/2015	S&A Supply-Pittsfield	Pittsfield	01201	Berkshire County
6/23/2015	F.W. Webb Co.-Pittsfield	Pittsfield	01201	Berkshire County
6/23/2015	TORRINGTON SUPPLY COMPANY INC	PITTSFIELD	1201	Berkshire County
6/23/2015	Simon'S Supply Co Inc-Plymouth	Plymouth	02360	Plymouth County
6/23/2015	Supply New England (Kitchen/Bath gallery)	West Yarmouth	02673	Barnstable County
6/24/2015	F.W. Webb	Falmouth	02540	Barnstable County
6/24/2015	Robinson Supply	Hyannis	02601	Barnstable County
6/24/2015	F.W. Webb	Hyannis	02601	Barnstable County
6/24/2015	F.W. Webb	Plymouth	02360	Plymouth County
6/24/2015	DCNE Equipment and Totaline Parts	Plymouth	02360	Plymouth County
8/24/2015	Quabbin Plumbing Supply	Athol	01331	Worcester County
8/24/2015	Carrier Enterprise - Peabody	Auburn	01501	Worcester County
8/24/2015	F.W. Webb	Auburn	01501	Worcester County
8/24/2015	S.G. Torrice Co	Beverly	01915	Essex County
8/24/2015	Salem Plumbing	Beverly	01915	Essex County
8/24/2015	The Bell Pump Company-Fitchburg	Fitchburg	01420	Worcester County
8/24/2015	F.W. Webb Co. Br #6	Fitchburg	01420	Worcester County
8/24/2015	F.W. Webb Co.-Gloucester	Gloucester	01930	Essex County
8/24/2015	Plimpton & Hills Corp.	Great Barrington	01230	Berkshire County



## APPENDIX 10: COLLECTION LOCATION SITE VISITS

(SORTED BY DATE VISITED, THEN ALPHABETICALLY BY CITY)

8/24/2015	S&A Supply	Great Barrington	01230	Berkshire County
8/24/2015	Berkshire Cty Plbg	Great Barrington	01230	Berkshire County
8/24/2015	F.W. Webb	Greenfield	01301	Franklin County
8/24/2015	Franklin County Plbg	Greenfield	01301	Franklin County
8/24/2015	Rivervalley Supply Co	Haverhill	01831	Essex County
8/24/2015	The Bourneuf Corp	Lynn	01902	Essex County
8/24/2015	Ferguson Enterprises, Inc.-Lynn	Lynn	01903	Essex County
8/24/2015	Torrco	North Adams	01247	Berkshire County
8/24/2015	Security Supply Co	North Adams	01247	Berkshire County
8/24/2015	F.W. Webb	Northampton	01060	Hampshire County
8/24/2015	Northampton Plbg Sup	Northampton	01062	Hampshire County
8/24/2015	The Bell/Simons Companies-Palmer	Palmer	01069	Hampden County
8/24/2015	Bell/Simons Co-Pittsfield	Pittsfield	01201	Berkshire County
8/24/2015	F.W. Webb Co.-Salem	Salem	01970	Essex County
8/24/2015	F.W. Webb	Springfield	01104	Hampden County
8/24/2015	Carrier Enterprise-Springfield	Springfield	01104	Hampden County
8/24/2015	Trane Supply	Springfield	01104	Hampden County
8/24/2015	Plimpton and Hills Corp	Springfield	01105	Hampden County
8/24/2015	Bay State Plumb&Htg Supply Co Inc	Springfield	01108	Hampden County
8/24/2015	Hampden County Plumbing Supply	Springfield	01119	Hampden County
8/24/2015	Westfield Plumbing Supply	Westfield	01085	Hampden County
8/24/2015	Weymouth Winair Co.	Weymouth	02188	Norfolk County
8/24/2015	SG Torrice Corp.	Woburn	01801	Middlesex County
8/24/2015	Johnstone Supply	Worcester	01608	Worcester County
9/28/2015	Supply New England	Attleboro	02703	Bristol County
9/28/2015	Robinson Supply Co. Inc.-Avon	Avon	02322	Norfolk County
9/28/2015	BROCKTON FRNC DUCT DISTRS INC	AVON	2301	Norfolk County
9/28/2015	F W Webb - Boston	Boston	02118	Suffolk County

## APPENDIX 10: COLLECTION LOCATION SITE VISITS

(SORTED BY DATE VISITED, THEN ALPHABETICALLY BY CITY)

9/28/2015	Supply New England (Kitchen/Bath gallery)	Boston	06437	New Haven County
9/28/2015	Bell Simons - Braintree	Braintree	02184	Norfolk County
9/28/2015	Johnstone Supply-Braintree	Braintree	02184	Norfolk County
9/28/2015	Trane Supply - Braintree	Braintree	02184	Norfolk County
9/28/2015	United Refrigeration - Braintree	Braintree	02184	Norfolk County
9/28/2015	Delta T Distributing Bridgewater	Bridgewater	02324	Plymouth County
9/28/2015	F.W. Webb	Brockton	02301	Plymouth County
9/28/2015	Air Purchases Inc.	Brockton	02375	Bristol County
9/28/2015	Air Purchases Inc	Burlington	01803	Middlesex County
9/28/2015	Metropolitan Pipe & Supply	Cambridge	02142	Middlesex County
9/28/2015	Alliance Express	Chelsea	02150	Suffolk County
9/28/2015	F.W. Webb	Dedham	02026	Norfolk County
9/28/2015	Air Purchases, Inc	Dedham	02027	Norfolk County
9/28/2015	Oil Express-Falmouth	East Foulmouth	02532	Barnstable County
9/28/2015	Carrier Enterprise-Fall River	Fall River	02721	Bristol County
9/28/2015	Supply New England	Fall River	02721	Bristol County
9/28/2015	Robinson Supply Co. Inc.-Fall River	Fall River	02722	Bristol County
9/28/2015	FW Webb - Hingham	Hingham	02043	Plymouth County
9/28/2015	Sid Harvey Industries-Malden (Boston)	Malden (Boston)	02148	Middlesex County
9/28/2015	DCNE Equipment and Totaline Parts	Malden	02148	Middlesex County
9/28/2015	F.W. Webb	Malden	02148	Middlesex County
9/28/2015	Carrier Enterprise-Medford	Medford	02155	Middlesex County
9/28/2015	Central Fan Co., Inc	Medford	02155	Middlesex County
9/28/2015	Johnstone Supply Co-Medford	Medford	02155	Middlesex County
9/28/2015	Supply New England	Nantucket	02554	Nantucket County
9/28/2015	Supply New England - Nantucket	Nantucket	02554	Nantucket County
9/28/2015	Plumbers' Supply Co.	New Bedford	02745	Bristol County
9/28/2015	Simons Supply Co - New Bedford	New Bedford	02745	Bristol County
9/28/2015	Supply New England (Kitchen/Bath gallery)	South Uxbridge	01569	Worcester County
9/28/2015	Avon Supply Co. Inc	Wakefield	01880	Middlesex County

## APPENDIX 10: COLLECTION LOCATION SITE VISITS

(SORTED BY DATE VISITED, THEN ALPHABETICALLY BY CITY)

9/28/2015	Pameco Corp.-West Springfield	West Springfield	01089	Hampden County
9/28/2015	Energy Federation, Inc.	Westboro	01581	Worcester County
9/28/2015	DCNE Equipment and Totaline Parts	Westwood	02090	Norfolk County
9/28/2015	Capco Energy Supply	Woburn	02760	Bristol County
9/28/2015	F W Webb - Woburn	Woburn	01801	Middlesex County
9/28/2015	Grainger - Woburn	Woburn	01801	Middlesex County
9/28/2015	Robinson Supply Co. Inc.-Woburn	Woburn	01801	Middlesex County
9/28/2015	Trane Supply - Woburn	Woburn	01801	Middlesex County
9/28/2015	Ferguson	Woburn	18010	Lancaster County

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Collection Location Name	Business Type	Street 1	St 2	City	Zip	County	Phone	Count-Bins at Location	Total Stats	Total Switches	Total Hg	Date(s) of Bin(s) Receipt
Nbswmd Offices	HHW Facility	3 Hoosac St.		Adams	01220	Berkshire County	413 743 8208	1	0	0	0.00	
Dept Of Public Works	HHW Facility	1000 Suffield Street		Agawam	01001	Hampden County	413-821-0624	1	0	0	0.00	
Pioneer Valley Winnelson	Wholesalers	12 Bowles Road		Agawam	01001	Hampden County	413-786-4500	1	44	66	0.41	11/04/2015
Anthol Dpw Suite 20	HHW Facility	584 Main Street		Anthol	01331	Worcester County	774-345-0793	2	0	0	0.00	
Dpw Building Dept	HHW Facility	51 Grove Street		Arlington	02476	Middlesex County	781-316-3108	1	0	0	0.00	
Town Hall	HHW Facility	895 Main Street		Ashby	01431	Middlesex County	978-423-9921	1	0	0	0.00	
Quabbin Plumbing Supply	Wholesalers	38 S. Main Street		Athol	01331	Worcester County	978-248-9500	1	1	1	0.01	08/06/2015
Supply New England	Wholesalers	123 East St.	Po Box 838	Attleboro	02703	Bristol County	508-222-5555	1	0	0	0.00	
Carrier Enterprise	Wholesalers	101 B Millbury Street		Auburn	01501	Worcester County	508-832-0501	1	10	12	0.07	04/21/2015
F.W. Webb	Wholesalers	43 Sword Street		Auburn	01501	Worcester County	508-757-9322	1	18	24	0.15	11/19/2015
R.E. Michel Company	Wholesalers	38 Southbridge Street		Auburn	01501	Worcester County	580-752-3339	2	55	108	0.67	08/13/2015
Brockton Furnace & Duct	Wholesalers	54 Bodwell Street		Avon	02322	Norfolk County	508-580-4560	1	24	32	0.20	08/27/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Distributors Inc.												
Carrier Enterprise	Wholesalers	655 Bodwell Street Ext.		Avon	02322	Norfolk County	508-894-8540	1	0	0	0.00	
Robinson Supply Company	Wholesalers	284 Bodwell Street		Avon	02322	Norfolk County	508-586-5503	1	0	0	0.00	
F.W. Webb Co.	Wholesalers	160 Middlesex Turnpike		Bedford	01730	Middlesex County	781-273-9322	1	0	0	0.00	
Dept Of Public Works	HHW Facility	290 Jackson Street		Belchertown	01007	Hampshire County	413-323-0415	1	0	0	0.00	
F.W. Webb	Wholesalers	37 South Maple Street		Bellingham	02019	Norfolk County	508-966-4999	2	0	0	0.00	
Victory Htg & Air Conditioning Co. Inc.	Contractor	115 Mendon St.		Bellingham	02019	Norfolk County	508 966-9858	2	0	0	0.00	
S.G. Torrice Co	Wholesalers	181 Elliott Street		Beverly	01915	Essex County	978-927-7120	1	0	0	0.00	
Salem Plumbing	Wholesalers	97 River Street		Beverly	01915	Essex County	978-921-1200	1	0	0	0.00	
The Bell Pump Company	Wholesalers	364 Rantoul Street		Beverly	01915	Essex County	978-922-1920	2	70	86	0.53	12/14/2015
Town Hall	HHW Facility	120 Main Street		Blandford	01008	Hampden County	413 822 2046	1	0	0	0.00	
Transfer Station	HHW Facility	12 Forbush Mill Road		Bolton	01740	Worcester County	978-779-6402	1	0	0	0.00	
F.W. Webb	Wholesalers	307 Dorchester Avenue		Boston	02127	Suffolk County	617-227-2240	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Next Step Living, Inc.	Contractor	21 Drydock Ave. 2nd Floor		Boston	02210	Suffolk County	781-507-1911	4	2,846	2,901	17.99	01/28/2015, 01/28/2015, 01/28/2015, 03/16/2015, 03/16/2015, 03/16/2015, 04/20/2015, 04/20/2015, 04/20/2015, 05/19/2015, 05/21/2015, 05/22/2015, 06/26/2015, 06/30/2015, 07/14/2015, 10/14/2015, 10/14/2015, 10/16/2015, 11/24/2015, 11/25/2015, 11/30/2015, 12/02/2015, 12/31/2015, 12/31/2015
S.G. Torrice Company, Inc.	Wholesalers	30 Northampton Street, Rear		Boston	02118	Suffolk County	857-233-4330	1	0	0	0.00	
Supply New England	Wholesalers	70 Windhorn Street		Boston	02134	Suffolk County	617-787-1800	1	2	2	0.01	09/14/2015
The Portland Group	Wholesalers	82 Gerard Street		Boston	02119	Suffolk County	617-442-6950	1	0	0	0.00	
Muirfield Mechanical	Contractor	80 Littlefield Road		Boxborough	01719	Middlesex County	978-263-7130	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Carrier Enterprise	Wholesalers	78 River Street		Braintree	02184	Norfolk County	800-770-9765	1	70	79	0.49	05/29/2015
Johnstone Supply	Wholesalers	180 Allen Street		Braintree	02184	Norfolk County	781-356-1664	1	34	46	0.29	08/28/2015
The Simons Company	Wholesalers	55 Messina Drive		Braintree	02184	Norfolk County	781-848-9394	1	0	0	0.00	
Trane Supply	Wholesalers	100 Messina Drive	Suite S	Braintree	02184	Norfolk County	781-794-9922	1	0	0	0.00	
United Refrigeration #46	Wholesalers	65 Bay State Drive		Braintree	02184	Norfolk County	781-380-3838	1	61	103	0.64	11/11/2015
Delta T Distributing Bridgewater	Wholesalers	20 Scotland Blvd # 7		Bridgewater	02324	Plymouth County	508-279-0525	1	0	0	0.00	
Johnstone Supply	Wholesalers	15 Scotland Boulevard		Bridgewater	02324	Plymouth County	508-279-1661	1	190	547	3.39	10/21/2015, 12/21/2015
Ferguson	Wholesalers	121 N. Beacon St.		Brighton	02135	Suffolk County	617-562-5146	1	0	0	0.00	
Interstate Electric Equipment	Wholesalers	30 Vineland Street		Brighton	02135	Suffolk County	617-782-9000	3	0	0	0.00	
Raynham Transfer Station	HHW Facility	1555 King Philip Street		Bristol	02767	Bristol County	508 824 2718	1	14	14	0.09	04/21/2015
Air Purchases Inc.	Wholesalers	1100 Pearl St # 2		Brockton	02301	Plymouth County	508-230-9399	1	0	0	0.00	
City Of Brockton Recycle Depot	HHW Facility	301 Oak Hill Way		Brockton	02301	Plymouth County	508-580-7827	1	19	24	0.15	09/30/2015
F.W. Webb	Wholesalers	60 Industrial Blvd		Brockton	02301	Plymouth County	508-580-8310	1	43	66	0.41	08/26/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Lennox Parts Plus	Wholesalers	195 Liberty Street		Brockton	02301	Plymouth County	774-297-6000	1	0	0	0.00	
South Shore Oil Heat Supply	Wholesalers	137 Plymouth Street		Brockton	02302	Plymouth County	508-588-3600	4	169	182	1.13	04/29/2015, 04/29/2015
Air Purchases Inc	Wholesalers	24 Blanchard Road		Burlington	01803	Middlesex County	781-273-2050	2	13	19	0.12	11/13/2015
Dept Of Public Works	HHW Facility	147 Hampshire Street		Cambridge	02139	Middlesex County	617-349-4876	1	0	0	0.00	
Honeywell Sgs	Contractor	65 Shawmut Road	Suite 4, 2Nd Fl.	Canton	02021	Norfolk County	781-298-2755	5	0	0	0.00	
The Simons Company	Wholesalers	10 Temple Street		Charlestown	02129	Suffolk County	617-241-7800	1	22	38	0.24	11/17/2015
Delta T Distributing Chelmsford	Wholesalers	10 Elizabeth Drive Ste 1		Chelmsford	01824	Middlesex County	978-244-7820	1	0	0	0.00	
Alliance Express	Contractor	11 Broad Way		Chelsea	02150	Suffolk County	508-548-0131	11	328	386	2.39	07/01/2015, 07/15/2015, 08/05/2015
Atlas Glen-Mor	Contractor	295 Eastern Avenue		Chelsea	02150	Suffolk County	617-887-7357	1	0	0	0.00	
Transfer Station	HHW Facility	815 Newton Street		Chestnut Hill	02467	Norfolk County	617 646 2708	1	0	0	0.00	
Dept Of Public Works	HHW Facility	115 Baskin Drive		Chicopee	01020	Hampden County	413-594-3557	1	0	0	0.00	
Johnstone Supply Co	Wholesalers	590 Center Street		Chicopee	01013	Hampden County	413-781-1721	1	103	150	0.93	10/15/2015
Concord Public Works	HHW Facility	133 Keyes Rd		Concord	01742	Middlesex County	978-318-3240	1	0	0	0.00	
Sid Harvey Industries	Wholesalers	7 Healy Ct		Danvers	01923	Essex County	978-750-4541	1	0	0	0.00	



## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Air Purchases Inc.	Wholesalers	85 Commerce Way		Dedham	02026	Norfolk County		1	0	0	0.00	
F.W. Webb	Wholesalers	45 Commerce Way		Dedham	02026	Norfolk County	781-329-6200	2	38	62	0.38	08/27/2015
Supply New England	Wholesalers	25 East Line Road		Edgartown	02539	Dukes County	508-693-6792	1	0	0	0.00	
Board Of Health	HHW Facility	40 Center Street		Fairhaven	02719	Bristol County	508-979-4022	1	0	0	0.00	
Carrier Enterprise	Wholesalers	599 Commerce Street		Fall River	02721	Bristol County	800-581-9181	1	2	17	0.11	03/10/2015
Robinson Supply Company	Wholesalers	195 Broadway		Fall River	02721	Bristol County	508-971-5829	1	0	0	0.00	
Simon's Supply Co Inc	Wholesalers	821 Cambridge Street		Fall River	02721	Bristol County	508 679 6431	1	105	118	0.73	12/09/2015
Supply New England	Wholesalers	186 Plymouth Avenue		Fall River	02722	Bristol County	508-673-5801	1	8	8	0.05	12/01/2015
F.W. Webb	Wholesalers	171 Worcester Court		Falmouth	02540	Barnstable County	774-255-4155	1	0	0	0.00	
Supply New England	Wholesalers	343 Dillingham Avenue		Falmouth	02540	Barnstable County	508-457-9720	1	7	7	0.04	06/12/2015
F.W. Webb Co. Br #6	Wholesalers	135 Falulah St.		Fitchburg	01420	Worcester County	978-345-4121	1	77	97	0.60	08/10/2015
The Bell Pump Company	Wholesalers	56 Daniels Street		Fitchburg	01420	Worcester County	978-342-6686	1	54	96	0.60	08/10/2015
Center For Ecological Technology	HHW Facility	320 Riverside Dr Suite 1A		Florence	01062	Hampshire County	202-340-6232	5	174	180	1.12	02/24/2015, 11/20/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

The Portland Group	Wholesalers	390 Franklin Street		Framingham	01702	Middlesex County	508-875-7484	1	0	0	0.00	
Delta T Distributing Providence Franklin	Wholesalers	40 Kenwood Circle Unit 5		Franklin	02038	Norfolk County	508-528-6660	1	78	112	0.69	02/19/2015
Ferguson	Wholesalers	22 National Drive		Franklin	02038	Norfolk County	508-528-0006	1	59	63	0.39	12/03/2015
S. G. Torrice Corp	Wholesalers	1376 W. Central Street Suite 20		Franklin	02038	Norfolk County	508-541-9014	2	158	227	1.41	01/22/2015, 10/30/2015
Transfer Station	HHW Facility	744 West Street		Gardner	01440	Worcester County	978-630-4013	1	0	0	0.00	
F.W. Webb Co.	Wholesalers	51 Great Republic Drive		Gloucester	01930	Essex County	978-283-7800	2	0	0	0.00	
Chet Lulek, Chair Of Board Of Health	HHW Facility	70 Pond Hill Road		Goshen	01032	Hampshire County	413 268 7792	1	0	0	0.00	
Board Of Health	HHW Facility	250 State Street		Granby	01033	Hampshire County	413-467-7174	1	0	0	0.00	
Berkshire County Plumbing Supply	Wholesalers	305 Stockbridge Rd		Great Barrington	01230	Berkshire County	413-528-0056	2	74	81	0.50	08/11/2015
Plimpton & Hills Corp.	Wholesalers	10 Crissey Road		Great Barrington	01230	Berkshire County	413-528-6723	1	2	2	0.01	10/07/2015
S&A Supply	Wholesalers	20 Maple Ave		Great Barrington	01230	Berkshire County	413-528-3470	2	0	0	0.00	
F.W. Webb	Wholesalers	136 Silvio O Conte Drive		Greenfield	01301	Franklin County	413-773-3644	1	124	138	0.86	07/14/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Franklin County Plbg	Wholesalers	340 Chapman Street		Greenfield	01301	Franklin County	413-774-6002	3	83	91	0.56	07/31/2015
Franklin County Solid Waste Management District	HHW Facility	50 Miles Street		Greenfield	01301	Franklin County	413-772-2438	1	168	189	1.17	02/26/2015, 12/14/2015
Greenfield Department Of Works	HHW Facility	14 Court Square		Greenfield	01301	Franklin County	413-772-1528	1	0	0	0.00	
Town Hall	HHW Facility	3650 Hancock Road		Hancock	01237	Berkshire County	413 738 5225	1	0	0	0.00	
Rivervalley Supply Co	Wholesalers	472 River Street		Haverhill	01831	Essex County	978-374-4771	1	11	13	0.08	05/08/2015
The Portland Group	Wholesalers	472 River Street		Haverhill	01832	Essex County	978-374-4771	1	0	0	0.00	
F.W. Webb	Wholesalers	45 Park Pond Road		Hingham	02043	Plymouth County	781-749-9322	1	16	21	0.13	08/27/2015
Dept Of Public Works	HHW Facility	50 North Franklin Street		Holbrook	02343	Norfolk County	781-767-1800	1	0	0	0.00	
Holyoke Public Works Dept.	HHW Facility	63 Canal St.		Holyoke	01040	Hampden County	413-322-5645	1	12	14	0.09	09/21/2015
The Bell/Simons Co	Wholesalers	6 Kane Industrial Drive		Hudson	01749	Middlesex County	978-562-9070	1	0	0	0.00	
Air Purchases Inc.	Wholesalers	68 Cit Avenue		Hyannis	02601	Barnstable County		1	0	0	0.00	
Carrier Enterprise	Wholesalers	192 Airport Road		Hyannis	02601	Barnstable County	508-790-1111	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

F.W. Webb	Wholesalers	108 Breeds Hill Road		Hyannis	02601	Barnstable County	(508) 775-3890	1	11	11	0.07	06/25/2015
Robinson Supply Company	Wholesalers	35 Cit Avenue		Hyannis	02601	Barnstable County	508-775-4115	1	4	4	0.02	06/17/2015
S. G. Torrice Corp	Wholesalers	71 Bodick Road		Hyannis	02601	Barnstable County	508-790-8856	1	0	0	0.00	
The Simons Company	Wholesalers	105D Ferndoc Street		Hyannis	02601	Barnstable County	508-771-3588	1	0	0	0.00	
Morris Heating & Air	Contractor	56 Mitchell Road		Ipswich	01938	Essex County	978-356-4328	1	0	0	0.00	
Tri-Town Health Dept	HHW Facility	45 Railroad Street		Lee	01238	Berkshire County	413-243-5540	1	0	0	0.00	
The Granite Group	Wholesalers	320 Hamilton St		Leominster	01453	Worcester County	978-728-0701	1	0	0	0.00	
Town Hall	HHW Facility	9 Montague Rd		Leverett	01054	Franklin County	413-548-9699	1	0	0	0.00	
Dept Of Public Works	HHW Facility	31 Pondsides Road		Longmeadow	01106	Hampden County	413 567 3400	1	0	0	0.00	
F. W. Webb Company	Wholesalers	120 Old Canal Drive		Lowell	01851	Middlesex County		1	0	0	0.00	
Johnstone Of Lowell	Wholesalers	588 Gorham St.		Lowell	01852	Middlesex County		1	0	0	0.00	
The Granite Group	Wholesalers	1035 Westford St.		Lowell	01851	Middlesex County		2	0	0	0.00	
Board Of Health	HHW Facility	960 Massachusetts Ave		Lunenburg	01462	Worcester County	978-582-4146X430	1	0	0	0.00	
Ferguson	Wholesalers	400 Lynnway		Lynn	01903	Essex County	781-592-1200	1	25	38	0.24	09/23/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

North Shore Heating	Wholesalers	454 Summer Street		Lynn	01905	Essex County	781-595-5101	1	0	0	0.00	
The Bourneuf Corp	Wholesalers	55 Alley St.		Lynn	01902	Essex County	781-592-0583	1	0	0	0.00	
Town Of Lynnfield Dpw	HHW Facility	55 Summer Street		Lynnfield	01940	Essex County	781-344-9595	1	0	0	0.00	
Sid Harvey Industries	Wholesalers	1256 Eastern Ave.		Malden (Boston)	02148	Middlesex County	781-332-9600	1	0	0	0.00	
Distributor Corporation Of New England	Wholesalers	767 Eastern Avenue		Malden	02148	Middlesex County	800-347-8804	1	0	0	0.00	
F.W. Webb	Wholesalers	700 Broadway		Malden	02148	Middlesex County	781-322-7111	1	9	12	0.07	09/16/2015
Sid Harvey	Wholesalers	18 Green St.		Malden	02148	Middlesex County	781-322-9600	1	15	19	0.12	10/23/2015
Ferguson	Wholesalers	405 Maple Street		Marlborough	01752	Middlesex County	508-481-4221	1	0	0	0.00	
Town Hall Dept Of Public Works	HHW Facility	870 Moraine Street		Marshfield	02050	Plymouth County	781-831-3134	1	0	0	0.00	
Ferguson	Wholesalers	106 Falmouth Road		Mashpee	02649	Barnstable County	508-539-8704	1	0	0	0.00	
Carrier Enterprise	Wholesalers	57 Hicks Ave.		Medford	02155	Middlesex County	781-391-4199	1	3	3	0.02	09/09/2015
Central Fan Company, Inc.	Wholesalers	3890 Mystic Valley Pkwy		Medford	02155	Middlesex County	781-393-4456	1	0	0	0.00	
Johnstone Supply Co	Wholesalers	322 Mystic Avenue		Medford	02155	Middlesex County	781-391-5550	1	20	107	0.66	09/10/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

R.E. Michel Company, Inc	Wholesalers	63 Hicks Avenue		Medford	02155	Middlesex County	781-395-3407	3	0	0	0.00	
The Portland Group	Wholesalers	74 Mystic Avenue		Medford	02155	Middlesex County	781-395-5807	1	0	0	0.00	
F.W. Webb	Wholesalers	98 Lindbergh Avenue		Methuen	01844	Essex County	781-325-7041	1	31	51	0.32	05/15/2015
All-Temp	Contractor	16 Pond Street		Milford	01757	Worcester County	508-478-0088	1	0	0	0.00	
Town Hall	HHW Facility	807 Mill River South Field Rd		Mill River	01244	Berkshire County	413-229-8116	1	0	0	0.00	
Dept Of Public Works	HHW Facility	900 Main St		Millis	02054	Norfolk County	508-376-5424	1	0	0	0.00	
Supply New England	Wholesalers	17 Teasdale Circle		Nantucket	02554	Nantucket County	508-228-0544	1	65	66	0.41	09/29/2015
Ferguson	Wholesalers	64 Worcester Road		Natick	01760	Middlesex County	508-655-3301	1	0	0	0.00	
Homeserve	Wholesalers	16 Tech Circle		Natick	01760	Middlesex County		2	148	150	0.93	10/30/2015
United Refrigeration #V0	Wholesalers	150 Gould Street		Needham	02494	Norfolk County	781-433-0090	1	41	63	0.39	01/19/2015
F.W Webb Company	Wholesalers	915 Church Street		New Bedford	02745	Bristol County		1	0	0	0.00	
Plumber's Supply	Wholesalers	429 Church Street		New Bedford	02745	Bristol County	508-985-4966	2	0	0	0.00	
Plumber's Supply	Wholesalers	700 Acushnet Avenue		New Bedford	02740	Bristol County	508-997-9451	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Simon's Supply Co Inc	Wholesalers	770 Mt. Pleasant St		New Bedford	02745	Bristol County	508 995 5161	1	10	16	0.10	11/20/2015
Dugan Supply Company	Wholesalers	9 Graf Road		Newburyport	01950	Essex County	978-462-6656	2	46	46	0.29	02/12/2015, 11/23/2015
Ferguson	Wholesalers	56 Ramsdell St.		Newton	02461	Middlesex County	617-630-0100	1	0	0	0.00	
The Portland Group	Wholesalers	224 Needham Street	Suite 4	Newton	02464	Middlesex County	617-332-6662	1	0	0	0.00	
Security Supply Co	Wholesalers	65 Walden St		North Adams	01247	Berkshire County	413-664-6374	2	0	0	0.00	
Torrco	Wholesalers	96 Union Street		North Adams	01247	Berkshire County	413-664-2790	1	0	0	0.00	
The Portland Group	Wholesalers	74 Salem Road		North Billerica	01862	Middlesex County	978-262-1356	1	0	0	0.00	
Town Of Dighton	HHW Facility	979 Somerset Avenue		North Dighton	02764	Bristol County	508-669-5182	1	0	0	0.00	
Town Hall	HHW Facility	171 Egremont Plain Road		North Egremont	01252	Berkshire County	413-528-0182	1	0	0	0.00	
F.W. Webb	Wholesalers	135 Industrial Drive		Northampton	01060	Hampshire County	413-586-8100	1	234	265	1.64	07/17/2015, 08/06/2015, 12/23/2015
Northampton Dpw	HHW Facility	125 Locust Street		Northampton	01060	Hampshire County	413 587-1059	2	0	0	0.00	
Northampton Plumbing Supply	Wholesalers	168 Industrial Drive	Suite 3	Northampton	01060	Hampshire County	413-584-4250	3	0	0	0.00	
Board Of Health	HHW Facility	70 E. Main Street		Norton	02766	Bristol County	508-285-0262	1	28	48	0.30	03/06/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Supply New Englad	Wholesalers	2 Bog Hollow Road		Orleans	02653	Barnstable County	508-255-0560	1	7	7	0.04	06/15/2015
Bell/Simons Co	Wholesalers	1127 South Main		Palmer	01069	Hampden County	413-283-1902	3	0	0	0.00	
Board Of Health	HHW Facility	4417 Main Street		Palmer	01069	Hampden County	413-283-2606	1	0	0	0.00	
Peabody Supply Co	Wholesalers	58R Pulaski Street		Peabody	01960	Essex County	978-532-2200	1	0	0	0.00	
S. G. Torrice Corp	Wholesalers	One First Ave Suite 3B		Peabody	01960	Essex County	978-977-7900	2	6	7	0.04	11/11/2015
Town Of Phillipston	HHW Facility	50 The Common		Phillipston	01331	Worcester County	978-249-1735	1	0	0	0.00	
Bell/Simons Co	Wholesalers	18 Taconic Park Ave		Pittsfield	01201	Berkshire County	413-443-7718	1	10	11	0.07	08/07/2015
Center For Ecological Technology	Wholesalers	112 Elm Street		Pittsfield	01201	Berkshire County	413-445-4556 ext 14	1	25	26	0.16	05/04/2015
F.W. Webb	Wholesalers	35 Commercial Street		Pittsfield	01201	Berkshire County	413-448-8205	2	6	6	0.04	06/11/2015
O'Connell's Oil Associates Inc.	Contractor	545 Merrill Rd.		Pittsfield	01202	Berkshire County	413-499-4800	1	0	0	0.00	
Pittsfield Plumbing Supply	Wholesalers	45 Commercial Street		Pittsfield	01201	Berkshire County	413-499-1902	1	0	0	0.00	
Plimpton & Hills Corp.	Wholesalers	28 Yorkshire Avenue		Pittsfield	01201	Berkshire County	413-629-1941	1	0	0	0.00	
S&A Supply	Wholesalers	1311 East St		Pittsfield	01201	Berkshire County	413-443-9681	4	0	0	0.00	



## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Torrco	Wholesalers	30 Commercial Street		Pittsfield	01201	Berkshire County	800-570-1515	1	0	0	0.00	
Robinson Supply Company	Wholesalers	147 Washington Street		Plainville	02762	Norfolk County	508-643-1300	1	0	0	0.00	
Dept Of Public Works	HHW Facility	9 Nantasket Avenue		Plymouth	02045	Plymouth County	781-925-0900	1	0	0	0.00	
Distributor Corporation Of New England	Wholesalers	22 Mary B Lane		Plymouth	02360	Plymouth County	855-710-3385	1	5	7	0.04	06/16/2015
F.W. Webb	Wholesalers	3 Collins Avenue		Plymouth	02360	Plymouth County	508-830-4666	1	4	5	0.03	11/24/2015
Simon's Supply Co Inc	Wholesalers	6 Apollo 11 Road		Plymouth	02360	Plymouth County	508 747 5112	1	0	0	0.00	
Town Of Plympton	HHW Facility	23 Palmer Road		Plympton	02367	Plymouth County	781-585-3703	1	0	0	0.00	
S. G. Torrice Corp	Wholesalers	81 York Avenue		Randolph	02368	Norfolk County	800-727-HVAC	2	4	4	0.02	10/30/2015
The Portland Group	Wholesalers	350 Richmond Street		Raynham Center	02768	Bristol County	508-880-4902	1	92	177	1.10	07/09/2015, 11/05/2015
Board Of Health	HHW Facility	139 Central Street		Rowley	01969	Essex County	978-948-2231	1	0	0	0.00	
Russell Town Hall	HHW Facility	65 Main Street		Russell	01071	Hampden County	413-862-4769	1	0	0	0.00	
F.W. Webb Co.	Wholesalers	295 Bridge Street		Salem	01970	Essex County	978-744-6550	1	0	0	0.00	
Seekonk Public Works	HHW Facility	871 Taunton Ave		Seekonk	02771	Bristol County	508-336-7404	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Town Hall, Board Of Selectmen	HHW Facility	140 Wood Street		Somerset	02726	Bristol County	508-646-2800	1	2	2	0.01	05/28/2015
Abco Hvacr Supply-Boston	Wholesalers	10 First Ave.		Somerville	02143	Middlesex County	617-625-5500	1	86	158	0.98	08/31/2015
United Refrigeration #37	Wholesalers	69 Innerbelt Road		Somerville	02143	Middlesex County	617-776-8900	2	0	0	0.00	
Town Of South Hadley	HHW Facility	10 Industrial Drive		South Hadley	01075	Hampshire County	413-538-5033	2	31	33	0.20	06/12/2015
Carrier Enterprise	Wholesalers	155 Northboro Road		Southborough	01772	Worcester County	800-406-2523	1	9	9	0.06	02/10/2015
The Simons Company	Wholesalers	150 Cordaville Rd.		Southborough	01772	Worcester County	508-879-6590	1	0	0	0.00	
Town Hall	HHW Facility	41 Elm Street		Southbridge	01550	Worcester County	508-764-4252	1	0	0	0.00	
Dept Of Public Works	HHW Facility	454 College Highway		Southwick	01077	Hampden County	413-569-3040	1	0	0	0.00	
Bay State Plumb&Htg Supply Co Inc	Wholesalers	15 Mill Street		Springfield	01108	Hampden County		1	0	0	0.00	
Bell Pump Co	Wholesalers	210 Albany St		Springfield	01105	Hampden County		1	67	77	0.48	03/06/2015
Bell/Simons Co	Wholesalers	545 St. James Avenue		Springfield	01109	Hampden County	413-781-6646	2	91	125	0.78	10/01/2015
Carrier Enterprise	Wholesalers	467 Cottage Street		Springfield	01104	Hampden County	413-739-6045	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Dept Of Public Works	HHW Facility	70 Tapley Street		Springfield	01104	Hampden County	413-787-6075	1	0	0	0.00	
F.W. Webb	Wholesalers	145 Performance Blvd		Springfield	01104	Hampden County	413-781-7700	1	0	0	0.00	
Hampden County Plumbing Supply	Wholesalers	372 Pasco Road		Springfield	01119	Hampden County	413-782-4420	1	0	0	0.00	
Hurley & David Inc	Contractor	90 Fisk Ave		Springfield	01107	Hampden County	413-732-3141	1	0	0	0.00	
Plimpton & Hills Corp.	Wholesalers	25 Mill River Lane		Springfield	01105	Hampden County	413-731-1500	1	11	172	1.07	08/17/2015
Trane Supply	Wholesalers	90 Carando Drive		Springfield	01104	Hampden County	413-271-3001	1	0	0	0.00	
United Refrigeration	Wholesalers	259 Page Blvd		Springfield	01104	Hampden County	413-737-3984	1	63	116	0.72	04/20/2015
Plumber's Supply	Wholesalers	10 Dana Street		Taunton	02780	Bristol County	508-823-0733	1	0	0	0.00	
United Refrigeration	Wholesalers	230 John Hancock Road		Taunton	02780	Bristol County	508-823-7300	1	0	0	0.00	
Board Of Health	HHW Facility	272 Main Street		Townsend	01469	Middlesex County	978-597-1713	1	0	0	0.00	
Board Of Health	HHW Facility	21 South Main Street		Uxbridge	01569	Worcester County	508-278-8604	1	0	0	0.00	
Supply New England	Wholesalers	582 Quaker Highway		Uxbridge	01569	Worcester County	508-278-7761	1	69	70	0.43	11/23/2015
Avon Supply	Wholesalers	123 Foundry Street		Wakefield	01880	Middlesex County	781-245-8715	2	9	10	0.06	03/04/2015, 06/10/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

William Lee Memorial Town Hall	HHW Facility	1 Lafayette Street		Wakefield	01880	Middlesex County	781-246-6300	1	0	0	0.00	
Town Offices	HHW Facility	3 Hollow Road		Wales	01081	Hampden County	413 245 7571 X105	1	0	0	0.00	
Delta T Distributing Waltham	Wholesalers	301 2nd Ave		Waltham	02453	Middlesex County	781-893-0800	1	0	0	0.00	
Johnstone Of Waltham	Wholesalers	244 Second Ave.		Waltham	02451	Middlesex County		2	0	0	0.00	
P.R. Douglas Co., Inc.	Contractor	33 Calvary Street		Waltham	02453	Middlesex County	781-330-7084	1	0	0	0.00	
F.W. Webb	Wholesalers	33 Grove Street		Watertown	02472	Middlesex County	617-924-2840	1	0	0	0.00	
The Portland Group	Wholesalers	20 Westwood Street		West Newton	02465	Middlesex County	617-527-7040	1	0	0	0.00	
Pameco Corp.	Wholesalers	89 Myron St		West Springfield	01089	Hampden County	413-781-4830	1	0	0	0.00	
Sid Harvey Industries	Wholesalers	8 Capital Drive		West Springfield	01089	Hampden County	413-788-0979	1	108	111	0.69	04/27/2015
Town Of West Springfield, Dept. Of Public Works	HHW Facility	26 Central Street		West Springfield	01089	Hampden County	(413) 263-3234	1	0	0	0.00	
Town Offices	HHW Facility	21 State Line Road		West Stockbridge	01266	Berkshire County	413-232-0300X319	1	0	0	0.00	
American Ref-Fuel	Contractor	141 Cranberry Hwy.		West Wareham	02576	Plymouth County	508-291-4427	25	0	0	0.00	
Sid Harvey Industries	Wholesalers	46 Mid-Tech Dr		West Yarmouth	02673	Barnstable County	508-711-4590	1	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Supply New England	Wholesalers	28 Aaron's Way		West Yarmouth	02673	Barnstable County	508-775-5815	1	0	0	0.00	
Westfield Health Dept.	HHW Facility	59 Court Street		Westfield	01085	Hampden County	413-572-6206	1	0	0	0.00	
Westfield Plumbing Supply	Wholesalers	8 Coleman Avenue		Westfield	01085	Hampden County	413-562-1046	1	0	0	0.00	
Heating Oil Partners	Wholesalers	23 Village Inn Rd		Westminster	01473	Worcester County	800-922-8585	1	0	0	0.00	
Westport Board Of Health	HHW Facility	856 Main Road		Westport	02790	Bristol County	508 636 1015	1	0	0	0.00	
Distributor Corporation Of New England	Wholesalers	384 University Avenue		Westwood	02090	Norfolk County	800-959-7278	1	38	59	0.37	09/02/2015
Control Consultants	Wholesalers	242 Libbey Industrial Pkwy		Weymouth	02189	Norfolk County	781-335-8353	3	274	446	2.76	01/16/2015, 03/26/2015, 04/15/2015
Sid Harvey Industries	Wholesalers	50 Finnell Drive, Unit 10		Weymouth	02188	Norfolk County	781-803-3344	1	127	149	0.92	06/16/2015
Weymouth Winair	Wholesalers	106 Finnell Drive	#9	Weymouth	02188	Norfolk County	781-340-6777	1	36	36	0.22	07/31/2015
(Hrhc) Highway Department Transfer Station	HHW Facility	Po Box 630		Williamsburg	01096	Hampshire County	413-268-9230	1	0	0	0.00	
Department Of Public Works	HHW Facility	675 Simonds Road	Town Of Williamstown	Williamstown	01267	Berkshire County	413 458 9344	3	0	0	0.00	

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Carrier Enterprise	Wholesalers	250 Ballardvale Street		Wilmington	01887	Middlesex County	978-988-9692	1	16	26	0.16	03/18/2015
Lennox Industries Inc.	Wholesalers	7 Lopez Road		Wilmington	01887	Middlesex County	978-694-1500	4	17	23	0.14	12/15/2015
S.G. Torrice Co	Wholesalers	80 Industrial Way		Wilmington	01887	Middlesex County	(800) 888-8359	3	210	278	1.72	09/30/2015, 09/30/2015
Town Offices-Select Board	HHW Facility	1890 Route 9		Windsor	01270	Berkshire County	413 684 0251 413 684 3811	1	0	0	0.00	
Recycling Center	HHW Facility	100 Kennedy Drive		Winthrop	02152	Suffolk County	617 846 1341	1	0	0	0.00	
Capco Energy Supply	Wholesalers	10 Industrial Pkwy		Woburn	01801	Middlesex County	781-721-0303	1	0	0	0.00	
Carrier Enterprise	Wholesalers	130 Commerce Way		Woburn	01801	Middlesex County	781-937-7600	1	0	0	0.00	
F.W. Webb	Wholesalers	50 Everberg Road		Woburn	01801	Middlesex County	781-933-1804	2	0	0	0.00	
Ferguson Plumbing	Wholesalers	134 D New Boston Street		Woburn	01801	Middlesex County	781-933-1111	1	8	9	0.06	09/08/2015
Grainger	Wholesalers	31 Cadot Road		Woburn	01801	Middlesex County	781-935-8860	1	0	0	0.00	
Johnstone Supply Co	Wholesalers	35 Industrial Parkway		Woburn	01801	Middlesex County	781-933-8506	1	314	515	3.19	09/18/2015, 09/30/2015, 11/02/2015, 11/18/2015, 12/09/2015

## APPENDIX 11: 2015 LOCATION SUMMARY REPORT

(SORTED ALPHABETICALLY BY CITY)

Robinson Supply Company	Wholesalers	45 Industrial Pkwy		Woburn	01801	Middlesex County	781-933-1355	1	0	0	0.00	
Trane Supply	Wholesalers	96E Commerce Way		Woburn	01801	Middlesex County	781-932-0423	1	5	15	0.09	12/31/2015
United Refrigeration	Placeholder	96 Commerce Way		Woburn	01801	Middlesex County		1	55	145	0.90	02/12/2015
Bell Simons Co	Wholesalers	559 Cambridge Street		Worcester	01610	Worcester County	508-756-5772	1	0	0	0.00	
Johnstone Supply Of Worcester	Wholesalers	4 Quinsigamond Ave.		Worcester	01608	Worcester County	508-795-7777	1	0	0	0.00	
Mad Dash East	Contractor	19 Mckeeon Road		Worcester	01610	Worcester County	413-539-4177	2	0	0	0.00	
The Granite Group	Wholesalers	12 E Worcester St		Worcester	01604	Worcester County		1	0	0	0.00	
The Portland Group	Wholesalers	660 Lincoln Street		Worcester	01605	Worcester County	508-853-5912	1	0	0	0.00	
United Refrigeration #39	Wholesalers	25 Crescent Street		Worcester	01605	Worcester County	508-754-7247	1	0	0	0.00	

## APPENDIX 12: NEW LOCATIONS ADDED IN 2015

(SORTED BY DATE ENTERED, THEN ALPHABETICALLY BY CITY)

Date Entered	Central Location	Address	City	Zip	Bins
1/2/2015	F.W. Webb	307 Dorchester Avenue	Boston	2127	1
1/9/2015	F.W. Webb	108 Breeds Hill Road	Hyannis	2601	1
2/10/2015	TOWN OF SOUTH HADLEY	10 INDUSTRIAL DRIVE	SOUTH HADLEY	1075	1
2/24/2015	THE PORTLAND GROUP	74 SALEM ROAD	NORTH BILLERICA	1862	12
3/12/2015	F.W Webb Company	915 Church Street	New Bedford	2745	1
3/23/2015	F. W. Webb Company	120 Old Canal Drive	Lowell	1851	1
3/27/2015	CET	320 Riverside Drive	Florence	1062	3
3/30/2015	Homeserve	16 Tech Circle	Natick	1760	2
5/8/2015	Bell Simons	975 Riverside Drive	Methuen	1844	1
7/31/2015	Security Supply	50 Roberts Drive	N Adams	1247	1
9/11/2015	Lennox Parts Plus	195 Liberty Street	Brockton	2301	1
10/29/2015	The Bell/Simons Co	6 Kane Industrial Drive	Hudson	1749	1
11/2/2015	S.G. Torrice Company, Inc.	30 Northampton Street, Rear	Boston	2118	1
11/3/2015	Plumber's Supply	700 Acushnet Avenue	New Bedford	2740	1
11/3/2015	Plumber's Supply	429 Church Street	New Bedford	2745	1
11/3/2015	Plumber's Supply	10 Dana Street	Taunton	2780	1
11/9/2015	(HRMC) Highway Department Transfer Station	PO Box 630	Williamsburg	1096	1



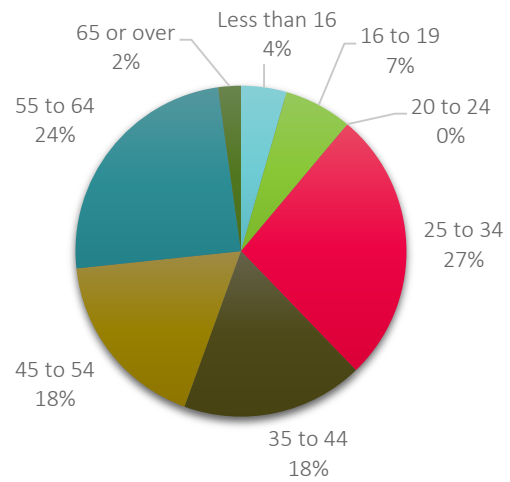
## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

### DEMOGRAPHIC

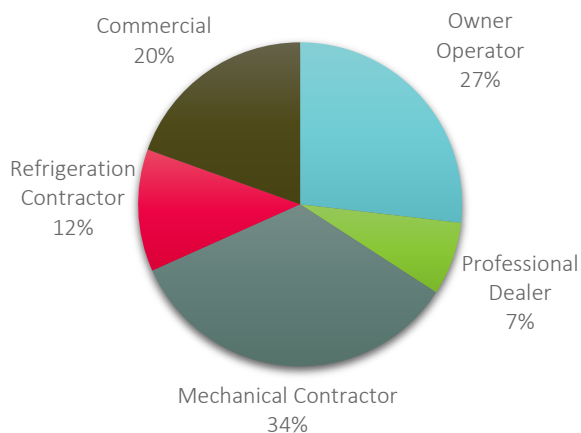
What is your gender?



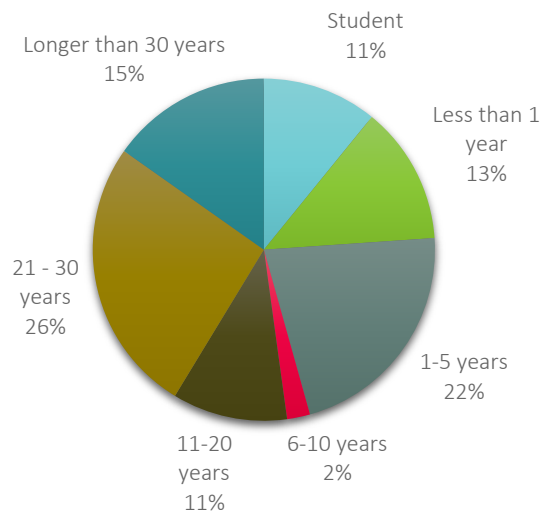
What is your current age?  
(U.S. Census)



What is the nature of your business?



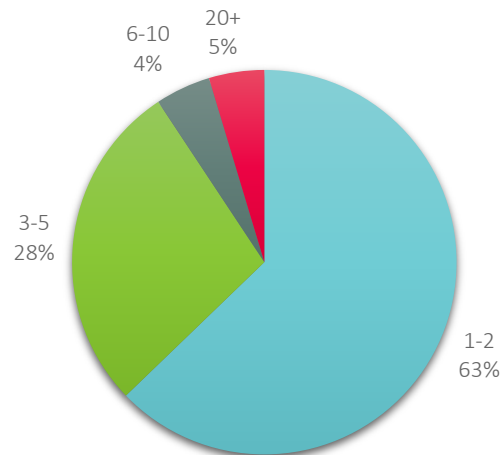
How long have you worked as a technician/contractor?



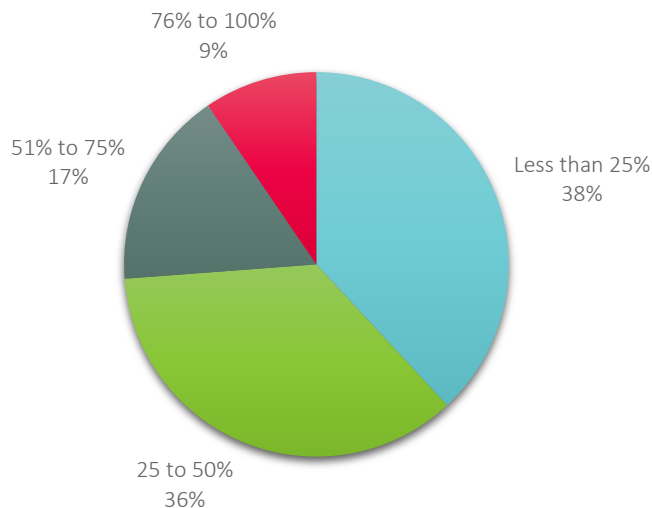
## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

### THERMOSTAT REPLACEMENT

How many thermostats do you remove/replace in an average week as part of your job?



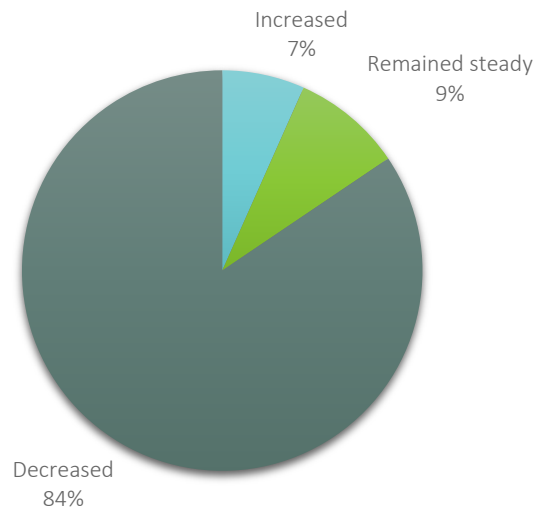
What percentage of the thermostats you replaced in 2014 would you estimate contained mercury?



## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

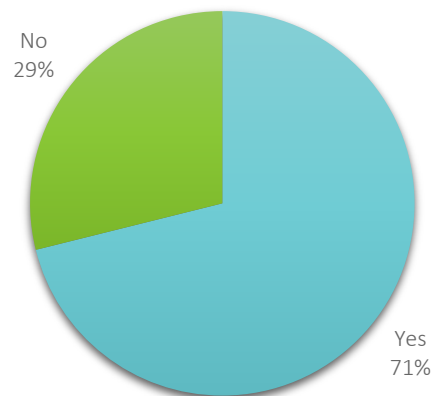
### MERCURY CONTAINING THERMOSTAT PREVALENCE

Would you say that during the time you have worked as a technician/contractor the number of mercury containing thermostats you see has...



### EMPLOYER POLICIES

Are you required by your employer to recycle mercury containing thermostats?



## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

### INCENTIVES

To your knowledge, are there any incentives provided by utilities (eg. energy companies) to encourage recycling of thermostats?

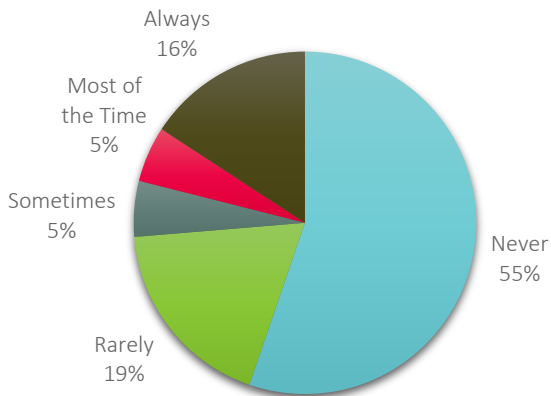


### DISPOSAL

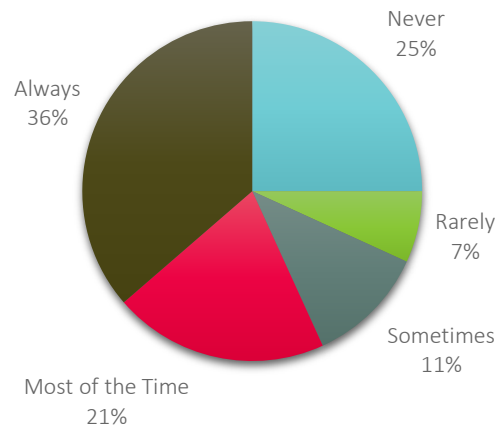
Where do you dispose of the mercury containing thermostats you collect?

## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

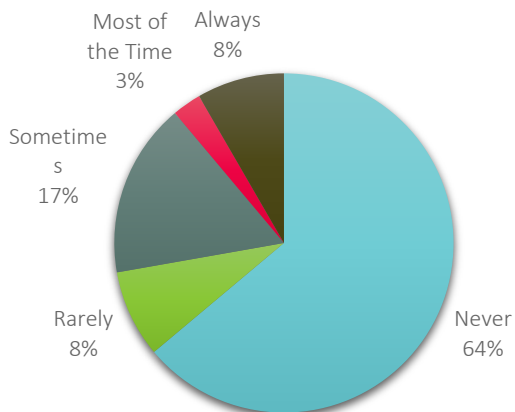
Company/office



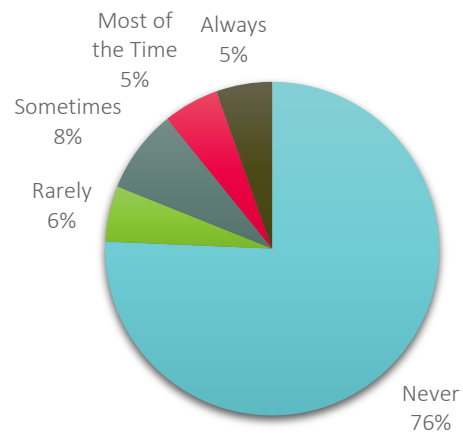
Wholesaler/Supply House



Hardware Store



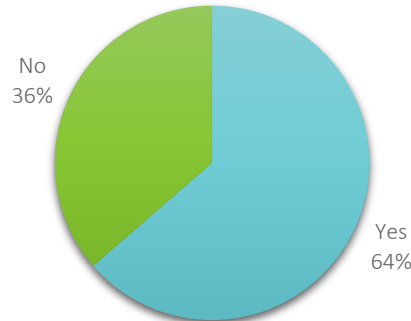
Trash



## APPENDIX 13: TECHNICIAN SURVEY RAW RESULTS

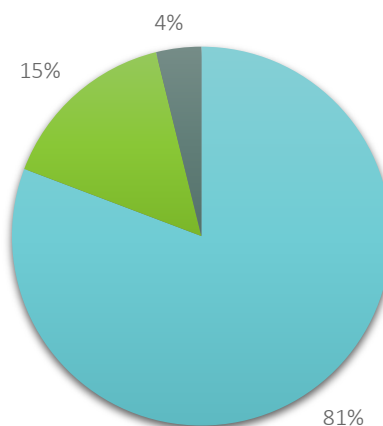
### GREEN BIN UTILIZATION

If you recycle thermostats, do you recycle them in a green bin?



### MERCURY HARMFULNESS

Which of the following statements best reflects your personal opinion of the harmfulness of mercury?



- Mercury is very harmful and we need to do more to keep it out of the environment.
- I don't know. I have no opinion about the harmfulness of mercury.
- I don't think it is very harmful.

## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

### HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

#### **Company Name**

#### **Mercury Thermostat Disposal Overview**

It is XXX's policy to be an environmentally conscious company while complying with all state and federal regulations. As such, XXX will make every effort to educate both our customers and employees on the regulations pursuant to Section XXX of the NAME OF BILL and description of the bill. This education will include the risks and dangers associated with mercury pollution into the environment along with any regulatory, legal and/or business obligations or responsibilities related to the recycling of mercury thermostats.

XXX will comply with all regulations and industry requirements concerning the safe disposal of mercury thermostats. Further, it is the responsibility of the company and each employee who, as a matter of course, deals with mercury thermostats and/or customers, to be aware of this policy and the associated legal requirements.

It is the responsibility of each XXX employee to be aware of the information regarding disposal of mercury thermostats to the extent necessary to perform his or her duties in an environmentally sensitive nature and to explain to our customers what we are doing to prevent the improper disposal of mercury thermostats.

#### **Background on Mercury Thermostats**

**Health/Safety Concerns:** Mercury is a neurotoxin which has both negative impacts on human and ecological populations. The toxicity is fatal if inhaled, consumed, or exposed into the blood stream. It may also damage fertility or an unborn child. Mercury can also cause damage to organs through prolonged or repeated exposures.

**Mercury Thermostat Sources:** Mercury thermostats were first manufactured and sold starting in 1956 and began a final cease in production around 2006. As mercury thermostats are replaced, the available inventory to recycle diminishes until eventually all in-service thermostats are upgraded to a mercury free control device. While estimates vary, there were millions of mercury thermostats sold in the United States.

These units still remain in service in the following types of facilities;

- Residential single family homes either in attached, detached, or semi-attached
- Residential multifamily homes such as apartments or low income housing
- Light commercial buildings such as hotels, restaurants, banks, and retail
- Educational buildings such as schools, colleges, and museums
- Military building such as barracks

When a mercury thermostat is discovered during the direct installation of replacement thermostats, XXX Proper Disposal Policy will be followed. If it is deemed that the Proper

## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

### HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

Disposal Policy is insufficient, XXX will contact the Thermostat Recycling Corporation (TRC) on guidance on how to properly dispose of mercury thermostats<sup>1</sup>.

#### Regulatory History

##### **U.S. Federal Rules and Regulations**

The Resource Conservation and Recovery Act (RCRA)<sup>2</sup> was enacted in 1976 to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner.

The Universal Waste Rule within RCRA is designed to reduce the amount of hazardous waste items in municipal solid waste stream, encourage recycling and proper disposal of certain common hazardous wastes, and reduce the regulatory burden on businesses that generate these wastes. Universal wastes includes mercury thermostats that contain as much as 3 grams of liquid mercury and are located in almost any building, including commercial, industrial, agricultural, community, and household buildings.

##### **State Rules and Regulations**

Many states regulate the installation, disposal and sale of mercury bearing equipment such as mercury thermostats, with varying requirements and methods of compliance for contractors and distributors. In many states enforcement authority is granted through the state's EPA.

When XXX has a job where the customer's address is located in any of the following states; CA, CT, FL, IL, IA, LA, ME, MD, MA, MI, MN, MT, NH, NY, OH, OR, PA, RI, VT, and WA XXX's employees will follow the Proper Disposal Procedure. See Appendix 2 for chart.

<sup>1</sup> For a one-time fee of \$25.00 participating locations are provided with a reusable plastic recycling container, a 5mil plastic liner, and wire zip ties to seal the liner and the bin for transport. Each container also comes with a pre-paid Federal Express label to return the container to TRC. The container will hold up to 150 waste mercury thermostats. A participating location simply needs to accumulate waste mercury thermostats for up to one year, prepare the container for shipment, and arrange pick-up with carrier. TRC is an automatic return program, and the same container will be returned to the location within 10 business days, restarting the process. The TRC program operates under Universal Waste Regulations and there is no requirement to manifest to maintain records of shipments. TRC only accepts whole mercury thermostats. No other item, particularly mercury containing items, can be stored or shipped in the TRC container. TRC reserves the right to terminate participation if a collection location ships items other than whole mercury thermostats.

<sup>2</sup> <http://www2.epa.gov/rcra>



## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

### HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

#### **XXX Proper Disposal Procedure**

To be compliant with this proper disposal of mercury thermostats procedure, **XXX** will take the following actions to ensure effective monitoring and assessment of compliance:

- **XXX** will assign an employee to oversee compliance including but not limited to: owners, service managers, service technicians, and any and all employees whom generate mercury thermostat waste. This employee will be assigned the responsibility of record keeping (if necessary) and ensuring compliance by all **XXX**'s employees.
- Commit (1) hour of employee training on what a mercury thermostat is and how to dispose of them properly following federal, state, and local regulations. Visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) with questions.
- Require each new employee who generates mercury thermostat waste to order a mercury spill kit as a condition of employment or **XXX** will provide each new employee a mercury spill kit upon employment, and replace it when necessary.
- Create a working environment in which employees can report violations of the Proper Disposal Procedure.
- Consider direct participation with TRC when the Proper Disposal Procedure is insufficient. **XXX** may consider ordering a mercury thermostat recycling container for each shop, work van/truck, or employee as necessary<sup>3</sup>.

As per this policy, the employee will do the following; **See Appendix 3 for flow chart.**

1. Sign the Employee Compliance Policy herein.
2. Remove the mercury thermostat during work order
3. Place the mercury thermostat in a 5 gallon bucket with a lid
4. Locate the closest collection point to job site
5. Drop off mercury thermostat at collection point as soon as convenient
6. Repeat as necessary

<sup>3</sup> <http://www.thermostat-recycle.org/signup/>

## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

### Appendix 1 – Employee Proper Disposal Compliance Policy Form

#### **XXX Section XXX of the XXX of XXX** **Employee Proper Disposal Compliance Policy**

It is the policy of XXX to strictly adhere to XXX of the XXX of XXX.

Employee compliance, as required by law, is required.

Therefore, as the undersigned, I agree to fully comply with this policy which includes properly disposing of all mercury thermostats I generate and to use the prescribed method of disposal set forth by **Company Name**. I also agree to **NEVER** intentionally dispose of mercury thermostats and to not leave the device(s) behind with the customer.

Should I fail to comply with the foregoing statements, I understand that I am in non-compliance with the law and accept full personal liability in connection with any action or actions that may occur.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

By: \_\_\_\_\_ (Print Name)

\_\_\_\_\_ (Sign Name)

## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

### HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

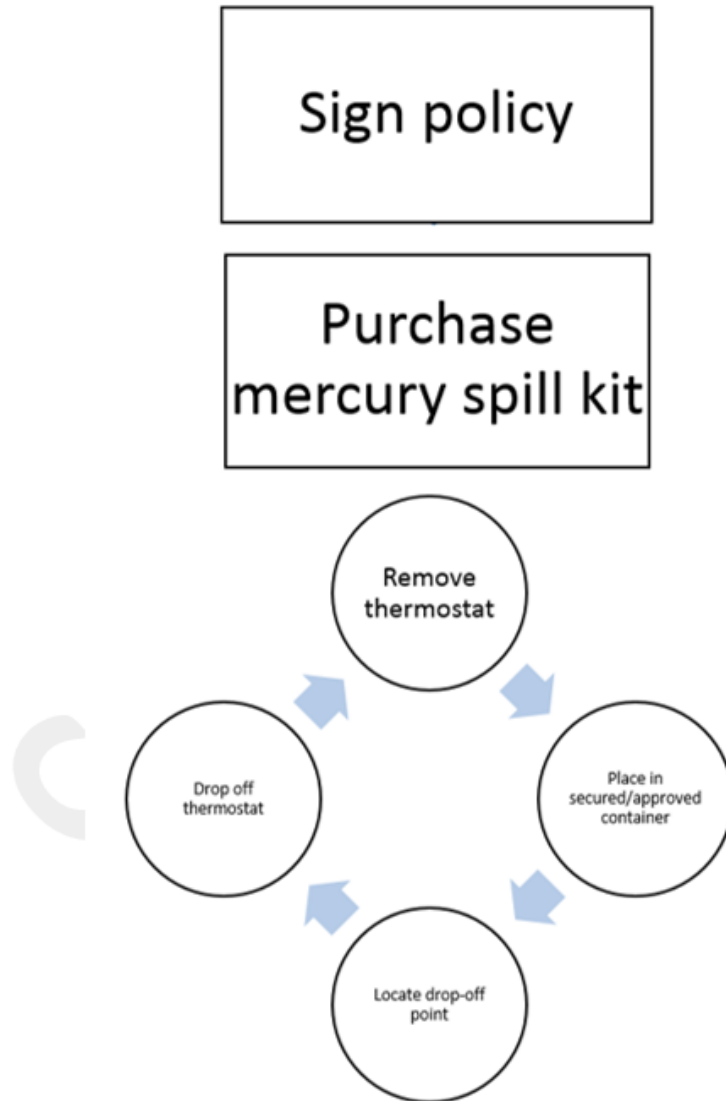
#### Appendix 2 - Table with state specific legislation

State	Sales Ban	Installation Ban	Disposal Ban	Mandatory Wholesale Distributor Collection	Mandatory Contractor Recycling
California	X	X	X	X	X
Connecticut	X		X	X	X
Florida	X	X	X		
Illinois	X	X	X	X	X
Iowa	X	X	X	X	X
Louisiana			X		
Maine	X		X	X	X
Maryland	X				
Massachusetts	X		X	X	X
Michigan	X				
Minnesota	X		X		X
Montana	X	X		X	
New Hampshire	X	X	X	X	X
New York	X		X	X	X
Ohio	X				
Oregon	X	X	X		X
Pennsylvania	X		X	X	X
Rhode Island	X		X	X	X
Vermont	X		X	X	X
Washington	X				

## APPENDIX 14: CONTRACTOR COMPLIANCE POLICY

### HVAC Contractor Employee Compliance Policy – MERCURY THERMOSTAT DISPOSAL

#### Appendix 3 – Proper Disposal Procedure Flow Chart



## APPENDIX 15: SAMPLE UTILITY IMPLEMENTER RFP REQUIREMENTS

### **Standard RFP Language for Management of Waste Mercury Thermostats Generated through direct installation (DI) of thermostats or HVAC Equipment**

#### **Background**

Mercury thermostats were widely used to control heating and cooling systems starting in the 1950s. Mercury thermostats dominated the market until the early 1990s when electronic thermostats began to gain wider acceptance in the market. All major manufacturers ceased production of mercury switch thermostats by 2009. While the number remaining in use is unknown, they are still found on some heating and cooling systems installed prior to 2006.

Mercury thermostats are still prevalent in the following types of facilities;

- Residential single family homes - either attached, detached, or semi-attached
- Residential multifamily homes such as apartments or low income housing structures
- Light commercial buildings such as hotels, restaurants, banks, and retail outlets
- Educational buildings such as schools, colleges, and libraries
- Barracks and other military installations

#### **Statutory Authorities**

Title 21 Section 27-2105 of New York Environmental Conservation Law (ECL) prohibits knowing disposal of mercury thermostats in solid waste and waste mercury thermostats can be managed as “Universal Wastes” under the Federal Resource Recovery and Conservation Act (40 CFR Part 273)“

Title 29, Section 27-2909 of ECL also requires the following:

## APPENDIX 15: SAMPLE UTILITY IMPLEMENTER RFP REQUIREMENTS

§ 3. 1. Any person or contractor who replaces a mercury-containing thermostat from a building shall deliver the mercury-containing thermostat to an appropriate collection site.

And:

3. Any department, authority, instrumentality, or municipal corporation of the state administering a program that involves the removal or replacement of mercury containing thermostats as a result of any statutory requirement, shall inform contractors of their statutory obligations to deliver the mercury-containing thermostats to a collection site and prohibiting the disposal of such thermostats in a solid-waste facility.

4. Any contractor, organization or subcontractor of such organization, who contracts with or receives funding or financing provided in whole or in part by or through any department, agency, instrumentality, or political subdivision of the state for the installation, service, or removal of heating, ventilation, or air-conditioning components resulting in the removal or handling of out-of-service mercury thermostats, shall ensure the collection, transportation and proper management of out-of-service mercury thermostats in accordance with the provisions of title 29 of article 27 of the environmental conservation law.

### RFP Language

The vendor, all subcontractors, and affiliated parties in the trade channel including but not limited to trade allies, preferred installation vendors or rebate processors must comply with all applicable federal, state, local regulations in relation to the proper management and disposal of waste mercury thermostats generated in the performance of the requested scope of work. The vendor will describe efforts to inform program subcontractors and affiliated parties in the trade channel including but not limited to trade allies, preferred installation vendors or rebate processors on New York law relative to the removal and disposal of mercury thermostats. The vendor should also describe any planned steps to support and/or facilitate the collection of mercury thermostats generated through this program by direct participation in the TRC program. The vendor will describe procedures

## APPENDIX 15: SAMPLE UTILITY IMPLEMENTER RFP REQUIREMENTS

all technicians (direct installers) will follow to identify mercury thermostats and ensure proper management of all mercury thermostats removed from service. The vendor will also describe the procedures to monitor and document (report) compliance with the above requirement and for meeting post project reporting requirements below. The successful vendor may be required to provide more information to verify its compliance with above requirement which will include at a minimum;

- A post project report of the following information;
  - Total number of thermostats installed
  - The number of mercury thermostats removed from service
  - The number of mercury thermostats recycled and the location(s) where the thermostats were recycled.