

## VIA Email and US MAIL

Mach 31, 2015

Pauline Batarseh  
Policy Implementation and Support Branch  
California Department of Toxic Substances Control  
1001 "I" Street  
P.O. Box 806  
Sacramento, CA 95812-0806

Subject: Thermostat Recycling Corporation's 2014 Annual Report for California

Dear Ms. Batarseh:

Attached is TRC's annual collection report for calendar year 2014. A copy of this report is posted on [www.thermostat-recycle.org/resources/media\\_center](http://www.thermostat-recycle.org/resources/media_center).

TRC would like to highlight some aspects of the 2014 program:

- Nationally TRC recovered more than 203,000 whole thermostats in 2014, a 12 percent increase over 2013. This is the most thermostats TRC has recovered in one year since the program's inception in 1998.
- California collections were essentially flat in 2014; despite an increase in the total number of TRC containers received from California in 2014. Unfortunately, successful efforts by TRC to improve participation by collection points were offset by declines in the number of thermostats per shipment. The average number of thermostats per shipment has declined from 50 units in 2009 to 33 units last year.
- Efforts to grow the base of participation to include additional HHW locations, demolition/remediation contractors, utility program implementers and large HVAC contractors were largely unsuccessful last year, despite expanded efforts to engage all of these sectors.
- TRC added two full-time employees in 2014. Ryan Kiscaden, Director of National Accounts, joined the staff in January and Alex Monie, Marketing and Operations Coordinator, joined the staff in September. TRC staff visited over 100 locations in California last year, including wholesale locations in the Bay Area, Los Angeles and San Diego Markets. TRC staff also contacted over 70 locations with low or no participation via phone encouraging participation and the timely return of TRC containers.
- TRC launched a state-wide loyalty program. Technicians now earn merchandise rewards by recycling mercury thermostats at participating locations. By year's end over 100 wholesale locations were participating, providing access to this program in all major California markets.

March 31, 2015

Ms. Batarseh

Page 2

- TRC again funded a “sweep” of locations with low or no participation during the preceding 12 months. Over 165 wholesale and retail locations were visited. If there were thermostats in the bin, shipment was arranged and location staff were again educated on program’s policies/procedures and the location’s legal obligations.
- Our analysis of collection data from California and other states suggests the most significant driver of collections remains access to the program. We are seeing little evidence that increased trade channel advertising has substantively affected participation levels at existing locations. TRC suggests the best remaining opportunity to increase collections is to increase the levels of participation within the existing network of locations, and more importantly, adding additional collection locations.

Sincere Regards,

A handwritten signature in black ink, appearing to read 'Mark Tibbetts', with a long horizontal flourish extending to the right.

Mark Tibbetts  
Executive Director

Cc: Rick Brausch, DTSC  
Donn Diebert, DTSC  
TRC Member Representatives

## Collection Data

### Exhibit 1: 2014 California Collections by Manufacturer/Brand<sup>1</sup>

Brand Holder	Thermostats	Count Switches	Pounds Mercury
Bard	91	273	1.69
Carrier	1,215	4,055	25.14
Climate Master	10	28	0.17
Crane Company	1	3	0.02
Empire Comfort Systems	7	7	0.04
General Electric Corporation	130	345	2.14
Goodman Global	20	51	0.32
Grainger	16	37	0.23
Honeywell	13,981	26,742	165.80
Hunter Fan	10	10	0.06
Invensys	740	800	4.96
ITT Corporation	224	245	1.52
Lear Siegler	20	60	0.37
Lennox	274	509	3.16
Lux Products	312	320	1.98
Marley-Wyain Company	5	5	0.03
McQuay International	107	244	1.51
Nordyne Corporation	35	90	0.56
PSG Controls	31	85	0.53
Rheem	159	364	2.26
Sears Holdings	69	85	0.53
Trane	208	666	4.13
White Rodgers	2,277	3,142	19.48
York/Johnson Controls	83	189	1.17
----- Non-Member Brands -----			
Jade	2	2	0.01
Atlas	2	2	0.01
Energy Sentry	1	1	0.01
Aliso Air Inc.	1	2	0.01
Contols Co.	1	1	0.01
American Stabilis	2	2	0.01
Addison	1	4	0.02
Singer	4	4	0.02
Command Aire	1	2	0.01
California Economiser	6	12	0.07
Santiago Air Conditioning	1	2	0.01
Jameson	2	2	0.01
Holly	1	1	0.01
Climate Control	1	1	0.01
Pioneer	1	1	0.01
Comfort Zone	2	2	0.01
Goettl	7	14	0.09
Energy Saving Heat Pump	2	8	0.05
Slant Fin	1	1	0.01
Sunair	2	2	0.01
Whirlpool	1	1	0.01
Simplex	5	6	0.04
Signature	2	2	0.01
Comfort Control Center	1	1	0.01
Friedrich	56	170	1.05
SJP	1	1	0.01
Montgomery Wards	2	2	0.01
Seco Controls	4	4	0.02
Comfort Set	5	10	0.06
Fedders	1	1	0.01
Mars	8	29	0.18
Tempmaster	1	1	0.01
EMI	1	2	0.01
Climatrol	1	1	0.01
Seco	4	4	0.02
Marvair	4	12	0.07
----- NOM (Manufacturer not identifiable) -----			
NOM	15	17	0.11
Loose Bulbs	0	4,361	27.04
<b>TOTAL</b>	<b>20,178</b>	<b>43,046</b>	<b>266.89</b>

In 2014, TRC recovered 266 pounds of mercury from the equivalent of 22,453 mercury thermostats. A total of 20,178 intact mercury thermostats and 4,361 mercury thermostat switches removed from thermostats were recovered from California collection locations in 2014 (mercury thermostats recovered from California locations averaged 1.92 switches per thermostat in 2013, increasing from 1.86 in 2012).

TRC recovered 19,033 thermostats from HVAC wholesale distributor collection locations, 733 from HHW locations, 380 from Contractor locations and 32 from retail locations (less than 1%)<sup>2</sup>.

By regulation, California set a performance requirement for manufacturers or groups of manufacturers to collect 95,400 thermostats in 2014.

### Manufacturers Represented in the Program

TRC reviewed collections by manufacturer for 2014 through 2009 and TRC recovered thermostats with brand name(s) owned by the following manufacturers currently participating in its collection program: Bard Manufacturing Company, Burnham Holdings, United Technologies Corporation (Carrier), Chromalox, LSB Industries (Climate Master), Empire Comfort Systems, General Electric Corporation, Goodman Global, W.W. Grainger, Honeywell International, Hunter Fan Company, Invensys, ITT Corporation, Original

<sup>1</sup> For participating manufacturers, TRC aggregates counts of thermostats collected under the name of the manufacturer that owns or owned the brand name of the thermostats. For brands owned by other manufacturers, TRC records returns under the brand name of the thermostat. NOM represents thermostats of indeterminate manufacture. TRC began recording names of non-member brands July 1, 2013. Prior to that date all brands not owned by TRC members were recorded as "NOM."

<sup>2</sup> Retail participation under state law remains voluntary. TRC made a number of efforts to engage retailers in 2009/2010 but these efforts were largely unsuccessful. San Luis Obispo County, by ordinance, requires thermostat retailers to collect waste mercury thermostats. One location in San Luis Obispo County returned one thermostat in 2014.

Charter Corp (Lear Siegler), Lennox International, Lux Products Corporation, Marley-Wylain Company, Daikin Applied (previously McQuay), Nordyne Corporation, PSG Controls, Rheem, Sears Holdings, Ingersol Rand (Trane), Uponor, Inc., White-Rodgers (a division of Emerson Electric Co.), and Johnson Controls.

Note, Thomas & Betts is no longer a TRC member, and TRC has no record of recovering a mercury thermostat manufactured by Taco, (a TRC member) from a collection location located in California.

### **Waste Mercury-Added Thermostat Management**

Bins with waste mercury 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 moved 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. These thermostats are 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 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 involved in processing the waste mercury thermostats received from collection locations 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 in compliance with local, state, and federal law.

## **Program Education and Outreach**

### **Direct Mail**

TRC utilized direct mail, targeting collection locations (wholesale and HHW), HVAC contractors/technicians, and demolition/remediation contractors.

### **Collection Locations—**

- To encourage collection point participation and to stimulate timely return of TRC collection containers, TRC periodically mailed postcards (Exhibit 2) to collection points not returning a container within the previous 12 months (in accordance with California's Universal Waste Regulations). Reminders were mailed in July (211) and September (187).

**Exhibit 2: “Miss You” Postcard**



**HVAC Contractors/Technicians—**

TRC specifically targeted larger contractors in California 2014.

**Exhibit 3: Percentage Share of Returns by Collection Location Type**

	2009	2010	2011	2012	2013	2014
Contractor	8.00%	12.58%	8.42%	2.35%	1.56%	1.88%
HHW Facility	1.36%	3.98%	3.55%	3.88%	3.49%	3.63%
Retail	0.00%	0.00%	0.00%	0.14%	0.37%	0.16%
Wholesaler/Dist	90.65%	83.44%	88.03%	93.63%	94.59%	94.33%

Direct participation by contractors in California as percentage of returns remains low compared to other states. There are less than 40 California HVAC contractors directly participating in program and there was no direct participation by utility implementers in California in 2014<sup>3</sup>. Greater direct participation by larger contractors remains one of the best opportunities to stimulate collection growth in California. This is particularly important as technicians employed by larger contractors are less likely to visit a collection point. This is because larger contractors typically rely on “runners” to purchase parts and/or rely on delivery.

To increase participation among this sector TRC implemented the following activities in 2014.

- TRC developed an oversized 9x6 full-color postcard targeting larger HVAC contracting businesses (businesses with more than 10 employees). The purpose of the mailing was to encourage direct participation by larger HVAC contracting businesses by informing them of the legal obligation to recycle and an “easy way

<sup>3</sup> This contrasts with Illinois. There were over 180 contractors directly participating in Illinois last year. Moreover, two utility implementers returned the majority of these thermostats. One contractor, Honeywell Utility Solutions, was responsible for over 70% of approximately 3,800 from Illinois contractors in 2014. TRC collections by contractors in California were significantly higher in 2010 and 2011 when GoodCents actively participated in the program.

to comply.” TRC mailed this postcard twice in July to **1,339** contacts in California and repeated the mailing twice in August<sup>4</sup>.

The postcard also included a link to an online survey for an opportunity to win a 42” flat screen TV for completing the survey (Exhibit 4).

TRC received **three** survey responses from California and **no requests for recycling containers**.

- Mouse Pad Mailing—TRC developed a branded mouse pad to direct mail by itself with no envelope (typically referred to as “lumpy mail”) in an attempt to improve the response rate (Exhibit 5). The mouse pad was mailed in October to 682 HVAC contracting business in California with more than 10 employees. The mouse pad included a sticker with a limited-time offer to sign up for a **free TRC recycling container**. TRC received **seven** bin orders from California.

An analysis of this effort begins on page 34.

#### Exhibit 4: 9x6 Summer Postcard



#### Exhibit 5: Mouse Pad Mailing



<sup>4</sup> Direct mail was used by IL EPA/Product Stewardship Institute in 2013/2014 to increase direct participation among HVAC contractors and was recommended as the preferred approach. These efforts added 140 contractors over a 1 year period, but note it appears this project also seems to have a low response rate of approximately .007% to mailings.

## Advertising

TRC's primary target remains HVAC contractors/technicians and HVAC wholesale distributors. For the contractors/technicians segment, TRC focuses on residential and light commercial contractors. The second segment is HVAC wholesale distributor locations.

Homeowners remain a secondary market as they represent a small market segment (+/- 10%) and one that has had little impact on collections due to limited HHW and almost no retail participation in the program.

TRC's 2014 advertising campaign continued to focus primarily on "easy and free" and "It's the law" messaging. The purpose of TRC's advertisements was to 1) continue to build brand/program awareness, 2) increase program participation by raising awareness of specific legal obligations to recycle and, 3) demonstrate the ease of recycling.

**Print-based advertising** — TRC again emphasized frequency in its 2014 advertising campaign and again expanded the scope.

New advertising in 2014 included:

- **Johnstone Supply Sales Flyer**, a printed version of their online catalogue that is mailed to more than 300,000 HVAC contractors nationwide. The TRC advertisement was on the back page of the August and December flyers (Exhibit 6). Johnstone Supply has 37 locations in California. This advertising was provided at no cost to TRC.

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

- **Indoor Comfort News** is published by the Institute of Heating Air Conditioning Industries Inc. (IHACI). IHACI is California's largest HVAC trade group and its monthly magazine has approximately 17,000 subscribers in California. TRC ran a 2-color 1/8pg ad in the March, April, May, August, and September editions (Exhibit 7). The November edition featured a larger 1/3pg ad to promote the "Recycle. Scratch. Earn<sup>SM</sup>" technician loyalty program. (Exhibit 8)
- **HVAC Insider Goldenwest**, has 6,960 subscribers in California and is published quarterly. The advertisement was a 2-color 1/2pg and ran in all issues for the year. (Exhibit 9)



- **Distribution Center Magazine**, the exclusive publication of Heating, Air Conditioning & Refrigeration Distributors International (HARDI) with more than 11,000 bi-monthly subscribers. TRC ran a full-color 1/4 page ad 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 (approximately 3,270 in California). TRC ran a 2-color 1/4 page ad in the January, February, and March editions. (Exhibit 11)

**Exhibit 6: Johnstone Supply Flyer Ad**



**Exhibit 7: Indoor Comfort News Ad Mar – May, Aug & Sep**



**Exhibit 8: Indoor Comfort News Ad Nov**



**Exhibit 9: HVAC Insider Goldenwest Ad**



### Exhibit 10: Distribution Center Ad



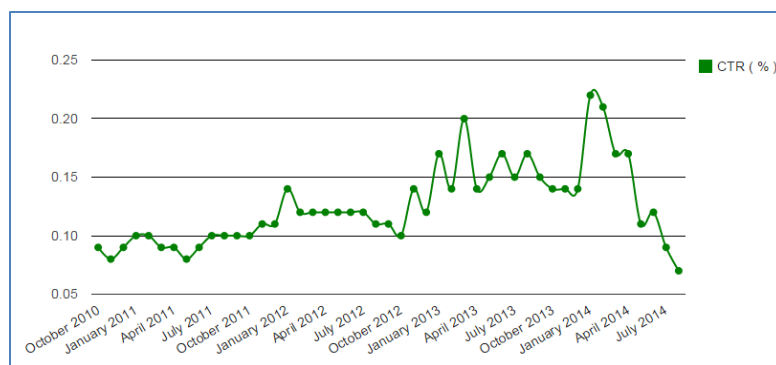
### Exhibit 11: HVACR Business Magazine Ad



**Web-based advertising** — TRC continued rotating banner advertisements in 2014, with changes in scheduling and scope.

TRC's web-based ads gained a cumulative total of more than 906,000 impressions, and email ads were sent to more than 19,000 subscribers. Exhibit 12 presents benchmark data from Google's Display Benchmarks tool on average CTR's in the U.S. by year. As seen below, the highest average CTR was 0.2%. TRC's CTR performance exceeds the national average.

### Exhibit 12: Google's Display Benchmarks Tool



New advertising this year included:

- **HVACR Business "Ahead of the Curve" Enewsletter**, a monthly newsletter that reaches approximately 9,000 opt in readers each month. TRC ran a rotating banner ad in February, March and April. (Exhibit 13)
- **ACHR News How-To Video**, TRC's program training video was featured in the "how to" section of ACHRNews.com in July. The video received 148

views. The video was also featured on their YouTube page for the remainder of the year where it received an additional 352 views.

- **Contracting Business Magazine dedicated Email blast**, sent twice to 5,989 subscribers in states with disposal bans, including 1,596 in California (Exhibit 14). The email offered a **free recycling container**. The July mailing received 944 opens and a 16% CTR, and the September mailing received 775 opens and a 13% CTR, which the publisher indicated was a high open rate for them.

### Exhibit 13: HVACR Business Newsletter Ad



**Recycling mercury thermostats has never been easier.**

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

**To order recycling bins, call us at 888.266.0550.**

### Exhibit 14: Contracting Business Magazine Dedicated Email Blast



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

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

## Are You Breaking the Law?



### TRC Offers Free Recycling Container

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, depending on your state.

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 10/31 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](#)

TRC also continued web-based advertisements on the following HVAC industry websites below:

- **ACHRNews.com**, a website that assists the decision-makers from all branches of the air HVAC industry including contractors, manufacturers, distributors, parts and supply wholesalers, and service companies. More than 181,000 HVACR professionals visit the website every month, totaling more than 218,000 monthly website visits. TRC ran a banner ad January – March and October – December that resulted in 165,904 combined impressions and an average CTR of 0.1%. (Exhibit 15)
- **ACHR Newsletter**, a weekly email blast with more than 12,000 subscribers. TRC ran a banner ad for 4 issues in March with a total open rate of 11,740 and a CTR of 0.4%. (Exhibit 16)
- **HVACRBusiness.com**: TRC ran a banner ad in July that resulted in 6,638 impressions and a CTR of 0.32%. (Exhibit 17)
- **HVAC-Talk.com**, an online forum that averages 310,000 monthly visitors. TRC ran a rotating banner ad February – March and September – October which resulted in 283,397 total impressions and an average CTR of .06%. (Exhibit 18)

**Exhibit 15: ACHRNews.com Ad**



**Exhibit 16: ACHR Newsletter Ad**

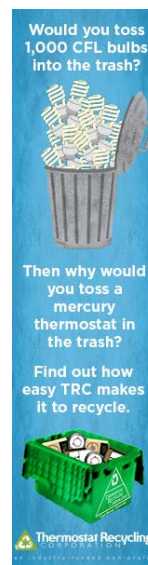




### Exhibit 17: HVAC Business.com



### Exhibit 18: HVAC-Talk.com



### Google AdWords —

TRC continued this campaign in 2014 with enhancements to California's landing page that included a direct link to the California's state law page (Exhibit 19). TRC launched the campaign in March, coinciding with the launch of the new website, and ran it through the calendar year.

In September, TRC increased California's AdWord buy by approximately 40% which roughly doubled impressions and CTR. However, there was a negligible impact on the number of searches for collection locations (TRC's benchmark for a "sale").

Google is TRC's preferred option to reach general consumers due to the campaign's targeted reach.

The California campaign yielded more than 1.6 million impressions with an average CTR of 0.4%, above average for this type of campaign.

## Exhibit 19: Google AdWords Landing Page



## TRC's Website

In March, TRC launched a new website with enhanced functionality. Changes include:

- **Find a Site page:** directs visitors to active collection sites. This assists homeowners, contractors/technicians in identifying convenient collection sites currently participating in the program. It also assists TRC in filtering out closed, consolidated or moved locations from search results. A new feedback form allows visitors to inform TRC if a site is no longer participating.<sup>5</sup> This was the second most visited page on TRC's website after the homepage.
- **State Recycling Programs:** features a clickable map of the United States to easily view different state laws and regulations. This supports easier navigation and lists state-specific information about mercury thermostat disposal. This is the 3<sup>rd</sup> most visited page.

The California program page's language was revised and includes a link to the California Department of Toxic Substance Control's mercury thermostat website.

- **Become a Collection Site:** Now supports an online application to become a collection site. PDF versions of the forms remain available on the site.
- **Collection Partners:** A new section that lists collection partners that have committed to offering TRC's mercury thermostat collection program at all of their locations within the continental U.S. This highlights information about each company and directs visitors to their websites. This gives TRC a marketing value-add to participating companies.

<sup>5</sup> Upon receiving a complaint that a location is no-longer collecting, TRC calls the location to confirm participation.

- **Blog:** Provides updates about TRC travels to trade shows, HVAC industry commentary, tips, etc.
- **Highlights:** Shows select program accomplishments and offers factoids, testimonials and more
- **Contact Us:** A new online form to submit an inquiry directly to TRC. This was added to make it easier to report locations no longer participating, or if a location is no longer at the listed address.
- **Veolia:** A partnership to assist visitors in recycling mercury-containing products other than thermostats.

Website traffic continued to grow in 2014. **TRC increased its total annual visitors by 50% compared to 2013.** There was a **41% increase of visitors from California** to TRC's website and the state ranked 1st among the country of its share of visitors to the site. The increase in traffic reflects the new redesign/enhancements, impact of paid trade channel advertising, Google Ad-word campaign, and search engine optimization efforts.

TRC member companies have also updated the information they include about TRC's program on their websites using a new partner logo TRC created (Exhibit 20).

### Exhibit 20: Examples of Member Company Usage of TRC Partner Logo



Additionally, TRC's Twitter account saw a 15% increase in number of followers in 2014, and its Facebook page enjoyed a 21% increase of page "Likes".

## Earned Media

In 2014 TRC continued to enjoy positive and frequent coverage within the industry trade press, appearing more than 25 times through a variety of publications. TRC issued a number of media releases and most were picked up 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 News* (110,000 circulation), *Distribution Center Magazine* (circulation 11,000), *Indoor Environment & Energy Efficiency Magazine* (mailed to every ACCA member who specializes in residential, commercial, and industrial applications), and *RSES Journal* (239,640 Web visitors).

## Trade Shows, Conferences & Presentations

TRC attended and/or exhibited at the following trade shows:

### **January 21 – 23: AHRI Expo**

*New York City, NY*

AHR Expo is the largest national trade show for the HVACR industry. TRC staff exhibited and promoted the program to HVAC contractors, manufacturers and distributors. The show had a total registered attendance of over 42,887 from 1,942 companies. Specifically, just over 1,660 attendees were from the Western region.

### **March 3 – 5: Johnstone Supply Member Meeting**

*Nashville, TN*

Johnstone Supply is a cooperative wholesale distributor of HVAC parts and equipment with 350 locations, including 37 in California. Johnstone's Annual Membership meeting is invitation only and TRC attended and exhibited as part of an ongoing effort with Johnstone's corporate staff to encourage and expand the cooperative's members' participation. The event is well attended by owners and senior staff and is a unique opportunity to engage directly with key decision makers.

### **March 17 – 19: The Indoor Environment & Energy Expo**

*Nashville, TN*

Co-presented by ACCA, this expo is the largest marketplace for the indoor environmental and energy services contracting industry. TRC staff exhibited and promoted the program at this show.

### **March 31 – April 2: HVACR Excellence Educators & Training Expo**

*Las Vegas, NV*

The nation's largest conference that is dedicated to providing professional development



exclusively for HVACR educators and trainers. TRC staff exhibited and promoted the program to educators to include information on mercury thermostat recycling in their trainings.

**April 28 – May 1: ACI National Home Performance Show (New)**

*Detroit, MI*

Affordable Comfort, Inc. (ACI) is the leading educational resource for the home performance industry. ACI trade shows feature product manufacturers and distributors, educational institutions, utilities, nonprofits, government agencies, industry media, trade associations, energy consultants, and more. TRC staff exhibited at the show.

**August 4 – 6: Association for Energy Service Providers (AESP) Summer Conference (New)**

*San Francisco, CA*

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 the show.

**September 17 – 18: International Facility Management Association (IFMA) World Workplace Conference & Expo 2014 (New)**

*New Orleans, LA*

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 attended the show.

**November 19: IHACI Annual Trade Show**

*Pasadena, CA*

IHACI is California's largest HVAC trade group and annually sponsors a one-day trade show at the Pasadena Convention Center. Attended by approximately 5,000 contractors and technicians, this is California's largest HVAC trade show. TRC raffled a cordless drill driver to increase booth traffic. TRC staff again exhibited at this show.

**December 6-9: Heating Air-conditioning and Refrigeration Distributors International (HARDI)**

*San Antonio, TX*

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."

## Summary of Additional Education and Outreach by Channel

### HHW Facility Outreach

In October TRC requested Form 303 data from Cal Recycle and identified approximately 200 HHW facilities in the state. Using 303 data, TRC developed a marketing list that includes agency contact point, address, and email.

TRC implemented a strategy to engage HHW facilities to increase their participation in the program:

- In late December 2013 TRC mailed a 22x28 program poster and letter to HHW facilities (documented in the 2013 Annual Report). This effort had a very low response rate that extended into 2014. The only substantive outcome of the mailing was the Santa Monica HHW signing up its facility. TRC mailed the location marketing collateral to promote the program.
- On November TRC mailed a package (lumpy mail to increase open rate) to over 200 primary contacts of HHW programs in California. The package contained:
  - A letter encouraging the HHW to support product stewardship by participating in the program (Appendix A) — this appeal was based upon the findings of the CalRecycle assessment of the program
  - Full color, double-sided custom flyer describing the program (Appendix B)
  - The 2015 product stewardship calendar developed in collaboration with Call2Recycle, CARE, and PaintCare

On 12/10/14 TRC followed up via email (26% open rate) to the same contacts to remind them of the program. Out of the 200 contacts, TRC received 14 responses and only 6 bin orders by year's end.

- TRC staff entered discussions with Clean Harbors regarding increasing the participation of Clean Harbor operated facilities participation in the program including potentially diverting mercury thermostats from regional facilities to the TRC program.

### HVAC Contractor Outreach

In November TRC developed a mailing list of 198 small (less than 10 employees) HVAC contracting businesses within a 10 mile radius of a single location participating in the HVAC Technician Loyalty Program. TRC mailed a 22x28 full-color, double-sided poster (Exhibit 21) and letter (Appendix C) asking the company to display the poster to remind their technicians to recycle every mercury thermostat removed from service. The letter also informed them of the new HVAC technician loyalty program and provided the URL to see which distributors near them are participating.

TRC analyzed loyalty program scratch card redemptions for that location and 8% of contracting businesses receiving a poster had staff participating in the loyalty program.

### Exhibit 21: 22x28 Poster to HVAC Contractors



### Demolition and Remediation Contractor Outreach

Responding to DTSC’s suggestion to increase marketing to the demolition contractor market, TRC obtained a list of 57 contacts from the National Demolition Association. In May, TRC mailed a letter to the contacts informing them of TRC’s program and offered a free recycling container (Appendix D). **The letter received no responses.**

In November, TRC staff spoke with the chair of the National Demolition Association’s Safety Committee, Michael Gunlund, to learn more about the industry in California (Michael is employed by a large California based demolition contractor). The discussion provided the following insights on the demolition industry in California:

- The number of “true” demolition contractors in California is less than 20, despite the significantly larger number of business licensees.
- Environmental remediation is conducted by third parties. Nearly all larger demolition contractors outsource environmental remediation work prior to razing a building. However, residential properties with less than 4 units do not require an asbestos inspection by a certified technician. The result is many, if not most, of the larger demolition contractors do not raze single family properties.

Later in November TRC purchased a mailing list of 98 remediation companies in the state (based upon SIC code). TRC sent a memo to each company informing them of the program and offered a **free recycling container** (Appendix E). **The memo received no responses.**

## Wholesale Distributor Gift Card Promotion

In June, TRC partnered with U.S. Air Conditioning Distributors (USACD) and developed a summer promotion at all 35 locations in California. The limited-time offer ran through the end of August and offered a \$5 gift card to In-N-Out Burger for every 5 mercury thermostats returned. TRC provided 1,000 gift cards, 18x24 posters (Exhibit 22), flyers, and newsletter copy to the branch locations to market and promote the program. USACD also featured the promotion on the homepage of its website.

Additionally, USACD's Director of Marketing conducted three trainings for new Wi-Fi thermostats in California in May. Information on the importance of proper mercury thermostat disposal and the In-N-Out Burger promotion with TRC was included in these presentations.

### Exhibit 22: USACD In-N-Out Burger Promotion 18x24 Poster



There were approximately 100 gift cards remaining at the end of the promotion. These were provided to Arizona USACD locations to continue the promotion.

## HVAC Technician Loyalty Program

TRC developed, "Recycle. Scratch. Earn," an HVAC technician loyalty program. The program was implemented at select wholesale distributor locations and is accessible in all major markets in California (Exhibit 23).

The program offers a scratch card worth 600 points for each mercury thermostat returned. Each scratch card contains a unique serial number to be entered online. Upon redeeming 8 scratch cards (4,800 points), participants are eligible to redeem the

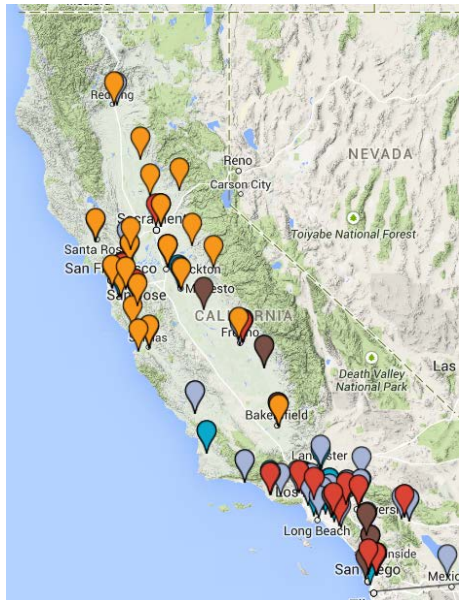
points for brand-name merchandise. Participants can also bank points for higher-value merchandise.

Six wholesale distributors were invited to participate in the program based on markets served, as well as a demonstrated ability to support the program at each branch location.

Each location was instructed to return bins prior to program launch and TRC staff called all participating USACD, Johnstone Supply, Lennox Parts Plus and R.E. Michel locations prior to program launch and requested the return of the bin. The six wholesale distributors participating have a total of 119 total branch locations in California:

- USACD – 35 locations, 9/1 program launch date
- R.E. Michel Company – 12 locations, 9/1 launch date
- Lennox Parts Plus – 16 locations, 9/15 launch date
- Johnstone Supply San Diego Owner Group<sup>6</sup> – 5 locations, 10/1 launch date
- Johnstone Supply Fresno Owner Group – 5 locations, 10/1 launch date
- United Refrigeration – 25 locations, 10/1 launch date
- Slakey Brothers – 21 locations, 12/1 launch date

**Exhibit 23: HVAC Technician Loyalty Program Participating Location Map**



TRC contracted a 3<sup>rd</sup> party to implement the program. A custom website was developed ([www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com)) for participants to enter/redeem points and view merchandise from the online catalogue.

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<sup>6</sup> Johnstone Supply is a cooperative wholesale distributor whose stores are independently owned. Each owner group has the option to decide whether or not they want to participate.



TRC created and provided a program launch toolkit to every location, containing a cover letter (Appendix F) and:

- Program overview (Appendix G)
- Program FAQ for staff (Appendix H)
- FAQ Tri-fold brochure for customers (Appendix I)
- Cardboard brochure holder
- Flyers to promote the program to customers, which was co-branded with each distributor's logo (Exhibit 24)
- Program best practices (Appendix J)
- 150 unique scratch cards (Exhibit K)

**Exhibit 24: Loyalty Program Flyer**



**Exhibit 25: Loyalty Program Scratch Card**



Additionally, TRC is offering a quarterly employee incentive to participating branch locations. Each bin a distributor branch location returns with a minimum of 40 mercury thermostats earns entry into a drawing for \$500. The winner of the first drawing in January 2015 was Slakey Brothers in Santa Ana.

An analysis of both promotions begins on page 27.

## Collection Site Location Engagement

- Site Visits to California Wholesale Distributors — TRC staff visited 111 collection locations. TRC staff visited a combination of low performing locations and locations participating in the loyalty program to assess participation. See Appendix K for a list of locations visited.

- A TRC contractor visited 168 HVAC wholesale distributor and retail collection locations with little to no participation in the previous 12 months. Visits were conducted during the months of November and December. A total of 127 TRC bins were returned from these visits, accounting for 2,508 mercury thermostats.
- Outbound Calls to Collection Points — TRC staff made 77 calls to collection locations 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 or promotional materials. See Appendix L for a list of locations contacted.
- Dump Bin Displays — In July TRC developed branded displays (Exhibit 26) to enhance the visibility of the program at HVAC wholesale collection locations. These displays were provided at no-cost to distributors nationwide, including all Lennox Parts Plus, R.E. Michel and Johnstone Supply locations in California. Additionally, a special version was created to promote the HVAC Technician Loyalty program and was provided to all 35 USACD locations throughout the state (Exhibit 27).
- BMOP — TRC partnered with Heating Air-conditioning and Refrigeration Distributors International (HARDI) for the third annual Big Man on Planet (BMOP) competition. In April TRC mailed an invitation to the executives of 320 HARDI members encouraging their participation in the program (Exhibit 28). In 2014 TRC also restructured the program to allow for multiple winners and included a \$500-\$1,000 employee incentive to the top three branch locations of each tier. National participation increased 67% over 2013. Twenty-one distributors with more than 1,000 locations competed nationwide. The competition ran May 1<sup>st</sup> – October 31<sup>st</sup> and participating locations shipped a total of 55,912 whole mercury thermostats during the competition.

### Exhibit 26: Dump Bin Display for Johnstone Supply



### Exhibit 27: HVAC Technician Loyalty Program Dump Bin Display





## Exhibit 28: BMOP Invitation



## Collaboration with Other California Entities

### California Energy Commission

In February, DTSC staff arranged a phone call between themselves, TRC, and Mr. Pedro Gomez from the California Energy Commissions (CEC). Mr. Gomez asked TRC to forward copy about the program that he could include in their CEC Enewsletter to contractors. TRC sent the copy (Appendix M) and followed up several times, with no response.

TRC was not made aware that Mr. Gomez no longer employed by CEC until July, and was then put in contact with his replacement, Joan Walter, regarding placement in their contractor newsletter. TRC was also in contact with Gary Fabian, Statewide Outreach & Education, about other potential collaboration. TRC has still been unable to get placement in the CEC newsletter.

### Demand Response

Following the February call with DTSC staff and Mr. Gomez mentioned above, Mr. Gomez provided a contact, Mary Ann Piette, for TRC to follow-up with regarding demand response programs in the state. Ms. Piette is the Director of the Building Technology and Urban Systems Division at Lawrence Berkeley National Laboratory, and she is also the Director of the Demand Response Research Center (DRRC). TRC staff reached out to this contact several times and received no response.

### California State License Board (CSLB)

In May TRC requested the C21 and C20 mailing list from the CSLB for a potential outreach mailing. However, the list did not include a contact name. Published research, and TRC's past experience, has indicated that a direct mailing with no contact name will result in a very low open/response rate. Therefore, TRC opted not to use the list.

## Program Expenses

### Exhibit 29: 2014 Program Expenses

Program Component	2013	2014	% Change
TRC Staff and Administration <sup>†</sup>	\$ 417,656	\$ 593,631	42%
Recycling Costs	\$ 317,874	\$ 356,043	12%
Incentive/Promotional Payments	\$ 23,955	\$ 47,712	99%
New Collection Containers	\$ 21,936	\$ 15,108	-31%
Travel	\$ 32,608	\$ 70,120	115%
Legal	\$ 27,696	\$ 40,373	46%
Direct Expense for Marketing & Outreach	\$ 194,761	\$ 289,347	49%
<b>Total (expenses)</b>	<b>\$ 1,036,485</b>	<b>\$ 1,412,333</b>	<b>36%</b>

There was significant variance in many expense categories from 2013. Causes for change include:

- TRC staff and administration increased by 42% in 2013. TRC added a full-time national account manager in January 2014 and one more full-time operations coordinator in September 2014, effectively adding three full-time positions since January 2013.
- Incentive/Promotional Payments: Incentive payments in Maine and Vermont continue to decline, but TRC ran a variety of promotional campaigns in 2014 leading to increased expense.
- Travel: The national account manager spends about 60% of his time on travel, primarily visiting collection locations and attending industry events.
- Direct Expense for Marketing/Outreach: Marketing expense increased by nearly 49%. This reflects increases in advertising, printing and the production/distribution costs of the bin display which cost over \$28,000.

## Listing of 2014 Changes & Evaluation<sup>7</sup>

TRC implemented a number of modifications to the collection program in 2014 as part of its continuous effort to improve program outcomes. Below is an analysis of a number of modifications highlighted in TRC's 2013 annual report.

**More Frequent Collection Location Contact**— Increasing collection location participation levels is a priority for the program. TRC made many programmatic changes and added staff resources in an effort to increase both the level of participation among collection points and the frequency of bin returns.

In 2014, TRC added two FTE, including a national account manager specifically tasked with increasing both distributor and HVAC contractor participation in the program. With the addition of staff, TRC contacted California collection locations more frequently in 2014. "Touches" include (these don't include incidental contacts to specific distributors):

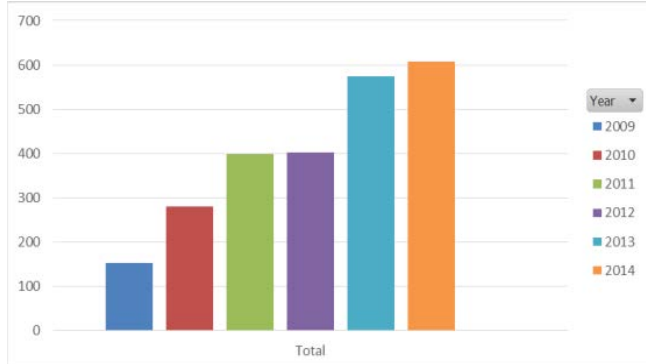
<sup>7</sup> TRC consolidated bin receipt records dating to 2009 for this analysis. TRC also reviewed these records and validated location types. This analysis is based upon whole thermostats received and does not include conversions of loose switches to whole thermostats.

- 111 collection location visits by TRC staff.
- 168 collection location visits by TRC contractors targeting wholesale and retail locations with low or no participation in the previous 12 months.
- Two “miss you” postcard mailings (July and September).
- 78 targeted phone calls to locations that hadn’t returned a container within the previous 12 months.
- TRC staff calls to all USACD, Lennox Parts Plus, R.E. Michel, and Johnstone Supply locations participating in the loyalty program.

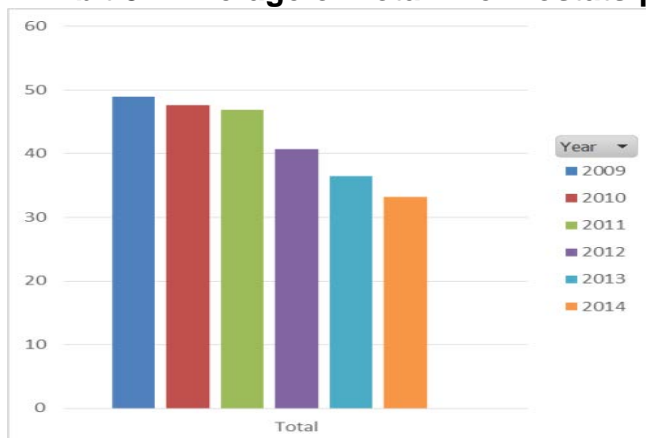
Exhibit 30 indicates these efforts have been successful. TRC increased the frequency of bin returns in 2013 substantially and maintained high return rates in 2014. With 55% of participating locations returning a bin in 2014, California’s participation rate ranks second among states with mandatory collection programs.<sup>8</sup>

However, increased participation by collection locations has not led to increases in collections. Exhibits 31 and 32 demonstrate the frequency of bins returned has increased since 2009, but the average number of thermostats per shipment has decreased. In 2009 each shipment averaged 49 whole thermostats and by 2014 the average declined to 33.

**Exhibit 30: Count of Bin Returns over Time**

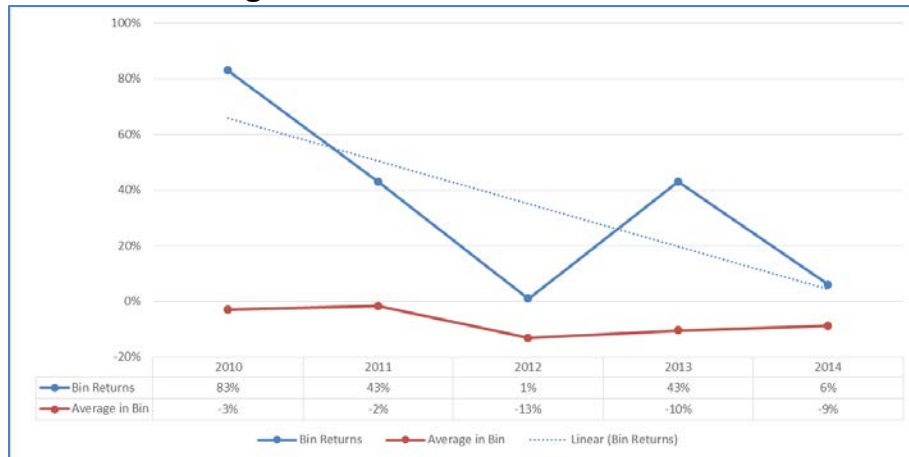


**Exhibit 31: Average of Total Thermostats per Shipment**



<sup>8</sup> TRC has records of just over 500 locations in California with one or more TRC recycling containers. Rhode Island has the highest participation rate with over 60% (out of 44 locations) returning a bin in 2014.

**Exhibit 32: Change in Number of bin returns compared against average t-stats in bin as Percentage**



In the 2013 report TRC asserted in-person visits would not stimulate greater participation among locations exhibiting low or no participation. TRC compared same store visits in 2014 to 2013 visits (Exhibit 33). TRC found that similar percentages returned no units in 2014. Moreover, locations shipping larger quantities (greater than 40) declined. The data suggests that the 2013 site visits had a one-time benefit returning units that had been generated over a longer period of time. The data also continues to indicate that TRC (either with staff or contractors) collection location visits do not fundamentally alter participation levels, just the frequency of bin returns.<sup>9</sup>

**Exhibit 33: Count of Thermostats by Location Visited 2014/2013**

	2014	%	2013	%
No Return	60	36%	57	35%
1 to 10	38	23%	27	17%
11 to 20	24	14%	9	6%
21 to 30	14	8%	9	6%
31 to 40	15	9%	20	12%
41 to 50	5	3%	10	6%
51 to 60	4	2%	10	6%
61 to 70	3	2%	4	2%
71 to 80	2	1%	6	4%
81 to 90	2	1%	3	2%
91 to 100	0	0%	1	1%
More than 100	1	1%	7	4%

**Technician Loyalty Program/Other Promotions**

<sup>9</sup> Reasons for poor location performance are not strictly due to non-compliance. Reasons include apathetic staff at a location, low sales volume at a location, lack of foot traffic at a location, and/or location sales focused on market segments other than residential/light commercial service and repair.

In 2014 TRC ran one limited-time promotion and implemented an ongoing “incentive” program at select wholesale distributors in all major California markets.

The \$5 for 5 In-N-Out Burger gift card promotion ran from June 1 to August 31 at all USACD locations in California. TRC selected USACD for this promotion for several reasons, including:

- Management capacity: USACD has demonstrated strong top-down management of the collection program and TRC entered the program confident this wholesaler would be able to implement and support the program at a majority of its locations.
- Internal Controls: TRC provided the equivalent of cash and with the strong top-down management TRC was confident sufficient internal controls would be in place to minimize program risk.
- Channel Placement: USACD is significant market player in California. Its locations have a high volume of counter traffic (as opposed to delivery) and focus on the service/repair market.

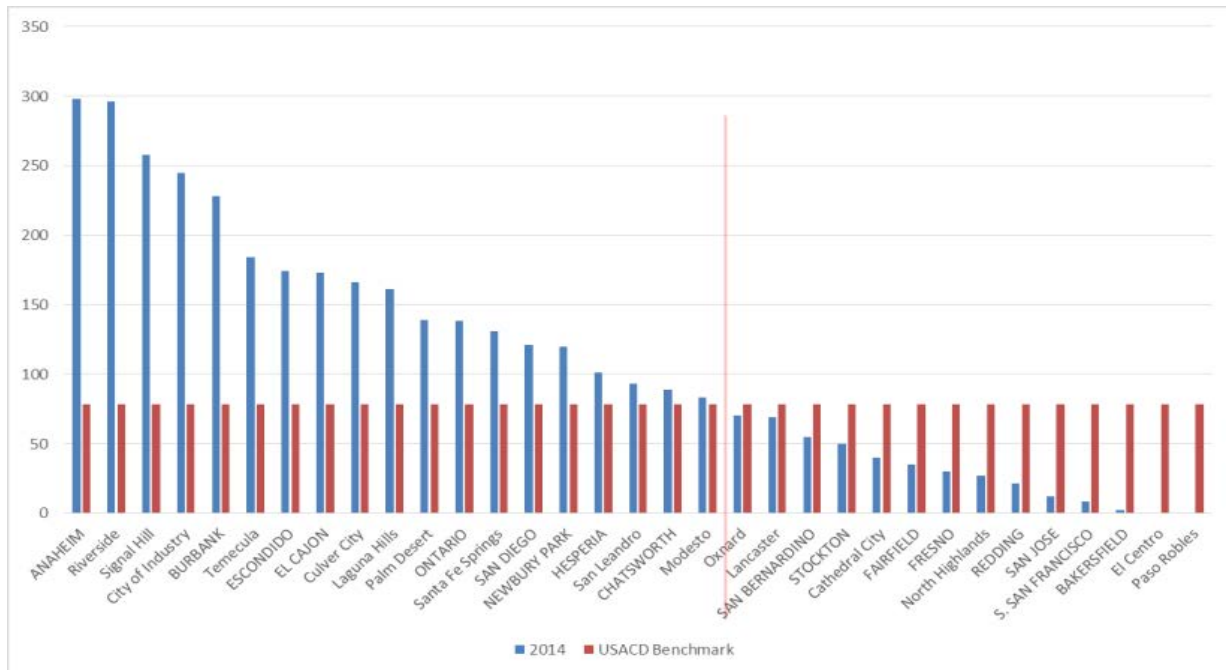
Total collections for the year increased at USACD locations in 2014 by 642 units, or 13%.<sup>10</sup> TRC saw more significant increases during the promotions, particularly the \$5 for 5 promotion. TRC analyzed returns by USACD locations during the promotion and compared each location against a USACD benchmark (average return by store 2011-2014 for the period) and against same store collections for the same period. Exhibit 34 illustrates that some stores performed better than others, with 57% collecting more than the benchmark. Exhibit 35 illustrates that compared against the same store, almost 80% of locations increased collections during the promotion period.

However, TRC emphasizes there is much unknown about the promotion. For instance, there is no data on the number of individuals recycling or the quantities of thermostats recycled by individual participants. As such, TRC doesn't know if the gains were from a few individuals bringing in larger quantities of thermostats, or a larger number of individuals bringing in small quantities of thermostats. Experiences in other states suggest these types of promotions are effective in recovering thermostats previously stored by HVAC contractors/technicians, but returns decline after time as the inventory of stored thermostats is collected.

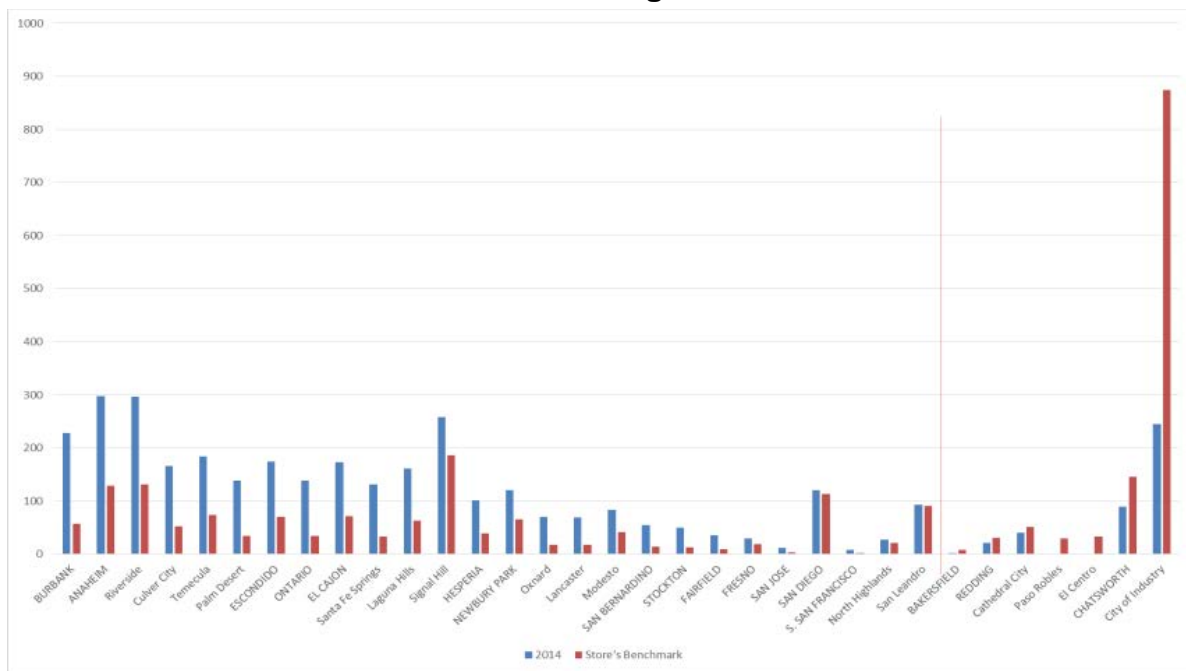
### **Exhibit 34: USACD \$5 for 5 Performance against USACD Benchmark**

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<sup>10</sup> The \$5 for 5 promotion was not the only change at USACD locations in 2014. All locations received a bin display and are participating in the technician loyalty program. USACD also competed in the 2014 Big Man on Planet Award Program which incented collection location participation.



**Exhibit 35: USACD \$5 for 5 Performance against Same Store Benchmark**



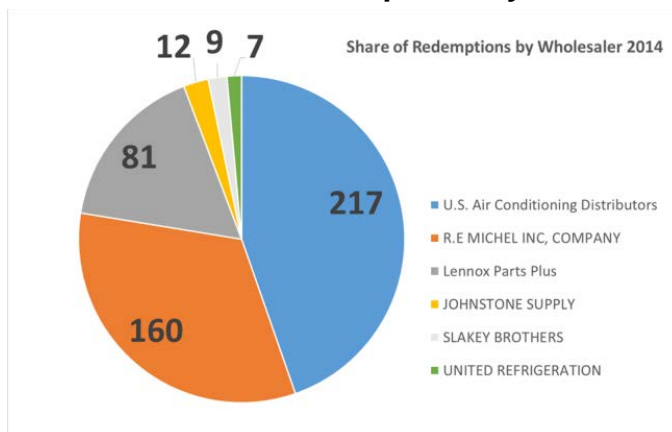
Results from the technician loyalty program provide a contrast to the \$5 for 5 gift card promotion. Unlike the \$5 for 5 promotion, the loyalty program delays reward (participants must redeem eight scratch cards before becoming eligible for rewards) and also requires participants to 1) create an account and 2) redeem cards online in order to participate in the program.

TRC is also incenting store participation. To encourage participation and incent timely return of bins, participating stores are eligible for a quarterly \$500 incentive. To be eligible a location needs to return at least one bin with a minimum of 40 thermostats during the previous quarter. Each bin return meeting the minimum generates another entry in the raffle. Locations were contacted in December to encourage bin returns.

USACD and R.E. Michel are the leading participants representing 78% of all redemptions in 2014 (Exhibit 36)<sup>11</sup>. This is not unexpected as both are a “best fit” for the program due to their position in market and history of strong top-down program management.

TRC analyzed total returns among participating locations (Exhibit 37). Note the redemptions at the R.E. Michel in Thousand Palms and USACD in Lake Forest are from a single customer. TRC also examined returns from USACD locations from October 1 through December 31.<sup>12</sup>

**Exhibit 36: Share Redemptions by Wholesaler 2014**



**Exhibit 37: Participating Wholesaler Redemptions by Location**

<sup>11</sup> Redemption indicates a participant entered the unique code from a scratch card on the program’s website. Not all cards issued may result in a redemption.

<sup>12</sup> The loyalty program began September 1 and TRC contacted all USACD locations requesting they return their bins to start at a zero base.

CA DTSC Thermostat Collection Report For Calendar Year 2014 Activities

Company	City	Total
JOHNSTONE SUPPLY	Bakersfield	1
	EL CAJON	1
	Escondido	4
	FRESNO	2
	VISALIA	4
JOHNSTONE SUPPLY Total		12
Lennox Parts Plus	Chatsworth	71
	Milpitas	10
Lennox Parts Plus Total		81
R.E MICHEL INC, COMPANY	FRESNO	4
	Ontario	6
	Riverside	25
	Thousand Palms	96
	Van Nuys	29
R.E MICHEL INC, COMPANY Total		160
SLAKEY BROTHERS	Chico	1
	North Highlands	1
	S. SAN FRANCISCO	2
	SANTA CRUZ	5
SLAKEY BROTHERS Total		9
U.S. Air Conditioning Distributors	Anaheim	10
	Burbank	19
	City of Industry	23
	CULVER CITY	2
	EL CAJON	13
	El Centro	20
	Fairfield	22
	Lake Forest	36
	Modesto	2
	Ontario	15
	Oxnard	4
	Redding	1
	Riverside	5
	San Diego	1
	San Jose	4
	San Leandro	11
	Santa Barbara	1
Signal Hill	7	
Stockton	21	
U.S. Air Conditioning Distributors Total		217
UNITED REFRIGERATION	IRWINDALE	2
	North Hills	1
	Palm Desert	1
	San Jose	2
	Santa Maria	1
UNITED REFRIGERATION Total		7
Grand Total		486

Program participation data indicates (Exhibit 37) participation was highly variable, with almost all locations not exceeding either the USACD benchmark or the individual store benchmark (see Exhibit 38 for individual store benchmarks).

**Exhibit 38: Redemption Rates at USACD Locations**



	Tstats Oct - Dec	Online Redemptions	Redemption Rate
U.S. Air Conditioning Distributors			
Anaheim	47	10	21.28%
BAKERSFIELD	0	0	-
BURBANK	60	19	31.67%
Cathedral City	0	0	-
Chatsworth	81	0	0.00%
City of Industry	66	23	34.85%
Culver City	30	2	6.67%
EL CAJON	0	13	-
El Centro	55	20	36.36%
Escondido	50	0	0.00%
FAIRFIELD	36	22	61.11%
Fresno	0	0	-
HESPERIA	0	0	-
LAKE FOREST	0	36	-
Lancaster	0	0	-
Modesto	0	2	-
NEWBURY PARK	0	0	-
NORTH HIGHLANDS	0	0	-
ONTARIO	41	15	36.59%
Oxnard	30	4	13.33%
Palm Desert	0	0	-
Redding	0	1	-
Riverside	63	5	7.94%
S SAN FRANCISCO	0	0	-
San Bernardino	53	0	0.00%
San Diego	50	1	2.00%
San Leandro	21	11	52.38%
Santa Fe Springs	0	0	-
Santa Rosa	7	0	0.00%
Signal Hill	82	7	8.54%
Stockton	0	21	-
Temecula	0	0	-
Grand Total	772	212	27.46%

At this point TRC has not operated the loyalty program long enough to draw firm conclusions on its relative effectiveness. Participation in the program is increasing and TRC continues to adjust program marketing/promotion.

However, TRC can share the following observations at this point.

- Participation levels are low. Conversations with collection location staff indicate that technicians prefer “instant” rewards and the additional effort to create an account and redeem points negatively affects participation rates. This is a significant issue with providing remunerative incentives and is not unique to California.

Data from the mandatory incentive program in Maine provides additional insight on this issue. In Maine, participants must complete and mail a coupon to TRC to receive the \$5 incentive. Additionally, payments are not made until receipt of the thermostat, meaning there is often a 3 to 12 month lag between recycling and payment.

TRC analyzed participation rates in the Maine program from 2008 to 2014 and observed the following:

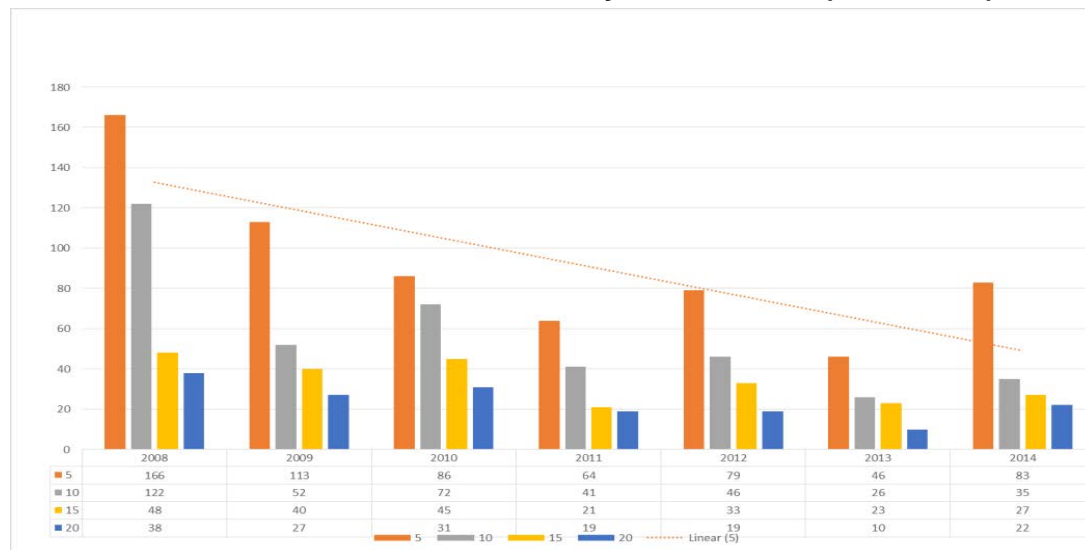
- 32% are repeat redeemers (have more than 1 transaction since 2008).

- 16 are the most transactions for any redeemers historically.
- 50% of repeat redeemers redeem only twice.
- 78% of repeat redeemers redeem only four times.

TRC also analyzed participation rates in Maine. Participation peaked in 2010 with 254 (out of 521 total unique participants since the program's inception in 2008). Participation has declined since, and there were only 143 unique participants in 2014. Also note that participation rates in Maine were inflated by collection point staff participation in program.

- The frequency of removals by any one technician is unknown in California and TRC suggests that participation may be affected by the level of effort required to benefit from an incentive. By example, if a technician has access to more thermostats (either because they were accumulated over a period of time, or the technician frequently removes thermostats) it creates a greater incentive by reducing the opportunity cost of participation in the incentive program. For the technician that infrequently removes thermostats, he may deem the opportunity cost (creating an account and redeeming coupons) is not worth the effort. Data from Maine again provides insight into this issue.

**Exhibit 39: Historical Distribution of Payments Maine (2008-2014)**



Overtime, the frequency incentive payments of \$5 has declined significantly. TRC suggests this reflects that many participants deemed the effort to receive \$5 or \$10 dollars was greater than the value of the incentive. Moreover, TRC found in Vermont upwards of 40% of thermostats from wholesale locations had no claim for payment.

- State-wide collections remained almost level in 2014 and data suggests these programs may be shifting returns among collection locations rather than stimulating additional participation in the program. At the state level, collection data indicates that both Johnstone Supply and USACD outperform all wholesalers. Moreover, increases at these distributors were offset by declines at others.

**Exhibit 40: Average Count of Thermostats per Bin**

Mean Tstats in bin returns						
	2009	2010	2011	2012	2013	2014
Wholesaler/Dist	50	49	49	42	37	33
Johnstone Supply	57	57	50	51	40	43
USACD	64	54	61	51	51	48

**Exhibit 41: Top Performers in 2014**

Sum of Total Stats			
	2013	2014	Percent Change
Allied Refrigeration	724	915	26%
R.E. Michel	345	412	19%
U.S. Air Conditioning Distributors	4975	5617	13%
Johnstone Supply	3567	3999	12%
Lennox Parts Plus	130	143	10%

**Exhibit 42: Lowest Performers in 2014**

Sum of Total Stats			
	2013	2014	Percent Change
HOWARD INDUSTRIES	378	192	-49%
Goodman Distribution	659	417	-37%
REFRIGERATION SUPPLIES DISTRIBUTOR	2807	1860	-34%
Siglers	636	441	-31%
AIR COLD SUPPLY	1221	947	-22%

Research by HARDI indicates that contractors’ spending at distributors is “sticky.” Meaning they concentrate purchases at one distributor (approximately 80%). What is unknown is whether recycling of thermostats is “sticky” too. Data from 2014 suggest that recycling is not “sticky” and contractors/technicians shifted recycling from one location to another likely due to either the availability of the \$5 for 5 gift card promotion or loyalty program. TRC suggests additional analysis of collections within individual markets is needed.

**HHW Participation**

In 2013 TRC attempted to stimulate HHW participation through direct mail. TRC mailed a large poster in a 24” tube in an attempt to increase open/response rate. Only one HHW location responded to the mailing. TRC determined one issue with the mailing

was the quality of the mailing list. Using Form 303 data, TRC developed a new marketing list of HHW contacts and through mail and email again attempted to increase HHW participation in the program. As reported above, the response rate to this initiative was low and TRC only added 6 HHW locations in 2014.<sup>13</sup> Moreover, total number of bins returned and total collections from HHW locations were unchanged last year.

Feedback from HHW locations and our review of CalRecycle's assessment of the program indicates that low volumes of mercury thermostats continue to weigh on program participation. TRC's analysis of Form 303 data also helps to support this conclusion. Form 303 data indicated that only 30% reported collecting mercury devices (switches, thermometers, etc.), only 10% reported collecting other mercury wastes, and only 10% reported collecting mercury thermostats. With low volumes of thermostats, there is little incentive for staff to separate mercury thermostats from other mercury wastes. Additionally, many locations are operated by third parties, which add further barriers to participation.

### **Direct Mail/Contractor Outreach**

In 2014 TRC specifically targeted larger contractors in California. Relying on direct mail, TRC attempted to increase participation among larger contractors. Marketing/selling the program to this segment remains a challenge. Identifying and reaching the best contact (direct mail typically only reaches the owner/principal) is difficult and may explain the poor response rate. Phone sales have low success rates as calls are typically routed through customer service representatives and are heavily screened. Direct sales are also difficult as decision makers are rarely at contracting business during business hours. The Product Stewardship Institute, in partnership with the Illinois Environmental Protection agency, conducted a similar recruitment effort in 2013-2014 and drew similar conclusions.

The postcards (dropped four times) yielded no bin orders and the mouse pad had about a 1% response rate.

The first solicitation did not offer a no-cost bin, whereas the second offered a free bin. Interestingly, TRC used similar postcards in other states and in some states offered bins at no-cost. The response rate varied, but it appears that the free bin offer increased the response rate, but not substantially so.

The response rate for the mouse pad was substantially better despite being a single mailing. However, TRC does not know if it was the "lumpy" nature of the mailing,

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<sup>13</sup> The city of LA contacted TRC in November following the initial mailing, but the order for containers was not placed until March of 2015.

seasonality, the free bin, or a combination of all three that lead to the higher response rate (it was the same mailing list). It's important to note, the per unit cost of the mouse pad was substantially higher than the postcard.

### Exhibit 43: Participation by Location Type

Row Labels	2009		2010		2011		2012		2013		2014	
	Tstats	% Diff.	Tstats	% Diff.	Tstats	% Diff.	Tstats	% Diff.	Tstats	% Diff.	Tstats	% Diff.
Contractor	595	n/a	1,678	182%	1,575	-6%	385	-76%	326	-15%	380	17%
HHW Facility	101	n/a	531	426%	663	25%	634	-4%	731	15%	733	0%
Retail	0	n/a	0	n/a	0	n/a	23	100%	77	235%	32	-58%
Wholesaler/Dist	6,745	n/a	11,131	65%	16,459	48%	15,311	-7%	19,822	29%	19,033	-4%
<b>Grand Total</b>	<b>7,441</b>	<b>n/a</b>	<b>13,340</b>	<b>79%</b>	<b>18,697</b>	<b>40%</b>	<b>16,353</b>	<b>-13%</b>	<b>20,956</b>	<b>28%</b>	<b>20,178</b>	<b>-4%</b>

Finally, the previously mentioned effort by PSI yielded approximately 140 direct HVAC contractor participants (out of 5,000 contacted 4 times via direct mail). These new participants in Illinois had a modest impact on TRC collections in 2014.

Despite these challenges, TRC still believes that greater participation by larger contractors remains one of the best opportunities for growth in California and intends to again solicit participation via direct mail in 2015. The offer will be for bins at no-cost and TRC is likely to rely more on "lumpy" mail as opposed to postcards.

The greater benefit would come from utility program participation. TRC highlights contractor collections in 2010 and 2011 in California. The majority of these returns were from GoodCents, a demand-side service provider for utilities ([www.goodcent.com](http://www.goodcent.com)). TRC also highlights the impact of these programs on collections in Illinois (Honeywell Utility Solutions), Massachusetts (Next Step Living, Honeywell Utility Solutions), and Michigan (Franklin Energy Services).

TRC's director of national accounts specifically targeted this channel in 2014 with mixed results. By example, TRC contacted a non-member thermostat manufacturer providing demand response thermostats for a southern California project in early spring 2014. The DSM contractor placed the order for a bin in March 2015, a 12 month lead time.

To better engage this channel, TRC joined the Association of Energy Service Professionals (the principal trade group representing this industry) and attended its summer meeting in San Francisco in 2014 (and exhibited at its annual meeting in 2015). TRC plans to implement a number of changes to its utility channel marketing strategy in 2015. Specifically, TRC believes it is essential to keep the program "top of mind" within this channel, specifically targeting program managers. TRC is developing a marketing list for this channel and plans to routinely push information on the program to this audience. TRC will also continue develop leads among the top ten national utility implementers and work toward internalizing the TRC program in their operations nationwide.

## Program Modifications

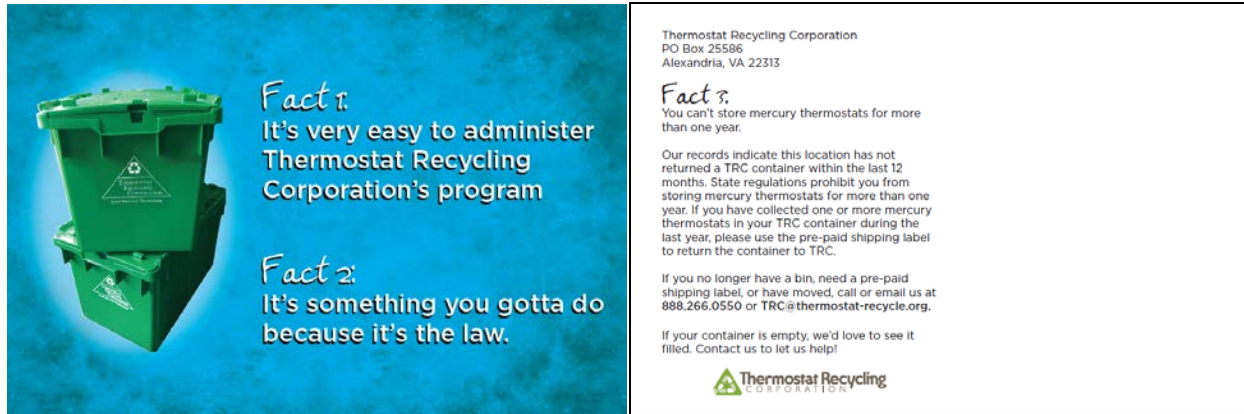
Below are several proposed modifications to the program. Further modifications will be incorporated pursuant to any resolution of the outstanding SOVs between DTSC and the TRC members.

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

- 1/8pg two-color ad in *Indoor Comfort News* for 6 months
- 1/4pg full-color ad in *HVACR Business Magazine* for 3 months
- 1/4pg full-color ad in *Distribution Center Magazine* for 2 months
- 1/2pg two-color ad in *HVAC Insider Goldenwest* for all 4 issues
- Banner ad on HVAC-Talk.com for 4 months
- *Contracting Business Magazine* dedicated Eblast
- Banner ad on *HVACR Business Magazine*'s website for 3 months
- Banner ad in *HVACR Business Magazine*'s Eblast for 3 months
- Banner ad in *Distribution Center Magazine*'s Eblast for 3 months
- Banner ad on ACHRNews.com for 3 months
- Banner ad in ACHR News' Eblast for 8 weeks
- Banner ad in the AHR Expo wrap-up Enews
- Text ad in NATE's Enewsletter for 2 months
- Expand frequency of Google Adwords/pay-to-click campaign
- Continue to exhibit at regional and key national industry events.
- TRC plans on continuing efforts to engage larger contractors and HVAC wholesale distributors

TRC has updated its direct mail strategy and has already developed new "miss you" postcards (Exhibit 44). These reminders will be mailed three times during 2015 to locations who haven't returned a bin within 12 months.

### Exhibit 44: New Miss You Postcard



**Fact 1:**  
It's very easy to administer  
Thermostat Recycling  
Corporation's program

**Fact 2:**  
It's something you gotta do  
because it's the law.


Thermostat Recycling Corporation  
PO Box 25586  
Alexandria, VA 22313

**Fact 3:**  
You can't store mercury thermostats for more  
than one year.

Our records indicate this location has not  
returned a TRC container within the last 12  
months. State regulations prohibit you from  
storing mercury thermostats for more than one  
year. If you have collected one or more mercury  
thermostats in your TRC container during the  
last year, please use the pre-paid shipping label  
to return the container to TRC.

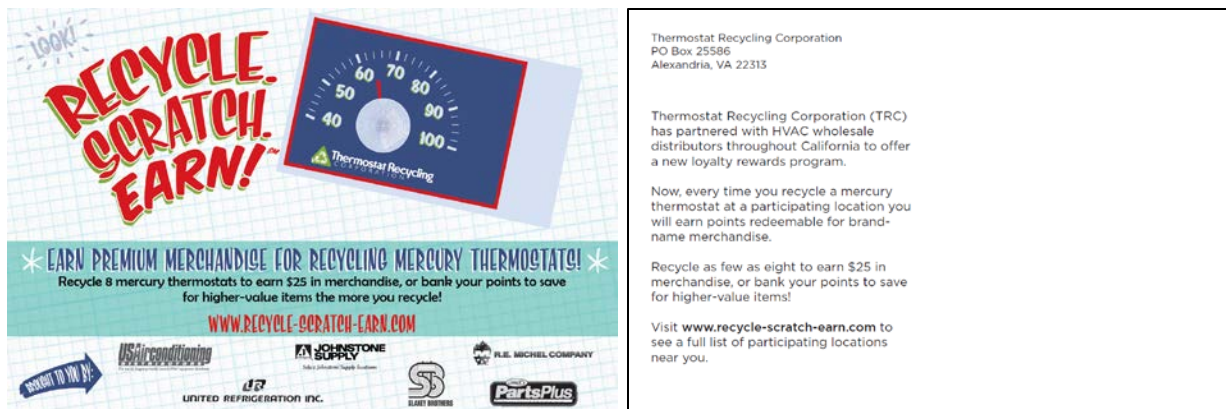
If you no longer have a bin, need a pre-paid  
shipping label, or have moved, call or email us at  
888.266.0550 or TRC@thermostat-recycle.org.

If your container is empty, we'd love to see it  
filled. Contact us to let us help!



TRC also plans to send a direct mail postcard to smaller contractors in the state within 5 miles of a participating loyalty program location (Exhibit 45).

### Exhibit 45: Loyalty Program Postcard Spring 2015 Mailing



**LOOK!**  
**RECYCLE SCRATCH EARN!**

Thermostat Recycling Corporation

Thermostat Recycling Corporation (TRC) has partnered with HVAC wholesale distributors throughout California to offer a new loyalty rewards program.

Now, every time you recycle a mercury thermostat at a participating location you will earn points redeemable for brand-name merchandise.

Recycle as few as eight to earn \$25 in merchandise, or bank your points to save for higher-value items!

Visit [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com) to see a full list of participating locations near you.

Thermostat Recycling Corporation  
PO Box 25586  
Alexandria, VA 22313

**\* EARN PREMIUM MERCHANDISE FOR RECYCLING MERCURY THERMOSTATS! \***  
Recycle 8 mercury thermostats to earn \$25 in merchandise, or bank your points to save for higher-value items the more you recycle!  
[www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com)

**BRANDS TO YOU BY:**  
US Air Conditioning  
JOHNSTONE SUPPLY  
P.L.E. MICHEL COMPANY  
UNITED REFRIGERATION INC.  
S  
PARTSPLUS

## Appendix A: Letter accompanying HHW Flyer



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

November 25, 2014

Ms. Jessica Diridoni  
City of Anderson  
Shasta County Dept. Resource Management  
1855 Placer Street  
Redding, CA 96001

**Subject: Supporting Mercury Thermostat Product Stewardship**

Dear Ms. Diridoni:

Only 18 HHW programs in California currently actively participate in Thermostat Recycling Corporation's (TRC) mercury thermostat collection program. We invite and encourage your agency to follow their lead in supporting product stewardship. The benefits of participation are:

- A self-contained recycling bin for storage and transport
- No cost shipping & disposal of waste mercury thermostats
- Promotional materials
- Data for use in annual Form 303 report

Responses to a recent CalRecycle survey cite "save some money" as the number one reason to work with TRC. Several also mention program ease. Sorting the thermostats from other mercury devices takes just a few minutes and will demonstrate your support for product stewardship.

Please see the enclosed flyer for more information about the TRC program and how to become a partner. I may be reached at 571-447-4313 or [Neisha.johnson@thermostat-recycle.org](mailto:Neisha.johnson@thermostat-recycle.org) for more information or to order bins.

Sincerely,

A handwritten signature in cursive script that reads "Neisha Johnson".

Neisha Johnson  
Manager, Operations and Marketing

*P.S. The enclosed calendar was developed in partnership with Call2Recycle, CARE, and PaintCare. Each month offers a fun fact about each product stewardship organization.*

Enclosure



**Appendix B: HHW Flyer – Side 1**

*Did you know?*

It costs more than \$150 for a pre-paid 5 gallon mercury devices recycling pail.



.....

**Luckily, TRC offers a NO COST container for recycling mercury thermostats that holds double the number of devices.**



The Thermostat Recycling Corporation (TRC) assumes all costs to transport and properly dispose of mercury switch thermostats recovered.

The program is quick and easy to implement, taking only 10 minutes to prepare a container for shipment. Once received, TRC's facility processes the container and returns it within 5-10 business days to start the process over again. It's that simple.

See reverse side for frequently asked questions.



Order a free mercury thermostat recycling container at [www.thermostat-recycle.org/signup](http://www.thermostat-recycle.org/signup).

## Appendix B: HHW Flyer – Side 2

# Frequently Asked Questions

### **What is the purpose of the Thermostat Recycling Corporation (TRC) program?**

TRC's mission is to promote and facilitate the proper management of waste mercury thermostats.

### **Is there a cost for CA HHW locations?**

Under California law there is no cost to participate in the program.

### **What thermostats can I include in the bin?**

All brands of wall-mounted, mercury-switch thermostats.



### **Should I take out the mercury switch?**

No. Return the entire thermostat. TRC prefers the covers attached but will accept those without.

### **Do you accept any other mercury containing waste?**

No. However, if you have mercury switches removed from thermostats contact TRC for further guidance.

### **Are there any record keeping requirements for participating in the recycling program?**

TRC has no requirements for additional record keeping.

### **Do I have to participate in the program?**

No. Participation is voluntary.

### **How do I weigh the thermostats? Do I include the weight of the bin?**

There is no need to weigh the thermostats and/or the bin. The amount of mercury recycled from each thermostat will be calculated as the bin(s) are processed.

### **What happens to the thermostats after I ship the bin?**

Bins with waste mercury thermostats are received at TRC's processing facility in Golden Valley, MN. The mercury switches are removed and then shipped to Veolia Environmental Services in Port Washington, WI for retort. [Veolia EPA ID #: WIR000130591]

For more detailed information about how the thermostats are processed, please email [trc@thermostat-recycle.org](mailto:trc@thermostat-recycle.org).

### **Our agency works with a subcontractor. Can we still participate in TRC?**

Yes.

### **I need thermostat collection data to complete Form 303. How do I get this information?**

Participating HHWs can request data on bin receipts. TRC will provide count of thermostats and mercury switches returned and pounds of mercury recycled.



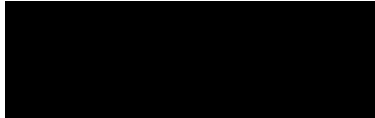
Have more questions? Call us at **888-266-0550**.

## Appendix C: Letter accompanying 22x28 Poster to HVAC Contractors



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

November 3, 2014



Subject: Thermostat Recycling Corporation's Program

Dear Mr Reeder,

Please display the enclosed poster to remind your technicians of the importance of recycling every mercury thermostat removed from service, which California law requires.

Thermostat Recycling Corporation's (TRC) program makes it free and easy for you to recycle mercury thermostats at your local HVAC wholesale distributors. Additionally, TRC has launched a new loyalty program at select HVAC wholesale distributors near you. Recycle a mercury thermostat at a participating location to receive points you can bank and redeem online for thousands of brand-name merchandise. Recycle as few as eight mercury thermostats to start earning prizes.

To see which locations near you offer TRC's loyalty program, visit [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com). To learn more about the benefits and ease of TRC's program, visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) or call us at 888-266-0550.

Sincere Regards,

A handwritten signature in black ink that reads "Christyn Zehnder".

Christyn Zehnder  
Senior Manager, Marketing and Communications

## Appendix D: Demolition Contractor Letter Sent 5/30

May 30, 2014



Subject: Compliance with California Health and Safety Code

Dear Mr. King:

We received your contact information from the National Demolition Association. As a member, we want to make you aware of a free mercury thermostat recycling opportunity.

Thermostat Recycling Corporation (TRC) offers a program to help demolition contractors comply with California Health and Safety Code, which requires all persons who demolish a building to remove any mercury-added thermostats prior to demolition and take it to a location that is authorized to collect them. As an industry-funded non-profit stewardship organization, TRC provides mercury thermostat recycling containers to its program participants and assumes all costs to transport and properly dispose of mercury switch thermostats recovered from service. **For a limited-time TRC is waiving its \$25 one-time fee per container to participate in its program.**

Call TRC toll-free at 888-266-0550 by June 30<sup>th</sup> and mention this letter to directly enroll in TRC's program at no cost. Once you sign up, TRC will send you a recycling container(s) that hold approximately 100 thermostats and contain all necessary materials to comply with universal waste and DOT transportation regulations.

Please note, TRC's recycling bins are for use for mercury thermostats only and the program does not accept any other mercury-containing devices or hazardous waste.

To learn more about the benefits and ease of the program, visit [www.thermostat-recycle.org](http://www.thermostat-recycle.org) or call us at **888-266-0550** to get started today.

Sincere Regards,

A handwritten signature in black ink, appearing to read "Mark Tibbetts".

Mark Tibbetts  
Executive Director

## Appendix E: Memo to Remediation Contractors



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

### MEMO

From: Neisha Johnson, Thermostat Recycling Corporation Operations Manager

Date: November 4<sup>th</sup>, 2014

Subject: **No Cost Transport and Disposal of Waste Mercury Thermostats**

---

If your business routinely generates waste mercury thermostats, please take advantage of a free mercury thermostat recycling container through the manufacturer sponsored stewardship program. The program is operated by the non-profit Thermostat Recycling Corporation (TRC) and is funded by 30 manufactures who historically sold mercury thermostats in California.

TRC operates the program in accordance with state and federal universal waste & transportation regulations.

Participants receive a reusable recycling container which holds approximately 75 waste mercury thermostats. The container comes with a liner and a pre-paid shipping label. Containers are processed in Golden Valley, MN and thermostat mercury components are retorted at Veolia Environmental Services, Inc. in Port Washington, Wisconsin (EPA – identification WIR000130591). Empty containers are returned at no cost to participants.

**Order before November 15<sup>th</sup>, 2014 and TRC will waive the \$25 sign-up fee.**

To order your container, visit [www.thermostat-recycle.org/signup](http://www.thermostat-recycle.org/signup) and use the promo code **CALIBIN** or mail the attached form. If you have questions, call our toll-free number at 1-888-266-0550.

Attachment: Bin Order Form

## Appendix F: HVAC Technician Loyalty Program Cover Letter to Branch Manager



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

Bob Bigler  
R.E. Michel Company  
1922 FRIENDSHIP DRIVE, SUITE 107  
EL CAJON, CA 92020

RE: "Recycle. Scratch. Earn.<sup>SM</sup>" Loyalty Program

Dear Mr. Bigler,

Thank you for participating in Thermostat Recycling Corporation's (TRC) exciting new loyalty program. This rewards program offers your customers the opportunity to earn points for recycling mercury thermostats which they can redeem for brand-name merchandise at [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com).

We have put together all the items you will need to get started with this program. This kit contains:

- Program overview
- Program FAQ for staff
- FAQ Tri-fold brochure for customers
- Cardboard brochure holder
- 50 Flyers to promote the program to customers
- Program best practices (checklist)
- 150 unique scratch cards

When you start to run low on any items, please contact me at **571-447-4311** or [christyn.zehnder@thermostat-recycle.org](mailto:christyn.zehnder@thermostat-recycle.org) to request more. It will take 5-10 business days from your request to receive new materials, so please keep this lead time in mind when you start running low on materials.

If you have any further questions about the program feel free to contact me or visit our website at [www.thermostat-recycle.org](http://www.thermostat-recycle.org) for more information.

Best Regards,



Christyn Zehnder  
Senior Manager, Marketing and Communications  
571-447-4311  
[christyn.zehnder@thermostat-recycle.org](mailto:christyn.zehnder@thermostat-recycle.org)

## Appendix G: HVAC Technician Loyalty Program Overview



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

### “Recycle, Scratch, Earn<sup>SM</sup>” Program Mechanics

- A HVAC technician or other person (participant) returns one or more waste mercury thermostats to a participating HVAC wholesale collection location and will receive a scratch card award for each mercury thermostat returned. Each scratch card will be worth 600 points towards merchandise rewards.
- If it is a new participant he/she will create an award bank online at [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com) to capture awards for immediate or future redemption. A participant will be able to redeem awards upon accumulating a minimum of 4,800 points choosing from the merchandise catalog which offers literally millions of rewards.
- The scratch card can be redeemed instantly using either a smartphone, tablet, or computer terminal with internet access.
- Scratch cards will be pre-printed with serial numbers and are assigned 600 points per card. An assignment of value is occurring for returning a thermostat to a wholesaler. TRC reserves the right to increase or decrease the number of points per card. If you need to re-order cards, please contact Christyn Zehnder at [christyn.zehnder@thermostat-recycle.org](mailto:christyn.zehnder@thermostat-recycle.org) and allow 5-10 business days for them to arrive.
- Participants may redeem points. Order delivery time of merchandise varies; most products are delivered within 7-10 business days.
- TRC will provide quarterly reports to participating wholesalers sorted by branch location with program results. TRC will also share aggregate results among all participating wholesalers.
- To incent HVAC wholesaler participation, TRC will provide a \$500 incentive to branch locations participating in the program. Each returned bin containing a minimum of 40 mercury thermostats will earn an entry for the branch in the drawing and drawings will be held quarterly. The incentive will be in the form of a gift card for funding a branch sponsored TRC party for location staff.
- Key program metrics include year over year same store collections, frequency of bin returns, participant survey(s), and year over year same store collections at non-participating locations.
- Wholesaler staff and their immediate families are prohibited from participating in the program. TRC will audit rewards and compare against returns from each location. Evidence of program abuse (e.g. more redemptions than thermostats collected) may result in program removal.
- Participating distributors will agree to TRC's terms and condition of participation. Breach of these terms may result in the termination of the distributor's participation in the program.
- TRC reserves the right to use "levers" of change for this program such as but not limited to;
  - Change in number of points required to qualify for a reward
  - Change in points thresholds for various membership levels
  - Introduction of points expiration date or inactivity period rules after which points are forfeited



## Appendix H: HVAC Technician Loyalty Program FAQ for Staff – Pg 1



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

# California Recycle, Scratch, Earn Program FAQ's

### Q. What is the Recycle, Scratch, Earn Program?

A. A loyalty program that offers registered participants the opportunity to earn points for qualifying activities. Participants may use points to redeem a wide variety of consumer goods and services, such as merchandise, entertainment or travel from our online rewards catalog. This program offers outstanding quality and robust selection options from the latest Apple products, to concert tickets, to airfare and hotel accommodations.

### Q. How does the Recycle, Scratch, Earn rewards program work?

A. Any participant who returns one or more waste mercury thermostats to a participating HVAC wholesale collection location will receive a scratch card award for each mercury thermostat recycled. Each scratch card will be worth 600 points. Participants will be able to redeem points upon accumulating a minimum of 4,800 points (8 mercury thermostats). Points may be redeemed for items in the online catalog at [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com).

### Q. What are the Recycle, Scratch, Earn operating dates?

A. Thermostat Recycling Corporation reserves the right to terminate this program at any time. Award points may be redeemed 90 days after the termination of the program.

### Q. Who is eligible for the Recycle, Scratch, Earn program?

A. The program is only available to legal residents of California who are at least 18 years of age when they enroll in the program. Only one account is allowed per participant and participants cannot share accounts.

### Q. Why do you request my personal information when I enroll in the Recycle, Scratch, Earn program?

A. When enrolling, you will provide us with personal information that will only be used for awarding you points in the program and fulfilling your redeemed points for merchandise. It is your responsibility to maintain the accuracy of your contact information through the "My Account" page of this website.

## Appendix H: HVAC Technician Loyalty Program FAQ for Staff – Pg 2

**Q. How do I redeem my Recycle, Scratch, Earn Points?**

A. After earning points, simply login to your personal account with the email address and password you provided when you first registered. After you've logged in, click the "Shopping" tab in the top menu to browse or search the online catalog or click "My Account" to update your profile, view available points, awarded points, points spent and item details on your redeemed points.

When you have located the item you wish to redeem points for, you may checkout right away or add more items to your online award shopping cart. Finally, update or confirm the shipping address and your rewards will soon be on their way!

**Q. Do I have to calculate shipping and tax?**

A. The shipping and tax for each item is included in the points and is based upon your personal delivery location information you provide. You will be able to add items to your Wish List and know exactly what it will take to achieve your goal!

**Q. How long will it take for my rewards to arrive after redeeming points?**

A. Order delivery time varies; most products are delivered within 7-10 business days. While some items may arrive in as little as 3-5 business days, this is not typical and will depend upon the vendor of the product and their shipping methods.

Important! Do NOT use P.O. Boxes for product delivery. Many carriers will not deliver to a P.O. Box and will likely result in product return and delay of your shipment.

**Q. What if I need to return a defective product?**

A. Contact Award Headquarters via the "Contact Us" form on this website for return instructions.

**Q. How do I track the shipping status of my rewards?**

A. Log in to your personal account and click "My Account" to view details on your order status.

**Q. Can I have my rewards shipped to an address that is not in my profile?**

A. Yes, simply update the shipping address when completing your order to have awards delivered to a new address. Do NOT choose a P.O. Box address for delivery.

**Q. Who do I contact if there is a problem with my reward merchandise?**

A. Contact Award Headquarters via the "Contact Us" form on this website for information.

## Appendix H: HVAC Technician Loyalty Program FAQ for Staff – Pg 3

**Q. I never received my reward product – what should I do?**

A. If the product is flagged “shipped” on your account “My Account” page, contact Award Headquarters via the Contact Us form on this website for shipping research.

**Q. Where do I obtain warranty information?**

A. Warranty registration forms are typically included in the product packaging.

**Q. Can I cancel an order after it has been placed?**

A. No, all redemptions are final. Please contact Award Headquarters via the Contact Us form on this website for information on returning a defective item.

**Q. How long has TRC been around and why was it established?**

A. TRC began operations in seven states in 1998 and expanded nationally to all states (except AK and HI) in 2002 following the adoption of regulations that allow the program to operate. TRC’s program was established to ensure the proper disposal of waste mercury thermostats. The program accomplishes this by providing a free recycling solution to HVAC contractors and others nationwide.

**Q. Why is it important to recycle mercury thermostats?**

A. Each thermostat contains between 3-16 grams of mercury, which is why it is very important they are not disposed of in the trash due to the toxicity of mercury. If thrown in the trash the mercury may get into the environment and pollute our waterways. To put it in perspective, there is at least 1,000 times more mercury in a thermostat than a compact fluorescent light bulb (CFL).

**Q. What is California law regarding mercury thermostat disposal?**

A. All states require the handling of waste mercury thermostats in accordance with state and federal law. Seventeen states further regulate the sale and/or disposal of mercury thermostats. Visit TRC’s [State Recycling Programs](#) page for more details on state specific regulations.



## Appendix H: HVAC Technician Loyalty Program FAQ for Staff – Pg 4

**Q. How does the Recycle, Scratch, Earn work?**

A. An HVAC technician or other person (participant) returns one or more waste mercury thermostats to a participating HVAC wholesale collection location and will receive a scratch card award for each mercury thermostat returned. Each scratch card will be worth 600 points towards merchandise rewards, unless it is the first thermostat which will be worth 1,200 points. If it is a new participant he/she will create an award bank online to capture awards for immediate or future redemption. Participants will be able to redeem awards upon accumulating a minimum of 4,800 points. The scratch card can be redeemed once instantly using either a smartphone, tablet, or computer terminal that is available. TRC will solicit a select group of wholesale distributors to participate in the program. Selection criteria include prior record of active participation in the program, markets served, willingness to promote program, and ability to ensure participation at all branch locations. The website recycle-scratch-earn.com prohibits the same scratch card to be redeemed more than once.

**Q. Can wholesaler employees participate?**

A. To ensure program integrity wholesaler staff and their immediate families will be prohibited from participating in the program. Moreover, TRC will audit rewards and compare against returns from each location. Evidence of program abuse (e.g. more redemptions than thermostats collected) may result in removal from the program. TRC will deploy a secret shopper to select locations to verify participation and compliance with program rules/procedure. If noncompliance is found, termination of wholesaler participation may occur. To incent HVAC wholesaler participation, a random drawing will take place once a quarter among the locations that returned a bin. The winner will be provided a \$500 gift card for funding a branch sponsored TRC party (BBQ or catered meal) for staff personnel. TRC will send a quarterly report to specific participating wholesalers sorted by branch location with program results. TRC will also share aggregate results among all participating wholesalers.

## Appendix I: HVAC Technician Loyalty Program FAQ Tri-Fold Brochure

### What is the Recycle, Scratch, Earn Program?

A loyalty program that offers registered participants the opportunity to earn points for qualifying activities. Participants may redeem points for a wide variety of consumer goods and services, such as merchandise, entertainment or travel from the online catalog of rewards. From the latest in Apple products, to concert tickets, to airfare and hotel accommodations, this program offers outstanding quality and robust selection options.

### How does the Recycle, Scratch, Earn rewards program work?

Return one+ waste mercury thermostats to a participating HVAC wholesale collection location to receive a scratch card award for each mercury thermostat returned. Each scratch card will be worth 600 points. Participants can redeem points upon accumulating a minimum of 4,800 points. Points may be redeemed for items in the online catalog at [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com).

### What are the Recycle, Scratch, Earn operating dates?

Thermostat Recycling Corporation reserves the right to terminate this program at any time. Award points may be redeemed 90 days after the termination of the program.



## HVAC Technician Loyalty Program

**\* RECYCLE A MERCURY \*  
THERMOSTAT & EARN POINTS  
TO REDEEM FOR BRAND-NAME  
MERCHANDISE!**

[www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com)



714

### Loyalty Program FAQs

#### Who is eligible for the Recycle, Scratch, Earn program?

The program is only available to legal residents of California who are 18+ years of age. Only one account is allowed per participant and participants cannot share accounts.

#### Why is my personal information requested when I enroll in the program?

To enroll you must provide personal information that will only be used in relation to awarding you points and fulfilling your redeemed points for merchandise. It is your responsibility to maintain the accuracy of your contact information through the "My Account" page of the website.

#### How do I redeem my Recycle, Scratch, Earn Points?

Visit [www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com) to register an account and login. After you've logged in, click the "Shopping" tab in the top menu to browse or search the online catalog, or click "My Account" to update your profile, view available points, etc.

When you have selected the item you wish to redeem points for, you may checkout right away or add more items to your online award shopping cart. Finally, update or confirm the shipping address.

#### Do I have to calculate shipping and tax?

The shipping and tax for each item is included in the points and is based upon your personal delivery location information you provide. You will be able to add items to your Wish List to know exactly what it will take to achieve your goal!

#### How long will it take for my rewards to arrive after redeeming points?

Order delivery time varies; most products are delivered within 7-10 business days. While some items may arrive in as little as 3-5 business days, this is not typical and will depend upon the vendor of the product and their shipping methods.

**Important! Do NOT use P.O. Boxes for product delivery.** Many carriers will not deliver to a P.O. Box and will likely result in product return and delay of your shipment.

#### How do I track the shipping status of my merchandise?

Log in to your personal account and click "My Account" to view details on your order status.

#### What if I need to return a defective product?

Contact Award Headquarters via the "Contact Us" form on the rewards website for return instructions.

#### Can I have my rewards shipped to an address that is not in my profile?

Yes, just update the shipping address when completing your order to have awards delivered to a new address.

#### Who do I contact if there is a problem with my reward merchandise?

Contact Award Headquarters via the "Contact Us" form on the rewards website.

#### I never received my reward product - what should I do?

If the product is flagged "Shipped" on your "My Account" page, contact Award Headquarters via the "Contact Us" form on the rewards website for shipping research.

#### Where do I obtain warranty information?

Warranty registration forms are typically included in the product packaging.

#### Can I cancel an order after it has been placed?

No, all redemptions are final. Please contact Award Headquarters via the "Contact Us" form on the rewards website for information on returning a defective item.

Rewards Website:

[www.recycle-scratch-earn.com](http://www.recycle-scratch-earn.com)

## Appendix J: HVAC Technician Loyalty Program Best Practices



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

### TRC Program Best Practices

The following checklist offers guidance on best practices to run TRC's "Recycle. Scratch. Earn.<sup>SM</sup>" loyalty program.

#### Checklist

Did you recently return your recycling bin to TRC to start this program with an empty bin?	<input type="checkbox"/>
Is your TRC recycling bin visible to customers?	<input type="checkbox"/>
Are you using the cardboard dump bin display TRC provided?	<input type="checkbox"/>
Can your staff explain the program in detail to a customer?	<input type="checkbox"/>
Does your staff know where the scratch cards are kept so they can give one to a customer when he/she recycles a mercury thermostat?	<input type="checkbox"/>
Is your staff aware of the 5-10 business days lead time needed to receive more scratch cards when you are running low?	<input type="checkbox"/>
Are you using the following from the marketing kit that TRC sent you?	
• Counter Flyer	<input type="checkbox"/>
• Counter brochures	<input type="checkbox"/>

#### Contact Information

If you need any additional materials contact TRC's marketing manager Christyn Zehnder:  
[Christyn.zehnder@thermostat-recycle.org](mailto:Christyn.zehnder@thermostat-recycle.org) or 571-447-4311