1765 Duke Street | Alexandria, VA 22314 | thermostat-recycle.org

#### VIA EMAIL and U.S. Mail

March 30, 2015

John Gilkeson Resource Management and Assistance Division Minnesota Pollution Control Agency 520 Lafayette Road North Saint Paul. MN 55155-4100

Subject: Thermostat Recycling Corporation's 2014 Annual Report

Dear Mr. Gilkeson:

Attached is TRC's annual collection report for calendar year 2014.

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.
- Collections of whole thermostats increased by 117% in Minnesota in 2014. With just over 50% of locations returning their TRC recycling containers, Minnesota enjoyed one of the highest participation rates among states with mandatory collection programs.
- 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 was actively "in the field" last year in Minnesota and visited 35 HVAC contractors, offering free recycling containers to locations. TRC staff also visited several wholesale locations during the year.

TRC welcomes the opportunity to review our 2014 efforts and update you on plans for 2015. I will contact you regarding your availability for a meeting shortly. If you have any immediate questions or concerns I may be reached at 571-447-4315 or by email at mark.tibbetts@thermostat-recycle.org.

Sincere Regards.

Mark Tibbetts

**Executive Director** 

Exhibit 1: 2014 Minnesota Collections by Brand

Brand Holder	<u>Thermostats</u>	Count Switches	Pounds Mercury
Bard	6	24	0.1
Burnham Holdings	50	50	0.3
Carrier	615	1104	6.8
Chromolox	2	2	0.0
Climate Master	1	1	0.0
	4	4	
Crane Company			0.0
Empire Comfort Systems	12	12	0.0
General Electric Corporation	31	71	0.4
Goodman Global	32	59	0.3
Grainger	18	20	0.1
Honeywell	12,549	13,739	85.1
Hunter Fan	6	12	0.0
Invensys	70	80	0.5
ITT Corporation	25	28	0.1
Lear Siegler	17	33	0.2
Lennox	816	1,047	6.4
Lux Products	50	51	0.3
Marley-Wylain Company	24	32	0.2
McQuay International	51	154	0.9
Nordyne Corporation	16	20	0.1
	7	13	
PSG Controls			0.0
Rheem	114	246	1.5
Sears Holdings	82	91	0.5
Taco, Inc.	1	1	0.0
TPI Corporation	1	1	0.0
Trane	104	188	1.1
Uponor, Inc.	23	23	0.1
Vaillant Corporation	1	1	0.0
White Rogers	477	592	3.6
York/Johnson Controls	44	110	0.6
	ber Brands		
ADDISON	1	4	0.0
afco	4	4	0.0
AMERICAN STABILIS	50	50	0.3
ARKLA	1	1	0.0
Asystas	1	2	
BRENTWOOD			0.0
	5	5	0.0
CLAYTON	4	4	0.0
Climatrol	2	2	0.0
COMFORT CONTROL CENTER	1	1	0.0
COMMANDAIRE	1	1	0.0
CONTROLS COMPANY OF AMERICA	4	4	0.0
Dunham Busch	1	1	
			0.0
DURO ZONE	5	5	0.0
ECONAIR	3	6	0.0
EDWARDS ENGINEERING	1	1	0.0
FLORIDA HEAT AND PUMP	2	3	0.0
Friedrich	2	6	0.0
Green Colonial	5	5	
			0.0
HALEN	1	1	0.0
LSI	3	3	0.0
Mercoid	1	1	0.0
Montgomery Wards	21	21	0.1
NEPCO	1	4	0.0
NEWMAC	2	2	
NRC			0.0
-	2	2	0.0
Propane	1	1	0.0
ROBERTS GORDON	4	4	0.0
Servel	1	1	0.0
SIGNATURE	1	1	0.0
Singer	8	8	0.0
SLANT FIN	6	6	
STEWART WARNER	2	2	0.0
OIL WALL WALLINER			0.0
TETOO	8	12	0.0
	7	7	0.0
TRIAD			
TETCO TRIAD WATER FURNACE	2	4	0.0
TRIAD WATER FURNACE		5	
TRIAD WATER FURNACE WATERBURY	2 5	5	0.0
TRIAD WATER FURNACE WATERBURY WIRSBO	2 5 2	5 2	0.0
TRIAD WATER FURNACE WATERBURY WIRSBO WOODCHUCK	2 5 2 1	5 2 1	0.0
TRIAD WATER FURNACE WATERBURY WIRSBO WOODCHUCK Zone-A-Trol	2 5 2 1 1	5 2 1 1	0.0
TRIAD  WATER FURNACE  WATERBURY  WIRSBO  WOODCHUCK  Zone-A-Trol	2 5 2 1	5 2 1	0.0 0.0 0.0
TRIAD WATER FURNACE WATERBURY WIRSBO WOODCHUCK Zone-A-Trol	2 5 2 1 1	5 2 1 1	0.0 0.0 0.0
TRIAD WATER FURNACE WATERBURY WATERSBO WOODCHUCK Zone-A-Trol ZYNOM (Manufaci	2 5 2 1 1 1	5 2 1 1	0.0 0.0 0.0 0.0
TRIAD WATER FURNACE WATERBURY WIRSBO WOODCHUCK Zone-A-Trol	2 5 5 2 1 1 1 1 1 1 urer not Identifiable)	5 2 1 1 1	0.0 0.0 0.0 0.0 0.0 0.0

In Minnesota, TRC recovered the equivalent of 16,418 mercury thermostats from 15,428 whole mercury thermostats plus 1,156 mercury switches removed from thermostats.

Collections increased by over 117% compared to 2013.

TRC recovered approximately 14% of thermostats from HVAC contractors, 13% from HHW locations, and 73% from HVAC wholesale distributor collection locations.

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

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

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

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

The containers are returned from the storage area to the TRC processing area to have the mercury bulbs removed from the plastic housing. Universal Waste Regulations require the disposal of waste within 12 months of generation. TRC's processor requires that the disposal occur within 6 months of generation and TRC follows the more stringent requirement. Small quantities of thermostats

are removed from the container, which is then closed again, and placed at the bulb removal workstation on a tray that contains any potential mercury spillage. The bulbs are removed from the thermostats and placed into a 2 quart container at the work station. If a bulb breaks and the mercury spills, the work area is designed to contain the spillage and the operators are trained in the clean-up and disposal of mercury. The TRC processing area is equipped with special mercury vacuum cleaners and the work area is vacuumed at the end of the work day to assure that any spillage is cleaned up and not left to evaporate.

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

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

### **Program Education and Outreach**

#### **Direct Mail**

TRC utilized direct mail, targeting both collection locations and HVAC contractors/technicians.

#### **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 that had not returned a TRC container within the last 12 months (in accordance with Minnesota's Universal Waste Regulations). TRC increased the frequency of these mailings in 2014 and reminders were mailed in May (64) and September (55). TRC determined this is one of

simplest, yet most effective changes to the program in 2014. TRC plans to increase the frequency of these mailings in 2015.

**Exhibit 2: Miss You Postcard** 





### 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, as they remain the most convenient location for the majority of Minnesota-based technicians/contractors to purchase replacement thermostats and recycle waste mercury thermostats.

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

TRC's 2014 advertising campaign continued to focus mostly on "easy and free" and "It's the law" messaging (where applicable, as only a limited number of states ban the disposal of mercury thermostats in solid waste and/or require HVAC contractors to recycle all mercury thermostats removed from service).

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

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

 Johnstone Supply Flyer, a printed version of their online catalogue that is mailed to more than 300,000 HVAC contractors nationwide. The flyer featured a TRC advertisement

in their August and December issues (Exhibit 3). Johnstone Supply has five locations in Minnesota. Johnstone Supply provided these placements at no-cost to TRC.

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

- 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 4)
- HVACR Business Magazine, a national publication with approximately 34,000 qualified subscribers. TRC ran a 2-color 1/4 page ad January – March. (Exhibit 5)

**Exhibit 3: Johnstone Supply Flyer Ad** 



**Exhibit 4: Distribution Center Ad** 



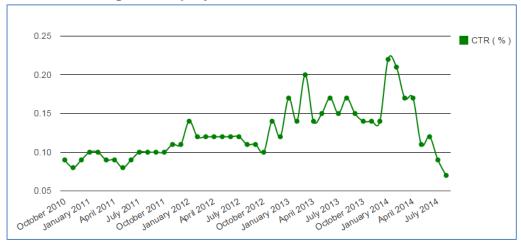
**Exhibit 5: HVACR Business Magazine Ad** 



**Web-based advertising** — TRC continued the use of rotating banner advertisements in 2014, with changes in scheduling and scope and the addition of new outlets.

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. An impression is a measure of the number of times an ad is displayed, and a CTR is the number of times a click is made on the advertisement divided by the total impressions. Exhibit 6 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%, so TRC's CTR performance exceeded the national average.

**Exhibit 6: Google's Display Benchmarks Tool** 



New advertising in 2014 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 7)
- 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.

**Exhibit 7: HVACR Business Enewsletter Ad** 



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 8)
- 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 9)

- **HVACRBusiness.com**: TRC ran a banner ad in July that resulted in 6,638 impressions and a CTR of 0.32%. (Exhibit 10)
- **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 11)

**Exhibit 8: ACHRNews.com Ad** 



**Exhibit 9: ACHR Newsletter Ad** 

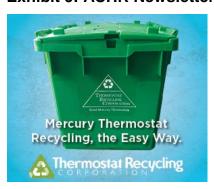


Exhibit 10: HVAC Business.com



**Exhibit 11: HVAC-Talk.com** 



**Google AdWords** — Since 2011 TRC has deployed a Google AdWord campaign that geo-targets contractors/technicians and consumers (homeowners) in states with mercury thermostat disposal bans, including Minnesota. Advertisements appear on Google search results pages after an

individual searches terms related to TRC's mission (E.g. thermostat replacement, contracting recycling regulations, mercury thermostat recycling, programmable thermostats, etc.).

TRC continued this campaign in 2014 with enhancements to Minnesota's landing page that included a direct link to the Minnesota's state laws page (Exhibit 12). TRC launched the campaign in March, coinciding with the launch of the updated website, and ran it through the calendar year.

This is TRC's preferred option to reach consumers because of the campaign's extensive and targeted reach.

The Minnesota campaign yielded 251,147 impressions with an average CTR of 0.32%

Thermostat Recycling

an industry-funded non-profit

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**Exhibit 12: Google AdWords Landing Page** 

### TRC's Website

In March, TRC launched an updated website with enhanced functionality. Updates include:

• **Find a Site page:** updated to direct people to active collection sites within the program that have returned a TRC bin within 14 months. This assists homeowners and contractors/technicians in identifying convenient collection sites actively 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 isn't collecting. 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 was the 3<sup>rd</sup> most visited page.
- Become a Collection Site: now supports an online application to become a collection site, and PDF versions are still available as well. It was the fourth most visited page and accounted for more than 70 bin sign-ups throughout the year.
- Collection Partners: a new section that lists collection partner locations 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 to find out more. This gives TRC a marketing value-add to participating companies.
- 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 offer ease communications with TRC.
- **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 191% increase of visitors from Minnesota and the state ranked 9th among the country in share of visitors.

The increase in traffic reflects the new redesign/enhancements, impact of paid trade channel advertising, Google AdWord campaign, and search engine optimization efforts.

#### 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. Just over 6,406 attendees were from the Midwest.

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

Nashville, TN

Johnstone Supply is a cooperative wholesaler distributor of HVAC parts and equipment with 350 locations nationwide, including five in Minnesota. Johnstone's Annual Membership meeting is invitation only and TRC again attended and exhibited as part of an ongoing effort with Johnstone's corporate staff to encourage and expand the cooperative's members' participation in the program. The event is well attended by owners and senior staff and it was 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 to attending HVAC contractors.

#### 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 this 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 this 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 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."

### Other Program Activities

Some examples of other program activities include:

- Direct Distribution of Bins to HVAC Contractors TRC staff made arrangements with Minnesota Pollution Control Agency (PCA) staff to pick up nearly 90 TRC recycling containers that had been stored unused at a PCA warehouse in Duluth. TRC agreed to distribute these containers at no-cost to HVAC contractors. TRC staff visited just over 30 HVAC contractors and offered each contractor a free TRC container. See Appendix A for more details.
- Wholesaler Collection Location Visits TRC staff visited two wholesale locations in Bloomington in October. TRC staff found several thousand waste thermostats at one of these locations. Subsequent to the visit, TRC made arrangements with this wholesaler to transfer these thermostats to TRC's facility in Golden Valley. TRC has one week of wholesaler location visits scheduled in 2015.
- Outbound Calls to Collection Points TRC staff made six 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 and see if they need shipping or promotional materials.
- Dump Bin Displays In July TRC developed branded displays to showcase the TRC container at HVAC wholesale distributor collection locations (Exhibit 13) and enhance the visibility of the program at HVAC wholesale collection locations. These displays were provided at no-cost to distributors nationwide, including Johnstone Supply, Gustave A Larson, and R.E. Michel locations in Minnesota.
- After attending the Indoor Environment & Energy Expo, TRC obtained a list of attendees and sent a letter in April to remind them of TRC's program, including six in Minnesota (Appendix B). The letter also offered a free recycling container for larger contractors.

- BMOP TRC partnered with Heating Air-conditioning and Refrigeration Distributors International (HARDI) for the third annual Big Man on Planet (BMOP) competition in 2014. In April TRC sent an invitation to 320 HARDI member Presidents/principals to encourage them to participate to see which distributor could recover the most thermostats (Exhibit 14). In 2014 TRC restructured the program to allow for multiple winners. TRC also included a \$500-\$1,000 employee incentive to the top location from each tier. Participation increased 67% over 2013, with 21 distributors competing with more than 1,000 locations nationwide. The competition ran May 1<sup>st</sup> October 31<sup>st</sup> and yielded 55,912 mercury thermostats nationally. Two Minnesota Johnstone Supply locations, the tier 1 winner, shipped more 4,200 thermostats to TRC during the competition. Gustave A. Larson's increased participation in the program last year is also due to the competition.
- Gustave A. Larson Promotion In October, TRC implemented a "5 for \$5 SUBWAY
   Promotion" at all six Gustave A. Larson Minnesota locations. Every five mercury thermostats
   returned earned a \$5 gift card to SUBWAY, and an entry into a drawing to win a 42 inch TV.
   The TV winner was randomly selected in December. The 5 for \$5 promotion has been
   extended indefinitely while gift card supplies last.
  - TRC also created and distributed to each location branded counter cards to market the promotion (Exhibit 15).
  - The promotion yielded 793 mercury thermostats. Because these locations had no returns in 2013 it is not possible to assess the impact of the promotion on collections.
- Johnstone Supply Promotion In October TRC implemented a "5 for \$5 Best Buy Promotion" at the Blaine, Bloomington, Rochester, and St. Paul Johnstone Supply locations. Every five mercury thermostats returned earned a \$5 gift card to Best Buy, and an entry into a drawing to win a 42 inch TV.
  - TRC created a flyer for the locations to market the promotion to their customers (Exhibit 16). Because of substantial returns during the promotion, but unrelated to the promotion, it is not possible to assess the impact of the promotion on collections.
- Social Media 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".

**Exhibit 13: Dump Bin Display** 



**Exhibit 14: BMOP Invitation** 





**Exhibit 15: Gustave A. Larson Subway Promotion Counter Card** 



**Exhibit 16: Johnstone Supply Best Buy Promotion Flyer** 



### **Program Expenses**

Below is a summary of TRC's national program expenses for 2014. A copy of TRC's 2013 IRS Form 990 is also available for inspection.

**Table 1: 2014 Program Administrative 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%	
Total (expenses)	\$ 1,036,485	\$ 1,412,333	36%	

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

- TRC staff and administration increased by 42% in 2013. TRC added a full-time national account manager in January 2014 and a full-time operations coordinator in September 2014. TRC has added 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.

**Appendix A: Collection Location Site Visits** 

Date Visited	Account Name	City	State
09/30/2014 08:06 AM	Genz-Ryan A/C, Heating, and Plumbing	Burnsville	MN
09/30/2014 10:14 AM	Air Mechanical Inc	Hamlake	MN
09/30/2014 11:11 AM	Global Mechanical	Elk River	MN
09/30/2014 11:59 AM	Minnesota Heating & Air Conditioning Inc	Maple Grove	MN
09/30/2014 12:06 PM	Comfort Solutions Heating & Cooling	Osseo	MN
09/30/2014 12:50 PM	KRINKIE'S ONE HOUR HEATING AND AIR CONDITIONING	Saint Paul	MN
10/01/2014 05:06 AM	Gustave A. Larson Company-St. Paul	St. Paul	MN
09/30/2014 10:28 AM	ABRAHAMSON HEATING	PROCTOR	MN
09/30/2014 10:47 AM	Superior Heating, Air Conditioning and Electric	Anoka	MN
09/30/2014 12:13 PM	Marsh Htg & A/C	Brooklyn Park	MN
10/01/2014 06:02 AM	S & R Appliance Repair, Inc.	White Bear Lake	MN
10/01/2014 06:42 AM	Prescription Heating and Cooling LLC	Oakdale	MN
10/01/2014 07:45 AM	Sedgwick Heating & AC	Mendota Heights	MN
09/30/2014 11:38 AM	Heating & Cooling Two, Inc.	Osseo	MN
10/01/2014 05:36 AM	Bay West Inc	St Paul	MN
10/01/2014 06:59 AM	Ed's Heating & Air, Inc.	Woodbury	MN
10/01/2014 07:02 AM	Aurora Mechanical LLC.	Inver Grove Heights	MN
10/01/2014 08:19 AM	Bob Boldt HVAC	Eagan	MN
10/01/2014 08:20 AM	LOFGREN HEATING AND AIR INC	Apple Valley	MN
10/01/2014 11:35 AM	Gopher Heating and Air Conditioning	Savage	MN
10/01/2014 08:41 AM	Metro Air Inc	Prior Lake	MN
10/01/2014 11:37 AM	Southside Heating & Air Conditioning Inc.	Bloomington	MN
10/01/2014 12:43 PM	Gustave A. Larson Co-Bloomington	Bloomington	MN
10/02/2014 02:28 PM	Johnstone Supply-Bloomington	Bloomington	MN
10/02/2014 05:59 AM	Bay West - Fridley	Fridley	MN
10/02/2014 06:34 AM	BFS Heating & Cooling Inc.	Eden Prairie	MN
10/02/2014 06:35 AM	Ron's Mechanical, Inc	Shakopee	MN
10/02/2014 08:22 AM	Bowman Sheet Metal, Heating & A.C., Inc.	Buffalo	MN
10/02/2014 08:56 AM	Ditter Inc.	Medina	MN
10/02/2014 09:26 AM	ductworks htg & a/c	Golden Valley	MN
10/02/2014 05:14 AM	Standard Heating & Air Conditioning	Minneapolis	MN
10/02/2014 07:34 AM	Avid Heating and Cooling LLC	Minnetrista	MN
10/02/2014 06:56 AM	Quality Heating & Air Services, Inc.	Shakopee	MN
10/02/2014 07:19 AM	Precision Heating and Cooling, Inc.	Chaska	MN
10/02/2014 08:21 AM	High Road Heating & Cooling Co.	Rockford	MN

#### **Appendix B: IE3 Post-Show Letter**



1765 Duke Street | Alexandria, VA 22314 | thermostat-recycle.org

April 15, 2014



RE: IE3 ACCA Show in Nashville, TN March 17<sup>th</sup> - 20<sup>th</sup>

Hello Scott Studer,

I am writing this letter to personally reach out to you regarding the importance of recycling waste mercury thermostats. I received your information from the recent ACCA trade show in Nashville, TN.

Thermostat Recycling Corporation is an industry funded non-profit that provides free mercury thermostat recycling at over 2,000 HVAC supply houses nationwide.

Each mercury thermostat your technicians remove from service contains at <u>least</u> 1,000 times more mercury than a compact fluorescent light bulb and many states now regulate the disposal of mercury thermostats. HVAC contractors are the first, and sometimes last, point of contact before a mercury bearing thermostat is disposed of. As such, we strongly encourage you to spend a couple of minutes on website (www.thermostat-recycle.org) and familiarize yourself with the program.

To further incent your participation, for a limited time, TRC is offering free participation to ACCA members with more than seven technicians. To receive a free TRC recycling container and pre-paid shipping of your waste mercury thermostats contact TRC at 1-888-266-0550 and reference "ACCA 2014 Offer"

I look forward to hearing from you. If you have any questions at all, please feel free to reach out to me.

Sincerely,

Ryan L Kiscaden

Senior Account Executive Mobile - 571-302-0877

ryan.kiscaden@thermostat-recycle.org

Attachment: Tri-fold brochure

Printed on 100% post-consumer waste.

#### **APPENDIX A—Location and Collection Data**

Collection Location Name	Business Type	Street 1	Street 2	City	State	Zip	# Bins at Location	Date(s) of Bin(s)Receipt	Total Stats	Total Mercury
Ace Supply Co Inc	Wholesalers	3825 Edgewood Ave. S.		St. Louis Park	MN	55426	2	03/07/2014, 03/08/2014, 11/06/2014, 11/06/2014	543	3.55
Ace Supply Co Inc	Wholesalers	4749 Old Hwy 8, Suite 100		Moundsview	MN	55112	2	11/10/2014, 11/10/2014	290	2.11
Air Mechanical, Inc.	Contractor	16411 Aberdeen Street Ne		Ham Lake	MN	55304	1		0	0.00
Allied Supply	Wholesalers	772 Kasota Avenue S.E.		Minneapolis	MN	55414	1		0	0.00
Associated Mechanical Contractors	Contractor	1257 Marschall Road		Shakopee	MN	55379	1	06/23/2014, 07/09/2014, 12/23/2014	51	3.51
Auer Steel & Heating Supply	Wholesalers	865 Xenium Lane North		Plymouth	MN	55441	3	01/10/2014, 01/10/2014, 09/15/2014, 09/16/2014, 09/16/2014	590	5.02
Bay West Inc	Contractor	5201 E. River Road	Suite 303	St Paul	MN	55103	4	04/29/2014, 07/08/2014, 09/26/2014	350	2.36
Becker County Environmental Services	HHW Facility	835 Lake Ave		Detroit Lakes	MN	56501	1		0	0.00
Blue Earth County, Envt Services	HHW Facility	410 S. 5Th St., 3Rd Floor		Mankato	MN	56002		10/14/2014	69	0.56
Boeser Inc (Trade Account)	Wholesalers	2901 Se 4Th Street		Minneapolis	MN	55414			0	0.00
Bowman Sheet Metal Heating & Air Conditioning Inc	Contractor	300 Brighton Avenue S		Buffalo	MN	55313	1		0	0.00
Center Point Energy	Contractor	10511 Hanson Blvd		Coon Rapids	MN	55433	2	02/14/2014, 10/29/2014	224	1.43
Center Point Energy	Wholesalers	1151 Lakeland Dr S.E.		Willmar	MN	56201	1	10/03/2014	90	0.56
Center Point Energy	Wholesalers	2400 N. Riverfront		Mankato	MN	56001	1	11/07/2014	134	0.83
Center Point Energy	Wholesalers	304 E. River Road S.		Brainerd	MN	46401	1		0	0.00

Center Point Energy	Contractor	501 West 61St St.	Minneapolis	MN	55419		02/25/2014, 03/13/2014, 09/05/2014, 11/21/2014	475	3.04
Center Point Energy	Contractor	9320 Evergreen Blvd. Ste B	Coon Rapids	MN	55433	1	04/23/2014, 10/21/2014, 01/30/2014, 06/27/2014	452	2.96
Chisago County Hhw	HHW Facility	39649 Grand Avenue	North Branch	MN	55056	1	01/06/2014	58	0.47
Comelex Corporation	Wholesalers	905 North Fifth Street	Minneapolis	MN	55401	1		0	0.00
Comfort Solutions Heating & Cooling	Contractor	11 1St Street Nw	Osseo	MN	55369	1		0	0.00
Crow Wing County Solid Waste Dept	HHW Facility	15728 State Highway 210	Brainerd	MN	56401	1	06/23/2014	45	0.30
Dakota County Recycling Zone	HHW Facility	3365 Dodd Road	Eagan	MN	55122	2	01/10/2014, 06/18/2014, 10/20/2014	315	2.42
Dakota Supply Group	Wholesalers	3130 County Road 45 Sw	Alexandria	MN	56308	1	01/28/2014, 02/06/2014, 02/10/2014	265	1.85
Excelsior Mfg. & Supply	Wholesalers	800 Berkshire Lane N	Plymouth	MN	55441	1		0	0.00
Excelsior Mfg. & Supply	Wholesalers	8756 W 35W Service Dr Ne	Blaine	MN	55449	1	06/11/2014	62	0.48
Express Central	Wholesalers	401 Ash Avenue Nw	Wadena	MN	56482	1		0	0.00
Ferguson Enterprises	Wholesalers	1321 N. Riverfront Drive	Mankato	MN	56001	1	10/03/2014, 10/17/2014, 11/06/2014, 11/26/2014, 12/04/2014, 10/07/2014, 10/27/2014, 11/14/2014, 11/25/2014	892	6.24
Ferguson Enterprises	Wholesalers	401 Lincoln Ave. N.E.	St Cloud	MN	56304	1	04/11/2014	123	0.86
First Supply Company	Wholesalers	151 Park Dr	Owatowma	MN	55060	2	03/06/2014	6	0.04
Freeborn County Household Hazardous Waste	HHW Facility	411 So. Broadway	Albert Lea	MN	56007	1		0	0.00
Goodin Company	Wholesalers	2700 N 2Nd Street	Minneapolis	MN	55440			0	0.00
Goodin Company	Wholesalers	285 Como Ave	St Paul	MN	55103			0	0.00
Goodin Company	Wholesalers	3347 Nw 19Th St	Rochester	MN	55901	1		0	0.00

Goodin Company	Wholesalers	4524 Venture Circle	Duluth	MN	55811	2	06/19/2014	49	0.31
Goodin Company	Wholesalers	620 Davis Avenue	Detroit Lakes	MN	56501	1		0	0.00
Goodin Company	Wholesalers	902 Thiesse Drive	Brainerd	MN	56401	1	06/23/2014	90	0.59
Goodin Company	Wholesalers	5205 Foundry Circle	St Cloud	MN	56303	1	01/28/2014	78	0.68
Gopher Heating & Sheet Metal	Contractor	12330 Ottawa Avenue	Savage	MN	55378	1		0	0.00
Green Lights Recycling, Inc.	HHW Facility	10040 Davenport Street Ne	Blaine	MN	55449	1		0	0.00
Gustave A Larson	Wholesalers	4001 W. Superior St.	Duluth	MN	55807	1	02/03/2014, 08/15/2014, 11/10/2014, 12/18/2014	439	3.27
Gustave A Larson	Wholesalers	2530 Schuster Ln. Nw	Rochester	MN	55901	1	11/13/2014	122	2.33
Gustave A Larson	Wholesalers	13200 10Th Ave North	Plymouth	MN	55441	4	10/23/2014	135	1.23
Gustave A Larson	Wholesalers	2575 University Av / Suite 190	St Paul	MN	55114	2	09/29/2014, 10/14/2014, 12/30/2014, 09/26/2014, 10/13/2014	428	3.43
Gustave A Larson	Wholesalers	525 Apollo Ave. N.E. Suite 1	St Cloud	MN	56304	1	04/07/2014, 11/11/2014, 12/15/2014	368	2.93
Gustave A Larson	Wholesalers	9208 James Av South	Bloomington	MN	55431	5	04/11/2014, 04/25/2014, 11/14/2014	273	2.91
Heating & Cooling Two Inc.	Contractor	18550 County Road 81	Osseo	MN	55369	1		0	0.00
Heisel Brothers, Inc	HHW Facility	801 6Th Ave N	Virginia	MN	55792	1	06/25/2014	85	0.53
Hennepin County Hhw	HHW Facility	1400 W. 96Th Street	Bloomington	MN	55431		01/10/2014	95	0.61
Hennepin County Hhw	HHW Facility	8100 Jefferson Hwy No.	Brooklyn Park	MN	55445	1	07/18/2014, 09/15/2014, 11/26/2014	379	2.78
J H Larson Co	Wholesalers	600 Lafayette Rd	St Paul	MN	55101	1		0	0.00
J H Larson Co	Wholesalers	700 Colorado Ave So	Golden Valley	MN	55416	1		0	0.00
Johnstone Supply	Wholesalers	1261 97Th	Blaine	MN	55434	1		0	0.00

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Johnstone Supply	Wholesalers	1929 7Th St Nw		Rochester	MN	55901	36	11/10/2014, 11/12/2014, 11/13/2014	2,316	16.12
Johnstone Supply	Wholesalers	1401 W. 94Th Street		Bloomington	MN	55431	10	10/24/2014, 10/27/2014, 11/11/2014, 11/12/2014, 12/03/2014, 12/23/2014, 11/11/2014	1,834	12.41
Johnstone Supply	Wholesalers	2550 Wabash Avenue		St Paul	MN	55114	1	11/10/2014, 11/20/2014	192	1.61
Johnstone Supply	Wholesalers	870 Decatur Ave North		Golden Valley	MN	55427	1	04/16/2014, 04/24/2014, 11/12/2014	326	3.63
Jr'S Advanced Recycler'S	Alternate Recycling Company	10619 Courthouse Blvd.		Inver Grove Heights	MN	55077	2	03/07/2014, 12/17/2014	192	1.30
Kandiyohi County Hhw	HHW Facility	1400 Sw 22Nd St.		Willmar	MN	56201	1		0	0.00
Lennox Industries Inc.	Wholesalers	1400 Commerce Ave.		Mendota Heights	MN	55120	2	06/05/2014, 12/29/2014	207	1.77
Lennox Parts Plus	Wholesalers	7150 Boone Avenue North	Suite 180	Brooklyn Park	MN	55428	1		0	0.00
Lofgren Heating And Air Conditioning	Contractor	5708 Upper 147Th Street W	#106	Apple Valley	MN	55124	1		0	0.00
Lyon County Environmental Office	HHW Facility	Public Works 504 Fairgrounds Rd		Marshall	MN	56258	1		0	0.00
Marsh Heating & A/C	Contractor	6248 Lakeland Avenue N		Brooklyn Park	MN	55428	1		0	0.00
Mcleod County Hhw Facility	HHW Facility	1065 5Th Ave Se		Hutchinson	MN	55350	1		0	0.00
Mercury Technologies Of Minnesota, Inc	HHW Facility	1110 Holstien Drive Ne		Pine City	MN	55063	1	07/15/2014	79	0.53
Mesaba Heating	Contractor	405 E. 41St Street		Hibbing	MN	55746	1		0	0.00
Minnesota Air Inc.	Wholesalers	5524 Lakeland Ave N		Crystal	MN	55429	2	08/08/2014	86	0.91
Minnesota Air Inc.	Wholesalers	6866 33Rd Street		Oakdale	MN	55128	2	10/24/2014	31	0.23

Minnesota Air Inc.	Wholesalers	6901 W. Old Shakopee Rd.		Bloomington	MN	55438	2	04/30/2014, 08/19/2014	106	1.72
Minnesota Air Inc.	Wholesalers	9650 James Ave S.		Bloomington	MN	55431	2		0	0.00
Minvalco	Wholesalers	3340 Gorham Ave		St Louis Park	MN	55426	1	08/05/2014	100	1.18
Mn Pollution Control Agency	Contractor	525 Lake Ave So., Ste. 400		Duluth	MN	55802	39	01/07/2014, 06/12/2014	63	0.40
Mn Air / Sps Co.	Wholesalers	6363 Hwy 7		St. Louis Park	MN	55416			0	0.00
Neighborhood Energy Connection	Contractor	1754 University Ave W		St. Paul	MN	55104		02/19/2014, 08/11/2014	302	1.90
Neighborhood Energy Connection	Contractor	1754 University Avenue West		Saint Paul	MN	55104	1	05/29/2014, 10/24/2014	243	1.52
Northland Mechanical Contractors	Contractor	9001 Science Center Drive		New Hope	MN	55428	3		0	0.00
Olmsted County Public Hw	HHW Facility	305 Silver Creek Rd Ne		Rochester	MN	55906	1	05/09/2014, 12/01/2014, 07/02/2014	334	2.58
Otter Tail County Hhw	HHW Facility	1115 North Tower Road		Fergus Falls	MN	56537			0	0.00
Pipeline Supply	Wholesalers	1515 6Th St. S.		Hopkins	MN	55343	1		0	0.00
Pope/Douglas Solid Waste Management	HHW Facility	2115 South Jefferson		Alexandria	MN		1	06/19/2014	21	0.29
Quality Heating & Air Services, Inc.	Contractor	12912 Ventura Court	Suite 21	Shakopee	MN	55379			0	0.00
R.E. Michel Company, Inc.	Wholesalers	17 N. 20Th Avenue West		Duluth	MN	55806		07/14/2014	117	0.74
R.E. Michel Company, Inc.	Wholesalers	730 Decatur Avenue North		Golden Valley	MN	55427		09/30/2014	13	0.10
R.E. Michel Company, Inc.	Wholesalers	775 Anderson Avenue		Saint Cloud	MN	56303		06/02/2014, 10/27/2014	163	1.05
Range Lp Gas	Wholesalers	102 S Hoover Road		Virginia	MN	55792		06/13/2014	25	0.17
Rapids Rental & Supply	Wholesalers	1887 E. Hwy 2		Grand Rapids	MN	55744		11/19/2014	60	0.42
Rice County Hhw	HHW Facility	3800 E. 145Th Street		Dundas	MN	55019			0	0.00
Roberts Hamilton	Wholesalers	6601 Parkway		Brooklyn	MN	55430	1	12/23/2014	112	0.87
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Co		Circle		Center						
S P S Companies, Inc.	Wholesalers	725 Crescent Street N. E.		St Cloud	MN	56304	1	02/14/2014	137	0.91
S&R Heating, Cooling & Appliance Repair	Contractor	4118 Hoffman Road		White Bear Lake	MN	55110	1		0	0.00
Schwartes Heating	Contractor	6080 Oren Ave. N.		Stillwater	MN	55082	2		0	0.00
Scott County Hhw	HHW Facility	588 Country Trail East, (Mn Hwy 282)		Jordan	MN	55352	1		0	0.00
Sedgwick Heating & Air Conditioning	Contractor	1408 Northland Drive	#310	Mendota Heights	MN	55120	1		0	0.00
Shorail Supply, Inc.	Wholesalers	9124 Grand Ave. South		Bloomington	MN	55420	1		0	0.00
Sid Harvey Industries	Wholesalers	2023 W 1St St		Duluth	MN	55806	2	05/22/2014, 05/22/2014	239	1.55
Sid Harvey Industries	Wholesalers	893 Pierce Butler Rte		St. Paul	MN	55104	1		0	0.00
Sid Harvey Industries	Wholesalers	601 N. Prior Ave.		St Paul	MN	55104	4		0	0.00
Southside Heating & Air Conditioning Inc.	Contractor	10800 Normandale Blvd		Bloomington	MN	55437	1		0	0.00
Sps Companies Inc.	Wholesalers	1201 N. Riverfront Dr.		Mankato	MN	56001	1	03/25/2014, 06/17/2014, 11/07/2014	256	2.72
St. Hilaire Supply	Wholesalers	Hwy. 32		St. Hilaire	MN	56754	1		0	0.00
Standard Heating & Air Conditioning	Contractor	130 Plymouth Avenue N		Minneapolis	MN	55411	1	11/10/2014	99	0.66
Superior Heating, A/C, & Electric	Contractor	3731 Thurston Avenue Nw	Suite 108	Anoka	MN	55303	1		0	0.00
Trane Parts	Wholesalers	720 Vandalia Street		Saint Paul	MN	55115	1		0	0.00
Trane Parts	Wholesalers	7860 12Th Avenue South		Bloomington	MN	55425	1		0	0.00
United Refrigeration	Wholesalers	2043 Gateway Blvd		Arden Hills	MN	55112	2		0	0.00
United Refrigeration	Wholesalers	2208 W. 94Th Street		Bloomington	MN	55431	2		0	0.00
United Refrigeration	Wholesalers	2231 W. 1St St		Duluth	MN	55806	1		0	0.00

United Refrigeration	Wholesalers	900 Vandalia St	Saint Paul	MN	55114	2		0	0.00
Wabasha County Solid Waste & Recycling	HHW Facility	Highway Dept 821 Hiawatha Dr W	Wabasha	MN	55981	1		0	0.00
Washington County Hhw	HHW Facility	1900 Hadley Ave. N.	Oakdale	MN	55128	1		0	0.00
Westburne Supply Co.	Wholesalers	2205 Trott Avenue S.W.	Willmar	MN	56201	1		0	0.00
Western Lake Superior Sanitary District	HHW Facility	2626 Courtland St	Duluth	MN	55806	1		0	0.00
Winona County Hhw	HHW Facility	225 W. 2Nd St.	Winona	MN	55987	1	05/23/2014	111	0.74
Wright County Compost And Recycling Facility	HHW Facility	505 County Rd 37 Ne	Buffalo	MN	55313	1	04/16/2014	89	0.61
York Upg	Wholesalers	1005 Berkshire Lane North	Plymouth	MN	55441	1		0	0.00