

**Switch the 'Stat Thermostat Recovery Program**  
(Province of British Columbia)

**Report on Non-Financial Information**

**December 31, 2011**

# Switch the 'Stat Thermostat Recovery Program (Province of British Columbia)

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To: The Heating, Refrigeration and Air Conditioning Institute of Canada

As specifically agreed, we have performed test procedures at Summerhill Impact ("the Agency") as described in this letter for the fiscal year ended December 31, 2011 over certain non-financial information pertaining to the Switch the 'Stat Thermostat Recovery Program which operates in the Province of British Columbia pursuant to:

1. British Columbia Recycling Regulation 449/2004, Section 8(2)(b) - the location of its collection facilities, and any changes in the number and location of collection facilities from the previous report;
2. British Columbia Recycling Regulation 449/2004, Section 8(2)(d) - a description of how the recovered product was managed in accordance with the pollution prevention hierarchy; and,
3. British Columbia Recycling Regulation 449/2004, Section 8(2)(e) - the total amount of the producer's product sold and collected and, if applicable, the producer's recovery rate.

The results of applying the test procedures are detailed in the attached Appendix. These procedures do not constitute an audit of the Program's non-financial information as provided by the Agency, and therefore we express no opinion on the overall accuracy or completeness for the fiscal year ended December 31, 2011.

This letter is for use solely by The Heating, Refrigeration and Air Conditioning Institute of Canada in connection with their consideration of the accuracy and completeness of the non-financial information as reported by the Agency for the fiscal year ended December 31, 2011.

*Abrahamse Berkis Pinto LLP*

Chartered Accountants, Licensed Public Accountants  
April 17, 2012

1.

For the following procedures test samples were selected from the fiscal period ended December 31, 2011, unless otherwise noted.

**Non-Financial Information Requirement: British Columbia Recycling Regulation 449/2004, Section 8(2)(b) - the location of its collection facilities, and any changes in the number and location of collection facilities from the previous report;**

Testing Procedure 1.0	To obtain comfort over the existence and accuracy of the collection facilities reported in the Agency's annual report.	
Procedures		Results
<p>1. For the period under review, obtain a listing from the Agency of all collection facilities participating in the program broken out by type.</p>	<p>1. A listing of all collection facilities participating in the program during the period under review was obtained. The listing contained the following information for each collection facility:</p> <ul style="list-style-type: none"> <li>a. Collection facility name and contact information</li> <li>b. Date of registration in the program</li> <li>c. Location of the collection facility by regional district</li> <li>d. Type of collection channel</li> </ul>	
<p>2. Compare total count of collection facilities from the listing with the annual report; investigate any discrepancies with the Agency as applicable.</p>	<p>2. The listing indicated there were 109 active collection facilities participating in the program during the period under review, which agreed to the count as reported in the annual report.</p> <p>In addition, the Agency indicated that 53 Canadian Tire locations in British Columbia participated in a "return to retail" event for an approximate 1 week period during the fiscal year ended December 31, 2011, which agreed to the annual report.</p>	
<p>3. Randomly select a sample of collection facilities participating in the program and obtain their registration form from their business file. Review the registration form to ensure the following criteria are met:</p> <ul style="list-style-type: none"> <li>a. A registration form exists for the collection facility.</li> <li>b. The registration form lists contact information and location, which agrees with the detailed listing.</li> <li>c. The registration form is signed by the collection facility.</li> </ul>	<p>3. A random sample of 22 collection facilities were selected from the listing.</p> <ul style="list-style-type: none"> <li>a. A registration form existed for each of the 22 randomly sampled collection facilities.</li> <li>b. Each of the 22 registration forms contained the collection facility's contact information and location, which agreed to the detailed listing.</li> <li>c. Collection facilities register for the program by either submitting a paper registration form or via electronic registration through the Agency's program website. Of the 22 collection facilities sampled, 18 submitted by paper registration and 4 by website registration. The 4 website registrations did not contain a signature.</li> </ul>	

Testing Procedure 1.0	To obtain comfort over the existence and accuracy of the collection facilities reported in the Agency's annual report	
<p>4. Using contact information on the facility listing provided in #1 above, phone each randomly selected collection facility to verify their existence and that they have an adequate understanding of the program.</p>	<p>4. Each of the 22 randomly sampled collection facilities were phoned and the following questions and responses were documented:</p> <p><b>Questions:</b></p> <ul style="list-style-type: none"> <li>a. Was the collection facility a participant in the program during the fiscal year ended December 31, 2011?</li> <li>b. Does the collection facility have an understanding of the purpose and benefits of the program, and if so, what is that understanding?</li> <li>c. Who were the collected thermostats shipped to for recycling, and what means of shipment was used?</li> </ul> <p><b>Responses:</b></p> <ul style="list-style-type: none"> <li>a. Each of the 22 contacts at the collection facilities confirmed that they were a registered participant in the program as at December 31, 2011.</li> <li>b. The general theme of the response by each of the 22 contacts at the collection facilities was similar. The respondents were able to communicate that the purpose of the program is to promote the collection and proper recycling of thermostats to reduce the environmental impact that would result from improper disposal. As the responses were consistent with the program overview contained in the February 3, 2010 - Final British Columbia Stewardship Plan for Thermostats, it appears that all 22 of the collection facilities phoned had an adequate understanding of the program.</li> <li>c. All 22 of the collection facilities phoned confirmed that the thermostats collected were only shipped to Tri-Arrow Industrial Recovery Inc. ("the Processor") for recycling, and that the program provided collection container and prepaid Purolator waybill were used to facilitate the shipment of thermostats from them to the Processor.</li> </ul>	

Testing Procedure 1.1	To obtain comfort over the completeness, consistency, and validity of the number of collection facilities.	
Procedures		Results
<p>1. Obtain the historical data for the total number of collection facilities for the past 3 years as reported by the Agency in their annual reports.</p>	<p>1. The program formally commenced on July 1, 2010 and accordingly, historical data was only available for the six-month fiscal period ended December 31, 2010.</p>	
<p>2. Investigate any fluctuations greater than 5% to understand the reason for the fluctuation in the number of collection facilities.</p>	<p>2. The program's target number of collection facilities at the end of its second year, as stated in the February 3, 2010 - Final British Columbia Stewardship Plan for Thermostats was 240. The adjusted target number of collection facilities for the 18-month period ended December 31, 2011 would be 220, based on an increase of 10% over the year 1 target of 200 participants. The program obtained 23 new registrants during the year, while 10 participants in the program as at December 31, 2010 de-registered, resulting in 109 participants as at December 31, 2011, an increase of 13.54% from the previous reporting period.</p> <p>The Agency indicated that significant joint efforts with the Heating, Refrigeration, and Air-Conditioning Institute of Canada and the Canadian Institute for Plumbing and Heating were made during 2011 to promote the Program and increase the number of collection facilities. Despite these efforts the response level was not as desirable as anticipated. Outreach efforts were furthered through the development and distribution of marketing materials to promote the program in addition to conducting a Province wide "return to retail" event with Canadian Tire retail stores for an approximate one week period.</p>	

**Non-Financial Information Requirement: British Columbia Recycling Regulation 449/2004, Section 8 (2)(d) - A description of how the recovered product was managed in accordance with the pollution prevention hierarchy.**

Testing Procedure 2.0	To obtain comfort over the accuracy, completeness and existence of end-use of the product collected and the accuracy of the processor's receipt of weight, volume or quantity of product, test on a sample basis the deliveries of product recovered to their end-use.	
Procedures		Results
	<p>1. Obtain a listing of products shipped to the Processor for the period under review. The listing should provide:</p> <p>a. The Processor's name and address.</p> <p>b. The total weight, volume or quantity of the product at the collection site.</p> <p>c. The total weight, volume or quantity of the product at the Processor.</p> <p>d. The date of delivery to the Processor</p>	<p>1. There was no listing available from the Agency or collection facilities of products shipped to the Processor. However, the Processor provided a listing of shipments of thermostats received by them from the collection facilities for each of the 12 months in the reporting period as well as, for the first month following the reporting period. The listing was obtained in an Excel document via E-mail directly from the Processor. The Processor is the sole company used by the Agency and collection facilities to dismantle and recycle the thermostats collected.</p> <p>a. Non-applicable</p> <p>b. The collection facilities do not count or retain a record of the quantity of thermostats collected and shipped to the Processor. The practice is for each collection facility to ship the thermostats collected to the Processor once they have a full pail or when requested to do so by the Agency as part of a collection sweep.</p> <p>c. For each shipment of thermostats by the collection facilities to the Processor, the Processor's listing provided the quantities for the following thermostat components:</p> <ul style="list-style-type: none"> <li>(i) Number of mercury thermostats</li> <li>(ii) Number of electronic thermostats</li> <li>(iii) Number of mercury switches/vessels</li> <li>(iv) Weight of the plastic components once the unit was dismantled</li> <li>(v) Weight of the metal components once the unit was dismantled</li> </ul> <p>d. The Processor's listing indicated the date each shipment was received as well as the corresponding Purolator package identification number.</p>

Testing Procedure 2.0	To obtain comfort over the accuracy, completeness and existence of end-use of the product collected and the accuracy of the processor's receipt of weight, volume or quantity of product, test on a sample basis the deliveries of product recovered to their end-use.	
Procedures		Results
2. Obtain a listing of all registered processors and ensure that all receivers of product were approved processors.	2. The Processor is the primary and sole recycler of the thermostat units. The Processor ships the mercury containing switches to Aevitas Inc. ("the Disposer") for further dismantling and waste treatment of the mercury. The Disposer consolidates the collection of the mercury switches for eventual shipment to Bethlehem Apparatus Company in Pennsylvania, USA for further dismantling and waste treatment of the mercury switches. The Processor and the Disposer are the entities endorsed in the program's February 3, 2010 - Final British Columbia Stewardship Plan for Thermostats.	
3. Randomly select shipments from the Processor's listing and obtain a copy of their invoice or other supporting documentation submitted to the Agency.	3. Each shipment from the collection facility to the Processor as indicated on the Processor's listing was selected for testing and agreed to the monthly invoices issued by the Processor to the Agency.	
4. Verify that each of the Processor's invoices to the Agency has evidence of the weight, volume or quantity of the product shipped by the collection facility to the Processor.	4. Each of the monthly invoices from the Processor to the Agency evidenced the quantity of mercury containing switches plus the weight of the plastic and metal components after dismantling.	
5. Compare the total weight, volume or quantity listed on the Processor's invoice or other supporting documentation with the weight, volume or quantity listed on the detailed listing received in #1 and note any discrepancies.	5. The aggregate quantities of mercury containing switches and the weight of the plastic and metal components as reflected on the Processor's invoices for the fiscal period ended December 31, 2011 were compared to the detailed listing and reconciled for any differences. No discrepancies or irreconcilable differences were noted. In addition, the Purolator shipment invoices and Package Identification Number ("PIN") for a sample of 19 shipments were examined and cross-referenced to the Processor's detailed listing to ensure completeness and existence. No discrepancies were noted.	



**Non-Financial Information Requirement: British Columbia Recycling Regulation 449/2004, Section 8 (2)(e) - The total amount of the producer's product sold and collected and, if applicable, the producer's recovery rate.**

<b>Testing Procedure 3.0</b>	To obtain comfort over the completeness, accuracy, cut-off and validity of the total product recovered, test on a sample basis, the collection of product recovered.	
<b>Procedures</b>		<b>Results</b>
<p>1. Obtain a listing of thermostat shipments from collection facilities for the period under review with the following details:</p> <ul style="list-style-type: none"> <li>a. The collection facility's name and address</li> <li>b. The date of collection from the facility</li> <li>c. The Processor to which the product was delivered.</li> <li>d. The date of delivery to the Processor.</li> <li>e. The amount of product collected (in units and in weight, where applicable).</li> </ul>	<p>1. As indicated in the results of Testing Procedure 2.0 (1), there is no listing from the collection facilities of the product shipped. Accordingly, the same Processor's listing was used for this procedure. The listing contained the following information:</p> <ul style="list-style-type: none"> <li>a. The collection facilities name and address</li> <li>b. No such date available</li> <li>c. All shipments were made to the Processor as indicated in Procedure 2.0(1)</li> <li>d. The date of delivery to the Processor.</li> <li>e. The amount of product collected (in units and in weight, where applicable).</li> </ul>	
<p>2. Compare the total weight, volume or quantity of product collected as indicated on the Processor's detailed listing to the Agency's annual report.</p>	<p>2. The total weight, volume or quantity of the mercury containing thermostats, electronic thermostats, mercury switches/vessels, and plastic and metal components from the Processor's detailed listing agreed to the Agency's annual report.</p>	
<p>3. Scan the Processor's detailed listing to ensure that there were no collections that were outside of the Program's reporting period.</p>	<p>3. a. The detailed Processor's listing was scanned and 1 shipment was received by the Processor on December 14, 2010, which was included on the processor's fiscal 2011 listing. The shipment quantities were included as part of the 2010 report and accordingly, excluded from the 2011 annual report.</p> <p>b. The detailed processors listing was scanned for the month of January 2012 and it was noted that one shipment was received on December 28, 2011. The 2011 annual report appropriately included this shipment as part of the collection results.</p>	
<p>4. Randomly select collection facility shipments to the Processor and obtain the supporting document (Bill of lading or other support) to verify the quantity of the product shipped.</p>	<p>4. Invoices from the Program's Purolator account were obtained which indicated the PIN and the shipper's and receiver's names. The PIN number and shipper and receiver names on the Purolator invoices were compared to the Processor's detailed listing for 14 shipments. In addition, 5 shipments from Canadian Tire retail stores participating in the "return to retail" event were tested in the same manner. No discrepancies were noted. The Purolator invoices do not indicate the quantity of thermostats collected nor do the collection sites track the quantities shipped.</p>	

Testing Procedure 3.1	To obtain comfort over the calculated recovery rate, by product type (where applicable).	
Procedures		Results
<p>1. Check the mathematical accuracy of the Calculated Recovery Rate (product collected by the collection facilities divided by the number of thermostats available for collection in the marketplace) and compare the Calculated Recovery Rate to the recovery rate reported by the Agency in the annual report. Note any discrepancies.</p>	<p>1. Neither the total number of thermostats available for collection or the calculated Recovery Rate is disclosed in the Agency's annual report. The Agency reported in the annual report the target number of thermostats to be collected for fiscal 2011 was 4,388 along with the actual collection results for the fiscal year of 1,876.</p>	