



October 18, 2024

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Subject: Proposed Amendments to *Hazardous and Special Products Regulation*

We are writing to you on behalf of Thermostat Producers of the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) with respect to the open public consultation to the proposed amendments to the *Hazardous and Special Products (HSP) Regulation*. HRAI is a national industry association of more than 1,190 manufacturer, wholesaler and contractor companies who provide the products and services for indoor comfort and essential refrigeration processes.

HRAI appreciates the opportunity to provide comments to the Ontario Ministry of Environment, Conservation and Parks (MECP) proposed amendments to the *Hazardous and Special Products (HSP) Regulation (O. Reg 449/21)* under the *Resource Recovery and Circular Economy Act, 2016 (RRCEA)* specifically related to the Recycling Efficiency Rate (RER) for thermostats. Our members fully support and are dedicated to producer responsibility programs and ensuring that hazardous materials are managed responsibly at end-of-life. This commitment is reflected in their active participation in HRAI's Thermostat Recovery Program (TRP).

Since 2016, HRAI has operated TRP, a national industry-funded stewardship program which encourages the uptake of newer energy efficient programmable thermostats and ensures that mercury-containing thermostats are recovered and recycled responsibly, along with all components. The program has adapted over the years to meet the needs of its participants and facilitators, and to meet developing regulatory requirements. The TRP program currently has approximately 1,785 active registered participants across Canada, primarily consisting of HVACR industry members such as contractors and wholesalers who work with HRAI to ensure that all decommissioned thermostats are returned for proper recycling and/or disposal. Since its inception, the TRP has successfully diverted approximately 299,000 end-of-life thermostats, and over 869 kg of mercury across Canada.

The main environmental concern with thermostats is the mercury contained in many of the older models. While many mercury-containing thermostats may remain in use, the last known date of manufacture for these models in Canada was 2008 and they are no longer sold in Canada. Since 2008 all thermostats have been redesigned eliminating the mercury-switch component and improving energy efficiency. As well, the Government of Canada *Products Containing Mercury Regulations (SOR/2014-254)* prohibits the manufacture, import, and sale of mercury-containing products (with some exceptions) in Canada.

HRAI does not encourage the reuse of old mercury-containing thermostats due to environmental concerns. Our primary goal is to collect end-of-life mercury-containing thermostats and ensure that the mercury and other components are properly recovered from the environment and managed responsibly, not see them in continued use. Due to strict laws surrounding mercury waste management, current options aim to permanently remove mercury from the environment, with no post-consumer market for this recovered material. As such, all of the mercury recovered from Category C mercury-containing thermostats is sent to Bethlehem Apparatus located in PA, USA where the mercury undergoes a stabilizing treatment process which converts elemental mercury into mercury sulphide, rendering it safe for disposal in a specially engineered permitted landfill. Once the mercury is processed by Bethlehem it is shipped back to Canada for safe disposal at Stablex Canada Inc. located in Quebec. The retirement process aims to remove mercury from the environment and safely dispose of it, not to recycle it and reintroduce it as raw material in product manufacturing. The glass ampoule's that contain the mercury are crushed and sent to landfill due to quality impurities and low market demand. The plastic components recovered are deemed e-waste and comprised of mixed types and have low recycling value and are therefore sent to landfill for disposal. Aveitas Inc., TRP's Thermostat Collection Service Provider, has approached numerous plastic recyclers and currently there is no option to recycle this low-quality plastic from thermostats. Shipping a relatively small amount of plastic (285 kg recovered in 2023) would create a disproportionately large environmental footprint.

Metals are the only component of the thermostat that is recycled. It is a mix of iron, nickel and aluminum, all holding high reuse/recycling value and is sent for recycling and reuse within Canada.

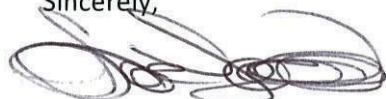
One of the proposed changes under Burden Reduction is to remove the RER requirements for materials with management targets and for HSP materials without targets, collected material is to be managed at the rate equivalent to the existing RER. Thermostats do not have a management target, therefore, the existing RER for thermostats is 90% under the HSP Regulation. The 90% RER for thermostats cannot be met given that metals are the only components of the thermostats that are recycled. HRAI is suggesting that a more appropriate RER for thermostats would be 20% based on kg of metals recycled vs total weight (kg) of metal, glass, plastic and mercury recovered.

Obligated parties for Category C (mercury-containing thermostats) have expressed concern regarding the requirement for a recycling efficiency rate of 90% under the HSP Regulation. The Producers feel that they should not be penalized for removing mercury from the environment and safely disposing of it simply because there is no market for post-consumer mercury, as well as plastics and the contaminated glass ampoule's from thermostats.

In summary, HRAI is requesting that the Ontario MECP remove the 90% RER requirement for mercury-containing thermostats from the *HSP Regulation (O. Reg. 449/21)* and replace it with a more appropriate 20% RER to ensure thermostat producers are in regulatory compliance.

HRAI appreciates the opportunity to provide feedback and looks forward to your response to our request. HRAI would be pleased to meet with your staff to further discuss this topic.

Sincerely,



Sandy Macleod
HRAI President and CEO

CC: HRAI Thermostat Manufacturer TRP members

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