July 30, 2019

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Via e-mail: Krista.Friesen@ontario.ca

Re: proposed regulation concerning electrical and electronic equipment under the *Resource Recovery and Circular Economy Act, 2016*

Krista,

This letter is a follow-up to our discussion on June 25th. Thank you for giving us the opportunity to comment on the proposed regulation referenced above.

The Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) is Canada's national trade association for the Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) industry. HRAI has over 1,200 manufacturer, wholesaler and contractor members across the country that provide the products and services for indoor comfort and essential refrigeration processes.

HRAI has an impressive and longstanding record of achievement in managing voluntary industry extended producer responsibility (EPR) programs. Among these is Refrigerant Management Canada and the Thermostat Recovery Program (TRP), formerly known as "Switch the 'Stat." HRAI also obliges contractor members to practice "responsible equipment management," which is defined in our members' Code of Conduct. Clearly, HRAI and its members understand the importance of ensuring that products of the industry do not cause harm to the environment at the end of their useful life. HRAI has worked with governments at the federal and provincial level across Canada to ensure its products are managed responsibly.

HRAI will address the proposed regulation as it affects two categories of products: "large equipment" and "small equipment."

Large Equipment

The "large equipment" category, as defined, includes "…appliances [and other equipment]… of which at least one external dimension , not including any cables, measures more than 50 centimetres and includes, but is not limited to, the examples set out in Section 2 of Schedule 1."

Section 2 of Schedule 1 provides a list that mostly includes self-contained, plug-in appliances, but also mentions "air conditioners" and "fans and exhaust ventilation equipment," which are products manufactured and installed by HRAI members.

In Part I, Section 2, Subsection (2), Paragraph 1, and exemption to the regulation is provided for "Large-scale fixed installations." And in Subsection (6) of the same Section 2, "large scale fixed installations" are defined to mean

> *equipment, such as elevators, escalators, automated entryways, streetlights and electronic billboards, that,*
>
> *(a) are assembled, installed and de-installed by a qualified person, and*
>
> *(b) are intended to be used permanently as part of the building or a structure at a pre-defined and dedicated location.*

HRAI submits that the definition of "large equipment" and, more importantly, its exclusions, must be clarified in the proposed regulation. The products of our industry included in Schedule 1 (with the exception of window air conditioners) are products that more accurately fall within the definition provided for "large-scale fixed installations." They are applied products that are installed by qualified technicians and are an integral part of the fabric of buildings (residential, commercial, ICI). These systems are piped, vented and wired directly to the fixed electrical and mechanical systems of a building and cannot be readily disconnected without altering the electrical and/or mechanical system's connections and functionality.

In the Province of Ontario, as in most parts of Canada, regulations specify that HVACR systems may only be installed, serviced or replaced by qualified technicians. For example, air conditioning systems (split systems, heat pumps) may only be installed and serviced by Refrigeration and Air Conditioning Mechanics or Residential Air Conditioning Mechanics licensed under the Ministry of Training Colleges and Universities. Combustion-fired heating equipment may only be installed and serviced by licensed gas or oil burner technicians registered with the Technical Standard and Safety Authority (TSSA). The design and performance of mechanical systems are also subject to provincial and national codes and standards related to the buildings sector (and subject to inspections) on the assumption that they form an integral part of these buildings.

Like the examples provided in Section 2, Subsection (6) – elevators, escalators, etc. – mechanical heating, cooling and ventilation systems, once installed, form part of the real property of the building into which they are installed. Unlike the plug-in appliances that make up the bulk of the "large equipment" category, HVACR products are not removed and replaced when buildings change ownership.

Finally, a comment about the end-of life handling of the applied products of our industry. The Ministry should be aware that HVACR products are professionally installed, commissioned and *de*commissioned by qualified technicians because of the complexity of the installation and regulations governing these systems. The licensed and trained technicians that remove and decommission HVACR products/systems are also governed by other provincial and federal regulations such as the Code of Practice for the Elimination of Fluorocarbon Emissions for Refrigeration and Air Conditioning Systems under the *Canadian Environmental Protection Act*.

These regulations bind technicians to follow strict guidelines for the handling, storage, re-use and transport of refrigerants, oils, and gases.

Moreover, the high metal content in HVACR equipment means that, even at the end of equipment life these system retain value to contractors and scrap dealers/recyclers who ensure the material is recycled. As a result, the HVACR industry has a built-in network system where the components and metals are recycled, refurbished or reused.

The aforementioned requirements are also included as a standard part of the Refrigeration and Air Conditioning Mechanic trade, the Gas Technician and Oil Burner Mechanics training programs, which are required courses for licensed technicians who install and decommission HVACR products/systems in Ontario. Within our industry, these waste products are being handled in an environmentally responsible manner and do not end up being released into the atmosphere or dumped in landfill.

For the reasons articulated above, ***HRAI recommends that the proposed regulation be revised to define HVACR products/systems explicitly as "large-scale fixed installations" and therefore exempt from the regulation.***

If it would be helpful to the Ministry, HRAI would be pleased to provide a comprehensive list of products, with technical details, that should be included in this exempt category.

Small Equipment

HRAI is primarily concerned about the inclusion of one product – thermostats – in the category of "small equipment" under the proposed regulation. Thermostats are an integral element of the heating and cooling systems in buildings and, as such, once installed, they become a wired-in part of the larger "fixed installation." Most of the legal requirements for proper installation and maintenance of these systems apply also to the installation of thermostats.

Though some thermostats are sold directly to end users through retail outlets, the majority of installations are done by professional HVACR contractors, as homeowners and building owners/managers lack the technical knowledge to integrate these control devices to the systems they will be regulating. Similarly, the removal of old thermostats is handled in the vast majority of cases, by professional contractors. For these reasons, thermostats do not belong in the same category as other electronic devices included in the proposed regulation.

More importantly for purposes of this regulation is the fact that HRAI has already established and managed for almost ten years a successful thermostat collection program (as noted above), called the *Thermostat Recovery Program*. Originally developed as a voluntary EPR program for the collection of mercury-containing thermostats, with the intent to divert harmful mercury from landfill, the program was broadened to include electronic thermostats and now operates in several provinces across Canada. The program was the first Industry Stewardship Plan (ISP) to be accepted by Waste Diversion Ontario in 2010 under the Municipal Hazardous and Solid Waste (MHSW) regulations.

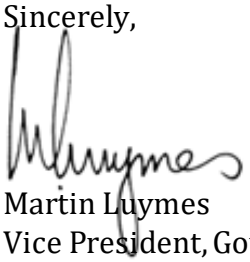
The Thermostat Recovery Program works well because it works within the traditional HVACR distribution channel. Collection and shipping has handled through a network of industry

participants (over 400 contractors and 120 additional drop-off locations) and the program has diverted more than 110,000 thermostats from the waste stream

Recognizing that this program is already established and effectively addressing the collection of thermostats in Ontario, ***HRAI recommends that the proposed regulation be revised to exempt thermostats from the scope of regulation, or to explicitly recognize that an appropriate collection process already exists for the purpose.***

HRAI would be pleased to discuss these recommendations with the Ministry in more detail as needed. We thank you again for the opportunity to comment on this important new regulation and look forward to further dialogue.

Sincerely,



Martin Luymes
Vice President, Government and Stakeholder Relations

cc Sandy MacLeod, President and CEO
David Weishuhn, Chair