



Department of Environmental Protection

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To: **Clerks of the Senate and House of Representatives and the Joint Committee on Environment, Natural Resources and Agriculture**
From: **Massachusetts Department of Environmental Protection**
Subject: **Thermostat Recycling Corporation (TRC) 2021 Mercury Thermostat Report**
Date: **September 27, 2022**

Pursuant to the 188th General Court's legislative revisions to Massachusetts General Law Chapter 21H, Section 6J1/2 (g), The Massachusetts Department of Environmental Protection (MassDEP) shall "collect and maintain data on the collection and recycling programs established in subsection (d), including the number of mercury-added thermostats collected and recycled and the number of wholesalers, retailers, qualified contractors, and local government authorities participating in the program. On or before September 30 of each year, the department shall prepare an annual report detailing the data collected under this subsection during the prior calendar year and shall file copies of those reports with the clerks of the senate and house of representatives and the co-chairs of the joint committee on environment, natural resources, and agriculture."

Subsection (e) of Section 6J1/2 states that each thermostat manufacturer that has distributed, offered for final sale, or sold at final sale, any mercury-added thermostat within the Commonwealth, shall individually or collectively, submit an annual report to the Department, that includes the following information:

- The number of mercury-added thermostats collected and recycled by the manufacturer under this section during the previous calendar year;
- The estimated total amount of mercury contained in the thermostat components collected by the manufacturer under this section in the previous calendar year;
- An evaluation of the effectiveness of the manufacturer's collection program;
- An accounting of the administrative costs incurred while administering the collection and recycling program; and
- A list of all locations to which collection containers have been provided, including any locations which received containers during the year, and the date on which each location received a collection container.

Attached is the 2021 annual report of the Thermostat Recycling Corporation (TRC). A copy of this report is also posted on TRC's website and linked to the Department's website at <https://www.mass.gov/guides/massdep-mercury-information#-industry-reporting-&-compliance-> under "Thermostat Recycling Corp.: [Mercury Recycling Corp. Annual State Reports \(including Massachusetts\)](#)".

TRC is a non-profit organization whose goal is to keep mercury in thermostats out of the waste stream. The organization facilitates and manages the collection and proper disposal of mercury-containing thermostats. The organization is currently comprised of 30 manufacturers that support the program.

The report includes an update of the thermostat collection and recycling data collected by TRC, an accounting of the program expenses, outreach strategies developed, and an overview of other states' collection and recycling programs. Also included in the report were methods for improving the program in Massachusetts.

It is important to note that collections were most likely affected by the pandemic, whether it be fewer in-home replacements, a delay of dropping thermostats off for recycling or collection locations returning less recycling containers due to limited personnel. Below are some highlights of the program in 2021:

- The program collected 43.2 pounds of mercury in Massachusetts. The 43.2 lbs. of mercury collected in Massachusetts in 2021 reflected an 11% decrease when compared to the 48.8 lbs. collected in 2020. Since 2000, the annual quantity of mercury collected in Massachusetts has been an average of 37.5 lbs.
- The program collected 5,585 whole thermostats in 2021. This was an 8% decrease from 2020 collections. Since 2000, the annual average number of thermostats collected is 4,634.
- In addition to 5,585 whole thermostats, 575 loose switches were collected, bringing the total number of "thermostat equivalents" returned in 2021 to 6,176, a decrease of 10% from 2020.
- The number of whole thermostats collected per collection container or bin in 2021 was 66 thermostats, an increase from 57 collected in 2020.
- In 2021, bin returns increased, checking in with 125 bins. The counties with the most bins and thermostats returned in 2021 were Middlesex County (26 bins, 2,041 thermostats), Worcester County (20 bins, 1,234 thermostats), and Barnstable County (8 bins, 540 thermostats).
- In 2021, 27% of the locations in Massachusetts returned at least one bin compared to a national average of 16%
- In Massachusetts, most thermostats collected in Massachusetts were through contractors (47.6%) with most of the remaining thermostats collected by wholesalers (41.4%).
- A total of 142 'Miss You' box collection reminder calls were placed in 2021 and 25 site visits completed.
- In 2021, the top 10 partners of total numbers of bins and thermostats returned were:
 - Wheelabrator (13 bins, 1,654 thermostats)
 - Scanlon Associates (8 bins, 878 thermostats)
 - Covanta Semass (12 bins, 694 thermostats)
 - F.W. Webb (6 bins, 399 thermostats)
 - Johnstone Supply (5 bins, 231 thermostats)

- Bell Simons (6 bins, 217 thermostats)
- Homeserve USA (1 bin, 129 thermostats)
- Town Hall (1 bin, 143 thermostats)
- United Refrigeration (4 bins, 122 thermostats)
- Sid Harvey (1 bin, 103 thermostats)

All the collection locations are listed in the report's appendices at <https://www.mass.gov/guides/massdep-mercury-information#-industry-reporting-&-compliance-> under "Thermostat Recycling Corp.: [Mercury Recycling Corp. Annual State Reports \(including Massachusetts\)](#)". These collection locations are also listed on MassDEP's website as part of a broader mercury products collection point listing at <https://www.mass.gov/guides/massdep-mercury-information#-handling-mercury-safely->.

The program reported \$29,226.05 in expenses in 2021, a decrease of 11% from 2020.

The 2021 education and outreach program involved direct marketing, including phone calls to collection locations, reminder postcards, emails, social and other media outreach, and site visits. In 2021, TRC also refined its approach on how to engage the Heating, Ventilation, and Air Conditioning (HVAC) industry, the building/facility management industry, property management industry, the Utilities and Waste Management and Remediation sectors.

For calendar year 2022, TRC plans to focus on:

- continuing to fulfill state statutory requirements, agreements, and other arrangements for regulatory compliance,
- targeting mercury thermostat collections at Utilities, the HVAC industries, and other key sectors, and,
- education and awareness tactics geared toward homeowners and HVAC industry professionals.

Attachment (1)