



MARR Stewardship Plan Consultations

Coast Waste Management Association Annual
Conference

October 20th, 2021



MARR

Major Appliance Recycling Roundtable



Presentation Overview

01

Housekeeping

02

Setting the Context

03

Highlights of Stewardship Plan

04

Comments, Questions and Answers

05

Closing and Contacts

01 |

Housekeeping

- Please note that this session will be recorded for future reference
- Please wait until the designated Q&A period to ask questions and provide feedback
- If participating virtually, please keep your microphone muted and ask questions via the chat box
- Please state your name and organization before providing comments or questions

02 |

Setting the Context

MARR Stewardship Plan Consultations

2018 BC Major Appliance Stewardship Plan

BC Major Appliance Stewardship Plan

Product Category:
Major Household Appliances within the Electronic and Electrical Product Category

Submitted to the Ministry of Environment by:
Major Appliance Recycling Roundtable

Approval Date: June 29, 2012
Revision Date: May 13, 2020



www.marrbc.ca

Contact

Major Appliance Recycling Roundtable

100 - 4259 Canada Way
Burnaby, BC V5G 4Y2

info@marrbc.ca

- MARR's Extended Producer Responsibility (EPR) plan was approved on August 7, 2018, replacing the previous version approved in 2012
- This plan was revised in 2020 to:
 1. Incorporate financial performance and Ozone Depleting Substances (ODS) removal targets;
 2. Incorporate consumer awareness targets and a plan to meet those targets, should they be below the goal; and,
 3. Conduct stakeholder consultations on the amendments
- MARR is now preparing to submit an updated BC Major Appliance Stewardship Plan to the Ministry of Environment and Climate Change Strategy in June 2022

2022 BC Major Appliance Stewardship Plan

Requirements for product stewardship plans are outlined in section 4 of the Recycling Regulation, stating:

"A producer must submit a product stewardship plan, at the time specified in the applicable Schedule, if any, and in a manner and format satisfactory to a director, for the products within the product category of the product the producer sells, offers for sale, distributes or uses in a commercial enterprise in British Columbia."

This five-year product stewardship plan for major household appliances is being submitted by the Major Appliance Recycling Roundtable (MARR) in accordance with the Recycling Regulation under the Environmental Management Act and replaces the previous stewardship plan for major appliances.

BC Major Appliance Stewardship Plan

Product Category:

Major Household Appliances within the Electronic and Electrical Product Category

Submitted to the Ministry of Environment by:
Major Appliance Recycling Roundtable



Major Appliance Recycling
Roundtable
100 - 4259 Canada Way
Burnaby, BC V5G 4Y2

www.marrbc.ca

info@marrbc.ca

Appointment of the Stewardship Agency

2022 BC Major Appliance Stewardship Plan

- MARR is a not-for-profit stewardship agency created to implement and operate a stewardship plan for end-of-life major household appliances in BC. It acts on behalf of producers of major appliances who are obligated under the BC Recycling Regulation.
- In registering, each producer must sign an Agency Appointment Agreement that formalizes the role of MARR as its agent to carry out the duties of the producer as set out in section 2(2) of the Recycling Regulation.
- The MARR program is open to all obligated producers of major household appliances in BC, including manufacturers, wholesalers and retailers.
- As MARR currently administers the only approved stewardship plan for major household appliances in BC, it is expected that member producers represent the vast majority of major appliance sales in the province.

Products Covered Under the Stewardship Plan

2022 BC Major Appliance Stewardship Plan

This stewardship plan covers a variety of large appliances as listed under 2(1)(c), “electronic or electrical appliances” and detailed in Schedule 3 of the Electronic and Electrical Product category of the BC Recycling Regulation under the Environmental Management Act.

The plan covers major appliances that have been designated for residential use in BC, provided they are electrical or electrically powered. However, it also includes:

- Products that are dual fuel natural gas or propane products, provided the other power source is electricity;
- Appliances used in or sold for industrial, commercial and/or institutional (IC&I) applications that have essentially the same design characteristics as major household appliances; and
- Products that are used for refrigeration or freezing that contain a compressor and/or refrigerant gases

The stewardship plan covers the following products:

- Refrigerators, wine coolers and beverage centers;
- Freezers;
- Portable, room and window air conditioners;
- Portable dehumidifiers;
- Clothes washers and dryers;
- Ranges, built-in ovens and surface cooking units;
- Built-in and over the range microwave ovens;
- Range hoods and downdrafts;
- Dishwashers;
- Food waste disposers and trash compactors; and
- Electric water dispensers.

For a detailed list of included products and relevant definitions, please refer to the MARR website: <http://www.marrbc.ca/>

Collection System and Consumer Accessibility

2022 BC Major Appliance Stewardship Plan

- There exists a long-standing and effective market-based system for end-of-life product management. This market-based system exists largely because major household appliances currently have a financial value at end-of-life.
- The stewardship plan for major appliances builds on and supports the existing market-based system for end-of-life major appliances, rather than replacing it with a traditional stewardship program model.
- The activities proposed in this plan are meant to enhance the performance of the current system, to address specific circumstances and challenges affecting key stakeholder groups, and to ensure continuous improvement with respect to the achievement of desired outcomes.

Collection System and Consumer Accessibility

2022 BC Major Appliance Stewardship Plan

Guiding the stewardship plan are the following commitments:

1. A commitment to reasonable and free consumer access to collection facilities. This will be accomplished by:
 - a) maintaining a robust network of collectors that provide collection of large appliances at no cost to the public, and
 - b) providing financial and administrative support to local governments or community organizations for organized collection events where the establishment of a permanent collection site is not feasible.
2. Through a network of approved collectors and community partners, a commitment to enhance the performance of the current system by paying the cost for:
 - a) the management, reporting, administration and collection of large appliances within the product categories;
 - b) safe removal of ODS from refrigerated appliances within the product categories; and
 - c) transportation of appliances to a processor should the metal value of the end-of-life appliances not cover transportation costs.

Collection System and Consumer Accessibility

2022 BC Major Appliance Stewardship Plan

- MARR's intention is to provide an opportunity for those currently involved in the collection of end-of-life appliances to become qualified collectors and to be part of the collection network upon signing a collection agreement with MARR.
- In areas where gaps in accessibility to collection sites exist, MARR is committed to supporting local drop off events by providing administration support, free transportation of all MARR products to the nearest authorized MARR collection site and the safe removal of ODS gas.
- When a consumer purchases a new appliance, many retailers offer a delivery/take-back option that facilitates the proper recycling or resale of the used appliance on behalf of the consumer.
- With over 200 collection sites, accessibility to a MARR collection site is convenient to well over 90% of the population of British Columbia.

Consumer Awareness

2022 BC Major Appliance Stewardship Plan

- The cornerstone of MARR's consumer awareness is the maintenance of a robust website that allows consumers and stakeholders access to program information including maps and a searchable database of collections sites, news and updates on the program, accepted products and Administrative Program Fees (APFs) and access to MARR's annual reports:
 - How to Recycle: <http://www.marrbc.ca/consumers/recycle>
 - Collection Sites: <http://www.marrbc.ca/collection-site-locator>
- In addition to MARR's website, informational brochures, point-of-sale rack cards, collection signage, "what's accepted" manuals, an annual public consumer education plan, a toll-free number, a dedicated email address, and more are all employed by MARR to increase consumer awareness and servicing.

Management of Program Costs

2022 BC Major Appliance Stewardship Plan

MARR is funded by Administrative Program Fees (APFs) applied to the sale and supply of new major household appliances in BC. The APFs for different products are established by MARR with regard to the cost to recycle the materials and the cost of administering the program generally. Current APFs for products are listed on MARR's website.

MARR is committed to providing reasonable and free collection to the public and achieves this through the following:

1. Collectors are contractually obligated to accept all products covered by the plan at no cost to the consumer.
2. Collectors are paid a unit based Administrative Fee negotiated on a per contract basis. The administrative fee is not fixed, and it is intended to pay the costs of collecting and managing products within the product category covered by the plan.
3. Each collector must hire qualified ODS removal technicians and MARR fully reimburses the cost of ODS removal to the collector or pays the ODS collector directly.
4. The collector will sell the scrap metal as a commodity to help cover operating and transportation costs.
5. Should commodity values be insufficient to pay for the cost of transporting the Program Products to market, MARR reimburses Collectors for the difference between invoiced, current-market transportation costs for the major appliance portion (by weight) and the price received for the metal. The weight of the major appliance portion will be determined by using the average weight of the appliances reported by the Collector to be contained in that load as determined by MARR.

Management of Program Costs

2022 BC Major Appliance Stewardship Plan

In 2015, the Board of Directors passed a resolution to establish a Restricted Reserve Fund. The purposes of the Restricted Reserve Fund are to assist in stabilizing eco fees by being available to:

- Manage year to year revenue and costs due to volume fluctuations.
- Cover the costs of winding up the program by the decision of the members or because of regulatory change, in an orderly manner, not to exceed one year.
- Cover any claims against the program, Board of Directors or staff in excess of the program's insurance coverage.
- Cover the costs of any unanticipated or extraordinary items.
- Fund other special projects that enhances the recycling of major appliances or the purchase of capital equipment.
- Cover the cost of managing products with long life spans, for which collection may occur well in the future.

The Annual Report, posted on MARR's website, includes audited financial statements along with additional performance measures such as number of large appliances sold and collected for recycling. Non-financial information will also be audited before being reported.

Management of Environmental Impacts

2022 BC Major Appliance Stewardship Plan

- MARR strives to promote the principles of the pollution prevention hierarchy where technically feasible and economically viable, to divert as much material as possible from the waste stream.
- Managing the safe removal of ODS gas from all units collected that contain refrigerant gasses used for cooling purposes is the primary environmental focus of the MARR plan.
- MARR will report annually on the following:
 1. The percentage of units collected that had the ODS gas removed prior to collection.
 2. Efforts to investigate refrigerated appliances that reach end-of-life without refrigerant (ODS empty) that exceed the 20% threshold.
 3. Procedures for safe handling and disposal of ODS gasses.
 4. Efforts taken by or on behalf of producers to reduce environmental impacts throughout the product life cycle and to increase reusability or recyclability at the end of the life cycle.

Management of Environmental Impacts

Pollution Prevention

- Major appliance manufacturers continue to focus significant attention on incorporating Design for the Environment (DfE) principles into the manufacturing of home appliances, specifically:
 1. Reducing the amount of materials used in the manufacture of the products,
 2. Incorporating new very low Global Warming Potential (GWP) refrigerant and foam blowing agent chemicals, such as cyclopentane, hydrofluoroolefins (HFOs) or isobutane (r600a)
- Significant changes have and will continue to be made in the types of refrigerants and foam blowing agents used in refrigerators and freezers as manufacturers incorporate refrigerants and insulation with very low greenhouse gas impacts as mandated by new regulations and laws in the U.S. and Canada.
- This effort builds on a history of environmental stewardship that includes significant gains in energy efficiency and the phasing out of ozone depleting substances without losing efficiency gains.

Management of Environmental Impacts

Reuse and Recycle

- MARR collectors sell the appliances to consolidators that in turn sell the material for processing, or directly to recyclers where the appliances are shredded and the metal is recycled. The shredded material is then sorted and ferrous and non-ferrous metals are separated from other materials such as plastic and foam.
- The material composition of major appliances contains metal that has commodity value. Of this metal, processors report that 98 percent of the ferrous and non-ferrous metal that enters the shredder is recovered and recycled back into the commodities market.

Pollution Control and Disposal

- Prior to shredding, products undergo decommissioning to remove refrigerant and to look for any other substances of concern. The refrigerant is removed by a technician and subsequently sent for recycling or destruction.
- Few appliances reaching end of life contain mercury switches. However, if present, MARR pays the cost of removal, shipping and processing of the mercury switch.

Management of Environmental Impacts

Material End Fates and Product and/or Material Processing Pathways

The table below illustrates the downstream management process for each material stream:

Material Commodity	Recycled	Landfilled	Safely Destroyed
Ferrous Metal	X		
Non-Ferrous Metal	X		
Plastic		X	
Refrigerant	X		X
Other		X	

Plastic waste reduction, tracking and recycling is an area of focus. MARR will undertake studies to determine:

1. Current available options for processing and recycling.
2. Time and movement studies to establish the cost of recycling plastics.

Dispute Resolution

2022 BC Major Appliance Stewardship Plan

- Should any disputes arise involving MARR with respect to the implementation of the product stewardship plan, MARR will first discuss the issue directly with the involved party, and may pursue standard commercial legal procedures should the need arise, including mediation, arbitration and civil proceedings, where necessary.
- This dispute resolution procedure was made with regard to the Ministry of Environment and Climate Change Strategy Guidance document “Producers Paying the Cost of Managing Obligated Materials and Dispute Resolution” and MARR commits to a timely and staged approach to all dispute resolutions.

Performance Monitoring and Reporting Commitments

2022 BC Major Appliance Stewardship Plan

The following performance measures will be reported annually:

1. Changes to Operating Structure and Board of Directors.
2. Collection System and Consumer Accessibility metrics such as the total amount of the product recovered in each regional district, the location of collection facilities, and any changes in the number and location of collection facilities from the previous report, the number and location of community collection events, and more.
3. The program's consumer awareness materials and strategies, including the number of unique visitors to MARR's website and the number of inquiries for MARR program materials.
4. Independently audited financial statements annually, detailing revenues and expenditures for any fees associated with the approved stewardship plan that are charged separately and identified on the consumer receipt of sale.
5. Environmental management metrics such as the percentage of units collected that had the ODS gas removed prior to collection, the procedures for safe handling and disposal of ODS gasses, conformance with acceptable product and/or material end disposition, and more.

Performance Monitoring and Reporting Commitments

2022 BC Major Appliance Stewardship Plan

The following performance measures will have specific performance targets:

1. Accessibility to free drop-off locations for the BC population: from 95% in year 1 to 95.8% in year 5.
2. Percentage of surveyed adults in British Columbia that are aware they can recycle large appliances: from 80% in year 1 to 82% in year 5.
3. Maintenance of a reasonable restricted reserve fund: around the annual budgeted operating cost of the program.
4. Safe removal of ODS gas from units collected that contain refrigerant gasses used for cooling purposes: all units that fit this description.

Polling Questions

To vote in the poll, visit www.slido.com on your mobile device and enter code #068023

When it comes to **ensuring accessibility**, of information and collection facilities, which of the following approaches do you feel are important (select each one that you feel is important):

- Maintaining a network of contracted collectors to collect large appliances
- Supporting local drop off events where gaps in accessibility to collection sites exist, with related MARR supports
- A current and accessible website that allows consumers and stakeholders access to program information
- Provision of printed material such as informational brochures, point-of-sale rack cards, collection signage, and “what’s accepted” manuals
- A toll-free number
- A dedicated email address
- Other

Polling Questions

To vote in the poll, visit www.slido.com on your mobile device and enter code #068023

As it relates to what you want to know about the progress being made in keeping with the five-year product stewardship plan, which of the following **areas for reporting** do you feel are important (select each one that you feel is important):

- Reporting on the percentage of the BC population that can access free drop-off locations
- Reporting on the percentage of surveyed adults in BC that are aware of how to recycle large appliances
- Reporting on the annual budgeted operating cost of the program
- Reporting on the reimbursement of the cost of ODS removal by qualified technicians hired by collectors
- Reporting on ODS gas removal from what has been collected
- Reporting on procedures followed in the safe handling and disposal of ODS gasses
- Reporting on producer efforts to reduce environmental impacts
- Reporting on the studies that will be undertaken to determine available options and costs for plastic waste reduction
- Other

04 |

Comments, Questions and Answers

MARR Stewardship Plan Consultations

05 | Closing

For additional feedback or questions
on the plan, please contact:

consultations@marrbc.ca

