



BC Used Oil
Management Association

BCUOMA Product Expansion Brief

June, 2021



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Background

Backdrop to the Study

- The British Columbia Used Oil Management Association (BCUOMA) is a collaborative, not-for-profit group formed in 2003 under the British Columbia Society Act. It is dedicated to collecting and recycling the following products:
 - Used motor oil
 - Used antifreeze
 - Oil filters
 - Oil containers
 - Antifreeze containers



Backdrop to the Study continued

Overview of the BC Used Oil Management Association

- Containers that are currently in the BCUOMA program include:
 - Oil Containers (50L or less)
 - Includes High density Poly Ethylene (HDPE) plastics, non-HDPE plastics, metal and eco-boxes (bag in a box).
 - Automotive Antifreeze Fluid Containers (50L or less)
- The BCUOMA program is funded by its producer members through an Environmental Handling Charge (EHC) on the sale or commercial use of new products.
- BCUOMA provides incentives to recyclers to ensure that oil, antifreeze, and related containers throughout British Columbia are collected and managed.

Backdrop to the Study continued

Purpose and Scope of This Study

- On June 29, 2020, the BC Recycling Regulation was amended to include “single-use” products. In response to this amendment, BCUOMA decided to add new automotive waste packaging (containers) and associated materials to its program by January 1, 2023.
- The intention of this study is to inform BCUOMA of the options and related issues for including such automotive waste packaging (containers) as part of the program.



Approach

Study Methodology

Nature and Extent of Consultations

- In March of 2021, MNP conducted interviews with five of BCUOMA's collectors and processors to better understand what is currently being collected and processed as well as products that could be included in the program.
- Added to this was an interview with a retailer, and with the *Société de Gestion des Huiles Usagée* (SOGHU), which provides for the collection of used oils, used glycol, related containers (50 litres or less) and used filters across Québec on behalf of member companies.

Organization	Role (Interest)
GFL	Collector and Processor
Merlin	Processor
Nu-Plastics	Collector
RPM	Collector and Processor
Terrapure	Collector and Processor
Canadian Tire	Retailer

Current State Assessment

Program Containers

- Interviewees currently recycle the following containers under the program:

Interview	HDPE of 50L or Less	Metal Containers of 50L or Less	Glycol Containers	Antifreeze Containers	Eco-Boxes*
1	Yes	Yes	Yes	Yes	
2	Yes		Yes	Yes	Yes (plastic liner only)
3	Yes		Yes	Yes	
4	Yes		Yes	Yes	Yes
5		Yes			Yes

- Regarding metal containers of 50L or less, two interviewees replied that they only recycle plastic, so receive metal containers by accident.
- Similarly, one interviewee replied that while their facility processes metal containers of 50L or less, these containers are not recycled under the program.

Ineligible Containers

- The following are the most common types of ineligible containers that processors and collectors reportedly receive while collecting and processing for the program.

Interview	DEF Container	Windshield Washer Fluid Container	Fuel Additive Containers	205L Plastic Drums	Brake Cleaner Containers
1			Yes		Yes
2	Yes	Yes			
3	Yes				
4	Yes	Yes			
5	Yes			Yes	

Large Containers

- The BCUOMA program does not currently include any containers of more than 50L in size. The interviews revealed that most processors and collectors could accommodate these large containers (most up to a size of 205L), provided several key considerations were accounted for prior to adding them to the program.
 - Processors described the labor-intensive procedure of cleaning and de-oiling large containers which is often done manually. Similarly, if the container does not fit in the processor's granulators they must be cut manually.
 - While collectors could accommodate metal and plastic containers of more than 50L, they take up significant room in the trucks. As a result, the way collectors are reimbursed should be considered if these larger containers are added to the program.

Retailer Perspective

- The approximate volumes of containers used on site, in relation to the volume of oil containers, is as follows:

Container	Volume
DEF Container	100 containers per quarter (estimate)
Eco-Boxes*	Minimal
Windshield Washer Fluid Container	200 containers per quarter (estimate)
Fuel Additive Containers	Minimal
Brake Cleaner Containers	Minimal

Detailed volumes of each product can be exported and made available.

- It was noted that inclusion of DEF and windshield washer containers in the BCUOMA program would simplify processes for Canadian Tire (in terms of no longer separating these containers and paying for them to be picked up as waste).

Retailer Perspective continued

- In addition, it was expected that the volume of DEF containers will increase, as older diesel vehicles are retired, and new diesel vehicles become more prevalent.
- Further, it was noted that 205L metal drums should be included in BCUOMA's program, as there is no established way to dispose of them.



Société de Gestion des Huiles Usagée

- As SOGHU has recent experience adding new containers into their stewardship program, MNP interviewed a representative to learn about the rationale behind the change and any lessons learned.
- SOGHU began recycling aerosol and antifreeze containers in 2012 for two main reasons:
 - Between 4 to 5 percent of the plastic containers they received were antifreeze containers.
 - Before antifreeze and aerosol containers were recycled by SOGHU, they contaminated plastics included in the program, necessitating action to separate them.
- The interviewee noted that the main challenge was establishing the collection rate as these containers are also gathered through the province's blue bin program.

Société de Gestion des Huiles Usagée continued

- Similar to the feedback that MNP received from BCUOMA's processors and collectors, SOGHU is considering adding DEF containers as well as aerosol cans of parts cleaner to its stewardship program.
- SOGHU manages the Used Oil Management Association Atlantic's stewardship program and, as of 2020, began collecting DEF containers for Nova Scotia.
- It was further indicated that Newfoundland and Labrador, as well as Prince Edward Island, will be adding DEF containers to the program.



Future Considerations

Potential Modifications to BCUOMA's Program



DEF Containers

Adding DEF containers will reduce the time spent sorting them from other collected containers.



Windshield Washer Fluid Containers

Adding windshield washer fluid containers will reduce the time spent sorting them from what is being collected. However, it may be difficult to calculate a collection rate based on the cross-over with RecycleBC.



Fuel Additive Containers

As these containers are non-HDPE plastic, they need to be sorted from HDPE plastics. It is estimated that these comprise less than 1% of the plastics collected for BCUOMA.



Containers Over 50L

Due to the amount of space taken in collectors' trucks, BCUOMA should consider incentivizing them by unit. While collectors and processors can accommodate large containers, they will require more time and effort to process which should be reflected in the incentive rate. For 205L drums, a separate collection network could be needed as these may not be generated and housed in the same locations as smaller containers.



Eco-Boxes

While currently a part of the program (if containing oil) these containers are difficult to process as they require separating the outer packaging from the plastic bladder. The plastic bladder is not currently economical to recycle and would go to landfill or energy.

Next Steps

- Estimate collection volumes of each additional container type:
 - DEF
 - Additives
 - Windshield Washer Fluid
 - Containers between 50L – 205L
- Identify potential EHC and collection system (if different from current)
- Consult with stakeholders
- Update Stewardship Plan

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