

Reference: 369313

February 18, 2021

David Lawes Executive Director BC Used Oil Management Association Suite 230, 830 Shamrock Street Victoria, BC V8X 2V1

Dear David Lawes:

Thank you for submitting proposed amendments to the BC Used Oil Management Association Extended Producer Responsibility Plan (the "Plan") in fulfillment of the requirements of section 6 of the Recycling Regulation (the "Regulation") made under the Environmental Management Act.

Under the Regulation, the director has the ability both to amend an approved extended producer responsibility (EPR) plan on his own initiative, and to approve amendments to an approved plan that have been proposed by a producer. I have completed my review of, and approve, the amendments proposed by the BC Used Oil Management Association ("BCUOMA") in the plan submitted on February 5, 2021.

BCUOMA was provided with my preliminary decision letter dated January 20, 2021 and the opportunity to propose further amendments or provide additional information for consideration. BCUOMA addressed each of the identified deficiencies as detailed in the preliminary decision letter by committing to propose further amendments to the Plan within 45 days from the date of this letter, as outlined in "Appendix V – Short Term Commitments Amendments" of the Plan.

Third party independent assurance for non-financial information in annual reports

Third party assurance for non-financial information in annual reports is required through section 8(2)(h) of the regulation. The assurance report should be completed in accordance with the document entitled, "Third Party Assurance Requirements for Non-Financial Information in Annual Reports" dated November 2019 and revised from time to time, which is enclosed.

Email: env.mail@gov.bc.c

Website: www.gov.bc.ca/en

Finally, the ministry expects this approval letter to be forwarded to BCUOMA's board of directors as well as its member producers, since each producer is responsible for ensuring its agent fulfills the plan, and compliance proceedings may be taken against a producer if the agent fails to implement the plan.

Right to appeal

If you disagree with this decision, Division 2 of Part 8 of the *Environmental Management Act* provides for appeal of my decision to the Environmental Appeal Board (EAB). In accordance with the *Act* and with the Environmental Appeal Board Procedures regulation, the EAB must receive notice of the appeal no later than 30 days after the date you receive this decision.

I look forward to working with you to ensure the success of your program. If you have any questions about this letter, please contact me at 778-698-4860 or ExtendedProducerResponsibility@gov.bc.ca. If you have any questions regarding the implementation of your plan, please contact your ministry file lead.

Sincerely,

Bob McDonald

Director, Extended Producer Responsibility Section

Enclosure (1)

cc: Sonya Sundberg, Executive Director, Environmental Standards Branch

Meegan Armstrong, Unit Head, Extended Producer Responsibility Section



BC Used Oil Management Association

Extended Producer Responsibility Plan

Lubricating Oil, Empty Oil Containers,
Oil Filter Products, Antifreeze Products

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Submitted to:

BC Ministry of Environment & Climate Change Strategy Extended Producer Responsibility Section

Submission Dates:

January 28, 2019 (original) February 5, 2021 (revised)



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1 Overview

The British Columbia Used Oil Management Association (BCUOMA) is a not-for-profit society formed under the British Columbia Society Act in 2003. BCUOMA's mandate is to ensure the responsible collection and management of the used oil, antifreeze, filters and containers required under the BC Recycling Regulation.

Since its inception, BCUOMA has improved collection and recycling performance in all regions of the province – and across all product categories. This commitment to continuous improvement is a major focus in the new extended producer responsibility plan.

BCUOMA has operated a province-wide collection and recycling program for used oil, oil filters and used oil containers since August 2003 and for antifreeze since 2011, for both the do-it-your-self market as well as the commercial and industrial markets. The BCUOMA program is funded by its producer members through an Environmental Handling Charge (EHC) on the sale or commercial use of new products. Each BCUOMA member determines if and how it will recover its costs for the BCUOMA charge. BCUOMA produces audited annual financial statements outlining the fee revenue and program expenditures.

BCUOMA received approval from the Province for its current Product Stewardship Plan in 2009. The plan was amended and approved to include antifreeze in 2011. In 2014, BCUOMA submitted an updated plan with new performance targets. The 2014 plan was reviewed over 3 years by the Ministry of Environment without decision. In 2017, after discussion with the Ministry, BCUOMA began the process to prepare a new plan with new targets since much of the information in the proposed 2014 plan had become outdated.

2 Legal Requirements

The <u>Recycling Regulation</u>, replacing the Post-Consumer Residual Stewardship Program Regulation, was brought into law on October 7, 2004. Under authority of the *Environmental Management Act*, the regulation sets out the requirements for extended producer responsibility in British Columbia. BCUOMA represents the producers of designated products appointed to carry out their legal obligations in accordance with the approved plan.

Section 4 of the Recycling Regulation states:

A producer must submit an extended producer responsibility 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 Extended Producer Responsibility plan is submitted in accordance with the above regulation.

The list of members that have appointed BCUOMA to carry out the duties of the producer under Part 2 of the regulation is held by BCUOMA and can be made available to the Director on request.



2.1 Products Covered under the Plan

Lubricating oil:

- o petroleum-derived or synthetic
- o crankcase, engine and gear oils
- o hydraulic, transmission and heat transfer fluids
- fluids used for lubricating purposes in machinery or equipment

Empty oil containers:

 empty containers with a capacity of 30 liters or less, manufactured and used for any product in the lubricating oil product category

Oil filter products:

- o spin-on-style or element-style fluid filters that are used in hydraulic, transmission or internal combustion engine applications
- o oil, diesel fuel, storage tank fuel, coolant and household furnace oil filters

Does not include gasoline, air or household furnace air filters.

Antifreeze products:

o automotive antifreeze and includes empty containers for this antifreeze

3 Governance and Financing

BCUOMA members, through networks of both company-owned and independently-owned retail and wholesale facilities, bring lubricating oil, automotive antifreeze and filters into the province for sale or distribution. Retail facilities range from self-serve gas bars to mass merchandise marketers, quick lubes, radiator shops, and automotive, farm, marine and commercial equipment dealers. Wholesale lubricating oil facilities comprise both branded bulk plants, and independently owned and brand owner warehouses.

Oil is sold in containers as small as less than a one-liter bottle, and as large as 205-liter drums, 1,600-liter "lube cubes", 30,000-liter tank trucks and 50,000-liter rail cars. Automotive antifreeze is mainly sold in 4 to 5-liter containers with very little, if any, sold in containers larger than the tote size (1,000 liters). For oil and automotive antifreeze containers, the Regulation applies only to the containers 30 liters or less in size.

3.1 Governance

A multi-sector nine-member <u>Board of Directors</u> manages BCUOMA, with representatives from the manufacturing, retail, local government and public. An Executive Director reports to the Board and is responsible for operations management, financial management, communications, staff management



and general administrative oversight. BCUOMA also works closely with other used oil associations in Canada to harmonise operations and minimize costs.

3.2 Bylaws

BCUOMA bylaws outline how the organization will operate. The bylaws are available on the BCUOMA website in the members' section.

3.3 Annual General Meeting and Annual Reporting

BCUOMA holds an Annual General Meeting (AGM) that is open to the public to attend. At the meeting, BCUOMA members vote on items such as Director appointments, bylaw changes and fees. The members also use the AGM to select an independent financial auditor for the next year.

An annual report is released to the members and the public at the AGM. The Annual Report outlines the financial and operational performance of BCUOMA over the last year, and includes an audited financial statement and an Independent Non-financial Information Review Report. The Annual Report is submitted to the Ministry of Environment for review against the requirements in the Recycling Regulation and approved Plan.

3.4 Program Financing

BCUOMA collects <u>Environmental Handling Charges</u> (EHCs) from its members. The EHCs are applied at the point that the member sells the product. Varying by product type, the EHCs are set by the members and reviewed as needed. The fee may or may not be passed on to the consumer as a separate charge by the member or downstream seller.

4 Product Design and Use Trends

4.1 Lubricating Oil

New vehicles are more efficient and require fewer oil changes. This trend could lead to lower sales of lubricating oil or less lubricating oil available for collection.

A portion of the oil put into vehicles is consumed in use and not available for collection. The most recent study in BC (see section 4.5) identifies that 31.1% of the oil put into vehicles is consumed in use and not available for recycling. Oil that is consumed in use is typically burned off during vehicle operation, lost in small leaks or drips, or lost in a vehicle accident or engine malfunction. A new Consumed in Use study is scheduled for completion in the Spring of 2019 and will be used to update the available for collection formula.

A BCUOMA study identified that in BC used lubricating oil unavailable for collection is being used for burner fuel, explosive manufacturing, cement/lime manufacturing, fish/pleasure boats and other uses. An estimated 18.75 million liters of used lubricating oil is repurposed by the owner and not available for



collection. The largest re-purposing application of used lubricating oil is as burner fuel in shop heaters, where an estimated 8.1 million liters is burned. The Ministry of Environment considers use of unprocessed oil in shop heater burners as an acceptable use and provides guidance for this use (including testing requirements).

A new Unaccounted Used Oil study is being commissioned in 2019 and likely to be complete at the end of the year. The study will be used to update the available for collection formula.

4.2 Antifreeze

Antifreeze is sold in concentrated and diluted form. BCUOMA tracks the ratio between these two forms as they have implications for determining the volume sold and available for collection. BCUOMA has been operating an antifreeze program since 2011, and a few other provinces have started a program since then. The number of reports and studies available for user stage analysis of antifreeze is much fewer than for oil. Antifreeze can be lost in use through leaks, vehicle accidents and engine malfunction (e.g., hose breaks). It can be assumed that most if not all of the antifreeze sold off the retail shelf is "top-up" antifreeze that is replacing antifreeze lost in use and not available for collection.

The <u>Used Oil Management Associations of Canada</u> commissioned a study in 2011 (see <u>section 4.5</u>) which estimated that 55% of antifreeze is lost in use and not available for collection. Further analysis, including anecdotal information from industry, suggests that its likely closer to 75% of antifreeze that is not available and that vehicle servicing intervals for antifreeze have become longer with newer, more efficient vehicles. In early 2019, BCUOMA intends to finalize a study that commenced in 2018, which will update the amount of antifreeze estimated to be unavailable for collection, and incorporate the results in the performance reporting in the annual report that follows the study's completion.

4.3 Oil Filters

Oil filters have typically been made of metal but in recent years there are more non-metals filters being sold. Non-metal filters often have plastic and cardboard components that are lighter in weight than metal filters. Light-weighting of filters will change the recovery performance measurement methodology, and affect the estimate used to translate kilograms collected into units. BCUOMA intends to finalize a study that commenced in 2018 (representing an update to the 2007 study – see section 4.5) to research market trends in non-metal filters and determine if the recovery measurement methodology should be updated. The study should be complete in early 2019 and the results will be included in BCUOMA's performance reporting in the annual report that follows the study's completion.

4.4 Oil and Antifreeze Containers

Oil and antifreeze containers have not changed in composition over the most recent years and the recycling methodology is well known. At times, manufacturers have used containers made of plastic that are difficult to recycle but this has not been the case in recent years. While some containers that are not used for oil or antifreeze but for similar automotive products find their way into the BCUOMA collection stream, BCUOMA collectors and processors endeavour to keep contamination at a minimum. Some provinces have added diesel exhaust fluid containers to their programs as they have seen large



increases of these containers in the recycling stream. BCUOMA will continue to monitor the level of contamination and adjust the program as needed.

There is also a new and growing trend to sell "oil-in-a-box" where oil is in a plastic bladder bag and packaged in a cardboard box with a spout. This new packaging poses a challenge for recycling and new methodologies will need to be researched as the trend develops, noting that BCUOMA's varying fee approach is intended to reflect the complexity and cost to manage each product type.

4.5 Available for Collection Studies / Research

BCUOMA uses the best available science to determine the amount of each type of material available to collect. BCUOMA often partners with other used oil associations in Canada on these studies to ensure there is cross-Canada consistency. These studies are publicly available on the BCUOMA website and each outlines the approach and methodology used:

BC Consumed in Use Study - Report 2005

- a study undertaken for BCUOMA by RGS Consulting to calculate consumed in use rates for EHC-applicable lubricants within lubricant using industries, and apply the rates against sales numbers that are representative for those industries. The result is consumed in use volumes and percentages for lubricants within industry classes of trade.

BC Unaccounted Used Oil Study 2011

- a study undertaken for BCUOMA by Conestoga-Rovers & Associates to determine the different uses or disposal methods of used oil that was not collected and processed through BCUOMA's oil collection and recycling program in 2011, thereby considered unaccounted.

BC Unaccounted Used Oil Study 2006

- a study undertaken for BCUOMA by RGS Consulting to identify and examine practices for handling or disposing of used oil that has not attracted a return incentive (RI), and therefore is unaccountable to BCUOMA.

Review of the Recovery Rate for Used Oil in Quebec 2010

- a study undertaken for Recyc-Quebec by Dessau / NI Environment to develop and implement a Quebec-specific methodology that allows an estimation of the recovery rate for used oil (or emission factors) taking the various applications into account.

Estimated Rates of Recoverable Antifreeze in Canada 2012

- a study undertaken for 7 Canadian provinces (including BC) by Dessau / NI Environment on the recovery rate for antifreeze in each province based on an identical set of parameters.

Used Oil Filter Study 2007

- a study undertaken for BCUOMA by Conestoga-Rovers & Associates to determine the typical composition of a drum of used oil filters, to evaluate the ratios and typical weights of different filter types in drums of used oil filters, and to determine the typical amount of free product, general waste and non-eligible filters in a drum of used oil filters.

BCUOMA commits to completing "Available for Recycling" type studies (Oil Consumed in Use, Unaccounted Used Oil, Antifreeze Available for Collection) at a minimum frequency of every 10 years.



Further, the percentages from the study year for the Unaccounted Used Oil study will be used in baseline development and annual reporting.

5 Collection

Of all the oil and antifreeze collected in BC, most (96%) is collected from commercial facilities such as service stations, lube shops and large commercial operations (e.g., mining, forestry and agriculture). These commercial facilities are typically serviced by a BCUOMA Registered Collector that has a service agreement with that facility. Approximately 4% of the oil and antifreeze collected in BC comes from consumers that change their own oil/antifreeze or small commercial operators that choose to use the free consumer drop-off system.

5.1 Commercial Collection (96%)

The commercial collection system includes over 4,000 generators in the province. This system provides the cleanest material and leads to the best environmental outcome for that material. In a commercial setting, oil and antifreeze recovered from a personal or commercial vehicle can be stored and kept clean and free of contamination such as water, gasoline or solids. Oil/antifreeze that is kept clean is more likely to be processed and re-used as new lubricating oil or antifreeze.

Commercial facilities choose the BCUOMA Registered Collector with which they want to enter into a service agreement. The agreements often outline the collection frequency, collection requirements and any payments or charges. These agreements are between the facility and the collector and do not involve BCUOMA, although BCUOMA does provide financial incentives to collectors and processors based on collection volumes and locations. The collectors have supply arrangements with processors that manage used oil, antifreeze, filters and containers.

Some small commercial operations choose to use the consumer recycling system and transport their oil or antifreeze to a registered facility. Access to BCUOMA Return Collection Facilities (RCFs) is therefore significantly less important for commercial collection than for consumer collection. While BCUOMA does not put volume restrictions on drop-offs, the recycling facilities may. If a large volume will be dropped off, it is recommended that a phone call be made in advance to ensure that the RCF has the capacity to accept it.

Given that the vast majority of BCUOMA products are collected through the commercial system, product recovery (see section 6.3) is considered the measure that best reflects BCUOMA's performance in this stream.

5.2 Consumer Collection (4%)

For consumers that choose to change their own oil or antifreeze, BCUOMA has a province-wide network of registered recycling centers that provide consumers with free access for recycling. Currently numbering 317, these Return Collection Facilities are often located in high traffic retail locations but can also be located at industrial sites, multi-material private depots (bottle depots) and local government recycling/landfill sites.



In addition, there are over 1,000 professional lube shops located across BC where consumers can take their vehicle to have their oil, oil filter and antifreeze changed. These facilities are located to coincide with the demand. Materials collected at professional lube shops are taken directly from the vehicle into the storage infrastructure for collection by a BCUOMA Registered Collector on a frequent basis.

Given the low product volumes represented by consumer collection, accessibility to recycling (see <u>section 5.5</u>) is considered a more meaningful BCUOMA performance measure for this stream than the level of product recovery.

5.3 BCUOMA Recycling Centers

BCUOMA recently made some changes to its <u>Recycling Center Program</u> to improve the consumer experience and environmental performance at the facilities. BCUOMA has invested in new infrastructure such as modified sea containers with spill containment, collection tanks and <u>consumer friendly signs</u>. BCUOMA has also increased the rates provided to facilities for the liters of consumer oil/antifreeze collected. In recent years, some retailers that were being inundated with late night drop offs, mystery materials and other products not part of the program (e.g., paint, tires, couches) have chosen to drop out of the BCUOMA program.

The 317 BCUOMA Return Collection Facilities (RCFs) are identified by municipality in the <u>2017 Annual Report</u>. Going forward, BCUOMA will report performance against the minimum and the under development enhanced accessibility standard for each community (see <u>section 5.5</u>).

5.4 Community Collection Events

BCUOMA provides financial support for community collection events operated by Regional Districts, municipalities and community groups. The events are often multi-material events also supported by other stewardship programs and provide residents with an opportunity to recycle many different types of products. Organizations are invited to apply for a BCUOMA <u>Community Collection Event grant</u>, which is currently \$1,500 per event.

These events are geared to communities that are interested in having an event in place of a facility, or as a consumer awareness initiative in communities that already meet the service level. BCUOMA's support of collection events is supplemental or community-optional to meeting BCUOMA's accessibility standard, discussed in section 5.5.

Each BCUOMA annual report will include a reporting of the collection events held.

5.5 Consumer Accessibility Standard and Targets

BCUOMA commits to applying the Stewardship Association of BC (SABC) Accessibility Standard, as a minimum service level. As of 2017, and serving as a baseline, over **95%** of the population of BC had access to a BCUOMA registered facility at the SABC standard (MNP report, 2018).



SABC Accessibility Standard (BCUOMA *minimum* target)

For urban communities with a population of 4,000 or more, at most there should be a 30-minute drive to a collection facility.

For rural communities with a population of 4,000 or more, it should be no more than a 45-minute drive to a collection facility.

BCUOMA has completed three studies over the past two years (see below in this section) to analyze the collection network, measure accessibility and customize an accessibility standard that supports the user types. The work done to date by BCUOMA to understand the user needs, and develop a return network to service its specific user needs, is unmatched by any program in Canada. As a continuous improvement initiative, BCUOMA intends to work towards an enhanced and aspirational level of accessibility across BC and to report progress against the stated levels:

Table 1. Accessibility Levels by Community Type

Type of Community	Enhanced Service Level
City, High Industrial	One facility per 100,000 people
City, Low Industrial	One facility per 200,000 people or one facility within a 30-minute drive if the population is less than 200,000
Town, High Industrial	One facility
Town, Low Industrial	One facility within a 30-minute drive, otherwise its own facility
Village	One facility within a 30-minute drive, otherwise its own facility

BCUOMA has defined the community types as follows:

Table 2. Categorization of BC Communities by Type

Type of Community	Population Characteristics	Business Establishment Characteristics	Number of Communities	Population (2016)
City, High Industrial	More than 5,000	More than 20 per 10,000 people	44	1,449,800
City, Low Industrial	More than 5,000	20 or less per 10,000 people	53	2,690,333
Town, High Industrial	2,501 to 5,000	More than 50 in total	3	14,196
Town, Low Industrial	2,501 to 5,000	50 in total or less	63	228,627
Village, High Industrial	1,000 to 2,500	More than 50 in total	1	1,047
Village, Low Industrial	1,000 to 2,500	50 in total or less	89	149,683



Other (<1000) Total	n/a	n/a	66 319	31,454 4,565,142
Type of Community	Population Characteristics	Business Establishment Characteristics	Number of Communities	Population (2016)

According to the 2018 MNP study, BCUOMA will need 178 facilities in specific communities and locations identified in the report to meet these service levels. More information on the methodology used to determine the community types and the BCUOMA enhanced accessibility levels is available in the three studies on the BCUOMA website:

- Update: Analysis of Coverage for the Return Collection Facility Incentive Program MNP 2018
 - an update to the 2016 study undertaken for BCUOMA by MNP to analyse the RCF program with the goal of improving its design and delivery, focusing on the concept of a "user intensity matrix" that considers target service levels across the province based on community characteristics.
- <u>Development of a User Intensity Matrix for the Return Collection Facility Incentive Program. MNP</u>
 2016
 - the original "user intensity matrix" study undertaken for BCUOMA by MNP, subsequently revisited and updated in 2018 (see above).
- Review of the Return Collection Facility Incentive Program MNP 2016
 - a study undertaken for BCUOMA by MNP to determine the overall achievement of the program's objectives, the factors that have contributed to its success, and improvement opportunities.

In addition to reporting progress on achieving the customized enhanced standards, BCUOMA will monitor and report performance against the SABC standard, addressing service gaps (e.g., remote areas) as determined appropriate,

6 Transportation and Processing

6.1 Incentive System for Province-wide Collection Coverage

BCOUMA has designated 11 zones across BC. Used oil, oil filters, oil containers, used antifreeze and antifreeze containers are regularly picked up from over 4,000 generators by BCUOMA Registered Collectors. Collectors are required to ship the collected materials to a BCUOMA Registered Processor for an approved end use. Any approved end use must be environmentally sound and be in compliance with environmental requirements.

Following is a map of the provincial zones and additional information is available on the <u>BCUOMA</u> <u>website</u>.





6.2 Registered Collectors and Processors

BCUOMA registers the collectors and processors before they are eligible to participate in the program. Under the Hazardous Waste Regulation, used oil, automotive antifreeze and oil filters are considered hazardous wastes. As well, the oil and antifreeze containers often contain a certain amount of new oil or antifreeze, and measures are required to ensure that proper equipment and vehicles are used to pick them up. As a result, it is important that any collectors and processors handling used oil and antifreeze materials are doing so in compliance with the required environmental standards.

BCUOMA requires as a condition of registration, and every two years thereafter, that each collector and processor engage an independent third-party qualified professional to conduct an environmental audit of their operations, and state in a Letter of Regulatory Compliance that the operation is in substantial compliance with all applicable provincial and federal environmental legislation and regulations. In addition, the collector and processor must submit a current Business Licence. If either of these two conditions is not met, BCUOMA registration will not occur.



6.3 Product Collection Targets

As BCUOMA is a mature program, collection is projected to be very stable, consistent and much higher than the 75% identified in the Recycling Regulation. The target Capture Rates for BCUOMA products are projected from 2017 results, which will serve as a baseline, using the following methodology:

Sold Consumed Available for Product Repurposed Collected Capture Rate in Use Collection (2017)Used Oil (Millions 99.7 $(31.1)^{1}$ $(16.8)^2$ 51.8 47.8 92.2% of Liters) Filters (Units) 6.8 5.9 87.0% 6.8 n/a n/a Containers 2.1 2.1 1.8 85.7% n/a n/a (Million Kgs) **Used Antifreeze** 12.6 $(9.45)^3$ n/a 3.15 2.6 82.6% (Millions of Liters)

Collection Targets

Refer to the referenced studies in section 4.5:

- 1. BCUOMA study identified that 31.1% of oil is consumed during use. New study underway and scheduled to be complete in Spring 2019.
- 2. BCUOMA study: 16.8 21.45 million liters of oil are repurposed by the owner or otherwise unavailable for collection. Next study to be commissioned in 2019.
- 3. An estimated 75% of antifreeze is lost in service and unavailable for collection. New study underway and scheduled to be complete in Spring 2019.

BCUOMA will demonstrate continuous improvement by further improving the precision of the measurements used in its methodology, and by continuing to investigate where uncollected material may be repurposed by the user or disposed.

6.4 Product Management

Collected products are managed in accordance with the Pollution Prevention Hierarchy.

Oil: Oil previously sold as lubricating oil is collected, refined and reused as lubricating oil. Some oil is collected, transformed and recycled as a new energy product. This includes re-refining and use as a fuel for pulp mills, cement kilns, asphalt plants and other uses that meet the Hazardous Waste Regulation or applicable government standards in other states or provinces, such as for mining explosives or exploration drilling.

Oil Filters: Metal filters are collected and recycled into other metal products. Paper filters that cannot feasibly be recycled are managed so a portion of the inherent energy can be recovered.

Containers: Plastic and metal containers are recycled into new plastic and metal products.

Antifreeze: Antifreeze previously sold as an antifreeze product is refined and reused as an antifreeze product. Antifreeze processors are already actively involved in processing used



antifreeze to the point where an additive package can be included and the recycled antifreeze can again be sold as automotive.

The BCUOMA Pollution Prevention Hierarchy Reporting Procedures are included in Appendix I.

A Life Cycle Assessment (LCA) study on used oil management was commissioned in 2017 by BCUOMA and Alberta's used oil program, and supports BCUOMA's approach to product management. The report is available at LCA Oil Report UC Santa Barbara 2017.

6.5 Landfill Audits

BCUOMA participates in landfill waste audits with local governments and other stewardship agencies on an annual or semi-annual basis depending on local government scheduling. To date, all but one audit found no detectable amount of BCUOMA products, with one audit finding the negligible amount of 0.1% of the waste stream.

BCUOMA will continue to work with local governments on future audits and commits to reporting on each landfill audit finding for BCUOMA products.

7 Paying the Cost of Collection and Management

BCUOMA pays the cost of collection and management of products by providing incentives to the marketplace to drive the desired outcomes. The registered participants own and have the ability to market the material, thereby being in control of their financial outcomes. This incentive system rewards facilities that collect more material. The system differs significantly from the payment systems used by some stewardship programs that set fixed rates for program service providers and retains ownership of the material, thereby pre-determining a program participant's financial outcome.

Most residents and businesses have their vehicles serviced commercially (e.g., service station, lube shop) and negotiate service terms with the commercial operation. For consumers that choose to service their own vehicles, the used oil and antifreeze can be returned at a BCUOMA Return Collection Facility (RCF) at no cost to the consumer.

RCFs receive a financial incentive from BCUOMA to collect oil and antifreeze from consumers. BCUOMA also supplements the commercial arrangement with RCFs by providing infrastructure support and marketing support. RCFs can be retailers, depots, local governments or other business that choose to enter into an agreement with BCUOMA and separately, enter into a service agreement with a BCUOMA Registered Collector.

BCUOMA provides an incentive to BCUOMA Registered Processors and Collectors based on the material type and the zones in the Province (see section-6.1). As noted in this section's introduction, the processors own the material they collect or receive from collectors and market this material for their own benefit. The incentives provided by BCUOMA are actively managed and reviewed by the association to ensure that the desired outcomes are being achieved.



Local governments can choose to register as a RCF with BCUOMA and follow the same rules and procedures as private facilities.

Local governments that collect other household hazardous waste products at their recycling facility or transfer station, and choose not to enter into an agreement with BCUOMA to collect oil and antifreeze, are impacting the marketplace by displacing the private options available to BCUOMA and reducing BCUOMA's access to an open market. Further, these local governments are providing assistance to a business to the detriment of BCUOMA and this will likely cause system disruption or poor results in that community. If a local government chooses to collect house hazardous waste in a community, then it should collect all types, including oil products, at rates and service levels consistent with the private sector.

7.1 Dispute Resolution

BCUOMA requires collectors, processors and collection facilities to register and follow the requirements to receive payment in the form of a financial incentive from BCUOMA. BCUOMA's requirements including manuals, registration forms and applications are posted on the BCUOMA website.

If there is a dispute between BCUOMA and a service provider or stakeholder, the individual consumer or company can take the following actions:

- 1. Bring the dispute to the Executive Director.
- 2. Ask that the BCUOMA Board consider the issue.
- 3. If the matter is not resolved at the previous two levels, service providers can use normal commercial legal procedures such as the Commercial Arbitration Act.

BCUOMA's incentive system supports the competitive commercial market. BCUOMA has had very few disputes, if any, that would require a more complex dispute resolution system to produce a successful result. More complex processes are likely needed in systems where the financial outcomes of participants are pre-determined which, as highlighted earlier, is not the case with BCUOMA.

BCUOMA is also the only stewardship agency in BC that has a local government representative and a member-at-large representative on its <u>Board of Directors</u>. This type of representation helps to provide the local government and non-industry input directly at the Board level, including the resolution of any disputes or concerns by collectors and processors, local governments, producer members, or the public.

8 Program Marketing and Consumer Awareness

BCUOMA will continue to ensure that timely and relevant information is available to the public on its website. BCUOMA will also continue to use brochures, municipal recycling calendars, table top displays, other visual displays and relevant public hand-outs as a means of spreading the message to the public on used oil and antifreeze material recycling. BCUOMA also uses traditional and social media including Facebook (https://www.facebook.com/BCUsedOil/) to inform the public of the program.



8.1 Consumer Awareness Target

The most recent Consumer Awareness Benchmark Study for all Stewardship Programs in BC was completed in 2016. The study indicates that 78% of consumers are aware there is a recycling program in BC for BCUOMA managed products. The study also states that 84% of British Columbians believe that the products collected in the BCUOMA program are being managed in a safe and environmentally responsible manner.

As BCUOMA is largely a commercial program with 96% of the product collected from commercial facilities, general consumer awareness as a performance measure is not as critical as for more consumer-oriented products and programs.

Consumer Awareness Target	75% of British Columbians are aware there is a recycling program for BCUOMA managed products
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In 2019, following the new 2019 BCUOMA Communications Strategy, the primary focus for the Communications team will be on segmenting and micro-targeting our audience to ensure greater reach and impact for BCUOMA's message. Using a combination of social media audience and engagement analysis along with industry and public surveys BCUOMA will determine key target markets and audiences and develop strategies for each.

Communications roles and responsibilities have been re-evaluated both internally and externally to ensure greater integration and support for the operational work. BCUOMA will also focus on using owned and earned marketing channels more effectively to build consumer knowledge and brand awareness.

9 Summary of Performance Commitments

BCUOMA commits to the following targets (table sections I. to III.) and reporting commitments (table section IV.).

Except where noted otherwise, the results of both the targets and reporting commitments below will be included in BCUOMA's annual report to the Director. Further, performance commitments I. and II. are subject to third party assurance through a Non-Financial Information Audit.

PERFORMANCE COMMITMENTS

I. ACCESSIBILITY TARGETS

As a minimum, 95%* of the total population is covered by the program based on the SABC standard (*representing BCUOMA 2017 performance per MNP Report, 2018)



PERFORMANCE COMMITMENTS

II. COLLECTION TARGETS (CAPTURE RATES)

Product	Sold (2017)	Consumed in Use	Re- purposed	Available for Collection	Collected	Capture Rate
a) Used Oil (Millions of Liters)	99.7	(31.1)	(16.8)	51.8	47.8	92.2%
b) Filters (Units)	6.8	n/a	n/a	6.8	5.9	87.0%
c) Containers (Million Kgs)	2.1	n/a	n/a	2.1	1.8	85.7%
d) Used Antifreeze (Millions of Liters)	12.6	(9.45)	n/a	3.15	2.6	82.6%

III. CONSUMER AWARENESS TARGET

75% of British Columbians are aware there is a recycling program for BCUOMA managed products

IV. REPORTING

Annual:

- a) Total liters of oil and antifreeze, total filter units, and total kg. of containers collected by Regional District in a calendar year for both the commercial and consumer collection streams
- b) Dates, locations and results of collection events
- c) Comparison of results to all performance targets
- d) Independently audited financial statements
- e) Non-financial audit report
- f) Total products collected and sold in the reporting year
- g) Description of how the collected product was managed in accordance with the pollution prevention hierarchy
- h) Number / locations of collection facilities
- i) Description of educational materials and educational strategies used
- j) Efforts taken to reduce environmental impacts, to increase reusability and recyclability
- k) Progress on achieving BCUOMA's proposed enhanced accessibility standards below:

Community Type	Enhanced Service Level	Community Type	Enhanced Service Level
a) City, High Industrial	One facility per 100,000 people	c) Town, High Industrial	One facility
b) City, Low Industrial	One facility per 200,000 people or one facility within a	d) Town, Low Industrial	One facility within a 30- minute drive, otherwise its own facility
	30-minute drive if the population is less than 200,000	e) Village	One facility within a 30- minute drive, otherwise its own facility



PERFORMANCE COMMITMENTS

As applicable:

- a) In the next annual report after they occur, the results of "Available for Recycling" type studies (Oil Consumed in Use, Unaccounted Used Oil, Antifreeze Available for Collection), at a minimum frequency of every 10 years
- b) In the next annual report after they occur, the results of landfill audit findings for BCUOMA products

10 Consultation Approaches

As a mature and successful extended product responsibility program, BCUOMA focused the plan and consultation on improving performance measurements to comply with Ministry requirements for independent verification, to augment existing – and successful – collection and processing systems, and to reflect industry's improved product design for the environment.

BCUOMA conducted the following stakeholder consultations which have contributed to the development of this extended producer responsibility plan:

- 1. From October 7 to November 21, 2014 consultation on the 2014 draft plan. This included two webinars (October 30 and November 6, 2014) with 23 participants from a cross section of stakeholders, including local governments, regional districts, environmental organizations, and recycling program participants.
- 2. From October 18 December 22, 2017, consultation on the proposed BCUOMA targets (details in Appendix II).
- 3. From May 28 June 30, 2018, consultation on the May 2018 updated draft plan and targets, reflecting the December 2017 consultation feedback. Consultation responses were received from local governments, regional districts and environmental groups (details in Appendix III).

Stakeholders were notified of the opportunity to comment on the May 2018 draft plan and the prior consultation materials through:

- posting on the BCUOMA website for the general public, with direct links to the materials;
- direct emails to all BCUOMA members, collectors and processors;
- notification to the Coast Waste Management Association and the Recycling Council of British Columbia and their respective members, including environmental organizations, business associations and local governments; and
- notification to the Product Stewardship Council and subsequent webinars.



In addition to feedback from specific consultation initiatives, BCUOMA welcomes questions and comments from consumers and businesses on an ongoing basis. BCUOMA contact information is available on the BCUOMA website at http://bcusedoil.com/contact/.



Appendix I – BCUOMA Pollution Prevention Hierarchy Reporting Procedures

BCUOMA is required to produce an annual report on the performance of its program, including how the recovered product was managed in accordance with Pollution Prevention Hierarchy (PPH). Key definitions and procedures to support this reporting are provided below.

1.0 Operating Definitions of Pollution Prevention Hierarchy Terms

Reuse the Product: to use again as the original product after reclaiming and/or refining.

Recycle the Product: to reprocess into a new, different product.

Recover Energy from the Product: to recover and use the inherent energy of the product in a thermal process. Thermal treatment without energy recovery is considered disposal not Recovered Energy.

2.0 Procedures for PPH Reporting

Used Oil: The amount of uncontaminated used oil recovered, less the water content, that is received at a used oil refinery is reported as Reuse. The amount of uncontaminated used oil, less the water content, that is received at a facility that is not a refinery and treated and sold for use as a new product (e.g., asphalt, energy product) that meets applicable use standards is reported as Recycled.

Used Antifreeze: The amount of used antifreeze that is received at a used antifreeze processing facility, that has a glycol content of 42% or greater and is uncontaminated, and is refined and sold as an antifreeze product that meets applicable use standards is reported as Reuse.

Filters: The amount of metal filters processed to remove the oil content and received at a steel recycler will be reported as Recycled. The amount of paper filters sent for thermal treatment where a portion of the inherent energy is recovered will be reported as Recovered Energy.

Antifreeze and Lubrication Oil Containers: The amount of containers, less the oil or antifreeze content, received at a facility that manufacturers plastic resin (pellets) or a steel recycler will be reported as Recycled. The amount of containers received at a facility that recovers a portion of the inherent energy from the containers will be reported as Recovered Energy.



Appendix II – 2017 Consultation on Proposed Targets – Written Responses

The October-December 2017 consultation on BCUOMA's proposed targets was based on content in the presentation <u>Stewardship Plan Consultation</u>: <u>2018-2022 Target Updating</u> (including BCUOMA's 2016 accessibility study) which is posted on the BCUOMA website.

Following is a summary of the key messages in the written consultation responses, together with links to the full responses on the BCUOMA website. This feedback was taken into account in preparing the **May 2018 draft plan** subsequently distributed for consultation (see Appendix III).

City of Abbotsford

 The minimum service levels proposed for the BCUOMA stewardship plan would not provide a sufficient number of drop-off locations in Abbotsford.

Capital Region

- Given the nature of the products managed by BCUOMA, the proposed minimum service levels appear inadequate for our region.
- In the January 2014 submission to SABC's Action Plan Consultation, CRD staff requested that accessibility standards should apply to all communities in British Columbia, including our electoral areas.
- We recommend that BCUOMA increase its awareness programs to educate consumers about return options and best practices for handling the materials.

Regional District of Kitimat Stikine

- The majority of our member municipalities and none of our electoral areas would have been included in the MNP study concluding that 99% of the population of BC live within driving distance of a facility.
- BCUOMA needs to reach out to retailers of products managed under the program and make the incentives for hosting a depot more attractive.
- The stewardship should endeavour to make siting of facilities at approved locations as
 easy an exercise as possible. Streamlining this process could include BCUOMA
 providing the local government storage tanks for the facility rather than the facility
 operator having to apply for grant funding and source the tanks themselves.

Regional District of Okanagan Similkameen

- The RDOS would prefer to see previous service levels re-established and a clear goal from BCUOMA to incentivise all locations already dealing with used oil to accept DIY used oil.
- The SABC standards clearly indicate a minimum standard (worst case scenario) not a description of a goal for stewards to adopt. With the recent drop of private sector



- participating depots in our Regional District, the RDOS is concerned that the service standards will lead to reduced number of depots in our communities.
- The decision in 2017 to increase the reporting requirements for oil change locations seems to be a barrier for some firms. Incentivising all generators of used oil to become depots should be a priority for BCUOMA to increase capture. Increasing, not decreasing, the number of depots will allow for more used oil to stay out of local water ways and landfills.
- This year, BCUOMA has not had any significant presence in the south Okanagan educating residents to the loss of depots and where DIY consumers should go.
- Local government landfills are becoming the depots that backstop the service levels indicated in the MNP report.

Fraser Valley Regional District

- There is an understanding for higher standards, but this should not come at the
 expense of improving accessibility. What does the BCUOMA believe can be done in
 partnership with the Province and Municipal governments, to cut down on the amount
 of illegal dumping of materials at collectors' premises.
- There is concern with a shift to the MNP service levels. This is because other factors should also determine a service level (e.g., Abbotsford Sumas major aquifer).
- There should not be a continued transfer of collection points away from those who sell or already deal with used oil.

Peace River Regional District

- The minimum service levels proposed by BCUOMA do not account for the rural population of our Regional District which do not have adequate access to services for the proper disposal of material accepted by the BCUOMA program.
- The infrastructure grant should cover the full cost of implementing the infrastructure rather than a portion.

Regional District of Kootenay Boundary

- The proposed BCUOMA Plan will need to determine sufficient incentive levels to collectors to overcome alternative options. The current level of \$.30 per litre might work in some high-volume locations but not necessarily rural BC.
- Despite an on-line presence and a relationship with the Recycling Council of BC, BCUOMA's program is unknown to many do-it-yourself oil changers in rural BC – especially the drop site locations.
- We would ask that BCUOMA acknowledge the damage caused by past BCUOMA depot management practices and provide funding to former drop sites for rehabilitation efforts.



- The proposed \$8,000 infrastructure grant is a good start but likely will not cover the full
 cost of the needed infrastructure. The infrastructure funding model should be focused
 on establishing a series of stable private sector.
- If residents had proper incentive to return containers to a place where they would get a refund, they would never abandon oil in parking lots or beside dumpsters.

Sunshine Coast Regional District

- These proposed service levels are adapted from the minimum service levels outlined in the SABC 2013 Action Plan. As used oil and antifreeze are hazardous materials, service levels should be tailored to the material type.
- Solid waste staff suggest that the south coast requires a minimum of one RCF for consumers. The majority of the south coast population uses the Town of Gibsons as the commercial hub and some households in Electoral Area F are a 40+ minute drive to the Sechelt RCF.
- BCUOMA should strive to have similar service levels (to other provincial programs such
 as batteries and health products) by providing adequate incentives and support to all
 retailers that sell oil products.
- The approach of active communication role of local government does not adhere to the BC Recycling Regulation. The steward and private industry should take the lead to fully fund and communicate the program, as per the Regulation.



Appendix III – 2018 Consultation on Draft Plan – Written Responses

The May/June 2018 consultation on BCUOMA's extended producer responsibility plan was based on the content of the May 2018 draft plan posted on the BCUOMA website and the summary presentation "Stewardship Plan Consultation May-June 2018" (see Appendix IV).

Where relevant, the feedback from the 2018 consultation has been incorporated in the final plan to provide greater clarity and/or address issues.

Following is a summary of the key subjects in the written feedback:

- Supporting the pollution prevention hierarchy for BCUOMA products
- Considering factors other than population for the number of collection facilities
- Understanding how BCUOMA will meet planned service levels
- Increasing and stabilizing private sector collection facilities / reducing reliance on public sector facilities
- Addressing illegal dumping
- Reducing product contamination at collection facilities
- Improving collection services especially in rural areas
- Reporting on consumer versus commercial recovery rates
- Increasing awareness of consumer return options and information accuracy

Beginning on the next page is a summary of the consultation feedback together with BCUOMA's responses.



	Comments – by plan topic (Summary)	Responder	BCUOMA response
	Product design and use trend	S	
1	Recommend the plan commit to increased advocacy to educate producers on material recyclability.	Squamish-Lillooet Regional District	BCUOMA has a varied fee schedule that is based on the cost to manage the product sold. In this way, BCUOMA intends to influence producers to lower their overall product environmental impacts. This approach has been clarified in the final plan.
	Recommend encouraging application of used oil in accordance with the hierarchy.	Terrapure Environmental	Considering PPH adherence in isolation can lead to unintended consequences and undermine other initiatives by government and industry to improve the environmental outcomes related to product use and management. For oil, there are approximately 6 re-refineries in North America and transportation is a critical value in determining the environmental benefits (and economic) and impacts of used oil management. There are also other high-profile BC government initiatives that have environmental objectives such as Clean BC and Low Carbon Fuels that could be undermined by strict adherence to the PPH. BCUOMA has completed a LCA study on the used oil management (link to study added to final plan). Considering best available science and the other BC Government initiatives, there is not a clear basis to modify BCUOMA's approach.
3	Recommend reviewing recyclability of new products and adding Diesel Exhaust Fluid containers to program.	Councillor	Regarding problematic products, see BCUOMA response 1. above. Regarding diesel exhaust fluid containers, as confirmed in the final plan, products such as these will continue to monitored and program adjustments made, as determined necessary.
4	Recommend looking for ways to further reduce the need for either products or containers.	Councillor	Thank you. We will consider.
	Collection – including accessil	bility standards ,	targets
	Recommend funding transportation costs if collectors are not reliably servicing collection facilities.	Squamish-Lillooet Regional District	BCUOMA has and will continue to look at the incentive model to ensure collectors are servicing all areas of the province. For example, in 2018 BCUOMA increased the incentive for containers to all rural and remote zones in the Province (everywhere besides the lower mainland and lower Vancouver Island).



	Comments – by plan topic (Summary)	Responder	BCUOMA response
6	Would support a facility for both Village and "Other" Community types where there is no 30-minute drive option — vs an annual round-up event.	Squamish-Lillooet Regional District	Good comment. BCUOMA has adjusted its service level in this plan to meet this suggestion.
7	Recommend Community definition be amended to include populations in unincorporated electoral areas; development of action plan to ensure depots are established and maintained; and number of collection facilities in a district tied to product sales in district.	Regional District of Central Kootenay	Good comment. Unincorporated Areas can be extremely remote or sparsely populated, and thus requires community level information to understand the needs. The Plan has been amended to meet this suggestion. BCUOMA will continue to review service levels in Electoral Areas, receive community level anecdotal advice on service needs and provide service where appropriate.
8	Recommend separate reporting on commercial vs consumer recovery rates.	Regional District of Okanagan- Similkameen	BCUOMA will report the total consumer and commercial material collected in each Regional District each year. BCUOMA does not track product sold by user type (e.g., commercial farmer versus back yard mechanic), as there is not always clear delimitation between user types (e.g., backyard farmer) and the user does not always pre-determine at sale point where the used product might be brought for recycling post use. Therefore, capture rates (formerly recovery rates) by collection stream could not be accurately measured.
9	Recommend separate reporting on commercial vs consumer recovery rates.	Metro Vancouver staff	See BCUOMA response 8 above. The consumer and commercial collection and processing streams are integrated, with payments provided at different strategic stages to produce the desired outcomes. Further, the key performance measure for consumer collection is the accessibility standard. The final plan commits to meeting the SABC standard for consumer collection, as a minimum. BCUOMA has completed several studies over the past 3 years to develop an accessibility standard that is specific to BCUOMA and based on the user characteristics of BCUOMA products. BCUOMA has demonstrated a commitment to work towards this standard, and has made infrastructure investments, incentive rate changes and marketing changes with the aim to achieve this new standard.



	Comments – by plan topic (Summary)	Responder	BCUOMA response
10	Recommend a commitment that service standards will not overwhelm/reduce existing depots.	Regional District of Okanagan- Similkameen	After consultation comments were received, BCUOMA adjusted the standard to have less emphasis on collection events and include more facilities, and this has been confirmed in the final plan. BCUOMA has also committed to monitoring and reporting progress on the implementation and results of this enhanced standard.
11	Recommend accessibility reporting be separate for private vs public sector depots to recognize the private sector's under-performance.	Regional District of Okanagan- Similkameen	We will take this into consideration.
12	Request consideration to BCUOMA partnering with governments to address dumping.	Fraser Valley Regional District	BCUOMA will partner with local governments in addressing disposed products.
13	Recommend service levels also factor in local environmental/other risks.	Fraser Valley Regional District	Good suggestion. We will take this into consideration.
14	Request assurance that new plan will not reduce number of current collectors in east FVRD.	Fraser Valley Regional District	Number of Collectors is not a performance requirement.
15	Request that plan include BCUOMA's actions to bring service levels up to MNP minimums.	Metro Vancouver staff	The plan has been updated to provide links to the studies that support the proposed BCUOMA accessibility standard. Further, BCUOMA is committed to reporting on progress towards the standard, but given its exceptional and aspirational nature is not currently in a position to commit to a timeline.
16	Recommend including BCUOMA's actions to meet SABC's 30-minute accessibility – or revise the MNP report to justify another approach.	Zero Waste and Resource Recovery, City of Vancouver	BCUOMA has completed several studies over the past 3 years to develop an accessibility standard that is <i>specific</i> to BCUOMA and based on the user characteristics of BCUOMA products. The BCUOMA specific accessibility standard is science based, is in the early days of application. BCUOMA has demonstrated a commitment to work towards this standard, and has made infrastructure investments, incentive rate changes and marketing changes with the aim to achieve this new standard. The plan has been updated to provide links to the studies that support the proposed BCUOMA accessibility standard. As noted earlier, BCUOMA is committed to reporting on progress towards the standard, but given its exceptional and aspirational nature is not currently in a position to commit to a timeline.



	Comments – by plan topic (Summary)	Responder	BCUOMA response
17	To avoid contamination, recommend that BCUOMA materials be collected in original containers, then transported in tubskids.	Zero Waste and Resource Recovery, City of Vancouver	We will take this into consideration.
18	Recommend providing sufficient financial incentives to encourage competitive facilities.	Regional District of Kootenay Boundary	BCUOMA's incentive system supports the competitive commercial market. Further, BCUOMA has demonstrated a commitment to work towards its proposed accessibility standard, including infrastructure investments, incentive rate changes and marketing changes.
19	Recommend determining depot locations in consultation with local governments, and incenting depots by covering all costs and allowing for a profit.	Councillor	BCUOMAs program uses best available science. Depot locations are located based on the user needs. The incentive rates are adjusted based on market conditions to ensure BCUOMA's outcomes are met.
20	Suggest improved signage/bin locations to avoid contamination.	Councillor	As noted in the final plan, BCUOMA has recently made some changes to its Recycling Center Program to improve the consumer experience and environmental performance at the facilities. BCUOMA has invested in new infrastructure such as modified sea containers with spill containment, collection tanks and consumer friendly signs. BCUOMA has also increased the rates provided to facilities for the liters of consumer oil/antifreeze collected.
21	Recommend adding details on how BCUOMA is working with the private sector to improve service/environmental protection.	Regional District of Okanagan- Similkameen	It is not clear how these details would benefit the plan.
	Transportation and processing – including collection targets		
22	The Recovery rate should be applied individually to each Regional District.	Regional District of Central Kootenay	BCUOMA has committed to report material collected by Regional District.
23	Recommend addressing approaches to increasing collection of unaccounted volumes to ensure environmentally best uses.	Terrapure Environmental	BCUOMA uses the best available science to determine the amount of each type of material available to collect. These studies are publicly available on the BCUOMA website and links to the reports have been added to the final plan. Further, BCUOMA now commits in the plan to complete "Available for Recycling" type studies (Oil Consumed in Use, Unaccounted Used Oil, Antifreeze Available for Collection) at a minimum frequency of every 10 years and to apply the



	Comments – by plan topic (Summary)	Responder	BCUOMA response
			percentages from the study year for the Unaccounted Used Oil in baseline development and annual reporting.
24	Recommend the plan include a financial preference for re-refined oil versus burned oil.	Terrapure Environmental	The plan has been updated to address this suggestion and include BCUOMAs position on this.
25	Recommend BCUOMA commit to regular waste audits with landfill operators to determine program's 'real' success.	Regional District of Kootenay Boundary	The final plan has been updated to include a commitment to report to the Ministry on each landfill audit finding for BCUOMA products.
26	Suggest consideration to a deposit/refund program for containers/ filters/ products.	Regional District of Kootenay Boundary	We will consider.
27	Recommend increasing recovery and pollution prevention hierarchy levels.	Councillor	See BCUOMA response 23 above (re: recovery/collection) and response 2 above (re: hierarchy).
	Paying the cost of collection a	and managemen	t
28	To improve service/cover costs, recommend consideration to contracted collectors vs incentives approach.	Squamish-Lillooet Regional District	We will consider.
29	Recommend increasing BC depots by considering incentive levels against administrative burdens, including dumping and paper work requirements.	Regional District of Okanagan- Similkameen	There is no evidence to support this claim.
30	Recommend that return incentive for collection facilities should at a minimum equal the event grant.	Regional District of Central Kootenay	The amount paid to facilities is volume driven.
31		Zero Waste and Resource	BCUOMA will continue to work with local governments to address illegal dumping, which is a local government responsibility and often driven by zoning and city planning decisions. BCUIOMA will



	Comments – by plan topic (Summary)	Responder	BCUOMA response
		Recovery, City of Vancouver	continue to provide consumers with information on how best to recycle oil and antifreeze, including the nearest location.
32	Recommend that the plan include incenting an increase in and stabilization of private sector depots.	Regional District of Okanagan- Similkameen	See BCUOMA response 5 above.
33		Metro Vancouver staff	See BCUOMA response 31 above.
34	Recommend adequate financial incentives to encourage collection across BC, funded by an increase in EHCs.	Squamish-Lillooet Regional District	See BCUOMA response 5 above.
35	Recommend consolidation of collectors already providing a service — and discontinue transfer of collection points away from those that already sell/deal with used oil.	Fraser Valley Regional District	BCUOMA looks for the most suitable collection location in each community.
36	, .	Metro Vancouver staff	BCUOMA treats public and private facilities equally.
37	Recommend plan revisions to allow negotiation of appropriate transportation and processing rates between BCUMOA and approved/registered collectors; the transfer of product ownership to collectors upon receipt; and guaranteed free	Zero Waste and Resource Recovery, City of Vancouver	See BCUOMA response 5 above.



	Comments – by plan topic (Summary)	Responder	BCUOMA response
	transportation/ processing for collection facilities	Desired District	C. POLIONA
38	Recommend a determination of sufficient collector incentives to overcome alternative disposal/use	Kootenay Boundary	See BCUOMA response 5 above.
39	options, especially in rural BC. Request that BCUOMA acknowledge past damage caused by depot management practices and provide	Regional District of Kootenay Boundary	BCUOMA expects that local government operated depots will follow the same rules and standards as private facilities, including following agreements between the facility owner and BCUOMA.
40	funding for rehabilitation of former drop sites.	Regional District of	The infrastructure grant is provided to interested private and public facilities.
41	focus on establishing stable private sector depots and greater steward investment.	Kootenay Boundary	The infrastructure grant is provided to interested private and public facilities.
	Program marketing and cons	umer awareness	
4:	Recommend increasing current awareness target and including funding for education and depot updates on website.	Regional District of Okanagan- Similkameen	BCUOMA has updated the plan to include details from its comprehensive 2019 Communication Strategy, which includes consumer awareness initiatives micro-targeted at the consumer collection system users and facilities. The consumer awareness target of 75% is a general awareness target of British Columbians, even though only a small fraction of the population uses the consumer collection system.
42	Recommend direct communication to educate rural residents on proper disposal options.	Regional District of Kootenay Boundary	See BCUOMA response 41 above.
43	Recommend increasing awareness of facilities and improving consumer practices to mitigate risk of losing more facilities.	Councillor	See BCUOMA response 41 above.



	Comments – by plan topic (Summary)	Responder	BCUOMA response
	Other or general comments		
44	Recommend formalizing the collection of data, including product	Metro Vancouver staff	Thank you for the comment. This is out of the scope of this consultation initiative but will be considered in the appropriate venue.
	pathways that are not directly managed by the stewardship		
	program.		
45	The Draft Stewardship Plan has a	Zero Waste and	Thank you for the feedback.
	number of strengths, particularly with respect to community	Resource Recovery, City of	
	engagement. BCUOMA has been a	Vancouver	
	leader in this area with the		
	introduction of their Summer		
	Ambassador program many years		
	ago, an initiative now taken by other		
	BC stewardship programs benefiting		
16	all British Columbians. The program is long standing and	Councillor	Thank you for the feedback.
40	solid. Many of the new directions are		Thank you for the reedback.
	quite positive such as the proposal to		
	do a study on the antifreeze		
	available for collection. BC Used Oil		
	is also to be recognized for its zoned		
	approach to acknowledge the		
	different costs in areas of BC, its		
	participation in landfill audits, its		
	work in reusing antifreeze and some oil and its good recovery rates.		
	on and its good recovery rates.		



Appendix IV – 2018 Consultation on Draft Plan – Stakeholder Presentation



About Us

- Non-for-profit Industry Association formed to comply with the Recycling Regulation (July 2003)
- · 9 person Board of Directors composed of :
 - 7 industry representatives;
 - 1 from local government; and
 - 1 from the public at large
- 247 Members (as of June 2018)
- Mandate: Ensure the responsible collection and management of used oil, antifreeze, filters and containers

Report 1



Presentation Overview

- About the BC Used Oil Management Program
- 2. Status of Stewardship Plan
- 3. Accessibility Target
- 4. Collection Targets
- 5. End Fate Targets
- 6. Consumer Awareness Target



Status of Stewardship Plan

- Previous Plan 2009-2014
- Updated Plan was submitted November 2014
 - Consultation August /September 2014
 - Operating / Reporting off targets in draft plan
- · Consultation on new 2018-2022 targets
 - BCPSC consultation on accessibility Spring 2017
 - CWMA Consultation Oct 2017
- · New Accessibility Study Jan-Apr. 2018
- · More consultation May/June 2018
- Submit Revised Plan to Ministry July 2018

Report 1





Macro Outlook

- BCUOMAs program = 14 years operating
- Pay the cost for collection and management of used oil, oil filters, antifreeze and oil/antifreeze containers from across the province by providing incentives (11 zones) and allow processors to recover value through sale of new product.
- Consistently responding to market changes, product use changes and material changes.

5

Report 1



Accessibility - Consumer 4%

- Return Collection Facility Program Objective: ensure that there are sufficient return options province-wide for consumers (e.g. DIY'ers) at no charge
- Consumer Collection History
 - 1992 Return of Used Lubricating Oil Regulation
 - Mandatory return to retail for consumer oil
 - · 2003 Oil added to Recycling Regulation
 - Mandatory RTR rescinded and replaced with EPR
 - · 2011 RCF Program Started
 - 2016 MNP Review of RCF Program
- Revised program starting January 1st, 2017
- Implementation through 2017
- · 2017 Consult on Accessibility Satndard
- · 2018 New MNP Study and Accessibility Standard



Accessibility

- Commercial Collection 96%
 - 46M Liters /yr. oil and 2.3M Liters AF
 - Service at 4000 generators (Lube shops, car dealers, mechanics, large operations e.g. mining, forestry, municipal gov.
- Consumer Collection 4%
 - 1.5 M liters oil per year 0.2M Liters AF
 - Minimum Service Levels

Repor



Accessibility Standard

- · Minimum Accessibility Standard
 - SABC (general) Standard is minimum
 - Currently, 99.0 percent of the total population in BC living in a municipality would be within driving distance to a facility
- · Target Accessibility Standard
 - Customized to meet oil and antifreeze generation and user needs
 - MNP study 2016; modified 2018
 - Big changes: add more rural facilities; improve infrastructure
- Support Community Collection Events
 - Multi-material events operated by RD's, Municipalities and Community Groups

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Provincial Community Types

Type of Community	Population Characteristics	Business Establishment Characteristics	Number of Communities	Population
City, High Industrial	More than 5,000	More than 20 per 10,000 people	44	1,449,800
City, Low Industrial	More than 5,000	20 or less per 10,000 people	53	2,690,333
Town, High Industrial	2,501 to 5,000	More than 50 in total	3	14,108
Town, Low Industrial	2,501 to 5,000	50 in total or less	63	228,627
Village, High Industrial	1,000 to 2,500	More than 50 in total	1	1,047
Village, Low Industrial	1,000 to 2,500	50 in total or less	89	149,683
Other	Less than 1000	n/a	66	31,454
Total			319	4,565,142

Facilities Needed to meet Target

Type of Community	Number of Communities with a Facility	Number of Communities Within Driving Distance to a Facility	Number of Facilities Required to Meet Target Service Levels
City, High Industrial	44	0	52
City, Low Industrial	22	31	26
Town, High Industrial	3	0	3
Town, Low Industrial	37	26	37
Village	60	30	60
Total	166	87	178



Target Service Level

Type of Community	Target Service Level
City, High Industrial	One facility per 100,000 people
City, Low Industrial	One facility per 200,000 people or one facility within a 30-minute drive if the population is less than 200,000
Town, High Industrial	One facility
Town, Low Industrial	One facility within a 30-minute drive, otherwise its own facility
Village	One facility within a 30-minute drive, otherwise its own facility

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9 - Current vs. Target

- March 2018 = 298 Facilities
- · Need 178 Facilities to meet Target.
- · Lots of facilities but not necessarily in right place

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- · 12 Communities under Target
- Providing new infrastructure
 - Fraser Valley
 - Vancouver
 - Surrey
 - North Vancouver
 - RD Columbia Shuswap





20' HC Sea Container with Spill Containment



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End Fate (PPH) Targets

	2016	Target
Oil	69% Reuse 31% Recycling	50% Reuse 50% Recycling
Antifreeze	100% Reuse	100% Reuse
Filters	99% Recycling 1% Energy Rec.	80% Recycling 20% Energy Rec.
Containers	100% Recycling	100% Recycling

1. Oil GHG Savings / LCA Study 2017/18

BC Used Oil

Collection Targets

	2014	2015	2016	Target (3 yr rolling)
Oil	73.89	69.25	71.72	75.0
Antifreeze	40.10	45.32	48.02	60.0
Filters	82.83	86.84	85.1	85.0
Containers	70.14	82.04	76.67	80.0

- 1. Waste Composition Studies (Annually with SABC)
- 2. Filter Light-weighting Study 2018
- 3. Antifreeze Available for Collection Study 2018
- 4. Oil Consumed in Use Study and Unaccounted Study- 2019
- 5. Container Contamination Study 2019



End Fate (PPH) Definitions

<u>Oil:</u> Oil is re-refined into new lubricating oil or recycled as a product, material or substance (liquid, gas, solid) to replace virgin equivalents.

<u>Oil Filters:</u> all collected metal filters are recycled; all non-metal filters (e.g. paper) are managed through energy recovery.

<u>Containers:</u> all collected containers are recycled into new plastic or metal products

<u>Antifreeze:</u> all collected antifreeze is refined for reuse

BC Used Oil
Management Association

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Consumer Awareness

- BCUOMA is largely a commercial program with 96% of the product collected from commercial facilities, thus consumer awareness is not as critical a performance measure to support collection as a more consumer oriented product and program.
- Consumer marketing is very targeted at small distinct user groups e.g. DIY'ers, car enthusiasts.
- Target = 75% of consumers are aware there is a recycling program in BC for BCUOMA managed products.
- 2016 Study = 78%

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 Also, 2016 study showed that 84% of British Columbians believe that the products collected in the BCUOMA program are being managed in a safe and environmentally responsible manner.

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Next study is planned for 2018.



Thank you - Questions

- Written Submissions by June 30
- emailed to dlawes@usedoilrecycling.ca
- Written submissions will receive a response
- All submissions will be included in Consultation summary in the Plan.

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Appendix V – Short Term Commitments Amendments

BCUOMA has added the following short term commitments following discussion with the Ministry and having received the Preliminary Decision Letter on January 20th, 2021 with proposed amendments.

1. Assessing the Performance of the Program

No later than 45 days from the date of the decision letter, BCUOMA will propose amendments to the Plan to better assess program performance in relation to the amounts of product available for collection in the consumer collection stream and commercial collection stream.

2. Reasonable and free consumer access to collection

No later than 45 days from the date of the decision letter, BCUOMA will propose amendments to the Plan to demonstrate all of the following:

- a) Commitments to improve reasonable and free access to Return Collection Facilities. The amendments must include descriptions of how levels of access will be improved, an enhanced accessibility target that provides a clear commitment to improved access, and the timeframes involved for implementing improvements and meeting targets;
- b) Current levels of access to advertised Return Collection Facilities and direct pick-up services, and the proposed number of Return Collection Facilities or alternative collection services required to meet the enhanced accessibility target set out in the Plan;
- c) Commitments to report in the BCUOMA annual report the types of products and volumes accepted at each advertised Return Collection Facility, and whether each Return Collection Facility is operational during normal businesses hours; and,
- d) Commitments to report in the BCUOMA annual report frequency of direct pick-up services and areas serviced.

3. Producers paying the costs

No later than 45 days from the date of the decision letter, BCUOMA must propose amendments to the Plan that either.

- a) Demonstrate that producers are currently paying the costs of collecting product at commercial facilities, Return Collection Facilities and through pick up services, and paying the costs of managing the product collected. Such an amendment must provide a summary of the cost methodology applied and a summary of stakeholder comments related to the cost methodology that were received during development of the Plan, and how and when those were addressed; or,
- b) If BCUOMA cannot demonstrate how it can comply with paragraph 3(a), BCUOMA must set out a process, including timelines, for ensuring that producers are paying the costs of collecting and managing product, and demonstrating that producers are paying such costs in accordance with the requirements set out in paragraph 3(a).

4. Environmental impacts of the program

No later than 45 days from the date of the decision letter, BCUOMA will propose amendments to the Plan that include:



- a) Definitions for different levels of the PPH relevant to obligated products managed by BCUOMA that are consistent with generally accepted practices;
- b) Product management performance commitments (i.e. statements of the minimum amount of product managed in accordance with different levels of the PPH which BCUOMA will be required to achieve), and reporting requirements related to meeting those commitments; and,
- c) Year-over-year product management improvement targets and reporting requirements related to meeting those targets.

5. Making consumers aware of the program

No later than 45 days from the date of the decision letter, BCUOMA will propose amendments to the Plan that establish additional commitments for improving consumer awareness among consumers who change their own oil or antifreeze or require drop off at consumer Return Collection Facilities, and the timeframes for doing so.