Reference: 334263

December 7, 2018

Rosemary Sutton
Executive Director
Tire Stewardship BC
PO Box 5366
Victoria BC V8R 1H8

Dear Rosemary Sutton:

Thank you for submitting proposed amendments to the Extended Producer Responsibility Plan - Tires (the "amendments") in fulfillment of the requirements of section 6 of the Recycling Regulation (the "regulation") made under the *Environmental Management Act*. I appreciate the industry's continued commitment to achieving compliance in this regard.

Under the regulation, the director has the ability to both 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 Tire Stewardship BC Association (TSBC) on November 28, 2018. This amended plan takes effect on December 7, 2018.

Pursuant to section 6 of the regulation and based on the plan's original approval date of September 19, 2006, TSBC's next plan review must be completed by September 19, 2021. However, a director under the *Environmental Management Act* may amend the approved plan pursuant to section 5(5) of the regulation or rescind approval of the approved plan pursuant to section 6.1 of the regulation, should TSBC fail to meet the commitments set out in the approved plan. Please also note that failure to comply with an approved plan may result in the imposition of an administrative monetary penalty of up to $40,000 or a fine of up to $200,000.

Future plans and amendments
The ministry expects continuous improvement across all future plans and amendments including the following areas of concern:

1. Plan commitments – for example, use specific and measurable language;
2. Consumer access – for example, develop comprehensive province-wide accessibility – particularly in rural areas, or improve upon the current Stewardship Agencies of B.C. accessibility standard;

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Extended Producer Responsibility
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3. Consumer awareness - for example, include performance requirements tailored for different consumer groups and all product types managed by the program;
4. Financial transparency – for example, provide greater levels of disclosure in financial statements to better serve interests of producers, the ministry, and other stakeholders; and
5. Pollution prevention hierarchy **–** for example, highlight program areas of influence.

I acknowledge that some plans better address various concerns than others, and that collaboration between some producers/appointed agencies and the ministry is underway. As well, the ministry intends to develop further guidance on select areas of concern.

Third Party 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 October 2018 and revised from time to time, which is enclosed.

Finally, the ministry expects this approval letter to be forwarded to TSBC'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.

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, or suggested opportunities for improvement, please contact your ministry file lead.

Sincerely,

Bob McDonald
Director, Extended Producer Responsibility Section
Environmental Standards Branch

Enclosure (2)

cc: Kris Ord, Executive Director, Environmental Standards Branch
Meegan Armstrong, Ministry file lead, Extended Producer Responsibility Section

TIRE Stewardship BC
New value from old tires

Extended Producer Responsibility Plan - Tires

Rosemary Sutton,
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Submitted to:
BC Ministry of Environment & Climate Change Strategy
Extended Producer Responsibility Section
Submission Dates: November 28, 2018, October 10, 2018, June 22, 2018.

TIRE Stewardship BC
New value from old tires

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A. Regulatory Basis for this Plan

This Extended Producer Responsibility Plan (Plan) is filed by Tire Stewardship BC Association (TSBC) with the Ministry of Environment (Ministry) pursuant to the requirements of the Recycling Regulation, B.C. Reg. 449/2004 (Regulation), for the tire product category identified in Schedule 4 of the Regulation as currently in effect.

For purposes of this Plan, the tires covered in Schedule 4 are referred to as "*regulated"* and are described in detail in Section I of Appendix I, Tire Definitions. The tire types currently regulated are commonly referred to as Passenger and Light Truck (PLT) tires, Medium Truck (MT) tires, Agricultural (AG) tires and Logger Skidder (LS) tires.

This Plan describes the current program for regulated tires in the context of the approval criteria set forth in the Regulation. The Plan is expected to remain applicable for the foreseeable term.

Some Off-the-Road (OTR) tire types are explicitly excluded under Schedule 4, Section 2 (d) of the Regulation. These *"unregulated"* tires are also described in more detail in Appendix I, under Section II e).

B. Appointment of an Agency

Established under the BC Society Act, and operating under the new British Columbia Societies Act, TSBC is the provincial not-for-profit society responsible for operating BC's scrap tire recycling program in accordance with its Ministry-approved Extended Producer Responsibility Plan and the Regulation.

Since January 1, 2007, TSBC has been accountable to the retailers, other stakeholders and the public for the collection, processing and environmentally sound disposal of all currently regulated tires. TSBC will continue to be the stewardship agency on behalf of each registered retailer (producer) in the province and will comply with Part 2 of the Regulation with respect to the duties referred to in paragraph (a). In addition, a copy of any notification the agency received from the producer is available upon the request of a director as per Section 2(4)(b) of the Regulation.

For the purpose of the tire program, the BC Recycling Regulation defines a producer as a person who

i. sells, offers for sale or distributes a new tire product in British Columbia,
ii. is the owner or licensee of a trademark under which a tire product is sold or distributed in British Columbia, whether or not the trademark is registered, or
iii. imports the tire product into British Columbia for sale or distribution.

The current list of retailers (producers) represented by TSBC is available at http://tsbc.ca/pdf/registeredretailers.pdf

The society is governed by a Board comprised of seven directors representing the four member organizations:

- Retail Council of Canada;
- Western Canada Tire Dealers Association;
- The Tire and Rubber Association of Canada; and
- New Car Dealers Association of BC.

TSBC also consults with its Advisory Committee comprising representatives from the Recycling Council of BC (Chair), retailers, scrap tire generators, haulers, processors, manufacturers, and local government. The committee meets at least annually or as needed to provide advice on program policy and operations. This forum is considered essential to the ongoing success of the program and will be maintained. The current membership is posted on the TSBC website.

Any changes to TSBC's structure and governance will be reported to the Ministry of Environment.

To guide the development of this Plan, TSBC has established its vision, mission, and goals, as amended from time to time.

VISION

All scrap tires are transformed to the environmental, economic, and social benefit of BC's citizens.

MISSION

To administer a sustainable Extended Producer Responsibility program for the stewardship of all BC scrap tires designated under the BC Recycling Regulation.

GOALS

- *To support the environmentally friendly and sustainable collection and management of 100% of regulated scrap tires available for collection.*
- *To sustain or reduce the "average" Advance Disposal Fee.*
- *To maintain TSBC's financial stability.*
- *To foster and support innovation and research relative to higher valued solutions within the industry.*
- *To assist the industry in building sustainable markets for recycled rubber products.*
- *To support community projects that use BC recycled rubber.*
- *To support the pollution prevention hierarchy as referenced in the BC Recycling Regulation.*
- *To provide public education on the benefits of maintenance and inflation of tires to extend tire life, thereby delaying their entry to the waste stream.*

C. Plan Components

1. Program Structure [Section 5 (1)(c)(i)]

The plan adequately provides for the producer collecting and paying the costs of collecting and managing products within the product category covered by the plan, whether the products are currently or previously used in a commercial enterprise, sold, offered for sale or distributed in British Columbia.

TSBC program participants are as follows:

- Retailers (producers): sell program tires and generate scrap tires.
- Return to Retailers (R2R): sub set of retailers that have voluntarily agreed to accept up to 4 car tires, clean and off rim from the public during business hours.
- Collection Facilities: sub set of retailers that in the normal course of business take back program scrap tires when a new program tire is purchased.
- Generators: generate scrap tires (auto wreckers, landfills etc).
- Haulers: collect and transport scrap tires from retailers and generators.
- Processors: process tires into products or for use as energy recovery.
- Manufacturers: manufacture products from BC recycled rubber.

TSBC collects an Advance Disposal Fee (ADF), commonly referred to as an eco-fee, from registered retailers on the sale of every new tire including replacement tires and tires on new vehicles. ADFs are set by TSBC on PLT, MT, AG and LS tires. The fee rates, listed on the TSBC website, vary by tire type to compensate for the higher costs of collecting and disposing of larger tires. Details of the tire types are provided in Appendix I – Tire Definitions.

These fees are used in the operation of the tire recycling program in BC with none of the eco-fees collected directed to government. While the majority of funds (currently 92%) are incentives paid to transport and recycle BC's scrap tires in environmentally responsible ways, TSBC also directs funds to other activities that enhance BC's tire recycling program and help TSBC meet its goals:

- A Manufacturer Incentive Program to stimulate the use of BC recycled rubber by BC manufacturing companies. This program has created a strong and stable market for BC recycled products.
- A Community Grant Program to support communities in their use of BC recycled rubber in projects such as playgrounds and other recreational facilities.
- A voluntary province-wide program to recycle bicycle tires and tubes. The program piggybacks on the existing automobile scrap tire and collection infrastructure. There is neither an eco-fee to the consumer nor a disposal fee charged to bicycle shops.

- A compliance process to ensure all retailers "pay their fair share" by correctly reporting and remitting eco-fees on all new program tires sold in BC.
- A Research and Development program to find value-added solutions to tire fibre.

Now that both the capability and capacity to process non-program OTR tires up to 39" exists in BC, TSBC has been researching projected volumes and costs to determine the eco-fees required for these tires. Early indications show significant support from affected stakeholders to add these tires to the BC Recycling Regulation.

2. Consumer Access to Collection Facilities [Section 5 (1)(c)(iii)]

The plan adequately provides for reasonable and free consumer access to collection facilities or collection services.

Unlike other product recycling programs where consumers must choose between putting their end of life product into the waste stream or taking it to a collection depot for recycling, most motorists exchange their old tires for new ones at the time of purchase. The majority of retailers take back one old tire for every new tire sold and arrange for haulers to collect and transport the tires to processors.

Not all tire retailers are in a position to take back a scrap tire for every new tire sold. An example is Home Depot, which may sell a trailer with new tires even though their primary business is not selling tires or equipment with new tires. TSBC therefore defines a collection facility as "a TSBC registered retailer that, in the normal course of business, will accept one scrap tire for every new tire sold." There are currently over 1,900 such retailers in BC that take back consumers' scrap tires when new tires are purchased.

Some motorists choose to take their old tires home rather than leave them with the retailer for disposal. Some consumers take these orphan tires to landfill where they are held for collection by haulers. Based on collection data, this volume is approximately **3%** of the total volume collected annually. However, recognizing this can be a logistical problem for some landfills, TSBC provides alternative disposal options to reduce this burden:

- The Return to Retailer (R2R) program provides consumers a free option to return these orphan tires to participating retailers. This is a year-round program for consumers to drop off up to four passenger or light truck tires, clean and off rim, during the retailer's business hours. R2R locations are a subset of the over 1,900 retailers referenced above and are located in both rural and urban locations. As reported in our 2017 Annual Report, at the end of 2017 there were 828 R2R locations throughout BC. The current list is posted on TSBC's web site and updated quarterly. This list is also the data source for the drop off location finder for Recyclepedia and BC Recycles.

- Tire collection events are another convenient option for disposing of orphan tires. These events are held primarily between March and September every year in various locations throughout the province. Event locations are selected based on where demand exists and/or upon request by a retailer or local government. Some collection events are held in partnership with elementary schools that participate in the Artist Response Team's educational program which teaches children through song about environmental stewardship. TSBC also seeks synergies to hold events in conjunction with other BC stewards and to continue to participate in clean up events held by regional districts and municipalities. In 2018, TSBC included a significant education component on what happens to the eco-fees and what happens to the scrap tires. After speaking with consumers at these events it became obvious that TSBC needed to focus its efforts on a communication strategy to educate the consumer on TSBC's Return to Retailer program rather than solely focus its efforts on collection events. In 2019 this will include, but not be limited to, attending community events, such as car free days and car related events, in addition to a social media campaign. In its Annual Report to the Director, TSBC will provide details of the various activities undertaken, including the location of collection events and the partners involved.

  Important to note is that no tires are refused at these events as TSBC recognizes the consumer could abandon them at a later time and place.

The collection and transportation of scrap tires from source locations throughout BC to processors is well established, efficient and effective with close to all scrap tires **available for collection** at retailers or scrap tire generators (e.g., landfills and auto wreckers) collected for recycling, energy recovery or reuse. There are no known stockpiles, and collection complaints from retailers, generators and consumers are extremely rare, demonstrating the effectiveness of the collection system and TSBC's confidence in the estimated number of scrap tires available for collection. TSBC will maintain annual contact with local governments through a survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council's monthly webinars and present to the Council upon request. TSBC will also continue to participate in the waste audits conducted jointly by the stewards under the SABC umbrella and these results will be reported in TSBC's Annual Report to the director.

In comparison, the common but imperfect measure of effectiveness of stewardship programs as required by the BC Recycling Regulation is the "Recovery Rate":

Recovery Rate = the actual number of scrap tires collected in the reporting year / the actual number of new tires sold in the reporting year

In a recent study conducted by Deloitte on behalf of the Ministry of Environment, it was recognized that the Recovery Rate, especially for long life products such as tires, is not a sound standalone measure especially if looking at only one year's data. TSBC's annual Recovery Rates

have ranged in the last ten years from 73% to 90% with an average of 80%. The annual rates vary according to the number of new tires sold or scrapped in any year, both of which are sensitive to changes in BC's economy, weather and population.

To better understand the divergence between collected volumes and sold volumes, and to derive a better measure, TSBC engaged its audit firm to conduct research on the underlying factors.

The factors identified in the analysis were:

1. The time lag between the sale of a new tire and the time of collection, i.e. at end of life;
2. Sales trends / consumer behavior – winter tires, new car sales / vehicle registrations;
3. Permanent loss of tires available for collection – export of used tires, population migration; and
4. Efficiency of the scrap tire collection system.

The analysis concluded that with a robust collection system in place, the most quantifiable factors impacting the delta between sales and collections is the long-term life of a tire and the tire sales trends, neither of which can be influenced by TSBC.

An example of the Recovery Rate being an unmeaningful and imperfect measure to reflect performance is the Recovery Rate of 76% as reported in TSBC's 2016 annual report. While this result alone would imply mediocre performance, there were no legitimate collection complaints and no known stockpiles. Driving the difference between sales and collections was the significant increase in sales, specifically those that did not generate a scrap tire (new car sales coupled with increased vehicle registrations and increases in winter tire sales by first time buyers). TSBC is reporting the same trend in 2017.

TSBC will continue to report on units sold and collected in the reporting year, including historical trends; however, the calculation used for the Recovery Rate will align with the average life of tire and therefore establish a more meaningful measure of program performance. Although there is no way to exactly tell the life of a tire due to design, driver's habits, climate, road conditions etc., most research indicates that the average life of a tire is between 4 to 6 years. Therefore, going forward, TSBC will report its Recovery Rate as follows:

Recovery Rate for Tires = actual number of scrap tires collected in the reporting year / actual number of new tires sold 5 years prior to the reporting year

If restated for the years in the table, the results are as follows:

	2015	2016	2017
Current Recovery Rate calculation	79%	76%	73%
Proposed Recovery Rate calculation	90%	94%	96%

TSBC fully expects this rate will continue to fluctuate given the factors affecting sales and the increased and ongoing use of winter tires that will extend the life of a tire.

3. Consumer Awareness [Section 5 (1)(c)(iv)]

The plan adequately provides for making consumers aware of the extended producer responsibility program; the location of collection facilities or the availability of collection services; and how to manage products in a safe manner.

TSBC uses a variety of methods to raise consumer awareness of the program:

- TSBC website.
- Facebook and Twitter.
- Videos showcasing the recycling process, Research & Development program and how the eco fee is used to create new value from old tires.
- Information brochures at the point of sale.
- Information available through the Recycling Council of BC (RCBC) Recycling Hotline and BC Recycles.
- TSBC-decaled trailers that travel throughout BC collecting tires.
- Media attention from special events, in particular TSBC's Community Grant Program. This program supports the use of BC recycled rubber in community projects such as playgrounds and other recreation facilities that are wheelchair and publicly accessible. TSBC requires that all grant recipients advise the MLA of the project and in 2019 this requirement will extend to informing mayor and council to ensure officials are aware of the use of recycled tires in their jurisdiction.

TSBC also works with other stewardship agencies in joint initiatives to improve overall public awareness and interest in recycling. Initiatives include:

- BCRecycles.ca – a common website for information about BC's stewardship programs.
- Recycling Handbook – a common brochure that describes all of BC's stewardship programs.
- Recyclepedia – an enhanced web tool and app for consumers wanting to know where to recycle certain materials.
- Community events – attendance at community events throughout the province either in conjunction with other stewards or as part of the Ambassador Tour, led primarily by the BC Used Oil Management Association (BCUOMA).
- First Nations coordinator – a resource hired by Recycle BC but jointly funded by many of the stewards to assist in our collective engagement with First Nations to develop or improve the collection of stewarded products.

- Joint collection events – a specific activity going forward that will focus on consumer education and awareness, emphasizing what the eco-fee is used for and what happens to the tires.

TSBC also participates in the biennial Stewardship Agencies of British Columbia (SABC) consumer awareness survey that has established a baseline for consumer awareness on drop off locations, and where to find information on the drop off locations. It is important to note that for tires, most consumers leave their tires at the retailer location when new ones are purchased and as such most consumers rarely need to know where to drop off tires. However, to address the need for a performance measure in this area, starting in 2019, TSBC will conduct its own annual survey pertaining specifically to these two areas of awareness. The results will be included in TSBC's Annual Report to the director under Performance Measure and Targets. The 2016 SABC survey results will be used as the baseline.

4. Management of Program Costs [Section 5 (1)(c)(v)]

The plan adequately provides for assessing the performance of the producer's extended producer responsibility program and the management of costs incurred by the program.

PROGRAM ECO-FEES

The program is funded by an eco-fee remitted by the retailer (producer) on every new regulated tire sold. TSBC does not have control over its revenue streams as this is dependent on product sales, which in turn is often dependent on the state of the economy.

On average, administration costs account for less than 8% of total revenues, which is in line with tire recycling programs across the country. Approximately 92% of the revenues are paid out in program incentives to: collect, transport, and process scrap tires; manufacture new products; host tire collection events; and provide community grants. Of the total incentives paid annually the average distribution and the recipient of the incentives is as follows: transportation incentive paid to haulers 32%; processing incentive paid to BC processors 63%; and manufacturing incentive paid to manufacturers 5%. The transportation incentive is adjusted quarterly for fuel related costs and every two years for non-fuel related costs. Processing incentives for TDP (recycling) were reviewed in 2016 with a significant reduction introduced on January 01, 2018, and a review is underway in 2018 for TDF (energy recovery). The manufacturing incentive is a budget driven program reviewed on an annual basis.

TSBC operates a return to retailer model and so does not contract with any local governments or private depots to accept tires on its behalf. TSBC provides free pick up of all program tires from these facilities, with the exception of tires that contain dirt or other debris, are on rims, or are not readily accessible. In these cases, a fee may apply. Feedback during the plan consultation

process indicated that some local government sites and private depots were seeking compensation from the program for accepting and handling tires. TSBC has concluded from the feedback that due to the disparity of the comments received that a one size solution is not the answer and that compensation, if appropriate, is not the only solution. In 2019, TSBC will initiate a review to understand the challenges for local government and private depots in handling tires. The objective of the report will be to quantify the issue, identify solutions and lay out the actions necessary for all parties involved. The report will be shared with Ministry staff.

REPORTING

TSBC's financial statements are audited annually and published on its website as part of its annual report to the Ministry. TSBC's non-financial information is also subject to an annual audit as required by the Ministry of Environment and the results are included as part of TSBC's annual report.

TSBC publishes its program policies which include the incentive rates for transporting and processing BC scrap tires and details of the Manufacturing Incentive Program.

RISK MANAGEMENT

TSBC has agreements with its recyclers and manufacturers which include but are not limited to the obligations of both parties with respect to insurance requirements, audit and reporting, performance measures and financial penalties, financial securities, and contingency plans in the event of fire, flood or market disruption.

TSBC maintains a reserve fund that assists in stabilizing eco-fees by addressing year to year cost variances resulting from program enhancements and fluctuations in sales and collection volumes. The fund also exists to provide support for research and development activities that align with TSBC's goal to *foster and support innovation and research relative to higher valued solutions within the industry.* TSBC's processing and manufacturing sectors have invested heavily in recent years to generate operational efficiencies and create new products, allowing TSBC to reduce the incentives paid (most recently on January 1, 2018) and/or build market stability for both sectors.

5. Management of Environmental Impacts [Section 5(1)(c) (v, vii & viii)]

The plan adequately provides for assessing the management of environmental impacts of the program. The plan adequately provides for eliminating or reducing the environmental impacts of a product through the product's life cycle and for the management of the product in adherence to the order of preference in the pollution prevention hierarchy.

There are many environmental benefits of diverting tires from landfills and the environment in general: reduced fire hazard and the potential for air, water and land pollution; fewer breeding

habitats for West Nile Virus-carrying mosquitoes; and the recovery of rubber and steel that are very energy intensive materials to obtain raw, and consequently major contributors of greenhouse gases (GHG).

TSBC will also continue to manage collected products in accordance with the Pollution Prevention Hierarchy, whenever feasible and economically viable.

REDUCE

While managing tires at their end of life is important, lengthening their lives so that fewer are used is essential. Tire manufacturers are making progress: since 1981 the average tire life has gone up 56% (from 46,000 km to over 72,000 km). Also, average tire rolling resistance has decreased by more than 25% simply by making the tires lighter and stronger. Manufacturers also recognize the need to balance environmental concerns with tire safety and customer satisfaction.

TSBC works in partnership with The Tire & Rubber Association of Canada in their annual Be Tire Smart campaign which focuses on educating the motoring public on the benefits of proper tire inflation and maintenance.

REUSE

Known in the industry as culling, tires collected by the hauler can be diverted from recycling and sold as used tires. TSBC recognizes but does not financially support the culling of tires for reuse. In addition, most of the Medium Truck tires are retreaded at least once, extending the life of the tire.

RECYCLE

TSBC's ability to influence product design to increase recyclability is extremely limited. While this is an accepted and theoretically possible outcome in some industries, automotive tires are not simple consumer commodities. Instead, they are a critical element in the safe operation of motor vehicles. For this reason, the design and operating parameters of tires are mandated by federal regulation and international agreement. The things that make a tire "safe" also tend to be those that make it difficult to recycle. That said, international tire manufacturers are responding to the environmental challenges of tire manufacturing by doing such things as replacing high aromatic petroleum-based oils with bio-based oils from corn, canola, oranges, etc. In addition, manufacturers are beginning to incorporate recycled rubber into selected tire types and are actively investing in new sources of natural rubber supply such as guayule and Russian Dandelion, which can be produced in North America.

A tire has three main components: rubber, steel and fibre. In BC, the majority of tires are recycled into:

- crumb rubber – granules of rubber with the steel and fiber removed; and

- mulch – tire shreds with the steel removed.

The crumb is used to create a variety of products including: athletic tracks and synthetic turf fields; playgrounds; colourful, resilient flooring in recreational facilities; and flooring and mats for agricultural and industrial use. The mulch is used to replace bark mulch and can be purchased by the public directly from many big box stores.

The steel extracted from tires during the crumb and mulch processing is recycled, the fibre is directed to a cement kiln for energy recovery, and any waste from the process is landfilled.

The processor is required to submit the results of its annual environmental audit and, per program policy, post a financial security. In addition, the processor is subject to 3rd party audits by customers that sell the recycled product, such as Costco and Walmart.

Beyond primary processing, TSBC promotes the use of BC's recycled rubber in products manufactured in BC through a Manufacturing Incentive.

ENERGY RECOVERY

The remaining tires are used as tire derived fuel (TDF) to recover the energy. The steel in tires consumed in the cement kiln is used to replace virgin steel and although accounted for historically in the energy recovery volumes, arguably should have been considered recycling.

The policy of allowing some tires to be used as a fuel supplement is both environmentally and economically sound and a practice followed by many other Canadian provincial programs for a variety of reasons. It is a significant end use in both the US and Europe and taking a life cycle approach, studies conducted in this area concluded the following:

- 2010 Pembina Report (Alberta)
  - "no outright winner… no option showed net benefit for all environmental indicators used."
- 2008 Aliapur (France)
  - "The environmental assessment of material recycling methods is not systematically better than that of energy recycling methods."

TDF usage at the cement plant in BC requires environmental permits, which are issued by Metro Vancouver as the delegated authority for the Ministry of Environment. The cement kiln is also required, as per program policy, to post a financial security.

TDF usage in BC has varied over the years, being primarily market driven in the past. However, in recent years the volume has held steady at around 12% of the tire volumes collected.

RESIDUAL MANAGEMENT

The volume of material going to waste, which results from the recycling process and tires that cannot be processed, has dropped significantly. This is due to equipment upgrades at BC's recycling plant which have reduced the amount of waste from processing the tires and increased the ability to process tires that previously could not be recycled. At the time of submitting this Plan, BC's waste component is at an all-time low of 1%.

Going forward, the Performance Measure and Targets for environmental impacts will follow the Ministry required format. Already adopted by other BC Stewards, TSBC will now report the end fate by product component: rubber, steel and fibre. The table below re-states TSBC's 2015 & 2016 data previously reported under the old format, the 2017 data included in TSBC's 2017 annual report, due to the director on July 1, 2018, and the proposed targets. TSBC's 2018 Annual Report to the director and Non-Financial Information Audit will reflect the new format.

Component*	Recycling	Energy Recovery	Landfill	*Total*
Rubber				
2018 target	*84%*	*15%*	*1%*	***100%***
2017	82.7%	17%	0.3%	**100%**
2016	79.4%	18.5%	2.1%	**100%**
2015	79.5%	18.2%	2.3%	**100%**
Steel				
2018 target	*100%*	*0%*	*0%*	***100%***
2017	100%	0%	0%	**100%**
2016	100%	0%	0%	**100%**
2015	100%	0%	0%	**100%**
Fibre				
2018 target	*0%*	*98%*	*2%*	***100%***
2017	0%	99.2%	0.8%	**100%**
2016	0%	99.6%	0.4%	**100%**
2015	0%	100%	0%	**100%**

* On average, of the total weight processed and shipped, the rubber component represents 70% with steel and fibre @ 15% each.

Important to note is that a tire component is tracked and reported only if it is separated from the whole product during the recycling process. An example from the table above for 2016 data is the rubber component of 18.5% under Energy Recovery, which also includes the steel and fibre within the tire as these materials are not extracted from the tire prior to entering the kiln. In the case of numbers reported for the steel and fibre components, these are residuals extracted during the recycling process. This distinction is important as the data reported to the Ministry

must be audited and an estimate of the percentage of steel and fibre in a whole tire or tire shred entering the kiln would not be considered auditable.

TSBC's focus in recent years has been to divert the amount of waste and tires from landfill to energy recovery and/or recycling. As noted earlier, TSBC is pleased that an all-time low waste level has been achieved. Through Research and Development funding, TSBC is currently supporting the work of a third party to find a recycling end use for fibre, a residual from the crumb recycling process. More information on the project can be found on the UBC website and TSBC will provide any significant updates in its Annual Report.

6. Dispute Resolution [Section 5 (1)(c)(vi)]

The plan adequately provides for a dispute resolution procedure for disputes that arise between a producer and person providing services related to the collection and management of the product during implementation of the plan or operation of the extended producer responsibility program.

TSBC's strategy has been to avoid disputes and our success has been achieved by taking a partnership approach with program service providers and related stakeholders. This entails:

- Having written contracts with all companies that receive financial incentives from TSBC (Participants).
- Managing key contracts with regular and frequent partnership relationship meetings to keep communication and trust levels high.
- Tracking and monitoring tire collection complaints from retailers and generators.
    - Should an issue arise with tire collection the retailer / generator is asked to handle the issue directly with Western Rubber Products. In the event the issue remains unresolved, the retailer / generator is asked to contact the TSBC office directly.
- Hauler and local government representation on TSBC's advisory committee.

There have been no disputes since TSBC implemented the program but in the event that one occurs, TSBC has set out a dispute resolution procedure in its contracts with Participants. This involves a multi-step settlement process that starts with negotiation before moving to mediation where the costs are shared equally among the parties involved.

7. Stakeholder Consultation on Plan Implementation and Operation [Section 5 (1)(b)]

The producer has undertaken satisfactory consultation with stakeholders prior to submitting the plan for approval and will provide opportunity for stakeholder input in the implementation and operation of the extended producer responsibility program.

STAKEHOLDER CONSULTATION – DURING TERM OF THE PLAN

TSBC connects with many of its stakeholders on an ongoing basis and this will continue during the operation of the program:

- The TSBC Advisory Committee convenes once a year and upon request by any of the members. The committee is made up of a broad reach of stakeholders including producers (retailers), service providers and local government. The committee has an opportunity to address any specific issues, to learn of any TSBC program updates and to provide advice on any operational or policy issues presented for discussion.
- The BC Product Stewardship Council holds frequent conference calls for the purpose of updating stewards on local government issues and for stewards to present to local government. This ongoing dialogue has been beneficial to keeping all parties up to date on current issues.
- The Ambassador Tour visits to retailers throughout the province to seek feedback on the program, in particular tire collection.
- Partnership meetings with key service providers occur monthly or quarterly and assist in keeping current on any issues or developing threats to the operation of the program.
- Monthly communication to retailers provides them with key updates / messaging.
- Quarterly dialogue is held between TSBC member organizations and the director that represents the member organization on the board. This allows for any member organization concerns to be conveyed to the board and staff and allows for a transparent process.
- Staff attendance at key conferences enables face to face dialogue with other stakeholders to specifically address any issues.

STAKEHOLDER CONSULTATION – INPUT TO THIS PLAN

Stakeholders were invited to attend consultation webinars for the review of TSBC's Extended Producer Responsibility (Plan). The Plan and webinar details were posted on TSBC's web site and the following consultation sessions were offered and held as follows:

- May 10, 2018: TSBC Advisory Committee
- May 15, 2018: BC Product Stewardship Council (BCPSC)
- May 16, 2018: general stakeholders
- June 5, 2018: general stakeholders

Interested parties could download a copy of the Plan from the TSBC web site, in addition to the Power Point presentation used to walk the attendees through the webinar sessions. TSBC's Plan was posted and available for public comment on April 25, 2018 with the deadline for submission of written comments by June 08, 2018.

Advance notifications were sent to the BCPSC on April 25, 2018, with follow up reminders, in addition to the Recycling Council of BC and the Coast Waste Management Association to distribute as part of their regular communications to their members. A notice was emailed to TSBC's registered retailers and generators on May 9, 15 & 31 and an email to TSBC's member organizations on April 28, 2018.

A total of 97 individuals participated in the four webinars. TSBC also received 6 emails with questions and 2 formal written submissions.

The PowerPoint presentation presented on the webinars is available in Appendix II. TSBC provided an overview of the Plan as well as opportunities to ask questions and provide feedback. Appendix III includes a summary of questions and comments received during both the webinars and in writing. Where relevant, the feedback received has been incorporated in the Plan to provide greater clarity and / or address issues raised.

8. Performance Measures and Targets [Section 5 (1)(a)(i),(ii),(iii)]

The plan will achieve, or is capable of achieving within a reasonable time:

- *a 75% recovery rate or another recovery rate established by the director;*
- *any performance measure, performance requirements or targets established by the director; and*
- *any performance measures, performance requirements or targets in the plan.*

TSBC commits to achieving the following annual targets (table 1) and reporting commitments (table 2). The results of both the performance targets and reporting commitments will be included in TSBC's Annual Report to the director submitted on or before July 1 every year. Performance Measures 1, 2 & 3 are subject to third party assurance (Non-Financial Information Audit).

Table 1.

<table>
<tr><th colspan="2">Performance Measures</th><th>Annual Targets</th></tr>
<tr><td>1.</td><td>Recovery Rate
(Total # Units Collected in reporting year / Total # Units Sold 5 years prior to reporting year)</td><td>90%</td></tr>
<tr><td>2.</td><td>The percentage allocation of total tonnes of scrap tires (i.e. all rubber, steel and fibre) processed and shipped
The percentages are for the term of the Plan unless otherwise indicated.
Note: on average rubber accounts for 70% of the total weight with 15% steel and 15% fibre.</td><td><table><tr><th></th><th>Recycling</th><th>Energy Recovery</th><th>Landfill</th></tr><tr><td>Rubber</td><td>2018 & 19:84%
2020 & 21: 86%
2022: 88%</td><td>2018 & 19:15%
2020 & 21: 13%
2022: 11%</td><td>1%</td></tr><tr><td>Steel</td><td>100%</td><td></td><td></td></tr><tr><td>Fibre</td><td></td><td>98%</td><td>2%</td></tr></table></td></tr>
<tr><td>3.</td><td>Number of collection sites (i.e. registered retailers that will take back a scrap tire from the consumer at the time a new tire is sold)</td><td>1,850</td></tr>
<tr><td>4.</td><td>a) Total number of retailers and generators in BC that take back orphan tires (R2R)
b) Number of R2Rs in each Regional District</td><td>a) 800 province-wide
b) At least 25% of registered retailers in each Regional District are R2R locations</td></tr>
<tr><td>5.</td><td>Education and Awareness
a) Awareness of where to take scrap tires for safe disposal
b) Awareness of where to go to find information on safe disposal locations</td><td>a) 2018 & 2019: 57%
2020 & 2021: 59%
2022: 61%
b) 2018 & 2019: 73%
2020 & 2021: 75%
2022: 77%</td></tr>
</table>

Table 2.

Reporting Commitments	
1.	Total tonnes collected by Regional District in a calendar year / total KG per capita for all of BC
2.	Dates, locations and results of tire collection events
3.	Number of legitimate collection complaints received by TSBC
4.	Number of consumer complaints received by TSBC
5.	Results of SABC waste audits and any local government waste audits if data is shared directly with / made available directly to TSBC
6.	Comparison of results to targets for all Performance Measures
7.	Independently audited financial statements
8.	Non-financial audit report
9.	Total product collected and sold in the reporting year
10.	Description of how the product was managed in accordance with the pollution prevention hierarchy
11.	Location of collection facilities
12.	Description of educational materials and educational strategies used
13.	Efforts taken to reduce environmental impacts, to increase reusability and recyclability

Appendix I Tire Definitions

SECTION I: TIRE PRODUCT CATEGORIES INCLUDED

Tire Type	Definition
Passenger Tires, Small RV Tires and Light Truck Tires	Passenger tires are designed for use on passenger cars, light trucks, small recreational vehicles (RVs) and multipurpose passenger vehicles (MPVs), including sport utility vehicles (SUVs) and crossover utility vehicles (CUV's), and to comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 109). The light truck tire category is tires designed for use on consumer or commercial light trucks, under 10,000 lbs. Gross Vehicle Weight, and comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 119). Codes found on the sidewall of light passenger and light truck tires are P (Passenger) and LT (Light Truck). Temporary spare tires are marked T (Temporary).
Motorcycle, Golf Cart and All Terrain Vehicle Tires	Includes all tires specifically designed for on/off highway motorcycles, motorcycle sidecars, motor bikes, mopeds, mini-cycles, golf carts and all terrain vehicles.
Forklift, Small Utility and RV Trailer Tires, Bobcat/Skid Steer Tires	Includes pneumatic forklift tires, bobcat/skid steer tires measuring 16” and under, as well as RV (Recreational Trailer) and utility trailer, tires marked ST (Special, Trailer).
Agricultural Tires (Small)	Includes drive and free rolling farm and implement tires up to 16” deemed for use on farm equipment.
Medium Truck Tires	Also commonly known as Commercial Truck Tires – Truck and Bus tires including Wide Base or Heavy Truck tires designed for truck/bus applications and Larger RV (Recreational Vehicle) tires not marked "P or LT” (Passenger or Light Truck), all of which comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 119).
Agricultural Drive Tires (Medium)	Includes drive wheel tires used on tractors and combine equipment. These tires are normally identified with a sidewall marking with suffix letters R (Radial Ply) or HF (High Flotation) and are 16.5” – 25.5”. These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 5 Agricultural.
Forklift, Bobcat/Skid Steer Tires	Includes pneumatic forklift tires, bobcat/skid steer tires measuring 16.5” and over.
Logger/Skidder Tires, Agricultural Drive Tires (Large)	Tires used on tree harvesting equipment and normally identified with a sidewall marking with suffix letters LS (Logger/Skidder). These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 5 Agricultural. This section would also include Agriculture Drive Tires measuring 26” and up.

For the purpose of determining eligible tire sizes within the tire type category, TSBC will deem the following reference material as the reference authority: 2005 Tire and Rim Handbook of the Tire and Rim Association of the United States as amended from time to time.

SECTION II: TIRE PRODUCT CATEGORIES EXCLUDED

The Recycling Regulation specifically excludes certain types of tires including:

a) *tires designed for use on cycles, wheelchairs or three-wheeled motorized devices designed for the transportation of persons with physical impairment;*
b) *tires designed for use on an aircraft or wheelbarrow;*
c) *tires that ordinarily have a retail value of less than $30;*
d) *recapped and retreaded tires; and*
e) *tires designated with a tread code of C,E,G,L, IND in the 2005 Tire and Rim Handbook of the Tire and Rim Association of the United States, as amended from time to time.*

TSBC Explanatory Note: Tires with tread code C (Compactor), E (Earthmoving), G (Grader), L (Loader), IND (Industrial) or NHS (Not for Highway Service) are generally referred to as Grader/Loader or Small-Off-The-Road or Large-Off-The-Road tires. A further distinction for clarity is as follows:

Small Off-the-Road (Industrial Equipment) Tires
Tires of truck type construction for off road applications without DOT approval. Conventional sizes smaller than 16.00" cross section and wide base sizes smaller than 20.5" cross section. These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 4 Off-the-Road.

Large Off-the-Road Tires
Tires of truck type construction for off road applications without DOT approval. Conventional sizes 16.00" and larger cross section, and wide base sizes of 20.5" and larger cross section. These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 4 Off-the-Road.

Industrial Tires
Industrial tires identified with a sidewall marking of “IND” (Industrial), “NHS” (Not for Highway Service) Solid and Press-On tires (commonly found on forklifts). These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 6, Industrial. This does not apply to bobcat/skid steer tires.

Appendix II Consultation Presentation

TIRE Stewardship BC
New value from old tires

Stewardship Plan Renewal Consultation

Stewardship Plan Outline

TIRE Stewardship BC
New value from old tires

A. Regulatory Basis for this Plan
B. Overview of Existing Program

1. Program Structure
2. Consumer Access to Collection Facilities
3. Consumer Awareness
4. Management of Program Costs
5. Management of Environmental Impacts
6. Tire Management per Pollution Prevention Hierarchy
7. Product Life Cycle Management
8. Dispute Resolution
9. Stakeholder Consultation
10. **Performance Measures and Targets**

20 | P a g e

A. Regulatory Basis

- ***Producer* = *Tire Retailer***
- ***Regulated*** tires
  - Passenger and Light Truck (PLT)
  - Medium Truck (MT)
  - Agricultural (AG)
  - Logger Skidder (LS)
- ***Unregulated*** tires
  - Bicycle Tires (but included in the program)
  - Other Off the Road (OTR)
    - Small, medium, large, giant

B. *Unregulated* Tire Research

- OTR research continues
  - ✓ Solution found for S, M, L
  - ✓ What are expected annual volumes?
  - ✓ What stockpiles exists?
  - ✓ What should the eco fee be?
  - ✓ Affected stakeholder buy in appears high
- Ongoing updates delivered to MOE
- TSBC will be in a position to start formal consultations with affected stakeholders soon

21 | P a g e

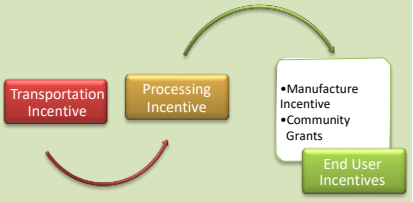
1. Program Structure

- Program Participants
  - Retailers (Producers)
    - Sell tires, generate scrap tires
  - Return to Retailers (R2R)
    - Sub set of Retailers that voluntarily take back car tires from the public
  - Collection Facilities
    - Sub set of Retailers that take back scrap tires when a new tire is purchased
  - Generators
    - Do not sell tires, generate scrap tires
    - Examples: transfer stations, auto wreckers
  - Haulers
    - Collect & transport tires from Retailers & Generators
  - Processors
    - Process tires into product or process tires for energy recovery
  - Manufacturers
    - Manufacture products from BC recycled rubber

1. Program Structure

- Financial Incentives
  - Transportation
  - Processing
  - Manufacturing
- Bike tire program
- Community Grants
- Revenue compliance program
- R&D program

- Maintain the existing operational structure
- All rates posted on TSBC web site



2. Consumer Access

- Retailer model (~97%)
  - Most consumers leave their tires at the retailer location (collection facility)
  - 1,900 collection facilities throughout BC

- Report # of collection facilities
  - ➢ Target – 1,700

2. Consumer Access

- Orphan Tires (~3%)
  - Option 1: Return to Retailer locations (R2R)
    - Number has doubled in last 5 years, close to 800 across BC
  - Option 2: collection events
    - 15 per year
    - Will accept all tires to avoid potential unacceptable disposal methods / abandoned waste post collection event

- Monitor distribution of R2R retailers and recruit new where needed
  - ➢ Target - 700
- Continue to conduct collection events with added educational component and held jointly with other stewards where feasible.
- Locations & # based on need / demand.

2. Consumer Access

- Recovery rate
  - Current definition not appropriate for long term products
  - Factors affecting recovery rate:
    - High sales volumes
    - Increase vehicle regns
    - Culls exported for reuse
- 100% of tires available for collection are collected

- Amend the definition
  #collected / #sold 5 yrs prior
- Report the recovery rate
  - ➢ Target - 80%
- Report collected and sold units
- ~~Report Capture Rate**~~
  ~~*#collected / #available for collection*~~
- Report on collection complaints
- Conduct annual survey with RDs on collection, known stockpiles & abandoned waste issues

** to be removed from Plan as measure and result are not auditable

3. Consumer Awareness

- Collection events
- Community events - Ambassador Tour
- Joint First Nations coordinator
- Website
- RCBC hotline / Recyclepedia
- BC Recycles web site / pamphlet
- Social media

- Addition of educational component for collection events
- Joint initiatives to improve overall public awareness and interest in recycling
- Increased presence on social media
- ➢ Target - > 57% awareness of drop off locations & > 75% awareness of where to find info on drop off locations

4. Program Costs

>90% revenue used to pay out incentives to transport, process scrap tires and create value add

Reductions in processing incentives Jan 1, 2018

Transportation incentive adjusted quarterly for fuel, bi-annually for all other transportation costs.

Recipients:

- Haulers
  - Receive a transportation incentive to transport tires. Based on weight & distance travelled.
  - Accounts for on av. 32% of total incentives paid annually.

- Processors
  - Receive a processing incentive to convert a whole tire into product or for energy recovery purposes.
  - Rates vary – lower incentives for energy recovery and $0 for landfill.
  - Accounts for on av. 63% of total incentives paid annually.
- Manufacturers
  - Receive a manufacturing incentive to make products from BC recycled rubber.
  - Accounts for on av. 5% of total incentives paid annually.

Note: also cover costs of all non program tires from collection events & bicycle tires

4. Program Costs

- Collection model – free* pick up from Retailer & Generator sites
- Reporting - financial statement audits & non-financial data audits

* Exceptions apply, e.g. full of debris (dirty), not readily accessible

- Continue to manage program costs to the economic, social and environmental benefits of BC's citizens.
- Continue to publicize incentive rates and conduct rate reviews.
- Remain open and transparent with audited financial and non financial data.
- Maintain TSBC's financial stability while fostering and supporting innovation and research relative to higher valued solutions within the industry.

5. Environmental Impacts

- Promotion of Be Tire Smart
  - Extending tire life so that fewer tires are used
- Using alternative materials to manufacture tires

- Continued messaging to encourage BC motorists to adopt good tire maintenance practices
- Report on progress made by manufacturers to reduce environmental impacts

5. Environmental Impacts

- Recycle (3R)
- Energy Recovery (4R)
  - Over 50% is the fibre sent to Lafarge, a residual from crumbing that is landfilled in most other provinces
- Residual Disposal (5R)
  - Significant reductions in the amount of material landfilled
    - 2% in 2013, down to 0.3% in 2017.

- Align reporting to the Ministry's requirement for NFI audit reporting
  - Report by component
  - Must be an auditable number

➢ Target

	Recycling	Energy Recovery	Landfill
Rubber	84%	15%	1%
Steel	100%		
Fibre		98%	2%

6. Dispute Resolution

- No disputes with any registered participant
- Success achieved by taking a partnership approach with our service providers

- Continue to manage & foster relationships with service providers.
- Ongoing communications with stakeholders throughout the term of the plan
  - BCPSC webinars
  - RD surveys
  - TSBC advisory meetings
  - Monthly retailer messaging

7. Stakeholder Consultation

- Advisory Committee – May 9
- BC Product Stewardship Council – May 15
- All stakeholders – May 16 & June 5
- Web site posting – until June 8

8. Performance Measures & Targets

	Performance Measures	Annual Targets
1.	Recovery Rate (Total # Units Collected in reporting year / Total # Units Sold 5 years prior to reporting year)	80%
2.	The percentage allocation of total tonnes of scrap tires (i.e. all rubber, steel and fibre) processed and shipped	Rubber: Recycling 84%, Energy Recovery 15%, Landfill 1% Steel: Recycling 100% Fibre: Energy Recovery 98%, Landfill 2%
3.	Number of collection sites (i.e. registered retailers that will take back a scrap tire from the consumer at the time a new tire is sold)	1,700
4.	a) Total number of retailers and generators in BC that take back orphan tires (R2R) b) Number of R2Rs in each Regional District	a) 700 province-wide b) At least 2 per Regional District
5.	Education and Awareness a) Awareness of where to take scrap tires for safe disposal b) Awareness of where to go to find information on safe disposal locations	a) Maintain or increase awareness level of 57% b) Maintain or increase awareness level of 73%

The 97%

To help address the 3%

To help address the 3%

= *Target to be amended based on feedback*

8. … & Reporting Commitments

	Reporting Commitments
1.	Total tonnes collected by Regional District in a calendar year / total KG per capita for all of BC
2.	Dates, locations and results of tire collection events To help address the 3%
3.	Number of legitimate collection complaints received by TSBC
4.	Number of consumer complaints received by TSBC
5.	Comparison of results to targets for all Performance Measures
6.	Independently audited financial statements
7.	Non-financial audit report
8.	Total product collected and sold in the reporting year
9.	Description of how the product was managed in accordance with the pollution prevention hierarchy
10.	Location of collection facilities
11.	Description of educational materials and educational strategies used
12.	Efforts taken to reduce environmental impacts, to increase reusability and recyclability

Appendix III Summary of Consultation Feedback and Associated Responses

Industry*: We are very satisfied with the performance of the Tire Stewardship BC organization and the way that it has been operating. We are looking forward to working with Tire Stewardship BC in the coming years.*
Local Government*: TSBC should be commended for its broad collection network, and leadership in adopting innovative new initiatives such as: the Research and Development Program to find new value-added solutions, the Community Grant Program to support the use of recycled rubber in playgrounds and recreational facilities, and the Be Tire Smart campaign to extend the service life of tires.*

During the consultation period, TSBC did receive some questions regarding program operations that related to the applicability of GST, the timing of an e-commerce solution for remitting eco-fees, auditor rotation, retailer record retention, etc.

In addition, Metro Vancouver included comments that were directed to all EPR programs in BC:

Data Collection. Formalize the collection of data, including product pathways that are not directly managed by the stewardship program.

Options for Local Government. All EPR programs should develop arrangements for local governments who receive, or pick-up illegally dumped material, to be paid for managing and handling this material, whether or not the facility is designated as a depot. Local governments, generally, do not seek to compete with private depot operators, yet still receive this material from residents and businesses. (Stewardship Agencies of BC members should consider a study to find out the root causes for people who dump illegally, who bring materials to transfer stations even when there are permanent depots available, prefer 'round-up' events to permanent depot locations, and 'hide' banned materials in residential loads. Such a study is recommended to include possible solutions to address these issues, such as enhanced collection models that go beyond the drop-off approach (depot model), and illegal dumping cost recovery models for local government, similar to the program implemented by producers in California.)

The following is a summary of the questions and comments received. In distilling four hours of discussion and 7 written comments into the following table, TSBC's intent is to capture the essence of the input without distortion. Where possible, direct quotes are used to convey comments from one or more individuals and when multiple questions were received on the same subject, the theme of the question is addressed rather than restating all the questions. The Ministry has been provided with a copy of all questions asked both on the webinars and received by email.

Participant Questions and Comments	Source	TSBC Response or Actions
Program Structure & Costs		
The questions below all relate to Producers paying the costs of managing obligated materials and so have been grouped as the response provided by TSBC is intended to address them all. How does TSBC intend to address the new Ministry of Environment and Climate Change Strategy guidance document on "Producers Paying the Costs of Managing Obligated Materials" (April 24, 2018)? Around ministry guidance documents on producers managing costs of obligated materials, how are the rates being determined – are the rates for transportation arbitrary, how do we know if what's being paid is enough? There are a lot of references to paying for the collection, but I don't see any numbers allocated to that cost - we don't get compensated for work we put in for tires. Can it be demonstrated that collection costs are being covered by TSBC? I'm looking for the methodology for the collection rates. About dirty tires or tires on rims – the only way to recover costs for these is to charge residents dropping off the tires, which would make it "not free" and would thus be out of compliance with the Regulation. We have to pay to transport tires from unmanned landfills to the main transfer station for collection.	Local Govt	TSBC has amended its Extended Producer Responsibility Plan (Plan) to specifically lay out the various parties involved in the program and which parties receive a financial incentive for what service. The Plan also provides a link to the program policy document on TSBC's web site that shows the various rates paid. Please note that the term collection in the Plan refers to the transportation of the scrap tires from the generating location to the processing facility. In addition, the Plan has been amended to state TSBC's intention to initiate a review in 2019 with the objective of gaining a better understanding of local government issues, current costs and revenue streams, and to help TSBC determine the strategy to remedy those issues. At its collection events TSBC will be conducting a survey with residents that drop off tires to better understand why the resident did not return the scrap tire when the new tire was purchased and why the resident chose to return the tire at a collection event and not to a R2R location. All of this information, and more, will help guide TSBC in its consumer awareness strategy.
Within TSBC's program, collectors do not receive a financial incentive. Thus, this is a	Local Govt	Collector is not a term used within the TSBC program, but it is understood what you are

Participant Questions and Comments	Source	TSBC Response or Actions
scenario where a local government or private depot may receive tires (but is not a collector) and may also be charged by the program's hauler to remove the tires. In order to recover costs, a local government or private depot may choose to charge consumers a drop-off fee to recycle tires		referring to. If a consumer chooses to return a scrap tire to a local government site or private depot, despite there being a R2R option, the fee assessed by the receiving location should be considered a convenience fee as a free option exists.
A question of clarification, when talking about debris and dirty tires, you're talking about registered collectors like retailers (not landfills, transfer stations), right?	Local Govt	Retailers are not registered collectors but any reference to debris and dirty tires is generic to any location, so includes landfills and transfer stations.
Some landfills comment that they do not always receive collection services equivalent to those provided to retailers, specifically frequency and not being able to take all the tires at the time of collection.	Local Govt	The haulers give priority to retailers because retailers are the stewards of the program and typically have much less storage space, especially in the snow season when tire changeovers produce high volumes of scrap tires for collection. TSBC will work with the industry and the landfill managers to look for ways to collect all the program tires available for collection.
Why is there no commission or incentive for us as retailers? It all costs money to recycle these tires and we as retailers don't produce them, the manufacturers do. You incentive everyone but us. We collect, handle, store and strip in some cases.	Industry	Under the BC Recycling Regulation, the obligated party for tires is the Producer, defined specifically in the regulation as the tire retailer. TSBC acts as the agency to help the obligated party, the tire retailer, meet its obligations under the regulation. In Canada, the only province that pays the tire retailer a fee to handle the tires is Ontario. In Ontario the obligated party is the Brand Owner / First Importer. Note: the current Ontario program is winding down Dec 31, 2018 with specific details of how the obligated party will be managing / dispersing the funds under a new program still unclear.
Tires on rims to retailers are still an issue for some. Has there been any further	Industry	Under the BC Recycling Regulation, TSBC is responsible, on behalf of the Producers

Participant Questions and Comments	Source	TSBC Response or Actions
thought to help offset the cost? There is increased labour cost to strip tires. Techs are getting more pay than ever. In 32 years, I have not been paid for steel scrap. Washington State indicated 400 automotive facilities will close this year alone. BC is almost the same, putting more pressure on us. More scrap tires to less retailers will be the result.		(retailers) to collect, transport and process scrap tires, not including the metal rims. Some retailers may be charging the consumer and some haulers may be charging the retailer for de-rimming services they provide to get the tire to a condition where it can be processed. The industry organization that expressed this concern, a member of TSBC's advisory committee, was invited to submit a request for a face to face meeting with TSBC. The request was received, and the two parties are planning to meet in July.
Wages and fuel costs climb continually. Is there a way to increase the frequency of when the transportation incentives are adjusted? I am wondering about the criteria and factors for these rates. There are lots of things up in the air more than ever now, with ICBC, insurance rates, etc.	Industry	The fuel is reviewed and adjusted quarterly, and the non-fuel component is adjusted every two years. TSBC asked for a written request from the haulers so the issue can be formally addressed. The request was received, and a review will be initiated shortly in consultation with representatives of the affected parties.
Does TSBC play a role in ensuring compliance (remittance of the tire eco fee) by retailers? If so, what's being done?	Industry	Yes, compliance reviews are conducted throughout the year. Every retailer is subject to review regardless of size and location.
Consumer Access to Collection Facilities		
R2R locations are a subset of the over 1,900 retailers referenced above and are located in both rural and urban locations." Can the Plan specify what percentage of the retailers are also R2R locations? R2Rs are a subset of the number of retailers. Can this be included in the context of the Plan rather than have it appear that you're skirting that number?	Local Govt	The Plan has been amended to better explain the subset and to explicitly state the number and the percentage. The measure and target related to the geographic distribution has been amended also.
TSBC has stated it "will maintain annual contact with local governments through a	Local Govt	The Plan has been amended.

Participant Questions and Comments	Source	TSBC Response or Actions
survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council's monthly webinars and present to the Council upon request." Since TSBC cannot assure stakeholders of actions that the BC Product Stewardship Council may or may not take, suggest rewording to the following: "TSBC will maintain annual contact with local governments through a survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council's monthly webinars and present to the Council other activities upon request."		
Why do you believe that a resident would consider a trip to the landfill or transfer station as less convenient than a trip to a tire retailer to drop off their tires? Most customers do not come to our landfill with only tires, they come with other materials to dispose of or recycle. Our facility could be more convenient if it saves them an additional stop.	Local Govt	It is TSBC's position that if a product is added to the Recycling Regulation, it is the agency's responsibility / regulatory requirement to provide free consumer access for drop off. In this case that means a tire retailer, or a collection event, as there is a fee associated with dropping off tires at landfills. In addition, a landfill that accepts the tires, will likely seek compensation from TSBC to handle this material. If TSBC has provided a local drop off location and the consumer chooses instead to drop off tires at a landfill site, then this is of course their choice. The Plan has been amended to include TSBC's intention to initiate a review in 2019 to understand better the issues expressed by local government for handling tires and to determine what actions are necessary to remedy those issues.

Participant Questions and Comments	Source	TSBC Response or Actions
Consumer Awareness		
Multiple local governments have reported the disposal in the garbage of painted tires, tires exposed to salt water, tires filled with foam, and tires filled with dirt. How does TSBC intend to address this topic? Will TSBC consider recycling these types of tires if there are future technological or financial developments? Why does the program not take responsibility for the tires that are program tires when sold, but have not been kept in good enough quality to recycle? Tires that have been used in salt water environments, painted or filled for example. The paint program accepts all paint cans, even if the paint is dry and cannot be recycled, they pay for the management of those materials as well. Our region has embarked on coastline cleanups and we have come across lots of Styrofoam filled tires – not sure where they're being produced. Maybe companies are filling them for dock flotation. It takes lots of labour to open the tires and remove the Styrofoam to try to get these tires recycled. Any knowledge of who is producing these? Is there any way to charge higher eco-fees to those producing these?	Local Govt	TSBC is currently working with the local cement kiln to see if these tires can be used for energy recovery. Failing that as a solution, TSBC will work with any local government that receives these types of tires to determine if it makes economic and environmental sense to collect these tires for transportation to the recycling facility when the eventual disposal will be landfill. Eco fees are triggered on the sale of a new tire. Those filling the tires with Styrofoam are doing so after the tire has been used for its intended purpose.
Environmental Impacts		
"TSBC will also continue to manage collected products in accordance with the Pollution Prevention Hierarchy, whenever feasible and economically viable." The	Local Govt	These terms are a direct quote from the Ministry of Environment's BC Recycling Regulation Guidance document. TSBC understands this to mean that a steward can

Participant Questions and Comments	Source	TSBC Response or Actions
criteria 'feasible' and 'economically viable' need to be fully defined in the Plan.		consider all factors associated with managing its products.
Does TSBC collect data on the number of tires reused? If so, does TSBC report on the number of tires directed for reuse? Why doesn't the program track how many tires are picked up from collection sites or generators and resold or reused? From my site it can be as high as 20% of the tires that leave our site (per the paperwork from the driver) are not reported as being accepted by the processor (per the data from TSBC).	Local Govt	This information is not formally tracked by TSBC except for tires that are culled for reuse by the Processor. TSBC does not report on this number. The Ministry / Regulation does not require TSBC to report on 2R. However, TSBC does survey the haulers to get a sense of what is being pulled out of the system and perhaps more importantly for TSBC, what is being sold out of the country. Accurate tracking and auditable numbers would require a complete system and process change.
The volume of material going to waste, which results from the recycling process and tires that cannot be processed, has dropped significantly." Does this amount include the tires that TSBC has determined to be non-recyclable? (e.g., painted tires, tires exposed to salt water, etc…) How does TSBC report on non-recyclable tires?	Local Govt	This number only includes non-recyclable tires if these tires have been received at the Processor site. TSBC does participate in the joint SABC waste audits that provide information on the volumes of program tires that do end up in landfill. To date, the waste audits conducted show trace amounts of program tires entering the landfill. TSBC is hoping its commitment to conduct a survey with Regional Districts will help identify and quantify the non-recyclable tires that are not collected by TSBC.
It says the number of tires that can't be processed has dropped significantly. Are these tires that have been designated as "not recyclable" (e.g., dirty tires)?	Local Govt	No, these would have included (up to a few years ago) mostly Agricultural and Logger/Skidder tires which were cut up and landfilled. These can now be processed.
You said that in the Plan you're not able to express the amount of fibre or streel in the tires that go to TDF, correct? If you can't include them, is this explained in the Notes to your Report? Also, can the	Industry	Correct, we can make assumptions on the tire composition, but the numbers wouldn't be auditable. And yes, it will be explained in the Annual Report as to why we do not pull out the fibre and steel numbers from whole tires

Participant Questions and Comments	Source	TSBC Response or Actions
assumed steel and fibre numbers be included in the Notes, even though they aren't auditable?		sent for energy recovery, and what the estimated volume of those components are.
Performance Measures and Targets		
The difference between capture rate and recovery rate is confusing as "tires available for collection" is not clearly defined. Capture rate should either be more clearly defined or discontinued. Metro Vancouver staff are supportive of adopting this new performance measure <new definition of Recovery Rate>, as long as both the Capture Rate measure and prior version of Recovery Rate measure are discontinued. Recovery Rate for Tires = actual number of scrap tires collected in the reporting year / actual number of new tires sold 5 years prior to the reporting year…for the sake of clarity, does the program intend to use the "average" or "actual" number of new tires sold 5 years prior to the reporting year?	Local Govt	The Plan has been amended to remove any reference to capture rate. This approach had been used in the current Plan to help support the Recovery Rate measure and target. However, with a proposed amendment to the definition to Recovery Rate to make it a more meaningful measure, TSBC has no issue removing capture rate. The Plan will continue to report on retailer and generator satisfaction by way of the number of complaints – the lower the complaints, the higher their satisfaction with tire collections. The new Recovery Rate measure will use the actual number of new tires sold 5 years prior to the reporting period.
Have you run the numbers backwards (using the new calculation for Recovery Rate) to see how they come out? Will it satisfy the requirement to be closer to 100%? If there's an opportunity to re-define the calculation, let's make sure we're doing it the right way to be representative of the actual recovery – every opportunity should be explored.	Industry	Yes, the new definition has been applied to historical numbers and the results are much more reflective of program performance and show a higher Recovery Rate than under the current definition. TSBC worked with its auditors to arrive at the new definition for Recovery Rate. There are a lot of variables and many ways to look at this, and none will be precise. The proposed definition seems the most accurate, most meaningful and reflective of actual program performance.

Participant Questions and Comments	Source	TSBC Response or Actions
Why is the target so low on a per-regional district basis for R2R locations? Would it be better to express it as a % of available locations – or perhaps a different way to express this, since this target looks terrible.	Local Govt	TSBC has replaced the target of 2 per Regional District with a minimum of 25% of the retailers in the Regional District are R2R locations.
Is the overall true goal not simply that only 1% or less goes to landfill? Is 15% the real goal for TDF?	Industry	The Ministry requires that all stewards report on end fate for recycling, energy recovery and landfill, so TSBC must set a target for each. Yes, 15% is the real goal. TSBC would have to explain the reason and state actions to remedy the missed target to the Ministry if TDF goes over 15%. There have been target reductions for TDF since 2007.
Other		
Can you please clarify again the approach to addressing OTRs? Will TSBC accept these types of tires? Further to my question about OTRs, I wanted to provide some additional comments and context on the challenges we are currently experiencing: As a generator under TSBC, we have had a challenge disposing of end-of-life OTRs. We shear the OTRs into smaller sizes and make arrangements to have them transported to Western Rubber Products (Liberty Tire) Vancouver Island facility; however, it is very expensive. It would make sense to us to expand the inclusion list to accommodate all OTRs, not just logging truck OTRs, skidders, etc.	Industry	Some OTRs do fall under the program (e.g., Agricultural and Logger/Skidder) but for TSBC to accept other OTRs going forward, they would first need to be added to the Recycling Regulation by the Ministry. We do have a solution for these tires and there appears to be considerable stakeholder support – we're hoping to make it happen in 2019 but our timeline is somewhat dictated by the Ministry. All affected stakeholders will be consulted as part of the process. For now, many retailers and generators, such as yourselves, have an arrangement directly with Western Rubber to collect these non-program tires, which are brought to their facility in Delta for processing.

Ministry of Environment and Climate Change Strategy

Recycling Regulation

Guidance

Third party assurance for non-financial information in annual reports 2018 reporting year

October 2018

Extended Producer Responsibility Section
Environmental Standards Branch
Environmental Protection Division

Contact

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Disclaimer

This document is intended to provide guidance in conducting assurance for non-financial information in annual reports pursuant to Section 8(2)(h) of the Recycling Regulation made under the *Environmental Management Act*. This technical guidance in no way supplants, replaces, or amends any of the legal requirements of the Recycling Regulation. Conversely, an omission or truncation of regulatory requirements in this technical guidance does not relieve producers or other parties of their legal obligation to fully comply with all regulatory requirements.

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1 B.C. Extended Producer Responsibility

The Recycling Regulation (the regulation), under authority of the *Environmental Management Act*, sets out the requirements for Extended producer Responsibility (EPR) in B.C., also known as Product Stewardship. This approach is based on industry and consumers taking full responsibility for the products they produce and use throughout the product's life cycle, including recycling.

The regulation provides a framework for establishing EPR programs, which are industry-led and include specific product categories. In some cases, producers of designated products appoint an agency to act on their behalf. A producer may appoint an agency to undertake their duties that include, but are not limited to, preparing an extended producer responsibility plan, implementing and managing their program, and reporting annually on performance.

Visit the ministry webpage for more information.

2 Purpose of the Assurance Report

To ensure regulatory requirements are met and the environment is protected, the ministry reviews and approves EPR plans and annual reports and conducts compliance and enforcement actions where necessary. Since July 2013, the ministry requires that an independent third party assures key non-financial information in annual reports to continuously improve credibility and transparency in EPR program reporting. External assurance or verification of EPR programs' reports will provide both report readers and internal EPR program managers with increased confidence in the quality of data and records. This also supports the ministry's assessment of whether non-financial information reported in annual reports meets reporting obligations under the Recycling Regulation.

In addition to non-financial assurance reports, producers are required to submit audited financial statements for deposits or fees they charge consumers shown on the sales receipt (refer to Section 8(2)(f) of the regulation). While assurance of non-financial reporting shares similarities with auditing financial reports, there are some important differences. It is clear what financial reporting is intended to measure and there are long-established procedures for financial accounting; whereas, non-financial reporting covers more diverse activities with a greater variety of metrics. Relevant measures may vary by sector, program or product.[1]

3 Assurance Requirements

Producers, and if applicable their EPR agency, operating under Part 2 of the regulation with an approved EPR plan must ensure their assurance engagement (that is, the process of gaining third party assurance on your annual report) is conducted in accordance with the requirements in this document. Third party

[1] Adapted from the External Assurance of Sustainability Reporting by the Global Reporting Initiative

assurance for non-financial information in annual reports is required through Section 8(2)(h) of the regulation.

Producers that do not have an approved EPR plan must report under Part 3 of the regulation. This document should be referenced as good guidance but does not specifically address the regulatory audit requirements specified in Section 14(2)(f) of the regulation.

3.1 Annual report due date

Under Section 8 of the regulation, producers are required to submit to the ministry an annual report for the previous year on or before July 1st, including the assurance report submitted as an attachment.

3.2 Applicable assurance standards

All assurance reports must be prepared in accordance with the International Standard on Assurance Engagements 3000 Revised (ISAE 3000), Assurance Engagements Other than Audits or Reviews of Historical Financial Information published by the International Federation of Accountants[2].

The assurance report must explicitly reference conformance with ISAE 3000. To the extent that additional assurance standards are determined to be appropriate for use, these shall also be referred to within the assurance report but do not replace the requirement to explicitly reference conformance with ISAE 3000.

3.3 Required level of assurance

A reasonable level of assurance is required as described in ISAE 3000.

General information

A reasonable level of assurance is described as a direct, factual statement expressing the assurance opinion of the qualified assurance practitioner regarding the non-financial information reported. Canadian assurance standards define reasonable assurance as a high, but not absolute, level of assurance[3]. To express an opinion with a reasonable level of assurance, the assurance practitioner must use professional judgement to obtain sufficient appropriate evidence that minimizes the risk of error.

3.4 Assurance practitioner qualifications

A Chartered Professional Accountant must provide the assurance opinion. The assurance provider must be registered in a Canadian jurisdiction and have suitable education, experience, knowledge and understanding of the subject matter.

[2] Web page: International Standard on Assurance Engagements 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information

[3] CPA Canada Handbook – Assurance (2014), Chartered Professional Accountants of Canada

3.5 Assurance objectives and scope

The assurance engagement is limited to the following four elements of the information required to be included in the annual report under Section 8(2)(b), (d), (e) and (g) of the regulation:

1. Collection facilities;
2. Product and material management;
3. Product sold, collected and recovery rate; and
4. Performance targets.

Note: The ministry is conducting a review of the current assurance framework to identify opportunities for improvement. The assurance requirements listed under the heading "2018 reporting year" below are transitional measures and subject to change when the comprehensive review is complete.

These transitional measures were identified through extensive consultation and feedback from EPR program managers, auditors and ministry staff. While the assessment of the assurance framework is ongoing, these measures attempt to balance the level of effort and resources required to achieve a reasonable level of assurance with the need for confidence in selected non-financial information reported to the ministry.

3.5.1 Collection facilities

The objective of the assurance engagement is to assess:

- Whether the location of collection facilities, and any changes in the number and location of collection facilities from the previous report, are fairly stated in the annual report in accordance with Section 8(2)(b) of the Recycling Regulation.

Scope

All collection facilities as defined in Part 1 of the regulation. The list of collection facilities identified in the annual report should, at a minimum, include the name of the facility and the community where it is located. Alternatively, the facility name can be replaced with "unadvertised", "private" or similar terminology when the facility location is not identified on the EPR program's website or is not publicly accessible.

2018 reporting year

Assurance is not required for:

- The Beverage Container Category (Part 1 (a) of the regulation) where the EPR program did not contract with the collection facility for services during the reporting year, such as retail stores.
- The Empty Oil Container, Electronic and Electrical, Tire, or Packaging and Printed Paper product categories (Part 1(c) of the regulation) where the products are recovered using mail-back services and reverse logistics using in-house technicians or warranty returns. For products returned through these types of collection mechanisms, data regarding collection facilities, such as the primary processor or consolidation facility, should not be assured.

Definition

- Collection facility is defined in the regulation.

Guidance on the development of suitable criteria

Basic testing procedures have been established and applied historically to assess the fair presentation of data under the requirements of Section 8(2)(b) of the regulation. These are presented in Appendix E and may form the basis of the assurance criteria. However, it is important to note that these procedures were not designed to provide a reasonable level of assurance and additional or amended procedures may need to be implemented. For instance, it may be necessary to confirm that the product was actually collected by the facility as part of the process of determining whether the site is a collection facility.

3.5.2 Product and material management

The objective of the assurance engagement is to assess:

- Whether the description of how the recovered product was managed in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation is fairly stated in the annual report.

Scope

The description of how recovered product was managed in accordance with the pollution prevention hierarchy for the year as defined in Section 5(3)(d),(e),(f), and (g) of the regulation, which includes:

- Product reuse;
- Product recycling;
- Recovery of material or energy (e.g., waste to energy) from the product; and
- Disposal of the waste from the product in compliance with the *Environmental Management Act* (e.g., landfill, incineration).

2018 reporting year

1. Assurance is required for EPR programs that report the "reuse" of a product to the point when the individual product is managed as a commodity. The actual reuse of the product does not need to be demonstrated.
2. The ministry's intent is to limit the boundaries for assurance activities where sufficient environmental and safety oversight exists in product and material management.

   <u>All EPR programs within the Electronic and Electrical Product Category where</u>[4]:

   - Programs are certified, meeting the R2 Standard; or
   - Programs utilized processors approved by the Recycler Qualification Office or certified, meeting the R2 Standard.

   Assurance is required on the amount (unit, volume, or weight data) of product or material managed by the EPR program until it is received at the applicable primary service provider. From this point, assurance is required only for the reported approved material flows and the expected final disposition of materials. Assurance is not required for the actual flow of materials that would be otherwise verified by conducting procedures at facilities. For example, the EPR program will not need to reconcile the input volumes for a given program to output volumes from facilities captured under the above approval or certification. Assurance can be based on data and information from the primary service provider's scope of approved materials and processes, including the downstream material flow indicating the materials streams generated from the process and the downstream

[4] The ministry expects that the estimated amount of materials attributable to the identified final disposition will be reported annually, although these estimates are not to be assured.

processors to handle those materials (e.g., materials sold as a commodity, used for material or energy recovery, landfilled, incinerated, etc.). Appendix C details which documentation the Recycler Qualification Office may provide to the assurance practitioner.

EPR programs managing hazardous wastes where[5]:

- Products or materials are classified or defined as hazardous waste and must be managed according to the rules and standards set out by the *Environmental Management Act* and the Hazardous Waste Regulation[6].

I. Assurance guidance for products managed by EPR programs:

Assurance is required on the amount (units, volume or weight data) of product or material managed by the EPR program until it is identified on the applicable government manifest by the EPR program as the consignor or generator. Assurance is required for the reported material flow and expected final disposition of the materials based on information obtained from the manifest as completed by the consignee after receiving the shipment (e.g., the receiving facility uses flammable liquids for energy recovery, long term storage retort facility, etc.).

II. Assurance guidance for batteries covered under the Lead-acid Battery Product Category:

Assurance is required on the weight of batteries identified on the applicable government manifest or the Transportation of Dangerous Goods shipping document completed by the consignor or generator. Assurance is required for the reported material flow and expected final disposition of the materials based on information obtained from the manifest or carrier documents as completed by the carrier or consignee, after receiving the shipment (e.g., smelter). For batteries exported from Canada, assurance is required on the weight of batteries, the reported material flow, and expected final disposition as identified on the applicable federal hazardous waste manifest and the consignor's export permit, or equivalent documentation, issued by Environment Canada under the Canadian Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations.

Guidance on the development of suitable criteria

The criteria to assess the pollution prevention hierarchy for the management of products, components, and materials[7] to the final disposition must address the processing pathways through to the point where

[5] The ministry expects that the estimated amount of materials attributable to the identified final dispositions will be reported annually, although these estimates are not assured.

[6] Hazardous wastes are defined in the Hazardous Waste Regulation and include "dangerous goods" that are no longer used for their original purpose. For more information refer to:

- Resources at http://www2.gov.bc.ca/gov/content/environment/waste-management/hazardous-waste/resources
- Transportation at http://www2.gov.bc.ca/gov/content/environment/waste-management/hazardous-waste/transporting-hazardous-waste

[7] The terms "components" and "materials" are used recognizing that a product may be broken down into distinct components or materials that follow different processing pathways. It will generally be necessary to disclose data separately for the components and materials.

the product, component, or material is handled as a recognized commodity, is destroyed (e.g., through energy recovery), or is disposed of as waste.

It is expected that information disclosed by a EPR program in an annual report, with respect to the management of products, components, and materials, will include the following:

1. Identified acceptable final disposition
    - Information showing what final disposition is acceptable in accordance with the approved EPR plan and regulation (refer to Table 1 below).
2. Conformance with acceptable final disposition
    - Information on the estimated conformance levels achieved with respect to the processing of products, components, and materials in accordance with the identified final disposition (refer to Tables 2a and 2b below).
3. Degree of certainty over the processing pathways
    - Information demonstrating the degree of certainty that exists when processing a product in accordance with the reported final disposition. For example, the disclosure of:
        - The proportion of product components and/or materials for each processing pathway, such as the direct transfer to a processor in B.C. or multi-step processing elsewhere in North America; and
        - The nature of the due diligence processes in place to verify the accuracy of the data supplied (e.g., processor inspections, third party audits, etc.) for each processing pathway to support the use of quantitative information on product final disposition.

The ability to provide quantitative information on individual product component and material processing pathways may be limited by the nature of the processing pathways, the number of individual processors within the custody chain, and the willingness of third party processors to provide processing data. Each EPR program should determine their own criteria for developing quantitative information and should use these criteria to disclose their best estimate of the product final disposition. The basis of information used to determine final disposition must also be disclosed. For example, state if the information is derived solely from a processor questionnaire.

Example approaches to present the findings in the annual report

Table 1: Identified acceptable final disposition

Acceptable final disposition matrix, in accordance with the approved EPR plan and regulation[8]						
Recycling Regulation 5(3) – pollution prevention is not undertaken at one level unless or until all feasible opportunities for pollution prevention at a higher level has been taken						
Product, Component or Material	Reuse	Recycling	Material Recovery	Energy Recovery	Landfill	Other Waste Disposal (e.g., incineration)
A	Preferred	Optional	Optional	Optional	Prohibited by regulation	NA
B	NA	NA	NA	Preferred	Optional	NA

Table 2a: Conformance with acceptable final disposition

20xx product, component, or material management			
Product, Component or Material	% of material stream (or other similar)[9]	Qualitative information on the processing methods	Downstream Process & final disposition[10]
A			
Ferrous Metals		Metals are manually and/or mechanically separated	Recycle – smelting
Identifiable plastic		Cleaned, sorted and pelletized	Recycled – sold as commodity to markets not in North America
Unidentifiable plastic 1		Sorted	Landfill
Unidentifiable plastic 2		Sorted	Used for energy recovery in metal smelting

[8] The table may be modified to incorporate performance targets from the approved EPR plan for the management of products at each level of the pollution prevention hierarchy.
[9] Define what this column represents for the EPR program.
[10] The annual report must identify the final deposition as one of the following: reuse, recycle, material or energy recovery, or another disposal method such as incineration or landfill.

Table 2b: Conformance with acceptable final disposition

20xx final disposition including sold as commodity-grade material								
Product (optional column)	Product, Component, or Material	Reuse	Recycled	Material recovery	Energy recovery	Landfill	Other Waste Disposal (e.g., Incineration)	Unknown fate (e.g., moisture or dust lost in the process)
A	A	64%	36%					
	B		69%		31%			

3.5.3 Product sold, collected and recovery rate

The objective of the assurance engagement is to assess:

- Whether the total amounts of the producer's product sold and collected and, if applicable, whether the producer's recovery rate is fairly stated in the annual report in accordance with Section 8(2)(e) of the Recycling Regulation.

Scope

All the products that are sold and collected by a EPR program and the recovery rate, if applicable, within each defined product category in the regulation.

2018 reporting year

Assurance is required for all EPR programs for the total amount (units, volume or weight data) of product collected. Assurance is only required for product sold data if the EPR program is required to report a recovery rate in accordance with the approved EPR plan[11].

Definitions

- Product category is defined in the regulation.
- Recovery rate is defined in the regulation and means the amount of product collected divided by the amount of product generated, expressed as a percentage.

Development of suitable criteria

Assurance criteria should be developed with a focus on providing reasonable assurance that:

- The reported product sold has been calculated using the source data from audited sources described in the annual report;
- The reported product recovered has been calculated using the source data described in the annual report;
- All sources of data for product sold and product recovered are included within the data described in the annual report; and
- Any calculations required in developing figures for products sold and products recovered have been accurately completed.

[11] Although assurance may not be required for product sold data, it is a regulatory requirement to include product sold data in the in the annual report.

3.5.4 Performance targets

The objective of the assurance engagement is to assess:

- Whether the performance for the year is fairly stated in the annual report in relation to targets in the approved EPR plan (under Sections 8(2)(b), (d) and (e) of the Recycling regulation in accordance with Section 8(2)(g) of the Recycling Regulation).

Scope

Performance requirements and targets specified in the approved EPR plan that are applicable to the calendar year covered by the annual report and relate to performance under Sections 8(2)(b), (d) and (e) of the regulation.

2018 reporting year

Assurance is required for:

- Quantitative performance requirements and targets in approved EPR plans.

Assurance is not required for:

- Qualitative commitments such as consumer awareness targets.
- An accessibility performance target in the approved EPR plan. The required frequency of this performance target is under review.

Development of suitable criteria

It is expected that the report will disclose at least the following with respect to targets in an approved EPR plan:

- The nature of the performance measure and target;
- The expected performance outcome;
- The date by which the performance target is intended to be met; and
- A specific assessment of conformance to the target.

Assurance criteria should be developed with a focus on providing reasonable assurance that:

- The list of performance targets is complete; and
- The disclosed outcomes are presented accurately in line with the performance requirements and targets specified in the approved EPR plan.

3.6 Applicable criteria

Specific criteria will need to be developed for each EPR program depending on the structure of the program and the nature of the product(s) managed. Given this, it is necessary that the applicable criteria be disclosed as an attachment to the assurance report to assist the ministry in understanding the conclusions.

General information

The purpose of the applicable criteria is to establish whether the information disclosed in the annual report is fairly stated. For an assurance practitioner to accept an assurance engagement, suitable criteria for measuring or evaluating the underlying subject matter must exist. Suitable criteria may already be established or may be developed specifically for the assurance review.

The management of the EPR program and the assurance practitioner will need to define and agree on the suitable criteria to assess the information disclosed in the annual report. The assurance practitioner must be comfortable that the applicable criteria are suitable for the ministry's purposes and for evaluating the in-scope non-financial information being reported.

The characteristics that should be reflected in suitable criteria are relevance, completeness, reliability, neutrality, and understandability. Refer to ISAE 3000 for a detailed description.

Reliability of data

In determining the suitability of criteria, EPR programs and assurance practitioners should carefully consider whether the data for which criteria are being developed is inherently reliable. Basically, the assurance engagement should not lend credibility to the information disclosed if those disclosures are not based on reliable information in the first place. For example, if a EPR program develops key disclosures in its annual report based on self-reported data from member producers or third parties, the data is not considered inherently reliable without specific procedures to test its reliability. This could be comfort letters from the assurance practitioner of the individual producers or internal audits of the data submissions by the producer's agency. Without procedures to test the reliability of self-reported data, it would be inappropriate for an assurance practitioner to accept criteria that simply confirms that the data was accurately transcribed from self-reported sources without commenting on the reliability of the source data in the assurance report.

Where self-reported data is being used in the absence of procedures to test its reliability, the annual report should not be considered fairly stated, due to the absence of clear disclosures regarding the source of data, the absence of any process to check its reliability and the inherent uncertainty in the disclosures created by this approach. Further, in such cases it would be expected that the assurance report would clearly indicate the limitations of the assurance engagement. For example, it would be clear that in the opinion of the assurance practitioner, the information disclosed by the EPR program is unreliable and that it does not extend to providing an opinion over the accuracy of the data.

4 Statement of Assurance

For reference, an assurance report template is provided in Appendix B.

5 Assurance Conclusion

General Information

An assurance report for a EPR program would ideally have an *unmodified* conclusion, in line with ISAE 3000, where the information in the annual report was prepared, in all material respects, in accordance with the applicable criteria.

An assurance practitioner shall issue a *modified* conclusion in cases where in the practitioner's professional judgement:

- A scope limitation exists, and the effect of the matter could be material - expressed as a qualified conclusion or a disclaimer of conclusion, or
- The subject matter information is materially misstated - expressed as a qualified conclusion or adverse conclusion

While it is understood in assurance practice that conclusions with qualifications in an assurance report are not desirable, the intent is not to avoid having to qualify conclusions at all costs, but rather to draw the EPR program's attention to the requirement to improve the quality and integrity of data and information provided in the annual report. Where the assurance practitioner concluded that an assurance report must be qualified, it is the ministry's expectation that issues leading to that qualification will be addressed in subsequent years.

If the practitioner considers it necessary to:

- Draw intended users' attention to a matter presented or disclosed in the subject matter information that, in the practitioner's judgment, is of such importance that it is fundamental to intended users' (the ministry's) understanding of the subject matter information (known as an Emphasis of Matter paragraph); or
- Communicate a matter other than those that are presented or disclosed in the annual report that, in the practitioner's judgment, is relevant to intended users' (the ministry's) understanding of the engagement, the practitioner's responsibilities or the assurance report (known as an Other Matter paragraph);

The practitioner shall do so in a paragraph in the assurance report that clearly indicates the practitioner's conclusion is not modified in respect of the matter. In the case of an Emphasis of Matter paragraph, such a paragraph shall refer only to information presented or disclosed in the subject matter information.

6 Data and Record Management

For a practitioner to perform a reasonable assurance engagement it is critical that appropriate selected data and records, also referred to as underlying subject matter, be available for assessment against the selected criteria. In addition to the approved EPR plan and annual report, the practitioner will review relevant EPR program records. Well-organized and accessible records will make it easier for the assurance practitioner to complete their work and will thereby reduce costs of the assurance engagement.

The ministry recognizes that the quality of the source of data (for example, self-reported data) and the qualitative nature of some information may cause difficulty in providing reliable data. In such cases, there exists the option to perform assurance procedures over the description of the information. The description in the annual report (that is, the performance requirement is prefaced with "The description of") is expected to include, at minimum, an assessment of the reliability of the data and a justification for the inability to source better quality data. The practitioner will consider the extent to which the description is fairly stated, the appropriateness of the criteria and the degree of reliance a reader of the report can place on the description.

General Information

Data quality and data management are critical components and are checked rigorously during the assurance process. By ensuring that the EPR program has a robust data management system, data-related risks can be reduced through:

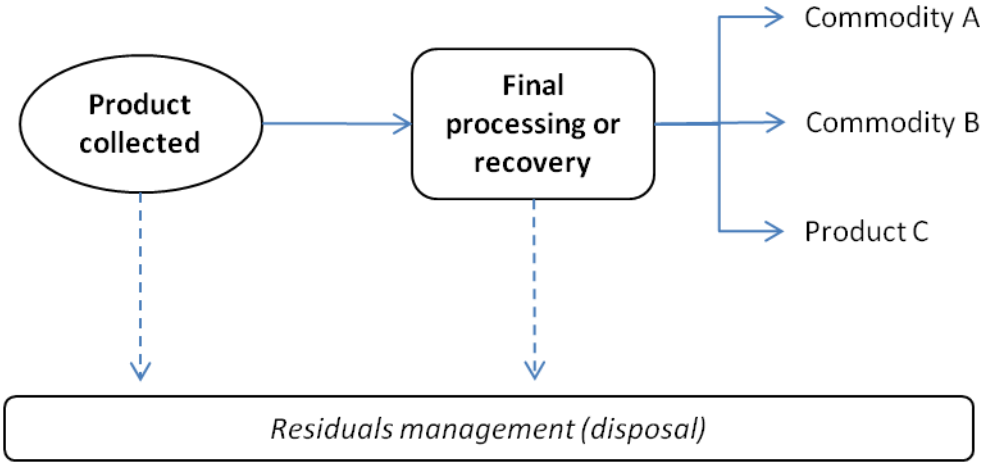
- Quality Assurance: These are plans and procedures to ensure that data is as precise, repeatable and reproducible as possible, and that established quality control procedures are being implemented as planned (for example, bi-monthly check to ensure that logs are being filled out correctly).
- Quality Control: This refers to measures controlling the data collection processes and the standard of the data (for example, procedures for sample collection and data validation during manual entry of data).

In designing a data quality management plan, risks to data quality need to be assessed across the entire data chain of custody (for example, from the point of data collection through to storage, processing and ultimate generation of results for all parameters). High-risk areas would then be the focus of quality control procedures designed to minimize risks. A poorly designed monitoring or data quality management plan can result in a program not being able to demonstrate and verify performance requirements.

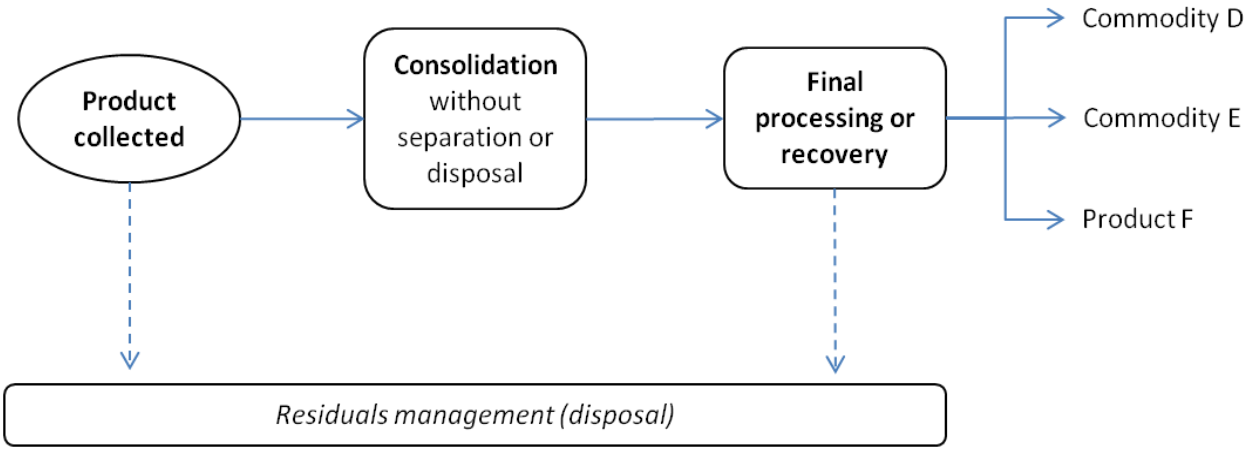
Appendix A: Guidance for Material Flow and Final Disposition

The following flow diagrams describe possible hypothetical product management scenarios to final disposition.

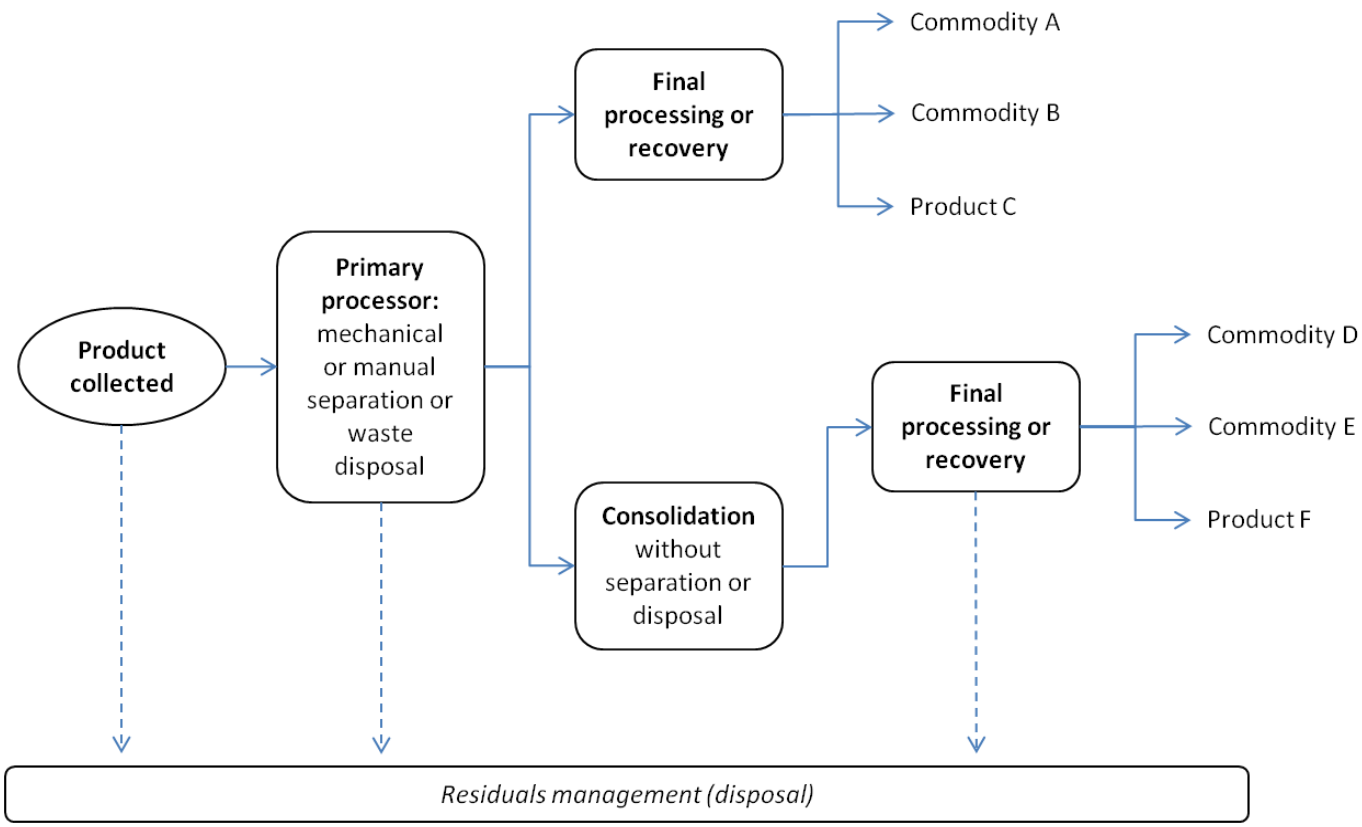
Scenario for Product Management #1: Direct transfer to a point of final processing and recovery (e.g., a smelter)



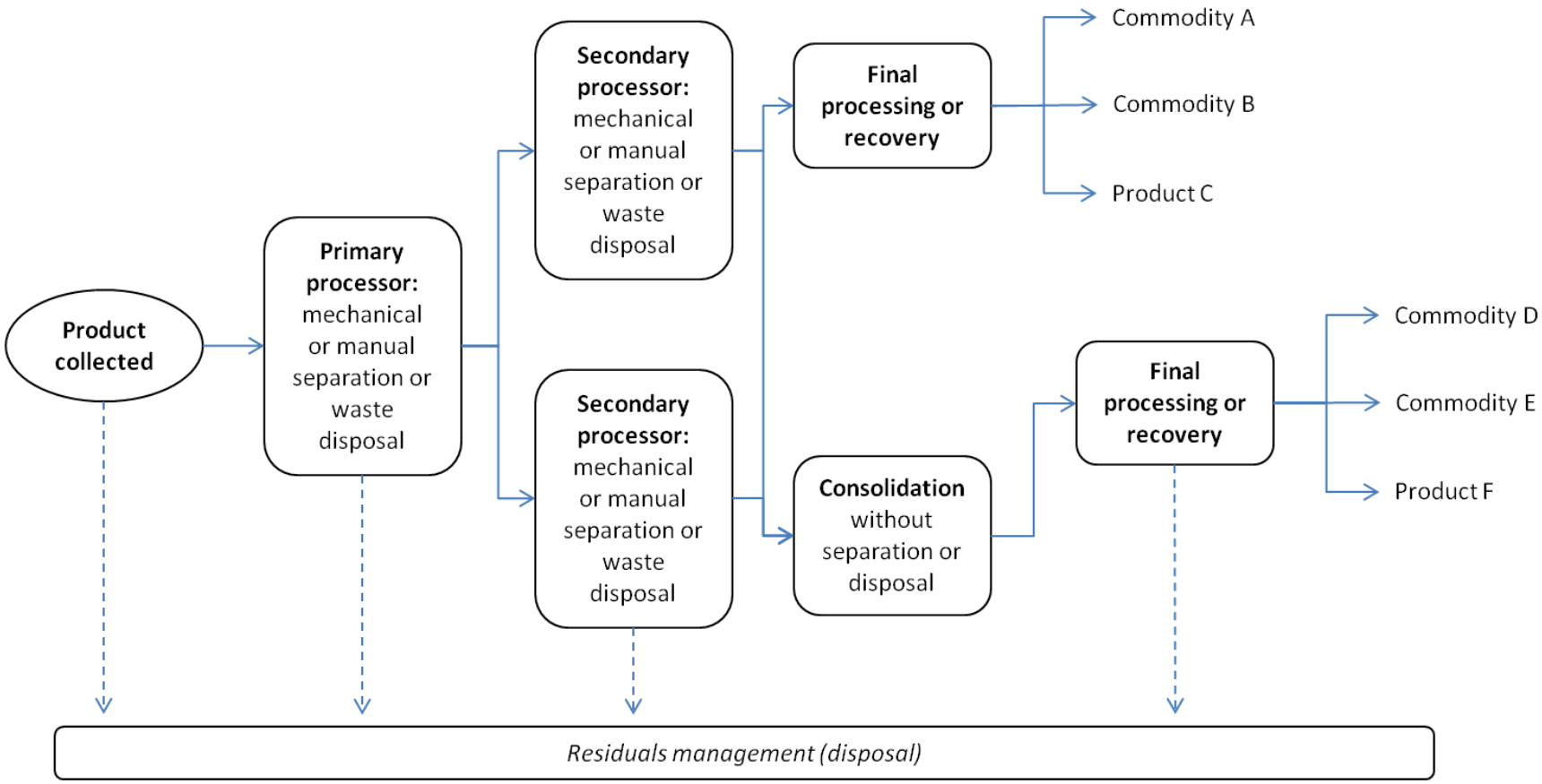
Scenario for Product Management #2: Transfer to a consolidation facility that stores material until there is enough volume to ship to a point of final recovery but does not undertake either mechanical or manual separation or waste disposal.



Scenario for Product Management #3: Transfer to a processing facility that undertakes either mechanical or manual separation or waste disposal. All downstream transfers are to points of final recovery or consolidation facilities.



Scenario for Product Management #4: Transfer to a processing facility that undertakes manual separation and waste disposal. Further downstream mechanical processing occurs by multiple different secondary processors prior to transfer to points of final recovery or consolidation facilities.



Along with the flow diagrams, below are the types of supporting data the assurance practitioner may request to complete their review of product management in accordance with the pollution prevention hierarchy.

Potential quantitative Data	Other potential data
• Quantity delivered to the primary processing facility or consolidation facility • Quantity or weighted average of material delivered to each downstream processor • Quantity or weighted average of material sent to each downstream processor for further processing or to a point of recovery or consolidation facility • Quantity or weighted average of material sent to waste stream	• Program can demonstrate that the material is processed on site • Program can demonstrate that consolidation facility does not undertake either mechanical or manual separation or waste disposal • Program can demonstrate that all processors in the materials handling chain have approval to undertake the processing • Program can demonstrate all steps in the downstream materials handling pathway for all material sent to the processor (what happens, who does it) through to specified consolidation facilities or points of final recovery (i.e., a complete material pathway exists that includes all potential transfers and final disposition and that is supported by auditable evidence) • Final disposition of materials • If exact quantities of recovered materials to each final disposition (including waste management) cannot be provided, the description can be estimated or qualitative. Uncertainty should be disclosed.

Appendix B: Assurance Report Template

The intent of this template is to facilitate the ministry receiving assurance reports that are, for the most part, formatted in a consistent and comparable manner across all EPR programs. The assurance report content must be prepared in accordance with ISAE 3000.

2018 INDEPENDENT REASONABLE ASSURANCE REPORT FOR SELECTED NON-FINANCIAL INFORMATION

Addressee:

Assurance Level and Subject Matter

E.g., identification of the level of assurance and the subject matter

Text may include:

We have been engaged by ABC Producer (or ABC EPR Agency) to perform a reasonable assurance engagement in respect of the following information, detailed within ABC Producer's annual report to the Ministry of Environment and Climate Change Strategy and in Attachment 1, for the year ending December 31, 2018:

- The location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of B.C. Regulation 449/2004 (the Recycling Regulation);
- The description of how the recovered product was managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation;
- The total amount of the producer's product sold and collected and, if applicable, the producer's recovery rate in accordance with Section 8(2)(e) of the Recycling Regulation; and,
- Performance for the year in relation to approved targets under Section 8(2), (b), (d) and (e) in accordance with Section 8(2)(g) of the Recycling Regulation.

Responsibilities

E.g., responsible party and practitioner's responsibilities

Assurance Standard and Professional Requirements

E.g., statement that: 1) the engagement was performed in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000); 2) relevant statement of professional requirements; and 3) relevant statement that the practitioner complies with independence and other ethical requirements

Applicable Criteria

E.g., applicable criteria are presented in Attachment 1

Summary of Work Performed

E.g., an informative summary of the work performed as the basis for the practitioner's conclusion

Significant Inherent Limitations

Only if applicable

Conclusion

A*pplicable text*

Emphasis of Matter

Only if applicable

Other Matters

Only if applicable

Practitioner's signature

City, Canada

Month DD, YYYY

ATTACHMENT 1 TO THE ASSURANCE REPORT – IDENTIFICATION OF APPLICABLE CRITERIA

1. Collection Facilities

Section 8(2)(b) of the Recycling Regulation - the location of collection facilities, and any changes in the number and location of collection facilities from the previous report.

Specific disclosures in the annual report for which criteria were developed	
Disclosure per annual report	**Reference**
Proposed text for the annual report	*Page # / Table #*

Definitions

If applicable

Applicable Criteria

- Reporting period:
- Description of criterion #2
- Description of criterion #3
- Description of criterion #4

2. Pollution Prevention Hierarchy

Section 8(2)(d) of the Recycling Regulation - the description of how the recovered product was managed in accordance with the pollution prevention hierarchy.

Specific disclosures in the annual report for which criteria were developed	
Disclosure per annual report	**Reference**
Proposed text for the annual report	*Page # / Table #*

Definitions

If applicable

Applicable Criteria

- Reporting period:
- Description of criterion #2
- Description of criterion #3
- Description of criterion #4

3. Product Sold, Collected and Recovery Rate

Section 8(2)(e) of the Recycling Regulation – the total amounts of the producer's product sold and collected and, if applicable, the producer's recovery rate.

Specific disclosures in the annual report for which criteria were developed	
Disclosure per annual report	**Reference**
Proposed text for the annual report	*Page # / Table #*

Definitions

If applicable

Applicable Criteria

- Reporting period:
- Description of criterion #2
- Description of criterion #3
- Description of criterion #4

4. Performance in relation to Targets in the Approved EPR Plan and the Recycling Regulation

Section 8(2)(g) of the Recycling Regulation - performance for the year in relation to targets in the approved EPR plan that relate to Section 8(2)(b), (d) and (e).

Specific disclosures in the annual report for which criteria were developed	
Disclosure per annual report	**Reference**
Targets in relation to Section 8(2)(b)	*Page # / Table #*
Targets in relation to Section 8(2)(d)	
Targets in relation to Section 8(2)(e)	

Definitions

If applicable

Applicable Criteria

- Reporting period:
- Description of criterion #2
- Description of criterion #3
- Description of criterion #4

Appendix C: Recycler Qualification Office Applicable Materials

The Recycler Qualification Office may provide the following documentation to demonstrate a processor's approval:

- Name and location of facility
- Statement of approval, including:
    - Date of last approval
    - Scope of approval (summary of materials, processes, and equipment)
- Listing on the Recycler Qualification Office website
- Approved downstream material flow (downstream flow indicates not only the scope of approval for the processor, but also the materials streams generated from the process and the downstream pathways approved to handle those materials)
- Final audit report

Appendix D: Frequently Asked Questions

Source document: Ministry of Environment, 2012, FAQ's for Guidance Purposes

1. Where do I start?

EPR programs should consider the following steps in preparation for the assurance of non-financial information in annual reports:

1. Perform a walkthrough and document the process flow from collection to final disposition of recovered materials.
2. Note information and data (documents, reports, invoices, weigh scale forms, etc.) available at various points in the process flow.
3. Develop applicable criteria for the non-financial information in your annual report based on the documented process flow and the data and records available (e.g., do not create new data and processes where existing data and processes are already effective).
4. Propose criteria to your organization's assurance practitioner and work with them to finalize the criteria.

2. What are the key characteristics of reasonable assurance?

In practice, to provide reasonable assurance two key characteristics must be met:

1. The assurance practitioner must be comfortable that the in-scope non-financial information in the annual report is fairly stated in accordance with the criteria. The assurance practitioner is essentially checking whether, with respect to the relevant non-financial information, the annual report was prepared in accordance with the criteria.
2. The assurance practitioner must be comfortable that the criteria are suitable for the intended users' purposes as well as suitable for evaluating the information being reported.

3. How is materiality defined?

An assurance practitioner will assess materiality as the relative importance of quantitative and qualitative factors that might influence the decisions of the intended users of the assured information. This assessment uses the practitioner's judgment and considers materiality in the following context:

- Relative magnitude;
- Nature and extent of the effect of these factors on the evaluation or measurement of the subject matter; and
- Interests of the intended users.

To assess materiality, an assurance practitioner must ask the following types of questions:

- Who are the readers of the annual report and assurance opinion?
- What would make a difference to the readers?
- What do the readers care about?

- What information might change the readers' decisions or behaviour?

The concept of materiality is applied by the assurance practitioner when assessing the effect of any identified misstatements. A misstatement based on the information, including omissions, is considered material if it could reasonably be expected to influence the user's decisions or actions.

4. What information, data or records is it reasonable for the assurance practitioner to ask for?

Your assurance practitioner will require certain data or records to support the audit criteria. To do this efficiently, the assurance practitioner will need access to your records. It is unnecessary for your assurance practitioner to request copies of all your records or data; however, they will need to understand the full scope of data available and sample that data. Your assurance practitioners should focus on the most relevant and reliable data.

To help keep assurance costs reasonable, your program's criteria should be well thought out based on available data and information to be presented in the annual report. Criteria that would significantly increase audit cost include those that force the assurance practitioner to increase the amount of testing on the reliability of data supplied by third parties.

5. What if I do not have high quality data available to report certain required information in the annual report? How do we treat uncertainty?

If any uncertainty exists surrounding your organization's non-financial information, be transparent about this by reporting what you do not know in the annual report. Uncertainty in reported information is expected to be addressed in subsequent reporting years. Continuous improvement of product management is an expected outcome of the assurance process.

Where uncertainty in data exists, it is important that the audit criteria reflect this uncertainty. It is possible to develop precise criteria around the reported information to allow the program to report transparently on the uncertainty in its data and for the assurance practitioner to subsequently conclude on whether the report presents the information fairly. For example, if some material goes to secondary processors and there are currently no processes in place to determine who those processors are and exactly how they process the material then appropriate criteria might include:

- The volume of material shipped by primary processors to secondary processors is determined from scale information provided to the program management by primary processors and checked annually through an on-site inspection that includes assessment of scale calibration, maintenance of shipment records and testing of specific volumes of shipments by destination.
- The volume of material shipped to secondary processors is recorded as "undetermined final disposition" in the annual report.

The degree of precision needed for data should be considered in the context of the method of reporting. For instance, it may be relatively straight-forward to demonstrate that all material containing mercury

was sent to facilities specifically approved to recover this material. However, it may be much more difficult to determine exactly how many grams of mercury were recovered from the specific products sent to the facility. In such cases EPR programs should choose appropriate descriptors. For example, it might be appropriate to disclose recovery rates in percentages (100% of mercury containing materials were processed for recovery) rather than absolute numbers (923g of mercury were recovered out of an estimated 962g in recovered product).

6. What about collection facilities – location and changes in number and location?

As a first step, each EPR program should determine what a "collection facility" is under their program in accordance with Section 1 of the regulation. EPR programs should keep in mind that the purpose of collection facilities is public access and convenience.

Recovery mechanisms other than collection facilities (e.g., collection events, non-contracted collection facilities, etc.) may contribute to public access to collection. The flow of recovered material from these initiatives should be included in the annual report from a transparency perspective and to demonstrate increased public access to collection. However, these initiatives may not meet the definition of a "collection facility". In such cases, they would not specifically be included in the assurance practitioner's assessment of the number and location of facilities, although the volume of material collected through these initiatives as a whole would be included in the assurance practitioner's assessment.

7. What about product sold and collected and recovery rate, if applicable?

EPR programs should consider the following when developing criteria:

- EPR programs should decide whether they will report in product units, weight or another metric. This decision should be made based on the availability of quality data to support the quantity type reported as well as whether the assurance practitioner can verify this measurement (e.g., electronic scale data is easier to audit than estimates of number of units). Sales data by unit or weight may be feasible. Where weight is used this should exclude packaging weight.
- Define product collected or product recovered –does your organization's product recovered include other materials, for example water content as part of recovered oil? The audit criteria can either define how recovered products or materials are measured or reflect an allowance of X% for contaminants that are comingled with recovered product (subject to a defensible rationale for the percentage selected).

8. Regarding product management in accordance with the pollution prevention hierarchy, how far should I go down the trail in establishing the end fate of recovered products?

This will be different for each EPR program and possibly for each product category. The ministry expects end fate to be reported as far down the processing chain as possible and continuous improvement in understanding end fate over time.

Consider the following principles for reporting on final disposition:

- Risk causing pollution or other environmental harm.
- Risk of processed material entering the waste stream.
- Volume of material in question.
- What final disposition is acceptable?
- Value as a commodity and risk of entering the waste stream.
- What would a member of the public want to know about the final disposition?

Also consider:

- Think inclusively: what are all of the possible fates?
- EPR programs may not be able to report accurately how much product goes to each end fate if product is co-mingled during processing. In such cases, data may need to be based on a weighted average of co-mingled product end fates.
- From a transparency perspective, it may also be important to report where product does not go.

Appendix E: Reference – 2010 Selected Testing Procedures

Although the ministry now requires non-financial assurance, the historical specified testing procedures may be of use to EPR programs and their assurance practitioner as a reference tool. Using only the testing procedures may not be sufficient for the assurance practitioner to be able to provide an opinion with a reasonable level of assurance.

Source: Ministry of Environment, 2010, Guiding Principles - Product Stewardship Agency Non-Financial Information Testing

A. Section 8(2)(b) – location of collection facilities and any changes in the number and location of collection facilities from the previous report

Testing Procedure #	Objective and Purpose	Testing Procedures
1.1	To obtain comfort over the existence and accuracy of the collection facilities reported in the annual report.	1. For the period under review, obtain a listing of all collection facilities from the program broken out by type (if applicable). 2. Compare total count of collection facilities from the listing with the annual report; investigate any discrepancies as applicable. 3. Randomly select a sample of collection facilities and obtain the business file for each. Review each file to determine that a registration form meets the following criteria: a. A registration form exists for the collection facility. b. The registration form lists contact information and location, which agrees with the detailed listing. c. The registration form is signed by the collection facility. 4. Using contact information on the facility listing provided in #1 above, phone each randomly selected collection facility to verify their existence and that they have an adequate understanding of the program.
1.2	To obtain comfort over the completeness, consistency, and validity of the number of collection facilities.	1. Obtain the historical data for the total number of collection facilities for the past 3 years as reported by the program in their annual reports. 2. Investigate any fluctuations greater than 5% to understand the reason for the fluctuation in the number of collection facilities.

B. Section 8 (2)(e) – total amounts of the producer's product sold and collected and, if applicable, the producer's recovery rate.

Testing Procedure #	Objective and Purpose	Testing Procedures
2.1	To ensure that there were no qualifications within the auditor's opinion over the schedule of product recovered.	1. Obtain the Auditor's Opinion over the Schedule of Product Recovered for the most recent fiscal year. 2. Review the opinion to ensure that there are no qualifications. 3. Check the mathematical accuracy of the calculated recovery rate (where applicable), as reported in the audited financial statements. 4. Compare calculated recovery rate to the recovery rate reported by the Program in their annual audited report. Note any discrepancies.
2.2	To ensure the accuracy and completeness of total product sold.	Note that the financial statements, in the case of most programs, include revenues from eco-fees which are tied to the total product sales. 1. Obtain the Financial Statement Auditor's Opinion for the most recent fiscal year. 2. Review the opinion to ensure that there are no qualifications. 3. Obtain a schedule of eco-fees by product type from the program (in total and by unit). 4. Compare the total eco-fees collected from the above schedule to the total reported in the program's financial statements (as opined by the financial statement auditor). 5. Recalculate the product sold by unit by dividing the total fees by product type by the per unit fee to arrive at total product sold for each unit. 6. Compare calculated total product sold to the amounts reported by the Program in their annual report. Note any discrepancies.

Testing Procedure #	Objective and Purpose	Testing Procedures
2.3	To obtain comfort over the completeness, accuracy, cut-off and validity of the total product recovered, test on a sample basis, and the collection of product recovered.	1. Obtain a listing of product shipments (for each product the program manages) from collection facilities for the period under review with the following details: a. The collection facility name/address. b. The date of collection from the facility. c. The consolidation site or processor to which the product was delivered. d. The date of delivery to the consolidation site or processor. e. The amount of product collected (in units and in weight, where applicable). 2. Compare the total weight of product collected from the detailed listing to the report total of product recovered from the Program's annual report. 3. Scan the detailed listing to ensure that there were no collections that were outside of the organization's fiscal year. 4. Randomly select shipments and obtain the supporting document (Bill of Lading or other support) to verify the amount of product shipped. 5. Verify that each of the supporting documents received has appropriate evidence of the total product shipped and weight of product received by the consolidation site supported by a scale ticket or like support, and signatures by the collection facility, consolidation site and hauler/transporter. 6. Confirm that the total product (in units/weight etc.) listed on the supporting document matches the total listed on the detailed listing.
2.4	To obtain comfort over the calculated recovery rate, by product type (where applicable).	1. Check the mathematical accuracy of the calculated recovery rate (where applicable) by dividing product recovered by product sold, as reported in the audited financial statements. 2. Compare calculated recovery rate to the recovery rate reported by the Program in their annual report. Note any discrepancies.