

Recycling Regulation Guide

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Extended Producer Responsibility Section Environmental Standards Branch Environmental Protection Division **References and Relationships:** This guidance is prepared in accordance with the Recycling Regulation [B.C. Reg. 449/2004], but in no way supplants, replaces, or amends any of the legal requirements of the Recycling Regulation, *Environmental Management Act*, or any other legislation.

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Purpose: The purpose of this document is to provide potential, new and existing producers with direction and assistance on meeting their obligations under the regulation.

The terms "part", "section" or "schedule" refer to the regulation, including a section or schedule number.

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Background

The Recycling Regulation (the "regulation") was enacted in 2004 replacing previous regulations dating back to 1971. The regulation, under the authority of the Environmental Management Act, provides a single results-based framework that provides producers with the flexibility to design extended producer responsibility (EPR) programs that work best for their businesses. The regulation includes core requirements applying to all producers and programs for each product category with an emphasis on environmental outcomes and program performance. The regulation requires product producers to establish targets and report on performance such as the amount of product sold versus collected, the number and distribution of collection facilities, and consistency with the pollution prevention hierarchy. The regulation may be expanded to include a new product category through the addition of a schedule for that product or material. The product categories are broad and can include a large number of varied products. The Electronic and Electrical Product Category, for example, includes such diverse items as computers, small appliances, power tools, cell phones, batteries and light bulbs.

Producers and consumers assume this responsibility within a framework characterized by:

Producer/User Responsibility

- Responsibility for the management of products is shifted from general taxpayers to producers and users.
- Responsibility is not shifted to other levels of government without consent.

Level Playing Field

- All brand-owners for a particular product category are subject to the same EPR responsibilities.
- All consumers have reasonable access to product collection facilities.

Results-based

- Programs focus on results and provide brand-owners with flexibility to determine the most costeffective means of achieving the desired outcomes with minimum government involvement.
- Product categories are clearly defined to simplify compliance and enforcement and ensure common understanding among program participants.
- Programs are tailored for individual products and encourage continued innovation by producers to minimize environmental impacts during all stages of the product lifecycle.

Transparency and Accountability

- Program development process is open and provides the opportunity for input to all stakeholders.
- Industry is accountable to both government and consumers for environmental outcomes and allocation of revenue from fees.

Part A. Roles and Responsibilities

What is Extended Producer Responsibility in British Columbia?

Extended producer responsibility (EPR) is a management system based on industry and consumers taking life-cycle responsibility for the products they produce and use. In British Columbia (B.C.), producers of regulated products are required to manage industry-led EPR programs that include collection and recycling. By regulating industry EPR the provincial government has moved away from government-managed and taxpayer-financed waste management programs.

Who is the producer?

The producer is typically the product manufacturer, distributor or brand-owner. The producer could also be an importer, broker or retailer who sells the product directly to a consumer or imports and uses the product in a commercial enterprise and includes catalogue or Internet transactions. The definition of a "producer" is provided in section 1 of the regulation.

What are a producer's basic obligations?

A producer must either have an approved extended producer responsibility plan (the "plan") under Part 2 of the regulation and comply with the plan or comply with Part 3, to use in a commercial enterprise, offer for sale, sell or distribute a regulated product in B.C. (Part 1, section 2). If the producer chooses to comply with Part 3, they must notify the director in writing of their intention to meet the requirements of this part by the deadlines specified in the related product schedule.

The regulation provides producers the option of appointing an agency to carry out their duties under an approved product plan. If a producer chooses to appoint an agency, the producer must notify the agency in writing before the agency begins to carry out the duties of the producer and specify the duties under Part 2 that the agency will perform on behalf of the producer.

At the request of the director, the agency must provide:

- 1. A list of the producers the agency represents.
- 2. A copy of the producer's appointment letter.

What is an agency?

A producer may appoint an agency to undertake their duties that include, but are not limited to, preparing a plan, implementing and managing a program and reporting on performance. Producers have found that creating a new agency or joining an existing agency can be a cost-effective and efficient way to meet their obligations under the regulation. The producers remain the obligated party regardless of the agency structure.

The agency must (refer to section 2):

- 1. Confirm the duties that the agency will perform on behalf of each producer and comply with the approved plan.
- 2. Notify the producer(s) of any alleged non-compliance, ticket, charge or conviction.

Who decides the design of the agency?

The governance structure, management of program costs, and operational systems of an agency are determined by the producers as members of the agency. It is recommended that producers consider multi-stakeholder representation on the board of directors of the agency, such as consumer groups, environmental non-government organizations (ENGOS), local governments, etc.

Consideration might be given to the establishment of an ongoing stakeholder advisory process, such as a standing stakeholder advisory committee to the board, as part of the accountability and transparency structure of the organization. Standing advisory committees are ways in which stakeholders with vested interests (e.g., commercial interests) could be included without having a decision-making role on the Board.

How do I fund the program?

EPR program funding is the producers' responsibility. Producers who choose to fund their EPR program with a visible fee charged to the consumer must submit an independently audited financial statement to the ministry as part of their annual report.

What is the role of the provincial government?

To ensure environment outcomes and regulatory requirements are met, the ministry reviews and approves plans and annual reports, provides assistance to producers in understanding the requirements of the regulation through documents such as this one, and conducts compliance and enforcement actions where necessary.

The ministry's framework for compliance and enforcement activities is provided in the document entitled, "Compliance Management Framework", January 2007. Ministry enforcement responses are guided by the "Compliance and Enforcement Policy and Procedure", January 2018.

The ministry prefers that producers in compliance with the regulation, or their agency, make the first effort in encouraging non-compliant producers to meet their regulatory obligations. After unsuccessful attempts, the producer(s) or their agency may refer the situation to the ministry for compliance action.

What is the role of local governments?

Local governments, possibly through a stakeholder advisory committee, may participate in or assist an EPR program by:

Providing input during the consultation phase on draft plans;

- Providing input on the operations of programs;
- Providing facilities or operational services as a service provider at a landfill or other local site for product collection or processing;
- Helping to inform the public that the program is available;
- Assisting the producer or agency with local land use and business licence issues relating to collection and processing facilities; and
- Imposing landfill disposal bans on regulated products.

What is the role of retailers?

A retailer may be a producer such as a brand-owner, as defined in the regulation, and have a duty to comply as a producer. Retailers of certain products may also have obligations as defined in an approved plan or in the regulation such as the beverage container deposit-refund system.

Even if not identified in the regulation, retailers are important stakeholders. Producers should ensure that retailers are correctly informed about their program and can inform consumers of:

- The existence of the program;
- The location of the nearest collection point for the product;
- Any deposits charged and refunds available in accordance with the regulation;
- Any fee collected as a part of the program; and
- The fact that producer fees are not government taxes.

Part B. Developing an Extended Producer Responsibility Plan

The regulation provides a framework for establishing industry-led programs. Schedules for specific product categories can be added to the regulation, each with unique requirements. The basic components required in a plan are specified in section 5 of the regulation. This portion of the guide provides examples, resources and tools a producer may use in developing a plan.

How do I prepare a plan?

Basic plan considerations are described in this guide. Producers should ensure that the plan addresses all elements outlined in section 5 of the regulation. Producers are encouraged to make their plan public and post it on the internet as a transparency provision prior to and during stakeholder consultations. The plan must be submitted to the ministry on or before the date set out in the applicable schedule of the regulation.

When do I submit/implement the plan?

Before a producer uses, distributes or sells a regulated product in B.C., the producer must have an approved plan, join an agency with an approved plan, or comply with Part 3 of the regulation.

For new product categories added to the regulation, transition provisions will be provided outlining the date by which plans must be submitted to the director and the program's implementation date.

Every five years the producer must review its approved plan and submit any amendments or advise the director in writing that the approved plan does not require changes as per section 6. The ministry's expectation is that producers will conduct stakeholder consultations based on a review of their previous five-year program performance and any new proposed program amendments.

What happens if my plan is not submitted by the required date?

If a producer has not submitted a plan or joined an existing agency with an approved plan by the required date for a new product category, the producer is immediately subject to and must comply with Part 3 in the regulation and must notify the director of their intent to do so. If the producer does not comply with Part 3, or is excluded from this option under the regulation, then the producer is in non-compliance with the regulation.

What must I include in a plan?

The minimum requirements for the content of a plan are outlined in section 5 of the regulation.

Headings for a plan should include:

- 1. Duty of producer
- 2. Appointment of an agency (if applicable)
- 3. Products covered under the plan
- 4. Stakeholder consultation
- 5. Collection system and consumer access
 - o Recovery rate
- 6. Consumer awareness
- 7. Management of environmental impacts
- 8. Management of program costs
- 9. Dispute resolution
- 10. Performance measurement summary table

Include details regarding program performance measurement and targets under each of the relevant topic headings and provide a performance measurement summary table. Consideration should be given to writing a clear and concise plan in under 15 pages.

How do I conduct a satisfactory consultation process?

Conducting a satisfactory consultation process is an essential part of developing and operating a program. As detailed in section 5(b) of the regulation, the producer must undertake satisfactory consultation with stakeholders prior to submitting the plan for approval and provide an opportunity for stakeholder input in the implementation and operation of the program.

A stakeholder is generally considered a person or organization whose interests will potentially be or are affected by the provisions of a proposed plan or the operation of an existing plan. Stakeholders include: consumers, retailers, service providers, brand-owners, producers, local governments, public interest groups, First Nations, or any other person or class of persons whose interests, in the opinion of the director, are or will be affected.

The ministry considers the following principles key to a satisfactory consultation process:

- Stakeholder involvement begins at the design of the consultation plan;
- The consultation process engages a cross-section of the stakeholder group, including:
 - Industry affected by or with an interest in the operation of the plan (retailers, service providers, brand-owners)
 - Local government representatives
 - Public interest groups
 - o Members of the public and/or consumers that will make use of the program

- Stakeholders are provided with effective and timely notice of consultation opportunities;
- Stakeholders can determine the implications to their interests by reading the wording in a document that is the subject of the consultation;
- Stakeholders are provided with sufficient time to respond to draft documents;
- The process for reviewing responses is open and responders are advised on how their responses were addressed; and
- Proceedings and results of activities that are part of the consultation process are properly documented and available for public review.

Some examples of consultation mechanisms include regional meetings, e-mail, an interactive website, and webinars. The ministry recommends:

- Web based posting of the draft plan for a minimum of 45 days; and
- Four public meetings held throughout the province giving stakeholders the opportunity to provide face to face feedback.

Alternative consultation options such as web-based seminars may be considered. Consult with the ministry to ensure options meet with the ministry's expectations.

A consultation summary document should be included as an appendix to the plan. This will outline what was heard and how the plan will or will not address these comments or issues, when and where the meetings (webinars) were hosted, the number of people that attended, and who they were (e.g., industry, public, local governments, NGO's, etc.).

What is an appropriate performance measurement framework for my program?

The regulatory framework of the regulation requires that producers provide measurable results that demonstrate their program's performance. Producers will need to define their program's desired objectives and outcomes and select performance measures that can be used to evaluate the achievement of these goals.

When designing a performance measurement framework with a core suite of performance indicators, consider researching and reviewing current measurement practices, consulting with representatives from other EPR programs and utilizing an external consultant and/or auditor. Performance information should be reviewed to ensure the right data is collected and reported in a way that can provide for third party verification of financial and certain non-financial information in annual reports and can be easily interpreted by the ministry and stakeholders.

The ministry considers that good performance indicators are:

- Representative of performance;
- Easily communicated and understood by stakeholders;
- Based on accessible, reliable and accurate data that is verifiable by a third party;

- Cost effective the costs and collection effort associated with selected performance measures should be proportionate to the informational value they provide; and
- Consistent over time and facilitate fair cross-program comparisons by using generally accepted measurement methodology.

Under each topic heading of the plan, where relevant, clearly identify key performance indicators and multi-year performance targets. Provide rationale describing how each indicator and corresponding target(s) will demonstrate the achievement of performance objectives (i.e., What is the performance indicator meant to gauge?); briefly explain what is measured and/or provide the calculation; and if applicable, acknowledge any limitations in using a particular indicator.

The total number of performance indicators chosen to track and report on should be adequate to demonstrate overall program performance. In some cases, relevant data needed to select indicators or set program targets may not be available during program implementation (e.g., estimates of what is available for collection, units sold in B.C., or consumer awareness levels). New programs may propose baseline or interim performance measures, requirements or targets and, if approved, report on theses metrics until core performance indicators and targets can be identified.

The director may require specific any performance measures, performance requirements or targets when approving the plan.

What might I consider when designing a collection system?

The regulation requires that the plan adequately provides for the producer to collect and pay the costs of recycling and managing products within the product category covered by the plan. The regulation also requires the plan to provide for reasonable and free consumer access to collection facilities throughout B.C.

The collection system design should consider and prioritize the degree of hazard presented by the product. For example, products that are considered hazardous should be handled differently from non-hazardous products such as beverage containers. The producer should refer to the British Columbia Hazardous Waste Regulation for hazardous waste products and all other applicable legislation.

Producers may partner across product categories to share existing collection systems. Service providers may be interested in developing new, or expanding existing, multi-material collection facilities. Producers should consult with local governments to determine the most effective collection system for specific areas.

How do I set a recovery rate?

Depending on the nature of the product, a producer must either report on the "recovery rate" of a product as defined in the regulation or a measure or combination of measures that provides an assessment of the program in terms of its success in collecting and appropriately managing the product. A recovery rate is a measurement of what is collected over what is sold. For consumable products, the

producer should develop a metric to estimate the amount of product available for collection and provide rationalization for product that is not collected. For products with a long lag time between purchase and collection by a program, appropriate targets will need to be set.

The general trend over a 3 to 5 year period should demonstrate continuous improvement in performance.

What should my consumer awareness program include?

An effective consumer awareness program will make consumers or the target audience aware of the program and its benefits, the location of collection facilities and how to manage products in a safe manner. Consideration should be given to developing program specific and collaborative communications tools, such as a web site, call-in service/province-wide hotline, participating in municipal calendars, brochures, posters, signage, and advertisements in languages suited to local demographics.

A producer or agency might consider conducting market research to identify baseline measures, target audiences and key messages relevant to its program. Some agencies regularly conduct studies or commission surveys to assist them in developing relevant messages and identifying suitable distribution channels for target audiences. Consideration might be given to utilizing the services of community-based organizations for assistance with designing and distributing information and key messages.

Producers need to engage with retailers and adequately inform them of their program including information to correctly answer questions regarding visible fees, the safe handling of products, and the location of collection facilities.

To evaluate the effectiveness of communications strategies, a performance measurement might include a benchmark and follow-up studies/surveys that demonstrate the level of consumer awareness about the program.

How can producers improve product life cycle management?

The regulation requires that the plan adequately provide for eliminating or reducing the environmental impacts of a product throughout the product's life cycle. This includes changes in product design (design for the environment); material use; recycled content; recyclability; resource, water and energy inputs; and program operations.

What is the pollution prevention hierarchy?

The plan must adequately provide for the management of the product in adherence to the order of preference in the pollution prevention hierarchy. This means that pollution prevention is not undertaken at one level unless or until all feasible opportunities for pollution prevention at a higher level have been undertaken. The plan should specify the performance targets for how much of a product, or which components of the product, will be managed at each level of the hierarchy.

Below are some questions related to the pollution prevention hierarchy that a producer may use as examples to consider and address in the plan and provide an update in each annual report:

- a) Reduce environmental impact of product production by eliminating toxic components or increasing energy and resource efficiency
 - Are there toxic materials used and released to the environment in the manufacturing process? Can these be eliminated by changing the manufacturing process or finding alternatives?
 - Are there any pollutants or chemicals used and released during the manufacturing process, during normal use of the product by consumers, or during the end-of-life management of the product? Can these be eliminated by changing the manufacturing process or finding alternatives?
 - Are there opportunities to increase the efficiency of material, energy and water use in the manufacturing process?
 - Are there opportunities to reduce the amount of greenhouse gas emissions during the manufacturing process?
 - Are there opportunities to increase the amount of renewable energy and recycled materials and decrease the amount of non-renewable energy and primary resources used in the manufacturing process?
- b) Redesign the product to improve reusability or recyclability
 - Can the product be designed so that it can be reused as is or easily upgraded by changing only necessary components or can it easily be disassembled so that its components can be profitably reused? Are there examples where such products are reusable?
- c) Eliminate or reduce the generation of unused portions of a product that is consumable
 - Can the product be packaged and marketed to reduce the amount of residual product/packaging that is generated?
 - Can product components that are not reusable or recyclable be eliminated or redesigned (e.g., use of flame retardant in plastics)?
- d) Re-use the product
 - Describe efforts made to ensure products are re-used.
- e) Recycle the product
 - If the product is not suitable for reuse, can it be easily and completely recycled? If not, can it be designed to be more easily recycled?
- f) Recover material or energy from the product
- g) Otherwise dispose of the waste in compliance with the Act
 - Identify the percentage of material that is disposed of and describe any efforts to process materials at a higher level in the hierarchy.

The order of the hierarchy is based on the principles of prevention and precaution and also on the following considerations:

- Actions taken at higher levels of the hierarchy can eliminate or reduce the environmental management costs of actions at lower levels. Redesigning a product to promote reuse or to reduce the recycling costs are examples of this.
- The environmental impacts of an activity at one level of the hierarchy are less than the
 environmental impacts of an activity at a lower level of the hierarchy. For example, reuse and,
 to a lesser degree recycling, reduce the environmental impact of extracting and processing
 primary resources, and use of recycled material reduces the energy cost of manufacturing new
 product.
- Adherence to the highest level of performance under the hierarchy can encourage innovation and investment to improve the capability and competitiveness of industry.

The application of the hierarchy should be assessed at the product-specific level for its reuse potential as early in the collection process as needed. For instance, "reuse" may apply to a whole product, such as glass beverage containers, or to a portion of the collected product, such as electronic components. The producer should include as many product management options in the assessment as possible.

To determine whether "all feasible opportunities for pollution prevention at a higher level have been undertaken" as stated in section 5 of the regulation, the producer should review opportunities for improvement and validate analysis.

The hierarchy is a general principle, and may not hold in all applications. Departures from the hierarchy may be justified, if based on a properly designed life cycle analysis.

What dispute resolution procedure should I use?

The producer is responsible for designing an appropriate dispute resolution procedure for disputes arising from the implementation and operation of the plan. This will be reviewed by stakeholders during the plan development process. While not specified in the regulation, the ministry encourages producers to establish a procedure for dealing with complaints or concerns on the part of consumers, local governments, retailers and non-commercial stakeholders.

Consideration should be given to the following principles:

- Access that appropriate options for preventing conflicts and resolving them at every stage of a
 dispute be available and easily accessible.
- Community participation that conflict resolution resources exist within various communities
 and that these communities, in appropriate circumstances, assume an active role in resolving
 disputes.
- Individual satisfaction that dispute resolution options maximize individual involvement and satisfaction with the process.
- Equality that dispute resolution processes be structured to balance power inequities between the parties.
- Quality of resolutions that settlements be fair and equitable and parties honour them.

- Efficiency that dispute resolution options
 - o Be well-matched to the dispute;
 - o Be cost-effective; and
 - o Minimize delay in reaching resolution.
- Awareness
 - o that the public be aware of alternative dispute resolution options; and
 - o that individuals understand how co-operative approaches to dispute resolution work.

Part C. Annual Reporting

Producers are required to submit an annual report to the director by July 1 each year and to post a copy of the report on their website. An agency may provide one report for each approved plan on behalf of its member producers. The regulation provides the minimum requirements for an annual report that documents how a producer has met all regulatory requirements, including those set by the director and commitments made in the plan. Along with the annual report, producers must submit reasonable assurance opinion from a third party on non-financial information and an independently audited financial statement if a fee or charge is applied at the point of sale to fund the program.

If the annual report is based on best management practices in the general industry or on industry trends, the agency should make reasonable efforts to indicate which or how many producers have adopted or endorsed those practices or trends.

What should be included in an annual report?

The following outlines requirements and recommendations for annual reports:

Program performance and recovery rate

Report on performance against targets committed to in the approved plan and any amendments or addendums.

Document the product's recovery rate information. This section of the report should include a description of the recovery rate of the product(s) compared to the target listed in the plan. Producers should report on the amount of product collected province-wide and in each regional district.

Educational materials and strategies

The report should detail both the educational materials and the various strategies that were used to meet program targets. Materials may include municipal calendars, advertisements in various media, web pages, social media, flyers, posters, and point-of-purchase messaging.

Collection facilities

Provide details on collection facility locations and any change in the number and location of these facilities since the previous report. In the interest of limiting the size of annual reports, the director may consider limiting the report to changes in the collection system, as long as the locations of all facilities are displayed on the program website. Producers should report on the number and location of their processing and disposal facilities as well as the services used in the management of the product.

Environmental impacts throughout the product life cycle and pollution prevention hierarchy

The report must include efforts taken by producers to reduce environmental impacts throughout the lifecycle of the product and increase reusability or recyclability. The report could include examples of

changes in: product design to increase reusability or recyclability; processing; packaging; green house gas emissions; and program operations. The producer may report on the performance of the financial mechanisms the agency is using to promote the reduction of the product's environmental impact. The producer may also report on the status of any studies the producer is undertaking to assist with measuring the environmental impact. Identifying successes by individual producers is encouraged.

Describe how the recovered product was managed in accordance with the pollution prevention hierarchy including the percentage of product managed at each level.

Financial statements

Producers are required to submit independently audited financial statements for deposits charged in the case of beverage containers, or for fees charged by the producer to the consumer that are shown on the consumer sales receipt. Submitting independently audited financial statements demonstrates the producer's commitment to financial transparency and accountability on the management of fees collected from the consumer.

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

The ministry requires third party verification of key information reported 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" revised from time to time.

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.

The objective of the assurance engagement is to assess whether the:

- 1. 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).
- 2. Description of how the recovered product was managed in accordance with the pollution prevention hierarchy under section 8(2)(d) is fairly stated in the annual report.
- 3. 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).
- 4. Performance for the year is fairly stated in the annual report in relation to targets in the approved plan (under sections 8(2)(b), (d) and (e) of the regulation in accordance with Section 8(2)(g).

Appendix A: Glossary

For the purposes of the Recycling Regulation Guideline, terms used in the document are described generally below:

"consumable product" refers to a product intended to be consumed during use.

"disposal" means the introduction of waste into the environment for the purpose of final burial, destruction or placement for future recovery, and does not include reuse or recycling.

"hazardous waste" has a prescribed meaning in the Environmental Management Act.

"recyclable material" means a product or substance that has been diverted from disposal, and satisfies at least one of the following criteria:

- (a) is organic material from residential, commercial or institutional sources and is capable of being composted, or is being composted, at a site;
- (b) is managed as a marketable commodity with an established market by the owner or operator of a site;
- (c) is being used in the manufacture of a new product that has an established market or is being processed as an intermediate stage of an existing manufacturing process;
- (d) has been identified as a recyclable material in a waste management plan;
- (e) is any other material prescribed by the Lieutenant Governor in Council, or the minister under section 22 [minister's regulations codes of practice].

"recycle" means a series of activities by which products are collected, sorted, processed and converted into raw materials and used in the production of new products. This excludes the use of these materials as a fuel substitute or for energy production.

"refuse" means discarded or abandoned materials, substances or objects.

"service provider" means a person or organization who is contracted or otherwise engaged to provide a service related to the management of the product and/or program

"stakeholder" means a person or organization whose interests will be or are affected by the provisions of a proposed plan or the operation of an existing plan, and includes a consumer, retailer, service provider, brand-owner, producer, local government, public interest group, First Nations, or any other person or class of persons whose interests, in the opinion of the director, are or will be affected.

Appendix B: Reporting on Program Performance

Note: Prior to using the information provided in Appendix B, please check with your ministry file lead as elements of this appendix may be outdated.				

Performance measurement guidance

Performance Categories and Program Performance Data source and/or notes Key Performance Indicators Multi-year Targets

- 1. The performance categories listed below reflect requirements in the Recycling Regulation, Approval of extended producer responsibility plan, part 2, section 5.
- 2. Various metrics may be used to measure program performance. Within each performance category, select relevant performance indicators from the examples given or propose alternatives. The examples given are intended to aid with the identification and selection of specific performance metrics, but are not intended to be prescriptive or exhaustive.

The program's core suite of indicators should clearly reflect the program operations and provide measurable results to demonstrate progress towards the specific program targets.

Good performance measures are:

In the plan, provide specific performance targets for 5 years. The plan must be reviewed every 5 years as per part 2, section 6 of the Regulation.

Program results: In the annual report to the director, provide a summary trend of actual results against program targets committed to in the plan. This gives the Ministry the capacity to validate program accomplishments or needed strategic change.

Report for a minimum of 3+ years to show trends over time.

Reference, footnote, or endnote in the plan and/or annual report: data sources, data limitations, supporting studies, surveys, pertinent information and, where relevant, state where estimates are used.

For example:

Demonstrate that the results of surveys are statistically valid, accurate and reliable.

GIS analysis should reference generally accepted procedures.

Representative of performance.

Easily communicated and understood by stakeholders.

Based on accessible, reliable and accurate data that is verifiable by a third party.

Cost effective: The costs and collection effort associated with selected performance measures should be proportionate to the informational value they provide.

Consistent over time and facilitate fair crossprogram comparisons by using generally accepted measurement methodology. Cite green house gas emissions calculator or data source/sets.

Identify supporting studies (e.g., lifespan data or estimates for the amount of product available for collection).

Reference demographic estimate sources. For Regional District demographic estimates use Ministry of Citizens' Services, B.C. Statistics Population Estimates, Regional Districts. Program performance: example performance summary table to include in the plan

Performance Category and			Targets		
Key Performance Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
Fill in the program's performance indicators within each category. Examples of performance indicators are given below.					

Recovery Rate 5 (1)(a)(i)

Depending on the nature of the product (e.g., consumables and durable goods with variable life spans) the program indicator will be:

Recovery rate: The amount of product collected divided by the amount of product generated, expressed as a percentage. For example: absolute product collected divided by the material available for collection (e.g., sales, average sales of x years, or estimated amount of product available for collection) presented as a percentage; or

Another recovery/diversion rate approved in the plan or established by the director. Examples include:

Per cent change in annual amount of product collected per capita.

Regional District per capita collection compared to the provincewide per capita collection average.

Supplemental information:

Reporting on relative findings of waste composition studies.

Accessibility: Reasonable and free consumer access to collection facilities 5(1)(c)(iii)

Per cent of provincial population within a certain proximity (e.g., driving time, kilometres) to a collection facility, separated into both urban and rural categories (e.g., GIS analysis).

Number of collection facilities per capita by Regional District compared to the provincial average, etc.

Participation rate: number of program participants (e.g., actively participating households) relative to the target community that the program serves (e.g., number of households in a municipality). Refer to the Environment Canada's Reporting Guidance Document for details.

Supplemental information may include:

Targets for collection events and mail back options.

Awareness: Consumer awareness of producers' program, location of collection facilities, and safe management of products 5(1)(c)(iv)

Per cent of population aware of how to return products through the program (e.g., the results from a province-wide consumer awareness, attitudes, and behaviours survey that establishes a measure of consumer awareness levels regarding the program).

Supplemental information may include:

Initiatives that identify and examine practises for handling or disposing of regulated product that are not collected through the program (e.g., research profile of discarders) and strategies to address findings.

Number of Regional District or municipal waste calendars and websites that the producer advertises their program in.

Per cent of products with return information on labelling /packaging.

Initiatives that provide information on the safe management of products.

Management of Program Costs 5(1)(c)(v)

Total program cost per unit collected in relation to the per unit fees that are charged separately and identified on the consumer receipt of sale.

Per cent of funds/expenses for the various functions of the program (e.g., collection, administration, post-collection activities, and awareness initiatives) in relation to recovery rate.

Stakeholder engagement and satisfaction 5(1)(b)

Results of a survey that establishes a measure of stakeholder engagement and satisfaction levels regarding the program (e.g., consumer convenience, facility surveys, etc).

Supplemental information may include:

Initiatives to solicit input and deal with concerns or complaints from consumers, retailers, local governments, and other produces and/or agencies.

Participation in community liaison committees, advisory panels, public meetings, etc.

Management of environmental impacts of the program 5(1)(v)

Greenhouse gas (GHG) emissions:

Percentage change per unit collected (e.g., weight, volume, or unit) in GHG emissions from program operations compared to previous year(s).

Amount of GHG emissions avoided through the reuse and recycling of the collected product/material compared to the emissions

produced if virgin materials were used in the production of new products.

Per cent of program's processors/contractors that are complying with the producer's processing standards (e.g., auditing processors to ensure contracts are fulfilled in a manner that minimizes environmental impacts).

Natural resource consumption and efficiency: amount of natural resources consumed by the program divided by the number of units collected. Refer to the Environment Canada's Reporting Guidance Document for details.

Supplemental information may include:

Initiatives to influence processing in a positive manner, by incenting higher material recovery.

Measure the extent to which the program prevents the release of toxic substances to the environment.

Product life cycle management 5(1)(vii) including the pollution prevention hierarchy 5(1)(viii)

Post collection fate - Per cent of total collected material and substances (e.g., aluminum, glass, lead, plastics, etc.) reused/refurbished, recycled, used for material or energy recovery or disposed (incinerated or land filled).

Per cent of product or materials introduced into the market that are reused and recycled.

Supplemental information includes initiatives on:

Design for environment.

Life Cycle Assessments.

References:

InterGroup Consultants Ltd. 2010. Research and Recommendations for Performance Measures for Regulated, Industry-led, End-of-life Electronics Recycling Programs in Canada. Commissioned by Atlantic Canada Electronics Stewardship (ACES), Electronics Stewardship Association of B.C. (ESABC), Ontario Electronic Stewardship (OES), and Saskatchewan Waste Electronic Equipment Program (SWEEP).

Stratos Inc. 2007. Performance Measurement and Reporting for Extended Producer Responsibility Programs: Reporting Guidance Document. Environment Canada.

Performance results: example performance summary table to be included in the annual report

Performance Measures	Results	Performance Targets
	Previous Year Previous Year Current Year	Current Year
List the program's performance indicators under each of the relevant performance categories below:	Fill in the appropriate year above (i.e., 2011, 2	2012, etc.).
Recovery Rate		
Accessibility		
Consumer awareness		
Management of Program Costs		
Stakeholder engagement and satisfaction		

Management of environmental impacts of the program

Product life cycle management including the pollution prevention hierarchy

illerarchy		
	% reused	
recycled	%	
recovered	%	
disposed	%	