



BRITISH COLUMBIA SMOKE AND CARBON MONOXIDE ALARM

EXTENDED PRODUCER RESPONSIBILITY PROGRAM PLAN



Submitted to:

Director, Extended Producer Responsibility
Environmental Standards Branch

BC Ministry of Environment and Parks

Submitted by:

Product Care Association of Canada

Due:

August 17, 2026



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GLOSSARY

The following is a glossary of terms and abbreviations used in this program plan.

Term	Definition
CO	Carbon monoxide
Contractor	A company that removes and installs Program Products
CWMA	Coast Waste Management Association
Director	The director of Extended Producer Responsibility within the Environmental Standards Branch of the Environmental Protection Division of the BC Ministry of Environment and Parks
EHF	Environmental handling fee
EPR	Extended producer responsibility
FNESS	First Nations Emergency Services Society
IZWTAG	Indigenous Zero Waste Technical Advisory Group
LVG	Large Volume Generator. An entity that is registered with Product Care to receive complimentary pick-up of large numbers of Program Products.
BCMoEP	British Columbia Ministry of Environment and Parks
PRO	Producer Responsibility Organization
Product Care	Product Care Association of Canada
Program	The Smoke and Carbon Monoxide Alarm Extended Producer Responsibility Program
Program Plan	The Smoke and Carbon Monoxide Alarm Extended Producer Responsibility Program Plan
Regulation	BC Recycling Regulation, BC Reg. 449/2004, as amended B.C. Reg. 170/2025 November 21, 2025
Program Product	Smoke and carbon monoxide alarm products captured under Schedule 3, section 2(1)(i), of the Electronic and Electrical product category of the BC Recycling Regulation and as defined under section 4 of this Program Plan.
NPP	Non-program products
SABC	Stewardship Agencies of British Columbia

1 INTRODUCTION

This amended Smoke and Carbon Monoxide Alarm Extended Producer Responsibility Program Plan ("Program Plan") is submitted to the British Columbia Ministry of Environment and Parks (BCMoEP) by Product Care Association of Canada ("Product Care"), a producer responsibility organization (PRO) on behalf of the Producers of smoke alarm and carbon monoxide ("CO") alarm products sold in British Columbia who are members of Product Care, pursuant to the requirements of the BC Recycling Regulation ("Regulation")¹.

The Regulation establishes requirements for extended producer responsibility ("EPR"), including the requirement for producers to operate approved stewardship programs under an EPR plan.

This Program Plan amends the original plan that was developed and implemented by Product Care, in collaboration with the Canadian Hardware and Housewares Manufacturers Association (currently known as the Centre for Consumer Products) and industry members in 2011 ("2011 Plan") and approved by the BCMoEP on August 17, 2011.

The Smoke and Carbon Monoxide Alarm Extended Producer Responsibility Program ("Program") commenced operation on October 1, 2011.

2 DUTY OF PRODUCER

The responsibilities of Producers are defined in the Regulation. For reference, Section 2(1) of the Regulation provides:

Except as otherwise specifically provided in this regulation, a producer must

(a) have an approved plan under Part 2 [Extended Producer Responsibility Plans] and comply with the approved plan, or

(b) comply with Part 3 [Extended Producer Responsibility Requirements If No Extended Producer Responsibility Plan]

with respect to a product in order to sell, offer for sale, distribute or use in a commercial enterprise the product in British Columbia

Section 1 of the Regulation defines a "Producer" as:

(i) a person who manufactures the product and sells, offers for sale, distributes or uses in a commercial enterprise the product in British Columbia under the manufacturer's own brand,

(ii)...a person who is not the manufacturer of the product but is the owner or licensee of a trademark under which a product is sold, distributed or used in a commercial enterprise in British Columbia, whether or not the trademark is registered,

(iii)...a person who imports the product into British Columbia for sale, distribution or use in a commercial enterprise.

The BC Recycling Regulation Guide makes further reference to the definition as "... importer, broker or retailer who sells the product directly to a consumer including sales generated online, by phone or by mail. A person that imports and uses the product in a commercial enterprise can also be a producer".²

¹ Recycling Regulation, B.C. Reg. 449/2004, as amended November 21, 2025, by B.C. Reg. 170/2025
https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004

² British Columbia Ministry of Environment and Parks, Recycling Regulation Guide, 2026.

3 APPOINTMENT OF A STEWARDSHIP AGENCY

The Program is developed, managed, and operated by Product Care, a not-for-profit industry association that manages extended producer responsibility programs across Canada on behalf of its members. Product Care was established as an agency to enable its members (i.e., Producers of Program Products) to meet their obligations under provincial extended producer responsibility legislation. Product Care is incorporated under the Canada Not-for-Profit Corporations Act³ and is governed by a board of directors from various membership classes, which are paint products, lighting and alarms products, retail, and other products. The elected board members are typically employees or representatives of Producers, retailers, or trade associations, involved in the various programs operated by Product Care. All board members are affiliated with companies or associations that have business interests in BC. A current list of Product Care's Board of Directors, including their corporate affiliation, membership class and province of residence is available on Product Care's website (productcare.org).

Product Care is incorporated under the *Canada Not-for-Profit Corporations Act* and is governed pursuant to its articles of incorporation and bylaws as well as its corporate governance policies. Any substantive change in legal status of Product Care, such as changing from not-for-profit status, would be consulted on and require membership approval, prior to making the change. The board maintains various standing committees, pursuant to the provisions of its bylaws. Any changes to Product Care's legal status will be referenced in the Program's annual report, if applicable.

According to section 2 of the Regulation, a Producer must either comply with Part 2 or Part 3 of the Regulation in order to sell, offer for sale, distribute or use designated products in a commercial enterprise in BC. Accordingly, each Producer that joins the Program appoints Product Care as its agent to carry out the duties of the Producer imposed by section 2(2) of the Regulation. In turn, the Program Plan confirms the duties that Product Care will perform on behalf of each Producer that is a member of the Program and in good standing. Product Care can provide confirmation of a company's membership upon request.

The Program is the only approved EPR program for smoke and CO alarms in the province. Product Care's members represent the vast majority of the market in British Columbia for designated products. Program membership is open to all Producers, including manufacturers, brand owners, distributors, first importers, retailers, and online sellers of obligated products in BC. Product Care is continuously engaged in identifying and recruiting Producers of Program Product in the BC market, and where necessary, notifying the BCMoEP for follow up and enforcement. A current list of Program members that have appointed Product Care as their agent, as well as other member-related information, is available on Product Care's website (productcare.org). In addition to member information on the website, Product Care engages with members on an ongoing basis through various channels, such as member meetings, member notifications and member support staff.

³ A copy of the Act is available at <https://laws.justice.gc.ca/eng/acts/c-7.75/>. Product Care's Letter of Continuance, bylaws and audited financial statements are available on Product Care's website <https://www.productcare.org/members/membership%20documents/>.

4 PRODUCTS COVERED UNDER THE EXTENDED PRODUCER RESPONSIBILITY PROGRAM PLAN

4.1 PROGRAM PRODUCTS

The Program covers smoke and carbon monoxide ("CO") alarm products captured under Schedule 3, section 2(1)(i), of the Electronic and Electrical product category of the Recycling Regulation. For reference, Schedule 3, section 2(1) of the BC Recycling Regulation provides that:

"2(1) The electronic and electrical product category consists of the following products:

- (i) electronic or electrical monitoring and control instruments, including smoke detectors, alarm systems, heating regulators, thermostats and appliances for measuring, weighing or adjusting;"*

The Program collects and manages smoke alarms, CO alarms, combination smoke and CO alarms, as well as orphan products (i.e., products that meet the definition of Program Product, but where the Producer is no longer in existence) ("Program Products").

Smoke Alarms

Smoke alarms, intended to provide occupant notification, are included in the Program. These products are generally certified to CAN/ULC-S531⁴, *Standard for Smoke Alarms*, as amended from time to time. The standard covers electrically operated single⁵ and multiple⁶ station smoke alarms intended for open area protection in indoor locations and portable smoke alarms used as "travel" alarms.

Smoke alarms detect smoke and issue a visible or audible signal to occupants to warn of the presence of smoke. As the smoke detection and alarm functions are combined in a single, stand-alone unit, the products are referred to collectively as "smoke alarms", although the term "smoke detector" is commonly used by the public.

Smoke alarms are powered by a battery, plug-in electrical connection and/or hardwired to a building's electrical system. They are typically housed in a disk-shaped plastic enclosure and attached to a ceiling or wall, although some models are designed to plug directly into an electrical outlet. Smoke alarms can be categorized according to the following five categories:

- Ionization smoke alarms
- Photoelectric smoke alarms
- Combination ionization and photoelectric smoke alarms
- Combination ionization smoke and CO alarms
- Combination photoelectric smoke and CO alarms

⁴ Underwriters Laboratory of Canada (ULC) Standards develops and publishes standards and specifications for specific product types, including those having a bearing on fire safety. Fire alarms installed in dwelling units must conform to the CAN/ULC-S531 standard.

⁵ The standard defines a "single station smoke alarm (e. g. ionization-type, photoelectric-type, smoke alarm with supplementary heat detection type, combination smoke type, multi-criteria type)... as a self-contained fire alarm device that consists of an assembly of electrical components including a smoke sensor/ chamber, alarm sounding appliance, and provision for connection to a power supply source, either by splice leads, terminals, a cord and plug arrangement or containing integral batteries to detect one or more products of combustion. The products of combustion may consist of visible as well as invisible smoke particles, gases, heat, radiant energy, and water vapor."

⁶ The standard states "multiple station units are single station smoke alarms that are: a) Interconnected so that actuation of one result in alarm sounding by all interconnected smoke alarms, or b) Smoke alarms that are connected to remote heat detectors or heat alarms."

Carbon Monoxide Alarms

Carbon monoxide ("CO") alarms intended to provide occupant notification are included in the Program. These products are generally certified to CAN/CSA 6.19, *Residential Carbon Monoxide Alarming Devices*, as amended from time to time. CO alarms detect dangerous levels of CO and issue a visible or audible signal to occupants to warn of the presence of CO. As the CO detector and alarm functions are combined in a single, stand-alone unit, the products are referred to collectively as "CO alarms", though the term "CO detector" is commonly used by the public. CO alarms are powered by a battery, plugged into an electrical receptacle and/or hardwired to a building's electrical system. They are typically housed in a rectangular or disc-shaped plastic enclosure and attached to a ceiling or wall.

Orphan Products

Orphan products are accepted by the Program if their function is the same as Program Products. Orphaned products may include Program Products that are no longer in production or Program Products that were sold and where the Producer no longer exists.

Batteries

Single-use and rechargeable batteries are a designated product under the BC Recycling Regulation. The Program is responsible for batteries that are sold in or packaged with Program Products. Some Program Products contain batteries that are managed under the battery-containing product category of the Recycling Regulation. Product Care will coordinate activities with producer responsibility organizations for managing batteries to support the safe and environmentally responsible management of these batteries.

4.2 NON-PROGRAM PRODUCTS

Non-Program Products (NPP) are products that are not defined as Program Products. These include products that perform only a smoke and/or carbon monoxide (CO) detection function (i.e., they do not provide occupant notification) and/or products that are linked to a building-wide alarm/monitoring system, such as smoke detectors covered by CAN/ULC-S588. These products are typically installed as components of integrated fire detection, monitoring, and alarm systems and are outside the scope of the Program.

NPP include, but are not limited to:

- Thermostats
- Alarm keypads
- Physically damaged smoke alarms⁷
- Building-wide smoke/CO detector units
- Smoke detectors without an alarm function

⁷ Some smoke alarms, specifically ionization smoke alarms, contain a small amount of radioactive material within a sealed internal source. While the potential risk associated with damaged ionization smoke alarms is low, the Program does not accept smoke alarms that are severely damaged or show signs of tampering as a precautionary measure to protect collection site personnel and to support the safe handling and transportation of collected products.

5 STAKEHOLDER CONSULTATION

To be completed after the consultation process and prior to submission to the BCMoEP.

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6 COLLECTION SYSTEM AND CONSUMER ACCESSIBILITY

6.1 PRODUCT SALES

British Columbia Market

The British Columbia smoke and carbon monoxide (CO) alarm market is concentrated among a small number of major Producers. Smoke and CO alarms are sold through a wide range of retail channels, including hardware stores, home improvement retailers, department stores, electrical distributors, online retailers, and other commercial suppliers, many of which operate nationally.

Smoke and CO alarms continue to evolve, with products incorporating features such as sealed long-life batteries, hardwired and wireless interconnection, combination smoke/CO detection, and smart connectivity. While product technologies continue to advance, these products maintain the primary function of detecting smoke and/or carbon monoxide and providing occupant notification.

In consideration of the small number of Producers selling these products into the BC market, the Program will continue not to publish aggregated sales data publicly, as done by other EPR programs, in order to protect confidential market share information. However, the Program will report year-over-year percentage changes where doing so does not compromise the confidentiality of producer sales information.

6.2 COLLECTION SYSTEM

The Program employs a system of permanent collection sites to provide reasonable accessibility to consumers.

There is no charge to drop off Program Products at any collection site or collection event, whether the products are currently or previously sold in BC. Product Care does not directly own or manage any collection sites, but contracts with existing collection sites. Collection sites include, but are not limited to:

- Local government facilities such as recycling centres, transfer stations or landfills
- Bottle depots
- Fire halls
- Non-profit organizations
- Private businesses
- Retailers of alarms
- Indigenous communities

Product Care supplements its collection network with one-day collection events, typically organized in partnership with municipalities, regional districts, Indigenous communities, or other local organizations. Program Products are often collected alongside other stewarded and non-stewarded products at these events. The number of events held each year varies based on requests from local governments and communities, as well as identified service gaps. Product Care provides collection containers and arranges for the transportation and responsible management of Program Products collected through these events.

A mail-back collection option is not offered under the Program. Canada Post classifies smoke alarms containing radioactive material as prohibited for mailing, making a mail-back collection system not an option for Program Products.

Direct Pick-Up Service for Commercial and Large Volume Generators

In addition to the collection network and collection events, the Program has developed a direct pickup service for qualified large volume generators (LVG) with minimum quantities of post-consumer Program Products, at no charge. Additional information on eligibility requirements, minimum quantities, and how to arrange a direct pickup is available on the Program website: [Free Smoke Alarm Recycling Pick-Up | Product Care](#).

6.3 ACCESSIBILITY

In accordance with section 5(1)(c)(iii) of the Regulation, Product Care commits to provide reasonable access to collection services throughout British Columbia.

In developing an accessibility standard, the Stewardship Agencies of British Columbia (SABC) engaged the Recycling Council of British Columbia (RCBC) to conduct a review of local government service standards for solid waste and responsible management services, as well as other public services within the province. The review concluded that there was no applicable benchmark for accessibility.

SABC subsequently developed an accessibility standard that incorporates population data and drive-time metrics, aligning with the regulatory requirement to provide reasonable access to collection services. The SABC Accessibility Standard is utilized to help define “reasonable access” to collection sites and represents the minimum level of service provided by the Program. The Standard is subject to change over time.

Reasonable access is currently defined as a 30-minute drive to a collection site in urban areas and a 45-minute drive to a collection site in rural areas with a population greater than 4,000. Urban communities are defined as cities, district municipalities and towns within the Metro Vancouver and Capital Regional Districts with a population of 4,000 or more and cities and district municipalities with a population of 30,000 or more in the remainder of the province. Rural communities are defined as cities, towns, resort municipalities and district municipalities with a population of between 4,000 and 29,999 outside the Metro Vancouver and Capital Regional Districts.

These criteria represent a minimum accessibility threshold for the Program. In practice, the Program's accessibility extends beyond these criteria through additional collection services provided to large volume generators (LVG) and collection events hosted in rural and remote communities.

Product Care remains committed to maintaining and expanding its collection network to increase service levels throughout British Columbia, with a particular focus on identifying and addressing underserved areas in accordance with the standard. Product Care will continue to monitor the accessibility of its collection network and assess the impacts of collection site closures or other service changes. Where accessibility gaps are identified, Product Care will work to restore reasonable access by securing replacement collection sites or implementing alternative collection services such as collection events.

Product Care has also been successful in establishing collection sites in several Indigenous communities across the province. In addition, Product Care partners with Indigenous communities through initiatives such as the Indigenous Zero Waste Technical Advisory Group (IZWTAG) and the First Nations Recycling Initiative (FNRI) to extend collection services to First Nation communities. These partnerships are supported through education, training, transportation and responsible management services.

Product Care has also engaged with the First Nations Emergency Services Society (FNESS) to explore opportunities to support its smoke and carbon monoxide alarm initiative, which provides replacement alarms to First Nations communities. As part of this engagement, Product Care shared information and resources regarding the Program and potential available collection services.

Product Care will continue to work through organizations such as IZWTAG, FNRI and FNESS, and engage with Indigenous communities that are interested and ready to explore collection opportunities and determine the most appropriate service options for their communities.

6.4 COLLECTIONS

This section outlines the performance indicators related to Program collections.

Manufacturers, standards-setting organizations, fire officials, and fire safety organizations recommend that smoke alarms and carbon monoxide alarms be replaced after ten years, as sensor performance may degrade over time due to aging, contamination, and component drift. Despite these requirements and recommendations, research indicates that many consumers are unaware of replacement timelines or do not replace their alarms as recommended. As a result, it is difficult to accurately predict the quantity of end-of-life alarms that may become available for collection through the Program.

Given these challenges, collection volumes are influenced by a variety of factors, including consumer awareness, replacement behaviours, housing turnover, renovation activities, and the implementation of fire safety initiatives and alarm replacement programs.

Collection metrics

Units Collected

Collections have generally increased since the launch of the Program. Although collection volumes have varied from year to year, the overall trend remains positive. This growth can be attributed to the accessibility of the Program's collection network, as well as ongoing consumer awareness and education activities outlined in Section 7.

The Program will continue to commit to reporting out on units collected in the annual report.

Capture Rate

A capture rate compares the amount of materials collected to the amount of material available to collect over the same time period. The limited number of producers for smoke and CO alarms sold in BC precludes reporting out on the Program's capture rate as a performance measure because it could jeopardize member confidentiality through the disclosure of sales data (as detailed in [section 6.1](#) above). In addition, estimating the number of smoke and CO alarms available to collect is based on numerous assumptions, including product lifespan and consumer behaviour, which survey data cited above shows is very difficult to accurately assess due to the lack of consistency in consumer behaviour, resulting in inaccurate or misleading measures. For these reasons, capture rate should not be used as a performance indicator for the Program.

Recovery Rate

A recovery rate compares the quantity of Program Products collected to the quantity sold over the same period. While recovery rates are commonly used as a stewardship performance metric, they are not considered an appropriate measure for the Program.

As described in [Section 6.1](#), the limited number of producers supplying smoke and carbon monoxide alarms in British Columbia means that reporting sales-based performance measures could compromise the confidentiality of producer sales information. In addition, smoke and CO alarms are durable products with long service lives, and the timing of replacement depends on factors such as product lifespan, renovations, home sales, and consumer behaviour. As a result, there is no direct relationship between the number of alarms sold in a given year and the number available for collection in that same year. Consequently, recovery rates may be misleading and should not be used as an indicator of Program performance.

Collection Targets

The Program has established a target to achieve an average annual increase of 1–3% in the quantity of Program Products collected over the term of this Plan. The target range recognizes the mature nature of the Program, historical collection trends, and the recognition that annual collection volumes are influenced by factors outside the Program's control, including the long service life of smoke and carbon monoxide alarms, evolving product technologies and reliability, changing replacement patterns, housing activity, and consumer behaviour. Accordingly, the Program considers an average annual increase of 1–3% to be a realistic, meaningful, and

achievable target that supports continuous improvement while recognizing the uncertainty associated with forecasting end-of-life product generation.

6.5 END OF LIFE MANAGEMENT

The objective of the Program is to minimize the improper disposal of Program Products by providing an effective collection program and ensuring that the collected materials are either responsibly managed or disposed of in an environmentally responsible manner. The Program encourages consumers to return their unwanted Program Products through the Program, rather than disposing of them improperly in the garbage or directly into the environment. The Program will manage collected Program Products using the highest available option on the pollution prevention hierarchy for each material as set out under section 5(3)(a)-(g) of the Regulation. The management option employed in each instance is influenced by the nature of the materials contained in the product, availability of appropriate processing technologies, financial sustainability of the Program and the availability of end markets for the various materials.

Product Care collaborates with other Producer Responsibility Organizations (PROs) that may occasionally receive smoke and CO alarms in their collection system. Where alarms are identified outside the Program, established arrangements support their transfer to the Program. Through these arrangements, Product Care ensures that misdirected alarms are managed appropriately, included in Program collection results, and funded through the Program's producer responsibility framework.

Specific commitments regarding the management of product materials are detailed in [section 9](#) (Management of Environmental Impacts) below.

Waste Composition Audits

To confirm that Program Products are being successfully diverted from landfill, the Program participates in waste composition audits undertaken by local governments in collaboration with other PROs. Not all local governments conduct waste audits and for those that do, the audits are not always conducted on an annual basis. Given the scope, complexities and logistics associated with conducting waste composition audits, it is necessary that audits are conducted in conjunction with local governments and SABC. Product Care reviews the scheduled audits with other SABC members who then collectively agree to participate in those that have the appropriate scope (i.e., audits of residential waste at landfills). Waste audits are coordinated by local governments and typically, are conducted by third party consultants engaged by local governments. Program commitments regarding waste composition audits are set out under [section 6.6](#) below.

6.6 COLLECTION SYSTEM & CONSUMER ACCESSIBILITY PERFORMANCE METRICS

Accessibility

As noted in [section 6.3](#) above, the Program conducted an accessibility study in 2019, which found that 99.6% of the provincial population had access to a permanent collection site according to the SABC Accessibility Standard. The Program's collection network has continued to grow since the study was completed. The Program will maintain a minimum accessibility standard of 95 per cent of the population having access to collection sites with free consumer drop off, per the SABC Accessibility Standard. The 95 per cent target allows for potential changes in the number of collection sites.

The Program will continue to report annually on the number and location by city of contracted collection sites providing free consumer drop off. The Program will also report annually on the number of contracted collection sites by regional district. Any changes in the number and location of contracted collection sites from the previous report will be reported. The Program will work with other PROs and/or local governments to coordinate and continue to add collection services where needed.

Collection Events

The Program will provide no charge pickup service for collection events that are coordinated with Product Care and coordinated and managed by local government or communities. Product Care will report annually on the date and location of collection events.

Program Product Collected

The Program will continue to report annually the total approximate units of Program Products collected and managed annually, as well as the total approximate units of Program Products collected annually per capita for the province and by regional district.⁸

Waste Composition Audits

The Program will report out annually on the number and location of waste composition audits that the program participated in each year as part of SABC and the number of units of Program Products identified, as well as the total units of single-use and rechargeable batteries under 5 kg found during each waste composition audit.

LVG Service

The Program will continue to promote participation in the Large Volume Generator ("LVG") program through targeted awareness and outreach activities and will report annually on the number of LVGs registered with the Program in its annual report.

First Nations

As noted previously, Product Care partners with Indigenous communities through initiatives such as the Indigenous Zero Waste Technical Advisory Group (IZWTAG), the First Nations Recycling Initiative (FNRI), and the First Nations Emergency Services Society (FNESS) to support and expand collection services. Product Care has engaged with FNESS to explore opportunities to support its smoke and carbon monoxide alarm initiative, which provides replacement alarms to First Nations communities, and has shared information regarding the Program and potential collection services. Product Care will continue to work with these organizations to identify and engage Indigenous communities that are interested and ready to implement responsible management services for smoke and carbon monoxide alarms and to determine the most appropriate service options for their communities.

The program will continue to report annually on First Nation communities that received collection services and the types of collection services provided.

7 CONSUMER AWARENESS

7.1 CONSUMER AWARENESS STRATEGY

Due to their function as a long-term use product, smoke and carbon monoxide alarms are classified as durable goods. As a result, education around alarms must be handled differently than "fast moving consumer goods" (FMCG), which have a short life span and quick turnaround between purchase and disposal. Understanding these differences in consumer use and behaviour is critical to the Program's awareness strategy.

Product Care allocates resources towards educating those responsible for purchasing and replacing their alarms that these products can, and should, be responsibly managed.

Product Care invests resources to maintain a comprehensive public education strategy/ program and to reach, if not exceed, the Program's consumer awareness target. Details of the tactics and results will be reported in each annual report, and are informed by three core pillars:

⁸ Units collected is determined by multiplying the number of collection containers collected in a reporting year by the average units per container determined by counting alarm units in each container sorted in the same reporting year.

- Identify the three Ps – people (who are using the product), place (how do we find these people) and promotion (how will we reach them)
- Identify critical timing – at which points in the product’s lifecycle are people most likely to engage with the product (aka when is our message relevant)
- Go a mile deep, not an inch wide – the Program focuses on relevant consumers at times that matter, rather than a blanket approach. Our message is highly targeted, highly relevant, and highly engaged with.

Messaging focuses on raising awareness:

- That alarms can and should be responsibly managed at designated collection sites
- The location and availability of collection sites and services
- How to manage products in a safe manner to ensure they work properly and are responsibly managed at end-of-life

The Program utilises the ‘key touchpoints’ approach to consumer education, where four key moments throughout the product’s lifecycle are identified and consumers are engaged and educated.

- **Point of Sale (POS)** – Product Care offers a suite of free tools for point-of-sale education, such as print materials, educational literature for retailer websites, and social media content for use on retailers’ channels. Product Care also works directly with producers and retailers to ensure they are aware of their responsibilities.
- **Active lifecycle** – Product Care educates consumers throughout the product lifecycle via proactive awareness and education activities. Product Care promotes the Program year-round and engages in a heavier awareness push in the fall to coincide with Fire Prevention Week and CO Awareness Week. Product Care leverages the relevant news cycle as well as the emotional (and therefore impactful) message that only working smoke/CO alarms save lives.
- **End of life** – Consumer inquiries (received by email and phone) seeking information about the Program, such as accepted products and collection site locations, are serviced by Product Care staff or through other services, such as RCBC’s hotline, website, and Recyclepedia app. Product Care also operates a user-friendly website (productcare.org), which hosts information about the Program, including accepted and non-accepted products, a collection site locator tool, and information on how to manage alarms at end-of-life. The website is regularly reviewed and updated to ensure information remains current and accurate. Product Care also employs a robust point of return education program, with free materials offered to collection partners, such as indoor and outdoor signage, educational brochures containing program information, and training for collection site staff to guide consumers at Point of Return (PoR).

Additionally, Product Care pursues third-party partnerships, which have grown year over year. Product Care intends to continue to strengthen and grow those relationships. The Program has collaborated with fire halls, schools, industry members, as well as had significant success with earned news media coverage around responsible managing end-of-life alarms. Product Care continues to build its highly engaged and reputable network of third-party relationships who validate and amplify the message about the importance of responsible managing alarms.

7.2 CONSUMER AWARENESS

The Program will maintain a minimum consumer awareness target of 65% throughout the term of this Plan. This target reflects the mature nature of the Program and recognizes that awareness levels for smoke and carbon monoxide alarms are inherently more variable than for many other PROs. Unlike products that are purchased, used, and replaced regularly, smoke and CO alarms are durable products that are typically purchased infrequently and may remain in service for many years. As a result, consumers have relatively few opportunities to engage with

Program messaging, and awareness levels are influenced by factors beyond the Program's control, including product replacement cycles, housing turnover, media coverage of fire safety, and consumer purchasing behaviour. A target of 65% represents a realistic and meaningful level of consumer awareness while supporting the Program's commitment to continuous improvement.

Consumer awareness will be measured through a biennial survey conducted by an independent third-party research firm. The most recent survey was completed in 2024, with the next survey scheduled for 2026 and every two years thereafter. The Program will report the survey methodology, the consumer awareness question, and the survey results in its annual reports.

8 MANAGEMENT OF PROGRAM COSTS

8.1 PROGRAM REVENUE AND ENVIRONMENTAL HANDLING FEES

The Program is funded by Environmental Handling Fees (EHF) paid to Product Care by its members based on the category and quantity of the designated products sold or supplied in BC. The EHF may appear at the time of retail sale as a separate charge or be integrated into the product price and is subject to sales taxes. The EHF is not a tax or a refundable deposit. Program revenues fund program operations, including but not limited to:

- Administration,
- Public education and communication,
- Collection, transportation, responsible management and responsible disposal of collected products, and
- Establishing and maintaining a reserve fund.

EHFs are set at a level which covers the costs of administration, program promotion/consumer education, collection, transportation and responsible management of designated products covered by the Program. Fees are set through a budgeting process and then reviewed and approved by Product Care's Board of Directors.

8.2 RESERVE FUND

The reserve fund is used to stabilize program funding in the case of unexpected collection volume increases, fluctuations in operating costs or reduced revenue due to economic or other factors. The reserve fund is also intended to cover the cost of winding up the Program in the event of regulatory changes. The reserve fund is continually monitored and is subject to a reserve policy determined by the Product Care Board of Directors.

8.3 AUDITED FINANCIAL STATEMENTS

As required by s. 8(2)(f)(ii) of the Regulation, the Program's audited financial statements are posted on the Product Care website as part of the Program annual report.

8.4 MANAGEMENT OF PROGRAM COSTS

Product Care enters into commercial agreements with collection sites, transporters, processors, and other service providers required to establish and operate the Program. These agreements establish the services to be provided and the associated compensation for the collection, transportation, processing, and management of Program Products. The Program also provides contracted collection sites with collection containers and other collection supplies, where applicable.

Product Care has developed and maintains a collection site compensation model consistent with the Ministry's guidance document, *Producers Paying the Cost of Managing Obligated Materials and Dispute Resolution (2024)*. The model, originally developed by BDO Canada LLP in 2019, considers the costs associated with collecting and

handling Program Products and is used by Product Care to support the establishment and periodic review of collection site compensation.

9 MANAGEMENT OF ENVIRONMENTAL IMPACTS

The Program seeks to divert Program Products from the waste stream and manage them according to the pollution prevention hierarchy as set out under section 5(3)(a)-(g) of the Regulation. The optimal management option depends on several considerations, including the material composition of the product, the availability of appropriate technology, qualified service providers, sufficient economies of scale, financial viability, the existence of end markets for commodities and global market conditions.

9.1 REDUCE AND REDESIGN

While the principal purpose of smoke and CO alarms is safety, the industry continues to take into account environmental considerations. The smoke and CO alarm industry maintains efforts to reduce the environmental impact of their products. Ionization foil stamping technology ensures less waste is produced and fewer precious metals are extracted in this stage of the manufacturing process. The amount of plastic and other materials in a typical smoke alarm continue to decrease, while the use of recyclable materials in product packaging increases. For example, some manufacturers now create alarms with 75 to 80 per cent recyclable materials. Finally, there is a continued trend in the industry away from 9 volt towards 3-volt alarms and to lithium batteries that last the life of the product, which reduce the number of batteries required for product operation.

Since August 1, 2009, ANSI/UL 2034 specifications require all CO alarms and combination smoke/CO alarms to have an end-of-life feature (e.g., audible chirp) alerting users that the alarm should be replaced. More recent breakthroughs in CO sensor technology and alarm design improvements allow most CO alarms and combination smoke and CO alarms to have a 10-year lifespan, similar to smoke alarms. Both smoke and CO alarms are now being sold with full lifetime batteries, avoiding the need to replace batteries.

Manufacturers regularly review the design of their products for functionality, sustainability and impact on the environment, ensuring compliance with environmental requirements. In addition, some manufacturers are looking into implementing best practice environmental standards from one region across all products sold to different countries, rather than just implementing the standards in the country that mandates them. An example of a best practice environmental standard is the RoHS (Restriction of Hazardous Substances) initiative in Europe, which restricts the use of certain hazardous materials found in electrical and electronic products.

The Program will continue to report annually on industry initiatives that reduce the environmental impact and improve the recyclability of their products as applicable, as made available to the Program and subject to the information representing trade secrets or being otherwise confidential in nature.

9.2 ELIMINATE OR REDUCE THE GENERATION OF UNUSED PORTIONS OF A PRODUCT THAT IS CONSUMABLE

This hierarchy level is not applicable to smoke and CO alarms because Program Products are durable safety devices, not consumable products that generate unused portions.

9.3 REUSE AND REPAIR

The reuse or repair of returned products or product components is not viable for safety reasons. New smoke and CO alarms must be certified for safety purposes, and it is critically important that they function properly in the case of an emergency.

9.4 RECYCLE, RECOVER AND DISPOSE

The Program will recycle as many components of returned products as possible, subject to economic conditions, such as fluctuations in demand and commodity prices. The typical components of Program Products are plastics, metal and in some cases radioactive cells. As reuse is not an option for the Program, and radioactive cells from ionization smoke alarms can only be sent to licensed facilities that handle and manage radioactive substances, the Program is already managing the components according to the highest possible level on the pollution prevention hierarchy.

The Program will continue to ensure all materials contained within smoke and CO alarms are managed according to the requirements of all federal and provincial/state regulations. The Program has a data tracking and management system to track and account for collection volumes and product management.

9.5 BATTERIES

The Program encourages consumers, where practical and safe to do so, to remove replaceable batteries from Program Products prior to returning them for end-of-life management. Where practical, batteries removed from Program Products are managed through the applicable battery PRO. Batteries are removed in one of two ways. The majority of batteries are removed at Product Care's own facility and temporarily stored until sufficient volumes have been amassed to send to the applicable battery PRO. Alternatively, embedded batteries or batteries that are otherwise difficult to remove at Product Care's own facility at the point of sorting, are extracted by Product Care's contracted processor(s) when the alarm unit is disassembled and the component materials are separated for management. All batteries are then sent to a downstream licensed processor for processing.

9.6 MANAGEMENT OF ENVIRONMENTAL IMPACTS - PERFORMANCE METRICS

The Program will track and report on the following information in its annual report:

- Current material management practices.
- Any significant developments, provided by its membership, that reduce the environmental impact and improve the recyclability of Program Products, as applicable.
- Approximate percentages of each material managed according to each management option in the pollution prevention hierarchy.

In addition, the Program commits to achieving the following targets:

- 100% of plastic from alarms is recycled.
- 100% of metal from alarms is recycled.
- 100% of radioactive cells from alarms collected by the Program are sent for long-term storage.
- Sending all batteries removed from Program Product to the applicable approved battery PRO for management.

10 DISPUTE RESOLUTION

The Program contracts with all suppliers and service providers by way of commercial agreements. Any disputes are resolved through normal commercial dispute resolution practices, including:

- Discussion between the service provider and Product Care manager.
- If necessary, escalation of discussion to Product Care senior staff.
- If necessary, escalation of discussion to Product Care board.
- If necessary, undertaking legal proceedings, including the option of mediation or binding arbitration, with the consent of the parties.

The first two procedures can be conducted with the consent of both parties, via conference call and/or video conferencing, including actual recordings of the meetings to be made available to both parties.

11 PERFORMANCE MEASUREMENT SUMMARY AND REPORTING COMMITMENTS

Given the complexities and nuances in managing the products covered in the Program, program performance should be assessed based on a suite of performance measures and not any one specific measure. Accordingly, this Program Plan sets out a number of performance metrics, which collectively, illustrate the Program's success.

These measures include accessibility targets to ensure British Columbians have reasonable and free access to the Program's contracted collection sites; consumer awareness targets to assess the effectiveness of the Program's promotion and education activities; collection targets to support the continuous improvement of Program Product recovery; and material management commitments that support the responsible management of Program materials. Together, these performance measures provide a comprehensive assessment of Program performance.

Table 1 below summarizes the targets and commitments of this Program Plan and indicates which non-financial elements of program performance are subject to audit by an independent third-party auditor in accordance with Guidance on Third Party Assurance for Non-Financial Information provided by the BCMoEP.

Unless otherwise indicated, all performance requirements, commitments and targets apply until the next Program Plan approval in accordance with section 6 of the Regulation. Following that period, Product Care will continue to report against all commitments and targets until they have been reassessed through a future plan review or approved plan amendment.

Table 1: Summary of Performance Measures and Reporting Commitments

Performance Metrics	Reporting Commitment / Target	Subject to Audit
Appointment of Stewardship Agency		
Product Care Structure, Governance and Board Information	Report any changes to Product Care's structure, governance, or board members, including affiliations, either in the annual report or through an updated posting on Product Care's website.	N
Collection System & Consumer Accessibility		
Percent of Population with Access to a Collection Site	Maintain a minimum accessibility standard of 95 per cent of the population having access to collection sites with free consumer drop off, per the Stewardship Agencies of BC's accessibility standard.	N
Number of Collection Sites	Report annually on the number and location of contracted collection sites providing free consumer drop off, along with their location by city. Any changes in the number and location of contracted collection sites from the previous report will be reported.	Y
Collection Network Changes	Report contracted collection sites opened and closed during the reporting year, including their name and location.	Y
Service Gaps	Report annually on service gaps as identified per the SABC accessibility standard.	N
Number of Collection Sites by Regional District	Report annually on the number of contracted collection sites by regional district	N
Collection Events	Provide no charge pickup service for collection events that are coordinated and managed by local government or communities.	N
	Report annually on the date and location of collection events.	
Large Volume Generators	Report annually on the number of LVGs registered with the program at the end of each year.	N
Indigenous Communities	Coordinate with First Nations such as IZWTAG, FNRI and FNESS to identify indigenous communities that are interested and ready to implement responsible management services for smoke and CO alarms.	N
	Seek partnerships with other indigenous organizations, such as First Nations Emergency Services Society, to have discussions with those indigenous communities who are ready, interested and in a position to discuss the possibility and best service options for their community.	
	Report annually on First Nation communities that received collection services and the types of collection services provided.	
Waste Composition Audits	Report annually on the number and location of waste composition audits that the Program participated in as part of SABC during the year.	N
	Report annually on the number of units of Program Products identified in each waste composition audit that the Program participated in during the year.	

Batteries	Report annually on total units of single use and rechargeable batteries under 5kg found in each waste composition audit that the Program participated in during the year.	N
Collection	Report annually on total approximate number of Program Products collected and managed annually.	Y
Collection Target	Achieve an average annual increase of 1–3% in the number of Program Products collected over the term of the Program Plan. Report annually on the total approximate number of Program Products collected and progress toward achieving the target.	Y
Collection per Capita	Report annually on total approximate number of Program Products collected annually per capita.	N
Regional District Collection	Report annually on total approximate units collected by Regional District.	N
Regional District Collection per Capita	Report annually on total approximate units collected per capita by Regional District.	N
Consumer Awareness		
Educational Strategies and Materials	Report annually on educational strategies and materials undertaken by the Program.	N
Consumer Awareness Survey	Awareness will be measured via a biennial survey conducted by an independent survey company, which is expected to run in 2026, 2028, and 2030 and every two years thereafter The Program will also report on the survey's methodology and the question used to survey consumer awareness.	N
Awareness	Achieve a minimum consumer awareness level of 65% for alarms and maintain or exceed this level in subsequent years.	N
Program Website Visits	Report annually on user visits to the Program's website.	N
RCBC Recyclepedia	Report annually on user visits to RCBC's Recyclepedia website and the number of hotline calls received on Program Products.	N
Large Volume Generators	Continue to promote participation among contractors through targeted awareness and outreach activities and will report annually on the number of LVGs registered with the Program in its annual report.	N
Management of Program Costs		
Audited Financial Statement	Report annually	Y
Management of Environmental Impacts		
Management of Environmental impacts	Report annually on current material management practices.	N
	Report annually on significant developments by program members that reduce environmental impacts and improve the recyclability of Program Products, where applicable.	
	Report annually on the approximate percentage of each material managed at each level of the pollution prevention hierarchy and provide rationale for any hierarchy levels that are not utilized.	

	Report annually on material processing pathways and end-fate information for Program Products and their sub-components, where available from processors or downstream service providers.	
Material Management	100% of plastic from alarms collected by the Program to be recycled. Report annually on the amount of plastic managed.	Y
	100% of metal from alarms collected by the Program to be recycled. Report annually on the amount of metal managed.	Y
	100% of radioactive cells from alarms collected by the Program are sent to Product Care's contracted processor(s) for long-term storage.	Y
	Send all batteries removed from Program Product to the applicable approved battery PRO for management.	Y
	Beginning in the calendar year following plan approval, Product Care will report annually on the final disposition of materials recovered from collected smoke alarms and CO alarms in accordance with the Pollution Prevention Hierarchy. The annual report will include all levels of the hierarchy, regardless of whether materials were managed at each level during the reporting period.	N

APPENDIX A: STAKEHOLDERS THAT PARTICIPATED IN PROGRAM PLAN CONSULTATIONS

To be completed after the consultation process and prior to submission to the BCMoEP.

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APPENDIX B: SUMMARY OF STAKEHOLDER FEEDBACK AND RESPONSES FROM PROGRAM PLAN CONSULTATIONS

To be completed after the consultation process and prior to submission to the BCMoEP.

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