

# Guide for Reporting to the Federal Plastics Registry

---

Phase 1



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

Canada 

## **Disclaimer**

Should any inconsistencies be found between this guide and the official Canada Gazette, Part I Notice with respect to reporting of plastic resins and certain plastic products for the Federal Plastics Registry for 2024, 2025 and 2026, published on April 20, 2024, the notice will prevail.

---

Cat. No.: En14-565/2024E-PDF

ISBN: 978-0-660-74927-3

EC24080

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada

Public Information Centre

Place Vincent Massey building

351 St-Joseph Boulevard

Gatineau, Quebec K1A 0H3

Toll free: 1-800-668-6767

Email: [enviroinfo@ec.gc.ca](mailto:enviroinfo@ec.gc.ca)

© His Majesty the King in Right of Canada, represented  
by the Minister of Environment and Climate Change, 2024

Aussi disponible en français

## Table of Contents

1.0 General Introduction.....	3
1.1 Explanation of Key Terms .....	4
1.1.1 Producer.....	4
1.1.2 Marketplace Seller .....	5
1.1.3 Marketplace Facilitator .....	5
1.1.4 Placed on the Market.....	5
1.1.5 Residential Waste Stream .....	6
2.0 Reporting Timelines .....	6
2.1 Phases of Reporting .....	6
2.2 Phase 1.....	6
3.0 Persons Obligated to Report .....	7
3.1 Who is Obligated to Report in Phase 1 .....	7
3.2 Who is Exempt from Reporting.....	7
3.2.1 De minimis provisions .....	7
3.2.2 Application of the de minimis provisions: examples that apply to Phase 1.....	8
3.3 Does This Notice Apply to Me? .....	8
3.4 Examples of Reporting Obligations .....	10
3.4.1 A Candy Store .....	11
3.4.2 A Wool Store .....	12
3.4.3 A Cotton Swab Importer.....	13
3.4.4. An Electronics Manufacturer .....	14
4.0 Submitting Reports.....	15
5.0 What Needs to be Reported .....	16
5.1 Plastics Included in the Notice .....	16
5.1.1 Resin Types.....	16
5.1.2 Resin Sources .....	17
5.1.3 Plastic Packaging .....	17
5.1.4 Plastic Products .....	18
5.1.5 Avoiding Duplication .....	18
5.2 Information Required.....	18
5.2.1 General Information.....	19
5.2.2 Plastics Information.....	19

5.3 Reasonably Accessible Information .....	22
5.4 Calculation Methods .....	23
6.0 Confidential Business Information .....	24
6.1 Claiming Confidentiality .....	24
6.2 Review and Disclosure of Confidential Information.....	24
6.3 Information Generally Not Expected to be Confidential.....	25
7.0 Frequently Asked Questions .....	25
Appendix A – Examples to Help Determine Reporting Obligations .....	28
Appendix B – Example Calculations – Packaging .....	33
Specific component identification method.....	33
Average bill of materials (ABOM) method .....	36
Fixed factor calculation method.....	38
Appendix C – Example Calculations – Single Use and Disposable Products .....	40
Specific component identification method.....	40
Average bill of materials (ABOM) method .....	41
Fixed factor calculation method.....	45
Appendix D – Example Calculations – Electronic and Electrical Equipment .....	47
Specific Component Identification Method .....	47
Average bill of materials (ABOM) method .....	49
Fixed factor calculation method.....	55

# 1.0 General Introduction

This guidance document provides additional information about the reporting requirements for the [Federal Plastics Registry](#) (FPR). The use of the guidance document is not mandatory, nor necessary for companies to fulfil their reporting obligations. It is designed to assist companies in understanding the FPR reporting requirements, and in determining if they are required to report to the FPR. It provides a general overview of the reporting requirements as well as additional guidance materials which include tools such as calculation methods and other aids.

The FPR collects information to support actions to prevent plastic pollution, which helps keep plastics in the economy and out of the environment. Companies (including resin manufacturers, producers of plastic products, and service providers) are required to provide the Minister of Environment and Climate Change Canada (the Minister) with information about the lifecycle of plastics in Canada. The federal government will collect information from key sectors in the Canadian economy and provide Canadians with meaningful and standardized data, from across the country, on the flow of plastic from production to its end-of-life management. The FPR will be a key source of information to inform and measure performance of actions to prevent plastic pollution and support the implementation and monitoring of various measures that are part of Canada's [zero plastic waste](#) agenda.

Information for the FPR will be collected and published in accordance with [subsection 46\(1\)](#) of the [Canadian Environmental Protection Act, 1999](#) (CEPA). The legal basis for the FPR is the [Notice with respect to reporting of plastic resins and certain plastic products for the Federal Plastics Registry for 2024, 2025 and 2026](#) published in the *Canada Gazette*, Part I on April 20, 2024 (hereafter referred to as the notice). The notice specifies that any person subject to it must provide certain information to the Minister by the reporting deadline for the specified calendar year.

Reporting to the FPR is mandatory. Persons who meet reporting requirements but fail to report, fail to report on time, or knowingly submit false or misleading information, face penalties as listed under section 272 of CEPA. Persons who did not meet the reporting criteria or were exempt from reporting in previous years should review their status each year to determine whether they are required to report.

This document provides guidance for responding to the [notice](#). **This version of the document is focused on Phase 1 reporting requirements – reports due in 2025 on 2024 data.** A subsequent version of the document will provide additional guidance for reporting years 2026 (2025 data) and 2027 (2026 data). This guide will help persons understand:

- If they are obligated to report to the FPR
- Who can report on their behalf
- What resins, plastic packaging and products are included
- What administrative information is required
- What information about these plastics is required
- The calculation methods used for reporting

Examples to support persons with their reporting and compliance obligations are in section 7.0 [Frequently Asked Questions \(FAQ\)](#) of this document.

Questions about the FPR and reporting requirements can be directed to [RFP-FPR@ec.gc.ca](mailto:RFP-FPR@ec.gc.ca)

## 1.1 Explanation of Key Terms

This section highlights and expands on some key terms used in the notice. A complete list of definitions is available in Schedule 2 of the notice.

### 1.1.1 Producer

A producer is:

- (a) A brand owner or intellectual property holder who resides in Canada
- (b) If the brand owner is not based in Canada, the producer is the first resident person in Canada to import or manufacture the product
- (c) If there is no resident manufacturer or importer, the producer is the first resident person in Canada who supplies the product to the consumer
- (d) If the producer is a retailer and that retailer is a marketplace seller, the marketplace facilitator that contracts with the marketplace seller shall be deemed to be the producer

The following examples demonstrate how this definition is applied in various scenarios:

- If a grocer places pasta, in plastic packaging, from a well-known Canadian brand on the market, the brand owner of the pasta would be defined as the producer and have reporting obligations to the FPR.
- If a grocer places their own brand of pasta, in plastic packaging, on the market, that grocer would be defined as the producer and have reporting obligations to the FPR.
- If the grocer places a brand of pasta, in plastic packaging, bought from an importer in Canada on the market, that importer would be defined as the producer and have reporting obligations to the FPR.
- If a grocer places a brand of pasta in plastic packaging, imported directly by the grocer, on the market, that grocer would be defined as the producer and would have reporting obligations to the FPR.
- If a grocer places their pasta in plastic packaging on the market via a marketplace facilitator, the grocer would be considered a marketplace seller. The marketplace facilitator would be defined as the producer and would have reporting obligations to the FPR.

The producer definition is closely aligned with existing provincial and territorial definitions of a producer in extended producer responsibility programs. This is intended to assist persons in determining whether they have an obligation to report to the FPR. If entities have an obligation as a producer at the provincial and territorial level, there is a strong chance they have an obligation to the FPR as well.

Where a municipality distributes plastic packaging or products on behalf of a brand holder, the municipality is not obligated to report this packaging or products to the FPR. That obligation falls to the brand holder.

Where a producer owns multiple brands that are placing plastic on the Canadian market, the producer can file one report for all their brands to the FPR; there is no obligation to file separate reports for each brand. However, a producer may choose to register each brand separately and file separate reports for each brand. Both approaches meet the requirements of the notice.

If a producer is a business that is a franchise, the franchisor is the obligated producer if that franchisor has franchisees that place packaging or products in any province or territory.

### 1.1.2 Marketplace Seller

A marketplace seller is a person that offers products for sale through a marketplace facilitator. Marketplace sellers are typically independent retailers or producers who utilize an online marketplace or platform managed by the facilitator to list, advertise, and sell their products. The marketplace seller is responsible for the initial creation and supply of the products, while the marketplace facilitator manages the sales process and fulfillment logistics.

For example, a person that contracts with an online electronics store to sell its products on that store's website is a marketplace seller. The online electronics store that sells that person's products on its website is a marketplace facilitator.

### 1.1.3 Marketplace Facilitator

A marketplace facilitator is a person that partners with a marketplace seller to help distribute the seller's products to the market. The marketplace facilitator owns or manages an online marketplace where the marketplace seller's products are listed or advertised for sale. The marketplace facilitator handles the communication of offers and acceptances between the seller and buyers. The marketplace facilitator is responsible for physically distributing the marketplace seller's products to consumers, including storage, preparation, and shipping.

For example, an online book retailer that sells and ships books on behalf of various independent book retailers acts as a marketplace facilitator while the independent book retailers are the marketplace sellers. The marketplace facilitator is responsible for reporting on the products and packaging that they place on the market on behalf of the marketplace sellers.

### 1.1.4 Placed on the Market

'Placed on the market' refers to the introduction of plastic products into the Canadian market, whether for payment or free of charge.

For example, candy manufactured and then wrapped in plastic packaging would be considered 'placed on the market' when it is available for purchase. A business that provides free samples of candy,

packaged in plastic at a festival is also placing that candy on the market. The act of making these plastic-packaged candies available for consumption constitutes placing the products on the market.

### 1.1.5 Residential Waste Stream

This refers to solid waste that usually accumulates in households. It includes waste that is collected at the curb, or that is taken by a member of the household at which the waste accumulates, to depots, transfer stations and disposal facilities. Phase 1 reporting to the FPR is on packaging and products that are assumed to be entering the residential waste stream only.

Packaging and products that are assumed to be entering the residential waste stream are those that accumulate in the household of individual consumers. The consumer is responsible for disposing of waste packaging, for example, that accumulates in their household. The consumer makes the decision to put it out for curbside collection, if curbside service is available (in many provinces this would be the blue box) or take it to a depot.

For example, when an individual consumer decides that a washing machine has reached the end of its useful life, it is the consumer's responsibility to discard the washing machine and the consumer's decision on how to discard it. Therefore, the washing machine is part of the residential waste stream.

## 2.0 Reporting Timelines

### 2.1 Phases of Reporting

The reporting requirements will be implemented gradually. The deadline to submit reports is September 29 of the year following the data collection year.

- For Phase 1 of reporting, the deadline to report is September 29, 2025, on 2024 data.

Persons obligated to report to the FPR must keep copies of all records for three years after the reporting deadline. This includes maintaining detailed records of all data and calculations to ensure accuracy and compliance.

### 2.2 Phase 1

Phase 1 of the Federal Plastics Registry requires reporting by **producers of plastic packaging, electronic and electrical equipment, and single-use or disposable products**. No other product categories are included in Phase 1 reporting. Reporting in this first year is required **only** on products that typically accumulate in households, i.e. will become part of the **residential waste stream**.

Table 1 summarizes the reporting requirements for Phase 1. Note that reporting is **not required** on products destined for the industrial, commercial, and institutional (ICI) waste stream, or for the construction, demolition, or renovation waste stream. Reporting on plastic waste generated on ICI



premises is also **not required** in Phase 1, nor is reporting required by those who import, manufacture, or place resins on the market.

*Table 1 – 2025 Reporting Obligations (2024 data)*

<b>CATEGORY</b> <b>(To be reported by September 29, 2025, with 2024 data)</b>	<b>Quantity of plastic (residential stream):</b> <b>a) imported</b> <b>b) manufactured</b> <b>c) placed on market in Canada</b>
Resins	<i>Reporting starts in 2026</i>
Plastic packaging, filled and unfilled	Yes
Electronic and Electrical Equipment	Yes
Single-use or disposable products	Yes
Agriculture and horticulture	<i>Reporting starts in 2026</i>
Tires	<i>Reporting starts in 2026</i>
Transportation	<i>Reporting starts in 2026</i>
Construction	<i>Reporting starts in 2026</i>
Fishing and aquaculture	<i>Reporting starts in 2026</i>
Apparel and textiles	<i>Reporting starts in 2026</i>

## 3.0 Persons Obligated to Report

### 3.1 Who is Obligated to Report in Phase 1

The following persons are obligated to report to the FPR by September 29, 2025, as laid out in Schedule 3 of the notice:

- 1) Producers of Plastic Products: A person that imports, manufactures, and places plastic on the market in Canada in the following product categories destined for the residential waste stream:
  - Plastic Packaging, filled and unfilled
  - Electronic and Electrical Equipment (EEE)
  - Single-use or Disposable Products

The term ‘person’ means a business, organization or other entity that has reporting obligations. In this guidance document, the term ‘person’ may be used interchangeably with the following terms: business, organization, company, and entity.

### 3.2 Who is Exempt from Reporting

#### 3.2.1 De minimis provisions

To help ensure that the FPR focuses on significant contributors to plastic waste while reducing administrative burden on smaller entities, certain persons are exempt from reporting requirements:

- Persons that manufacture, import, or place on the market less than 1000 kg of plastic products or packaging per calendar year are exempt from reporting requirements.

The exemption is based on the total combined weight of packaging and plastic manufactured, imported, and placed on the market. The de minimis is applied only to the quantity of plastic within a plastic item and is not determined based on the total weight of the item itself. De minimis calculations should only include the plastic in packaging and products that are specified in the categories and subcategories in the notice for that reporting year.

De minimis calculations and reporting must be based on national data. For example, if a person has operations in five provinces, the total number for determining a de minimis exemption will be derived by adding up the totals from operations in all five provinces, even if operations in the individual provinces do not exceed 1000 kg.

To determine if the de minimis exemption applies, persons are responsible for calculating the amount of plastic packaging and products they import, manufacture, and place on the market. These calculations must be performed annually.

Persons are advised to keep records related to their de minimis calculations and reconfirm their reporting obligations on an annual basis.

### 3.2.2 Application of the de minimis provisions: examples that apply to Phase 1

A person that manufactures 500 kg of plastic in products per year and imports 500 kg of plastic in products per year must report on all 1000 kg of plastic in products manufactured, imported, and placed on the market in Canada.

A person that imports 600 kg of plastic in products per year and imports 500 kg of plastic in packaging per year must report on all 1100 kg of plastic in products and packaging manufactured, imported, and placed on the market in Canada.

A person that manufactures and places 1200 kg of plastic in a product not included in a category or subcategory in the notice for that reporting year (for example, mattresses) on the market in Canada and places 300 kg of plastic in a product that is included in a category or subcategory in the notice for that reporting year (for example, packaging) on the market in Canada is exempt from reporting.

A person that manufactures 1200 kg of plastic in products that are included in a category or subcategory in the notice for that reporting year, places 400 kg of this plastic in products on the market in Canada, and exports 800 kg of this plastic in products in the same year must report on all plastic in products manufactured (i.e., reports on 1200kg) and reports on the plastic in products placed on the market in Canada (i.e., reports on 400 kg).

## 3.3 Does This Notice Apply to Me?

### Step 1 – The Applicable Categories and Subcategories

- 1.1 Are the packaging and products you manufacture, import, or place on the market included in the product categories of packaging, electronic and electrical equipment, or single-use or disposable products?
- If yes, continue to [Step 2](#).
  - If no, you are not an obligated reporter for Phase 1.

For the subsequent steps, answer the questions only for plastic products included in the categories of packaging, electronic and electrical equipment, or single-use or disposable products that are destined for the residential waste stream.

## Step 2 – The De Minimis Exemption

- 2.1 Do you manufacture and import a combined quantity that is greater than 1000 kg of plastic products and packaging in Canada per year?
- If yes, continue to [Step 3](#).
  - If no, continue to Step 2.2.
- 2.2 Do you place more than 1000 kg of plastic products and packaging on the market in Canada per year?
- If yes, continue to [Step 3](#).
  - If no, you are not an obligated reporter for Phase 1.

## Step 3 – Producers of Plastic Packaging and Products

- 3.1 Do you perform any of the following activities?
- 3.1.a. Manufacture of plastic products, including unfilled plastic packaging, in Canada.
- 3.1.b. Import of plastic products, including unfilled plastic packaging, into Canada.
- 3.1.c. Import of products packaged in plastic (i.e., filled plastic packaging) into Canada.
- If you perform any of the activities listed in 3.1.a, 3.1.b, or 3.1.c, continue to Step 3.1.1.

3.1.1. Do you perform this service for another brand owner that resides in Canada?

    - If yes, the resident brand owner is obligated to report to the FPR, but you may be obligated to report on other activities where you are the producer. Continue to Step 3.2.
    - If no, you are either the brand owner yourself or you are the first manufacturer or importer of products for which there is no brand owner resident in Canada. You are obligated to report to the FPR.
  - If you do not perform any of the activities listed in 3.1.a, 3.1.b, or 3.1.c, continue to Step 3.2.
- 3.2 Do you package products in Canada?
- If yes, continue to Step 3.2.1.

3.2.1. Do you perform this service for another brand owner that resides in Canada?

    - If yes, the resident brand owner is obligated to report to the FPR, but you may be obligated to report on other activities where you are the producer. Continue to Step 3.3.
    - If no, continue to Step 3.2.2.
  - If no, continue to Step 3.2.2.

3.2.2. Do you place these products on the market in Canada?

    - If yes, you are obligated to report to the FPR.

- If no, you are not obligated to report to the FPR as an entity who packages products, but you may be obligated to report on other activities where you are the producer. Continue to Step 3.3.
      - If no, continue to Step 3.3.
- 3.3 Do you place plastic products, including unfilled plastic packaging, or products packaged in plastic (i.e., filled plastic packaging) on the market in Canada as any of the following?
- 3.3.a. As a retailer *without* a [marketplace facilitator](#).
- 3.3.b. As a marketplace facilitator.
- If you answered yes to either 3.3.a or 3.3.b, continue to Step 3.3.1.
    - 3.3.1. Are you the brand owner for these products?
      - If yes, you are obligated to report to the FPR.
      - If no, continue to Step 3.3.2.
    - 3.3.2. Is there a brand owner in Canada for these products?
      - If yes, the resident brand owner is obligated to report to the FPR, but you may be obligated to report on other activities where you are the producer. Continue to Step 3.4.
      - If no, continue to Step 3.3.3.
    - 3.3.3. Do you import these products into Canada?
      - If yes, you are obligated to report to the FPR.
      - If no, the first importer or first manufacturer is obligated to report on these products, but you may be obligated to report on other activities where you are the producer. Continue to Step 3.4.
  - If you answered no to 3.3a and 3.3b, continue to Step 3.4.
- 3.4 Do you place plastic products, including unfilled plastic packaging, or products packaged in plastic (i.e., filled packaging) on the market in Canada as a [marketplace seller](#)?
- If yes, continue to Step 3.4.1.
    - 3.4.1. Are you the brand owner for these products?
      - If yes, you are obligated to report to the FPR.
      - If no, continue to Step 3.4.2.
    - 3.4.2. Is there a brand owner in Canada for these products?
      - If yes, the resident brand owner is obligated to report to the FPR. You are not an obligated reporter for Phase 1.
      - If no, the first importer or manufacturer or the marketplace facilitator is obligated to report to the FPR for these products. You are not an obligated reporter for Phase 1.
  - If no, you are not an obligated reporter for Phase 1.

## 3.4 Examples of Reporting Obligations

The examples below are intended to serve as a guide when evaluating a person’s reporting obligations for Phase 1 and are not exhaustive. Note that the examples assume that all resins are virgin fossil-based resins unless otherwise indicated. Additional examples can be found in the appendices to this document.

### 3.4.1 A Candy Store

ABC Candy Store is a retailer resident in Canada that places on the market imported candy products from outside Canada and domestic candy products made in-store. ABC Candy Store sells both packaged and bulk candy. They import some of their packaging and source the rest from a Canadian manufacturer. In all cases their packaging is made from low-density polyethylene resin (LDPE). They have reporting obligations for the following items (this list is not exhaustive), using the categories and subcategories as below:

- (a) Imported plastic bags offered in-store for bulk candy
  - The store must report on the bags as: Single-use or disposable products; foodservice ware; bags provided by a retailer and filled within the store with produce or bulk products; LDPE
- (b) Plastic on individually-wrapped imported candy
  - The store must report on the wrappers as: Packaging; filled; flexible; food contact; LDPE
- (c) Plastic on individually-wrapped candy made in-store
  - The store must report on the wrappers as: Packaging; filled; flexible; food contact; LDPE

N.B. The store does not have to report on the unfilled candy wrappers they purchase domestically for wrapping their candies. The person that manufactures those wrappers domestically is the obligated person for the unfilled packaging.

ABC Candy Store's report to the FPR for Phase 1 could look similar to the table below.

Table 2 – Sample data to be reported for ABC Candy Store

Phase 1 Reporting Requirements	Imported plastic bags offered in-store for bulk candy	Plastic packaging on individually-wrapped imported candy	Plastic packaging on individually-wrapped candy made in-store
<b>Category</b>	Single-use or disposable products	Packaging	Packaging
<b>Subcategory</b>	Foodservice ware: Bags provided by a retailer and filled within the store	Filled—Flexible, food contact material	Filled—Flexible, food contact material
<b>Resin Type</b>	2811221 – low-density polyethylene resins (LDPE)	2811221 – low-density polyethylene resins (LDPE)	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin	Virgin fossil-based resin
<b>Methods used to determine quantity</b>	Specific Component Identification Method	Specific Component Identification Method	Specific Component Identification Method
<b>Quantity of plastic (kg) imported into Canada</b>	1000 kg	400 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	0 kg	0 kg	250 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	ON: 600 kg; QC: 400 kg	ON: 250 kg; QC: 150 kg	ON: 150 kg; QC: 100 kg

### 3.4.2 A Wool Store

XYZ Wool Store imports and places on the market wool, yarn, and accessory products packaged in linear low-density polyethylene (LLDPE), which include knitting needles and balls and skeins of wool. They also import LDPE plastic packaging and prepare packaged sweater kits within the store and put them on the market. They have reporting obligations for the following items (this list is not exhaustive), using the categories and subcategories as below:

- (a) Plastic wrap around balls and skeins of wool and yarn
  - The store must report on the plastic wrap as: Packaging; filled; flexible; other packaging; LLDPE
- (b) Unfilled plastic bags (meant to be used for packaging the sweater kits)
  - The store must report on the unfilled plastic bags they import as: Packaging; unfilled; flexible; other packaging; LDPE
- (c) Filled plastic bags (containing the sweater kits)
  - The store must report on the plastic bags they fill with their sweater kits as: Packaging; filled; flexible; other packaging; LDPE

N.B. If the yarn contains plastic, the store must report on the plastic in the yarn in Phase 2.

XYZ Wool Store’s report to the FPR for Phase 1 could look similar to the table below.

*Table 3 – Sample data to be reported for XYZ Wool Store*

<b>Phase 1 Reporting Requirements</b>	<b>Plastic wrap around balls and skeins of wool and yarn</b>	<b>Unfilled plastic bags used for the sweater kits</b>	<b>Filled plastic bags used for the sweater kits</b>
<b>Category</b>	Packaging	Packaging	Packaging
<b>Subcategory</b>	Filled—Flexible, other packaging	Unfilled—Flexible, other packaging	Filled—Flexible, other packaging
<b>Resin Type</b>	2811222 – linear low-density polyethylene resins (LLDPE)	2811221 – low-density polyethylene resins (LDPE)	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin	Virgin fossil-based resin
<b>Methods used to determine quantity</b>	Specific Component Identification Method	Specific Component Identification Method	Specific Component Identification Method
<b>Quantity of plastic (kg) imported into Canada</b>	800 kg	250 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	0 kg	0 kg	250 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	BC: 800 kg	0 kg	BC: 250 kg

### 3.4.3 A Cotton Swab Importer

UVW Cotton Swabs Inc. imports large quantities of packaged cotton swab sticks made of polypropylene (PP) plastic and then re-packages them in high-density polyethylene (HDPE) packaging in smaller quantities and distributes them to companies across Canada. They also import all packaging materials used to repackage the swabs. They have reporting obligations for the following items (this list is not exhaustive), using the categories and subcategories as below:

- (a) Plastic in the imported cotton swab sticks
  - The business must report on the plastic in the swab sticks as: Single-use or disposable products; personal hygiene and care products; cotton swab sticks; PP
- (b) Un-filled packaging imported to be used to package the cotton swab sticks
  - The business must report on the unfilled packaging they import to repackage the swab sticks as: Packaging; unfilled; rigid; other packaging; HDPE
- (c) Filled packaging containing the cotton swab sticks placed on the market
  - The business must report on the packaging they fill with the swab sticks as: Packaging; filled; rigid; other packaging; HDPE

N.B. The business would also be required to report on the packaging used to import the bulk cotton swabs in Phase 2, as this is packaging destined for the Industrial, Commercial and Institutional waste stream.

UVW Cotton Swabs Inc.'s report to the FPR for Phase 1 could look similar to the table below.

*Table 4 – Sample data to be reported for UVW Cotton Swabs Inc.*

<b>Phase 1 Reporting Requirements</b>	<b>Plastic in the cotton swab sticks</b>	<b>Unfilled packaging used to package the sticks</b>	<b>Filled packaging used to package the sticks</b>
<b>Category</b>	Single-use or disposable products	Packaging	Packaging
<b>Subcategory</b>	Personal hygiene and care products: Cotton swab sticks	Unfilled—Rigid, other packaging	Filled—Rigid, other packaging
<b>Resin Type</b>	2811293 – polypropylene resins (PP)	2811223 – high-density polyethylene resins (HDPE)	2811223 – high-density polyethylene resins (HDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin	Virgin fossil-based resin
<b>Waste Stream</b>	Residential	Residential	Residential
<b>Methods used to determine quantity</b>	Average Bill of Materials Method	Average Bill of Materials Method	Average Bill of Materials Method
<b>Quantity of plastic (kg) imported into Canada</b>	10000 kg	5000 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	0 kg	0 kg	5000 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	AB: 6000 kg; SK: 2000 kg; MB: 2000 kg	0kg	AB: 3000 kg; SK: 1000 kg; MB: 1000 kg

### 3.4.4. An Electronics Manufacturer

LMN Electronics manufactures telecommunication devices in Canada and places them on the market in Canada and around the world. They use specialty packaging that they design and manufacture themselves using post-industrial recycled polystyrene (PS). They have reporting obligations for the following items, and they would report in Phase 1 using the categories and subcategories as below:

- (a) Plastic in the devices that are manufactured in Canada



- The business must report on the plastic in the devices they manufacture as: EEE; electronic or electrical information technology or telecommunication devices or equipment; acrylonitrile-butadiene-styrene (ABS)
- (b) Unfilled specialty packaging manufactured onsite
  - The business must report on all the unfilled packaging they manufacture using recycled resins as: Packaging; unfilled; rigid, other packaging; PS
- (c) Filled specialty plastic packaging used to package the devices
  - The business must report on the specialty packaging they fill with their devices that they will place on the market in Canada as: Packaging; filled; rigid; other packaging; PS

LMN Electronics’ report to the FPR for Phase 1 could look similar to the table below. Note that this is just a sample of a report (only one resin, ABS, in the electronic device is depicted), and that electronics contain many different types of resins that must be reported.

*Table 5 – Sample data to be reported for LMN Electronics.*

<b>Phase 1 Reporting Requirements</b>	<b>Plastic in the devices that are manufactured in Canada</b>	<b>Unfilled specialty packaging used to package the devices</b>	<b>Filled specialty packaging used to package the devices</b>
<b>Category</b>	Electronics and Electrical Equipment (EEE)	Packaging	Packaging
<b>Subcategory</b>	Electronic or electrical information technology or telecommunication devices or equipment	Unfilled—Rigid, other packaging	Filled—Rigid, other packaging
<b>Resin Type</b>	2811291 – acrylonitrile-butadiene-styrene resins (ABS)	2811231 – polystyrene resins (PS)	2811231 – polystyrene resins (PS)
<b>Resin Source</b>	Virgin fossil-based resin	Post-industrial recycled resin	Post-industrial recycled resin
<b>Waste Stream</b>	Residential	Residential	Residential
<b>Methods used to determine quantity</b>	Fixed-Factor Calculator Method	Specific Component Identification Method	Specific Component Identification Method
<b>Quantity of plastic (kg) imported into Canada</b>	0 kg	0 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	12000 kg	4000 kg	4000 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	ON: 3500 kg; QC: 2500 kg	0 kg	ON: 1200 kg; QC: 800 kg

## 4.0 Submitting Reports

Reports must be submitted using the online reporting portal, currently under development, designed to capture data for the FPR. Guidance and instructions on the use of the portal will be provided separately.

## 5.0 What Needs to be Reported

### 5.1 Plastics Included in the Notice

This section describes the different resin types, resin sources, plastic packaging, and plastic products that are covered by the notice. Different companies will have varying reporting obligations for Phase 1, requiring them to report a combination of single-use and disposable plastics, electronics and electrical equipment, and packaging based on their activities in the 2024 calendar year.

#### 5.1.1 Resin Types

Plastic resins are the raw materials used to create plastic products. The list of resin types for the FPR is derived from Statistics Canada's [\*Physical flow account for plastic material, 2020\*](#), which groups all the plastic resins that can be used as feedstock to produce plastic products into distinct resin groups or types. The resins are identified according to the [North American Product Classification System \(NAPCS\) Canada 2022 Version 1.0](#), which can be consulted for more detail.

Canadians might be most familiar with the American Society for Testing and Materials (ASTM) [International Resin Identification Coding System \(RIC\)](#), which are numbers that appear on plastic products to identify the plastic resin from which a product is made. The following table shows how these codes correspond.

The RIC numbers are included in this table for illustration purposes only. Reporting must be done using the NAPCS code corresponding to the applicable group of resins.

Table 6 – Resin Types by Code

ASTM RIC (1 - 7)	Full Resin Title	NAPCS code
#1: PET	Polyethylene terephthalate (PET) resins	2811211
#2: HDPE	High-density polyethylene (HDPE) resins	2811223
#3: PVC	Polyvinyl chloride (PVC) resins	2811292
#4: LDPE	Low-density polyethylene (LDPE) resins	2811221
#5: PP	Polypropylene (PP) resins	2811293
#6: PS	Polystyrene (PS) resins	2811231
#7: Other	Other thermoplastic polyester resins	2811219
#7: Other	Linear low-density polyethylene (LLDPE) resins	2811222
#7: Other	Other polyethylene resins	2811229
#7: Other	Acrylonitrile-butadiene-styrene (ABS) resins	2811291
#7: Other	Thermoplastic polyurethane (TPU) resins	2811294
#7: Other	Polyamide (PA, nylon) resins	2811295
#7: Other	All other thermoplastic resins, n.e.c*.	2811299
#7: Other	Bio-based thermoplastic resins	2811411
None	Phenolic (PF) resins	2811311
None	Urea formaldehyde (UF) resins	2811312
None	All other formaldehyde-based resins	2811319
None	Thermosetting unsaturated polyester (UPR) resins	2811391
None	Thermosetting polyurethane (PU) resins	2811392
None	Other thermosetting resins, n.e.c.	2811399
None	Bio-based thermoset resins	2811413

\*n.e.c. means “not elsewhere classified”. These categories should only be used for plastics that are not covered in the other resin groups (for example, polycarbonate).

### 5.1.2 Resin Sources

Resins can be derived from different sources. The FPR will collect data on products made with resins from four different sources. If the source of the resin you are using is unknown, it can be reported as virgin fossil-based resin to the FPR. The complete list is found in Schedule 1 of the notice.

### 5.1.3 Plastic Packaging

Packaging can be both a product placed on the market (e.g., waste bags sold in multiples or unfilled bags destined to be filled with a product) and a product that is filled with products from other product

categories (e.g., sealed plastic bags filled with pasta). The FPR requires reporting on both unfilled and filled packaging, rigid and flexible. The complete list is found in Schedule 1 of the notice.

#### 5.1.4 Plastic Products

In addition to packaging, two other product categories are subject to reporting in Phase 1. They are Electronic and Electrical Equipment (EEE) and Single-use or disposable products. The complete list of categories and subcategories for all phases of the FPR is detailed in Schedule 1, Parts 3 and 4 of the notice. This list should be referred to when confirming reporting obligations. Definitions are provided in Schedule 2 of the notice.

#### 5.1.5 Avoiding Duplication

Please note that a plastic product that falls under one category or subcategory does not need to be reported under another category or subcategory – the item should be captured in the most specific category possible. For example, clamshell containers used to package take-out food should be reported as foodservice ware in the single-use or disposable product category and not under the packaging category. If a product is referred to by name in the list of categories and subcategories, then it must be reported under that category. For example, agricultural containers should be reported as agricultural containers in the agriculture and horticulture category, and not under packaging. Stakeholders are encouraged to use their best judgement and closely review the definitions in the notice in selecting the most specific category and subcategory possible when reporting.

When a product is a component of another larger product that has its own reporting category, the component product should be included in the data reported by the producer of the larger product. For example, the plastics in electronics and electrical components that are installed in vehicles by the vehicle manufacturer should be reported by the vehicle manufacturer, in the transportation category in Phase 2. A car stereo installed in a vehicle and sold as part of that vehicle is therefore not subject to reporting in Phase 1. By contrast, a car stereo put on the market for after-market installation in a vehicle is subject to reporting in Phase 1.

The FPR also requires reporting on unfilled and filled packaging that is imported and manufactured in Canada. Please note that the reporting on unfilled and filled packaging is not considered double counting or duplication. They are separate data points and will be tracked separately in the FPR's online reporting system. Collecting data on unfilled and filled packaging allows the Government of Canada to track plastics along its lifecycle – starting from the raw resins that are converted to unfilled packaging to when that packaging is filled with goods and placed on the market in Canada.

## 5.2 Information Required

This section describes what information an obligated person must report.

## 5.2.1 General Information

For all information submitted to the FPR, persons obligated to report must provide a statement of certification or electronic certification that certifies all the information submitted to the notice is true, accurate, and complete or authorize another person to act on their behalf and so certify using the statement of certification or electronic certification.

Obligated persons must report the information required for the FPR each calendar year, using the online reporting system. When registering in the online reporting system, obligated persons will be required to provide all the administrative information as per Schedule 4 of the notice.

In the online reporting system, obligated persons may designate by name, with proof of designation:

- A producer responsibility organization (PRO), engaged to fulfil the obligated reporter's extended producer responsibility (EPR) or stewardship obligations, to make a report to the FPR on behalf of the obligated person
- Another person to make a report to the FPR, on behalf of the obligated person

## 5.2.2 Plastics Information

The FPR collects information on resins, plastic packaging, plastic products, and plastic when a product is made entirely of plastic and when it is a component of a multi-material product. When a product has many component materials, such as metal, wood, and plastic, it is only information on the plastic component that must be reported. If plastic comprises only a portion of the materials in a product or packaging, information is required only for the weight of the plastic in the product, not the total weight of the product. A good rule is to consider the "ingredients" of the product at manufacture. If one or more plastic resins is included in the "recipe" for the packaging or product, these plastic ingredients must be reported. The FPR is seeking a complete picture of plastics moving through the Canadian economy. A thin layer of plastic resin in a multi-laminate product, multiplied by the large number of such products in the economy, can result in a significant weight of resin that must be a part of the dataset.

### 5.2.2.1 Information on Plastic Packaging

In Phase 1, reporting is required on all packaging, filled or unfilled, regardless of its contents. Even if the packaging is meant for categories of products that are not required to report in Phase 1, that packaging must be reported. For example, a clear plastic bag used to wrap a T-shirt must be reported in Phase 1. The plastic in the T-shirt itself is to be reported in Phase 2. Packaging on products not listed in the product categories in Schedule 1, Part 4 of the notice must also be reported on. The packaging for wooden garden furniture sold wrapped in plastic must be reported on in Phase 1, even though the wooden furniture itself is not eligible for reporting under the FPR.

Packaging can be classified as primary, secondary, and tertiary packaging:

- Primary packaging is packaging that comes into direct contact with the goods it contains, such as candies that are individually wrapped.

- Secondary packaging is designed to contain primary packaging. If individually wrapped candies are put on the market in bags of 20, the secondary packaging is the material used to bag the 20 candies together.
- Tertiary packaging is material used to contain one or more articles or packaged, or bulk material, for transport, handling, or distribution. If bags of candy are sold in larger bags containing 50 smaller bags of 20 individually wrapped candies, and the grocery store opens these larger bags before displaying the smaller bags for sale, the larger bags are tertiary packaging. If the larger bags are shipped on pallets wrapped with pallet wrap, the pallet wrap is also tertiary packaging.

#### *5.2.2.1.1 Unfilled packaging*

Unfilled packaging is packaging that has not yet been filled. For example, a person that places rolls of cellophane on the market that are used in floristry to wrap flowers must report under the unfilled packaging category. A person that manufactures and sells flexible plastic packaging to a pasta manufacturer must report under the unfilled packaging category. A person that imports empty packaging to fill for both their own brand and private label would report on their own brands unfilled packaging.

#### *5.2.2.1.2 Filled Packaging*

Filled packaging is packaging filled with goods and placed on the market in this form.

For example, a person placing bouquets of flowers wrapped in cellophane on the market must report on that filled packaging. A pasta brand owner or manufacturer must report under the filled packaging category for the packaging used to place their pasta on the market. A person that imports empty packaging and then fills it for both their own brand and a private label would report on all filled packaging placed on the market for their own brand (for which they are the producer).

A person that manufactures, imports, or places plastic packaging on the market must report the following information in Phase 1:

*Table 7 – Information Requirements for Producers of Plastic Packaging*

<b>Reporter</b>	<b>Item</b>	<b>Reporting Requirements</b>	<b>Information to be Reported</b>
A producer of plastic packaging	Packaging destined for the residential waste stream	Total quantity, in kilograms, of all plastic packaging that is: (a) manufactured in Canada, if any, (b) imported into Canada, if any, and (c) placed on the market in Canada and in each province and territory	Resin type(s)
			Resin source(s)
			Category of packaging
			Subcategory of packaging
			Waste stream
			Quantity of each resin in packaging manufactured in Canada (kg)
			Quantity of each resin in packaging imported into Canada (kg)
			Quantity of each resin in packaging placed on the market in Canada (kg)
			Methods used to determine quantities

*5.2.2.1.3 Methods Used to Determine Quantities*

Methods of calculation must be identified and described when submitting information on the weight of resins. Quantities can be calculated using methods developed or sourced by the producer, or the producer can select a method from the three outlined in this document – the specific component identification method, the average bill of materials method, or the fixed factor calculation method. More information on the three methods can be found in section 5.4 [Calculation Methods](#) of this document. Examples for each method are detailed in [Appendix B – Example Calculations - Packaging](#).

**5.2.2.2 Information on Plastic Products**

In Phase 1, reporting is required on two product categories and their subcategories: Electronic and Electrical Equipment and Single-use and Disposable Products. For Phase 1, a person that manufactures, imports, or places plastic products from these two categories on the market must report the following information:

*Table 8 – Information Requirements for Producers of Plastic Products*

Reporter	Item	Reporting Requirements	Information to be Reported
A producer of plastic products	Plastic products destined for the residential waste stream	Total quantity, in kilograms, of all plastic products that are: (d) manufactured in Canada, if any, (e) imported into Canada, if any, and (f) placed on the market in Canada and in each province and territory	Resin type(s)
			Resin source(s)
			Category of plastic products
			Subcategory of plastic products
			Waste stream
			Quantity of each resin in plastic products manufactured in Canada (kg)
			Quantity of each resin in plastic products imported into Canada (kg)
			Quantity of each resin in plastic products placed on the market in Canada (kg)
			Methods used to determine quantities

*5.2.2.2.1 Methods Used to Determine Quantities*

Methods of calculation must be identified and described when submitting information on the weight of resins in products. Quantities can be calculated using methods developed or sourced by the producer, or the producer can select a method from the three outlined in this document – the specific component identification method, the average bill of materials method, or the fixed factor calculation method. More information on the three methods can be found in section 5.4 [Calculation Methods](#) of this document. Examples for each calculation method are detailed, for each category, in the appendices.

**5.3 Reasonably Accessible Information**

If a person is subject to the notice, they are required to provide information that they possess or to which they may be reasonably expected to have access. In many cases, producers are being asked for the identities and quantities of plastic resins in packaging or products for the first time. The novelty of the reporting requirements of the FPR does not constitute a sufficient reason for not providing the information to the FPR.

Phase 1 reporting may necessitate contacting those further upstream in the supply chain. If more information is needed on the composition of a product, obligated reporters are expected to contact their suppliers. A Government of Canada letter for communicating with foreign suppliers is available for download [here](#). The letter is designed to help entities obtain information from their suppliers to complete their submissions to the FPR.



An entity's supply chain may be able to provide information of which an entity may not be aware. Frequently this information is not available on a supplier's website nor on a specification sheet but is known to the supplier.

Obligated reporters are encouraged to make reasonable efforts to obtain information through their supply chain. Working and communicating with the supply chain to obtain the required information and meet the reporting obligations will help ensure that the Government of Canada has the most accurate information about plastic usage, waste, value recovery, and pollution across Canada.

It is recommended that obligated reporters inform their suppliers and any others further up the supply chain of the requirement to report to the FPR as soon as possible to ensure the reporting deadline is met.

## 5.4 Calculation Methods

When submitting data to the FPR, those reporting must identify the calculation methods used to determine the quantities they are submitting. The notice does not specify a particular calculation method. Persons obligated to report can use the method of their choice, on the understanding that some methods may be easier to use but provide less accurate information, and vice versa. Example calculations are included in the appendices to this document.

Three possible methods are the specific component identification method, the average bill of materials method, and the fixed-factor calculation method. Alternative methods may include, but are not limited to, calculation methods that have been developed to meet the reporting requirements for existing provincial reporting programs. For example, a blue box calculation method developed to calculate quantities reported to Ontario's individual producer responsibility program could be used to calculate quantities reported to the FPR for other provinces. Calculation methods specific to the Federal Plastics Registry can be developed by industry members or associations in consultation with ECCC. ECCC is not responsible for providing fixed factors to cover all cases.

Persons obligated to report to the FPR may choose one or more of these methods, or they may opt to use a different method when calculating the quantities they report. Regardless of which method is used, the calculation method must be identified in all submissions to the FPR. Any assumptions used in calculations or challenges encountered during the process should be identified.

Per the notice, data must be reported to the FPR in kilograms. If data is collected in other units, it must be converted to kilograms for reporting to the FPR. Tables containing common unit conversions are readily available on several Government of Canada websites, including [Energy conversion tables - Canada.ca \(cer-rec.gc.ca\)](https://www150.cer-rec.gc.ca) and [Field inspection manual—volumetric measuring devices—Appendix I \(canada.ca\)](https://www150.cer-rec.gc.ca). There is no requirement to provide more precise data (for example, in grams), so persons obligated to report are encouraged to round and report their data in whole numbers.

## 6.0 Confidential Business Information

The notice that establishes the Federal Plastics Registry is issued under section 46 of CEPA. Confidentiality is addressed in sections 51 to 53 of CEPA. The FPR will conform to the [Directive on Open Government](#) and the [Directive on Service and Digital](#) to provide data that can easily be accessed by Canadians to support transparency, accountability, citizen engagement, and socio-economic benefits while maintaining confidentiality and security of information. Although data collected for the FPR should be open and accessible, it should not compromise confidential information provided by obligated persons. The Government of Canada values the privacy and confidentiality of all data collected. Personal information created, held, or collected by ECCC is protected under the [Privacy Act](#).

Entities that submit data to the FPR will be able to request confidentiality in the online reporting platform and will be required to provide a rationale via the online reporting platform as to why data is considered confidential.

### 6.1 Claiming Confidentiality

Claims for confidentiality should only be made when the submitted information is truly confidential. To reduce the scope of confidentiality requests, entities requesting confidentiality for submitted information would be required to provide a rationale regarding the nature of the confidentiality, for example:

- The information constitutes a trade secret
- The disclosure of the information would likely cause material financial loss to, or prejudice to the competitive position of, the person providing the information or on whose behalf it is provided; and
- The disclosure of the information would likely interfere with contractual or other negotiations being conducted by the person providing the information or on whose behalf it is provided

### 6.2 Review and Disclosure of Confidential Information

There may be instances where the Government of Canada would want to make certain confidential information public. This includes, but is not limited to, situations where making the information public would serve to protect the environment or when it is necessary for the purposes of the administration or enforcement of CEPA.

In these situations, a review, as per section 53 of CEPA would be done to determine whether certain information claimed as confidential could be released to promote transparency or because it is in the best interest of Canadians. A reasonable attempt will be made to contact the person, who will be asked to provide additional information to substantiate their original claim, which may include:

- Description of commercial interest
- Description of potential competitive or financial harm
- Explanation of the measure taken to ensure confidentiality

## 6.3 Information Generally Not Expected to be Confidential

Certain types of information are generally not expected to be confidential. Release of this information is seen as desirable to promote transparency, for example:

- Province or territory in which plastic products were placed on the market/collected for diversion
- Category of plastic products
- Subcategory of plastic products
- Whether plastics belong to residential or ICI streams

## 7.0 Frequently Asked Questions

It is not possible for this guidance document to provide answers to questions covering every eventuality. Further examples are provided in the appendices. Reporting obligations are stipulated in the notice, which is the final authority.

### (1) What is the purpose of the Federal Plastics Registry?

The FPR is an inventory of data on plastics in Canada. It is a [tool](#) to monitor and track plastic. It serves to improve our knowledge of plastic usage, waste, value recovery, and pollution across Canada and provide useful information for stakeholders, government, and Canadians. The FPR is a key source of information that the government can use to support the implementation and monitoring of different measures that are part of the Canadian Council of Ministers of the Environment (CCME) Canada-wide Strategy on Zero Plastic Waste.

### (2) What plastics are included in the Federal Plastics Registry?

The notice [applies](#) to plastic resins, plastic packaging, and plastic products included in the notice that are manufactured in Canada, imported into Canada, or placed on the market in Canada.

### (3) Who must submit reports to the Federal Plastics Registry in Phase 1?

[Anyone](#) who manufactures, imports, and places plastic resins on the market in Canada in packaging, electronic and electrical equipment, and single-use or disposable products.

### (4) Does this reporting replace any of the provincial reporting that is required for packaging materials?

No. The FPR does not replace any provincial reports that producers are required to submit. Currently, provincial reporting requirements are inconsistent across Canada, using different definitions, calculations, and measurements of success. Furthermore, provinces do not share their EPR data with the federal government. Provincial reporting supports extended producer responsibility programs, allowing provinces and PROs to calculate EPR fees. The FPR harmonizes data and makes it openly accessible in one place.

(5) Are producers required to report on products that they export?

Producers are not required to report on plastic resins or plastic products that they export. Producers are required to report on plastic resins and plastic products that are manufactured in Canada, imported into Canada, and placed on the market in Canada. If an entity manufactures resins and products in Canada and these products are destined for export, these products are only subject to reporting requirements for quantities manufactured. If an entity exports those resins and products, that entity is not required to report on those exports to the FPR.

(6) Are importers required to report on the country of origin of the plastic resin, packaging, or plastic product?

No. Reporting on the country of origin of an imported plastic resin, packaging, or plastic product is not required.

(7) Do companies outside of Canada that export their products to Canada have an obligation to report to the FPR?

No. Only persons resident in Canada, with a Canadian address, have the responsibility to report on the plastics in the products that are imported. Companies that export into Canada have an important role to play, however, in supporting the Canadian entities that import their goods in their reporting obligations by providing information on the identities, sources, and quantities of resins in their products. Failure to supply this information may result in the Canadian entities with which they do business being out of compliance with the FPR. The Government of Canada has created a letter for communicating with foreign suppliers that is available for download [here](#). The letter is designed to help entities obtain information from their suppliers to complete their submissions to the FPR.

(8) If a producer manufactures packaging that they then fill with a product and place on the market in Canada, are they obligated to report on both the unfilled and filled packaging?

Yes. The producer must report on the [unfilled](#) packaging that they manufacture and the [filled](#) packaging that they place on the market.

(9) How will products that are made from multiple resin types be captured? For example, multi-layer bags that are woven PP with inner and outer LDPE layers?

Producers are required to report on each type of plastic in their products. The producer must provide the required data for the PP and LDPE in the product.

(10) Will producers that manufacture products with 100% recycled plastics be required to report?

Yes. They will specify the [resin source](#) as either post-consumer recycled resin or post-industrial recycled resin.

(11) Can a producer designate another person to make a report on their behalf?

Yes. Producers have the option of [designating](#) a producer responsibility organization (PRO), engaged to fulfil their provincial extended producer responsibility (EPR) or stewardship obligations, to prepare a report to the FPR on their behalf. They may also designate another person, if no EPR or stewardship obligations exist, to make a report on their behalf.

The producer is still ultimately responsible for submitting the report and ensuring that the information submitted is accurate and correct.

(12) If a marketplace facilitator supplies products for which there is a brand owner resident in Canada, who is the obligated producer who must report?

If the brand owner is resident in Canada they remain the obligated producer who must report to the FPR even when products are distributed by a marketplace facilitator. A [marketplace facilitator](#) only becomes obligated for products supplied through its marketplace where there is no brand owner resident in Canada, no manufacturer in Canada, and no other importer. In this case, the marketplace facilitator effectively acts like a retailer and is the first to place the product on the market.

(13) If a marketplace facilitator (for example, through a brick and mortar retailer) is also the marketplace seller are they obligated to report?

Yes, the [marketplace seller](#) would have an obligation to report on the plastics they place on the market independent of the marketplace facilitator.

(14) If a marketplace seller is a brand owner who resides in Canada and places their products on the market with a marketplace facilitator, who is obligated to report?

If the marketplace seller is the product brand owner who resides in Canada, they are obligated to report on the products they manufacture, import and place on the market.

(15) Are there penalties for non-compliance?

Subsections 272.1(2), (3) and (4) of [CEPA](#) set the penalties for persons who contravene section 46 of the Act. Offences include the offence of failing to comply with an obligation arising from the present notice and the offence of providing false or misleading information. Penalties include fines, and the amount of the fine can range from a maximum of \$25,000 for an individual convicted following summary proceedings to a maximum of \$500,000 for a large corporation convicted on indictment. The maximum fines are double for second or subsequent offences.

The Act is enforced in accordance with the [compliance and enforcement policy](#) for the *Canadian Environmental Protection Act, 1999*. Suspected violations under the Act can be reported to the Enforcement Branch by email at [enviroinfo@ec.gc.ca](mailto:enviroinfo@ec.gc.ca).

## Appendix A – Examples to Help Determine Reporting Obligations

These examples are intended to serve as a guide only. This is not an exhaustive list. If questions remain, please contact [RFP-FPR@ec.gc.ca](mailto:RFP-FPR@ec.gc.ca).

- (1) I manufacture flexible packaging in Canada and sell it to pasta makers who then sell their packaged pasta to large supermarket chains in Canada. Am I a producer that has an obligation to report in Phase 1?
- You are responsible for reporting in Phase 1 on the amount of plastic in the unfilled packaging that you make and sell to the pasta makers.
  - If you import resin to be used to manufacture the packaging, you are responsible for reporting in Phase 2 on the quantity of resin imported.
  - You are responsible for reporting in Phase 2 on the plastic packaging waste generated by your business.

Your report to the FPR for Phase 1 could look similar to the table below.

*Table 9 – Sample data to be reported for example 1*

<b>Phase 1 Reporting Requirements</b>	<b>Flexible packaging manufacturer would report on unfilled packaging sold to pasta maker</b>
<b>Category</b>	Packaging
<b>Subcategory</b>	Unfilled – flexible, food contact
<b>Resin Type</b>	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin
<b>Methods used to determine quantity</b>	Average Bill of Materials Method
<b>Quantity of plastic (kg) imported into Canada</b>	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	10000 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	ON: 6000 kg; QC: 4000 kg

- (2) I am a pasta maker who imports packaging from the US. I sell packaged pasta to large supermarket chains in Canada both under my own brand and the supermarket’s private brand. Am I a producer that has an obligation to report in Phase 1?
- You are responsible for reporting in Phase 1 on the unfilled plastic packaging you import for your own brand of pasta only.
  - You are responsible for reporting in Phase 1 on the product you produce and place on the market under your own brand, reporting on the amount of plastic in the filled packaging branded with your label, that you sell to the large supermarket chain in Canada.
  - You are responsible for reporting in Phase 2 on the plastic packaging waste generated by your business.

N.B. The supermarket would have to report on the unfilled packaging used for their brand and the filled packaging for their own brand that they place on their shelves.

Your report to the FPR for Phase 1 could look similar to the table below.

*Table 10 – Sample data to be reported for example 2*

<b>Phase 1 Reporting Requirements</b>	<b>Pasta maker would report on unfilled packaging they import for their brand</b>	<b>Pasta maker would report for their own filled brand packaging that they place on the market</b>
<b>Category</b>	Packaging	Packaging
<b>Subcategory</b>	Unfilled – flexible, food contact	Filled – flexible, food contact
<b>Resin Type</b>	2811221 – low-density polyethylene resins (LDPE)	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin
<b>Methods used to determine quantity</b>	Specific Component Identification Method	Specific Component Identification Method
<b>Quantity of plastic (kg) imported into Canada</b>	5000 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	0 kg	5000 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	0 kg	AB: 1000 kg; BC: 1000 kg; ON: 2000 kg; QC: 1000 kg

- (3) I am a large supermarket chain in Canada. I sell packaged pasta purchased from a Canadian pasta maker - both under my own store brand as well as under their own brand. Am I a producer that has an obligation to report in Phase 1?
- You are responsible for reporting in Phase 1 on the product you sell under your own private brand, reporting on the amount of plastic in your unfilled packaging.

- b. You are responsible for reporting in Phase 1 on the product you sell under your own private brand, reporting on the amount of plastic in the filled packaging.
- c. You are responsible for reporting in Phase 2 on the amount of plastic packaging and product waste generated by your business.

Your report to the FPR for Phase 1 could look similar to the table below.

*Table 11 – Sample data to be reported for example 3*

<b>Phase 1 Reporting Requirements</b>	<b>Supermarket chain would report on their own private label brand unfilled packaging</b>	<b>Supermarket chain would report on their own private label brand filled packaging</b>
<b>Category</b>	Packaging	Packaging
<b>Subcategory</b>	Unfilled – flexible, food contact	Filled – flexible, food contact
<b>Resin Type</b>	2811221 – low-density polyethylene resins (LDPE)	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin
<b>Methods used to determine quantity</b>	Average Bill of Materials	Average Bill of Materials
<b>Quantity of plastic (kg) imported into Canada</b>	0 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	5000 kg	5000 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	0 kg	ON: 3000 kg; QC: 2000 kg

- (4) I am a US company that sells my plastic products through Canadian retailers that sell many different products. The Canadian retailers place an order with me for my product and I ship directly to their retail locations. Am I a producer that has an obligation to report in Phase 1?
- a. No. The Canadian retailer who sells your products must check to see if they have an obligation to report to the FPR.

If the Canadian retailer has reporting obligations, they will likely be in contact with you to get information on the plastic in the products you provide them so that they can comply with their reporting obligations.

Since the US company does not need to report, there is no sample report.

- (5) I manufacture car stereos in Canada and use packaging from a Canadian supplier and place them on the market for consumers in Canada. Am I a producer that has an obligation to report in Phase 1 on the plastic in the stereos?



- a. You are responsible for reporting in Phase 1 on the plastic in the stereo that you manufacture and place on the market for consumers in Canada.
- b. You are responsible for reporting in Phase 1 on all the filled packaging you place on the market for the stereos.
- c. You are responsible for reporting in Phase 2 on any plastic packaging and product waste generated at your facility.

Your report to the FPR for Phase 1 could look similar to the table below. Note that this is just a sample of a report (only one resin in the electronic device is depicted), and that electronics often contain many different types of resins that have to be reported.

*Table 12 – Sample data to be reported for example 5*

<b>Phase 1 Reporting Requirements</b>	<b>Manufacturer would report on plastic in their stereos</b>	<b>Manufacturer would report on plastic in their stereo packaging</b>
<b>Category</b>	Electronics and Electrical Equipment (EEE)	Packaging
<b>Subcategory</b>	Electronic or electrical audiovisual and consumer equipment or media	Filled – flexible, other
<b>Resin Type</b>	2811223 – high-density polyethylene resins (HDPE)	2811221 – low-density polyethylene resins (LDPE)
<b>Resin Source</b>	Virgin fossil-based resin	Virgin fossil-based resin
<b>Waste Stream</b>	Residential	Residential
<b>Methods used to determine quantity</b>	Specific Component Identification Method	Specific Component Identification Method
<b>Quantity of plastic (kg) imported into Canada</b>	0 kg	0 kg
<b>Quantity of plastic (kg) manufactured in Canada</b>	1500 kg	500 kg
<b>Quantity of plastic placed on the market in each province/territory</b>	BC: 800 kg; AB: 700 kg	ON: 300 kg; QC: 200 kg

- (6) I am a Canadian company that imports dental floss and flossers into Canada and distributes them to a large Canadian pharmacy that sells them under their own private brand. Am I a producer that has an obligation to report in Phase 1?
  - a. The Canadian pharmacy is responsible for reporting in Phase 1 on the plastic in the dental floss and flossers sold under their brand.
  - b. You are responsible for reporting in Phase 2 on the plastic packaging and product waste generated by your business.

Since the Canadian company does not need to report for Phase 1, there is no sample report.

## Appendix B – Example Calculations – Packaging

This section provides three possible methods that can be used to calculate the required data points for packaging, which must be reported based on weight. The exact data points will vary, based on the packaging product, and obligated reporters are responsible for their own calculations.

### Specific component identification method

Company X manufactures packaging envelopes and places them on the market for consumers to purchase for personal use. These envelopes contain paper and a bubble wrap component. The bill of materials for the formulation of this product is provided below, where the bubble wrap is manufactured individually, then assembled with paper to create the envelope.

Table 13 – Bill of Materials for a Packaging Envelope

Bill of Materials	Packaging Envelope		
Material Code	Material	Quantity	Unit
P763220	Bubble Wrap (106 g/m <sup>2</sup> )	0.186	m <sup>2</sup>
R450001	Paper (130 g/m <sup>2</sup> )	0.200	m <sup>2</sup>
	<b>Total</b>	<b>0.046</b>	<b>kg</b>

Table 14 – Bill of Materials for the Bubble Wrap in a Packaging Envelope

Bill of Materials	Bubble Wrap (100 m <sup>2</sup> )		
Material Code	Material	Quantity	Unit
R100332	Polyethylene (PE)	10	kg
R100212	Ethyl vinyl acetate (EVA)	0.5	kg
R100673	Nylon	0.1	kg
	<b>Total</b>	<b>10.6</b>	<b>kg</b>

Company X calculates the quantities of each resin in a single unit of product sold as follows:

$$W_{PE,product} = \frac{W_{Part A \text{ in product}} \times W_{PE,Part A}}{W_{Part A, BOM \text{ total}}}$$

$$W_{PE,product} = \frac{\left(0.186 \frac{m^2}{unit} \times \frac{10.6 \text{ kg}}{100 m^2}\right) (10 \text{ kg})}{(10.6 \text{ kg})}$$

$$W_{PE,product} = 0.0186 \frac{kg}{unit}$$

$$W_{EVA,product} = \frac{W_{Part A in product} \times W_{EVA,Part A}}{W_{Part A,BOM total}}$$

$$W_{EVA,product} = \frac{\left(0.0186 \frac{m^2}{unit} \times \frac{10.6 kg}{100 m^2}\right) (0.5 kg)}{(10.6 kg)}$$

$$W_{EVA,product} = 0.00093 \frac{kg}{unit}$$

$$W_{Nylon,product} = \frac{W_{Part A in product} \times W_{Nylon,Part A}}{W_{Part A,BOM total}}$$

$$W_{Nylon,product} = \frac{\left(0.0186 \frac{m^2}{unit} \times \frac{10.6 kg}{100 m^2}\right) (0.1 kg)}{(10.6 kg)}$$

$$W_{Nylon,product} = 0.00019 \frac{kg}{unit}$$

If Company X manufactures 975,000 envelopes and places 950,000 envelopes on the market in Canada, the quantity of polyethylene in envelopes manufactured and placed on the market by Company X is 18,135 kg and 17,670 kg, respectively:

$$W_{PE,manufactured} = W_{PE,product} \times n_{product,manufactured}$$

$$W_{PE,manufactured} = (0.0186 kg/unit)(975,000 units)$$

$$W_{PE,manufactured} = 18,135 kg$$

$$W_{PE,market} = W_{PE,product} \times n_{product,market}$$

$$W_{PE,market} = (0.0186 kg/unit)(950,000 units)$$

$$W_{PE,market} = 17,670 kg$$

The quantity of poly(ethylene vinyl acetate) in envelopes manufactured and placed on the market in Canada by Company X is 907 kg and 884 kg, respectively:

$$W_{EVA,manufactured} = W_{EVA,product} \times n_{product,manufactured}$$

$$W_{EVA,manufactured} = (0.00093 kg/unit)(975,000 units)$$

$$W_{EVA,manufactured} = 907 kg$$

$$W_{EVA,market} = W_{EVA,product} \times n_{product,market}$$

$$W_{EVA,market} = (0.00093 \text{ kg/unit})(950,000 \text{ units})$$

$$W_{EVA,market} = 884 \text{ kg}$$

And the quantity of nylon in envelopes manufactured and placed on the market in Canada by Company X is 181 kg and 177 kg, respectively:

$$W_{Nylon,manufactured} = W_{Nylon,product} \times n_{product,manufactured}$$

$$W_{Nylon,manufactured} = (0.000186 \text{ kg/unit})(975,000 \text{ units})$$

$$W_{Nylon,manufactured} = 181 \text{ kg}$$

$$W_{Nylon,market} = W_{Nylon,product} \times n_{product,market}$$

$$W_{Nylon,market} = (0.000186 \text{ kg/unit})(950,000 \text{ units})$$

$$W_{Nylon,market} = 177 \text{ kg}$$

Company X would report this as follows:

*Table 15 – Specific Component Identification Method Example for Packaging Reporting Table*

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Manufactured in Canada (kg)	Quantity Placed on Canadian Market (kg)
Packaging	Single-use, flexible packaging – other (unfilled)	Residential	2811221 – low-density polyethylene resins (LDPE)	Virgin fossil-based conventional resin	18135	17670
Packaging	Single-use, flexible packaging – other (unfilled)	Residential	2811299 – all other thermoplastic resins	Virgin fossil-based conventional resin	901	884
Packaging	Single-use, flexible packaging – other (unfilled)	Residential	2811295 – polyamide resins	Virgin fossil-based conventional resin	181	177

## Average bill of materials (ABOM) method

Company Y manufactures 10 pasta boxes of various dimensions but with a relatively consistent percentage of plastic in the window. The bills of material for the formulation for a sample of these products are provided below.

*Table 16 – Bill of Materials for Pasta Box A*

Bill of Materials	Pasta Box A		
Material Code	Material	Quantity	Unit
P763220	Cellulose acetate (density: 1.3 g/cm <sup>3</sup> , width: 50 μm)	0.0080	m <sup>2</sup>
R450003	Boxboard (150 g/m <sup>2</sup> )	0.1000	m <sup>2</sup>
	<b>Total</b>	<b>0.0155</b>	<b>kg</b>

*Table 17 – Bill of Materials for Pasta Box B*

Bill of Materials	Pasta Box B		
Material Code	Material	Quantity	Unit
P763220	Cellulose acetate (density: 1.3 g/cm <sup>3</sup> , width: 50 μm)	0.0060	m <sup>2</sup>
R450003	Boxboard (150 g/m <sup>2</sup> )	0.1110	m <sup>2</sup>
	<b>Total</b>	<b>0.0170</b>	<b>kg</b>

*Table 18 – Bill of Materials for Pasta Box C*

Bill of Materials	Pasta Box C		
Material Code	Material	Quantity	Unit
P763220	Cellulose acetate (density: 1.3 g/cm <sup>3</sup> , width: 50 μm)	0.0090	m <sup>2</sup>
R450003	Boxboard (150 g/m <sup>2</sup> )	0.1090	m <sup>2</sup>
	<b>Total</b>	<b>0.0169</b>	<b>kg</b>

Using the bills of materials for this subset of products, Company Y creates an average bill of materials for the 10 similar products.

The cellulose acetate content in each of the provided bills of materials can be averaged over the three product weights to determine the average cellulose acetate content:

$$W_{average\ cellulose\ acetate,products} = \frac{\left(\frac{Area_{CA,A}}{W_{Product\ A}} + \frac{Area_{CA,B}}{W_{Product\ B}} + \frac{Area_{CA,C}}{W_{Product\ C}}\right)}{n_{products}} (W_{average\ product})$$

$$W_{average\ cellulose\ acetate,products} = \frac{\left(\frac{0.008\ m^2}{0.0155\ kg} + \frac{0.006\ m^2}{0.0170\ kg} + \frac{0.009\ m^2}{0.0169\ kg}\right)}{3} (0.0165\ kg)$$

$$W_{average\ cellulose\ acetate,products} = 0.0077\ m^2$$

The average bill of materials is provided below:

*Table 19 – Average Bill of Materials for a Pasta Box*

Bill of Materials	Average		
Material Code	Material	Quantity	Unit
P763220	Cellulose acetate (density: 1.3 g/cm <sup>3</sup> , width: 50 µm)	0.0077	m <sup>2</sup>
R450003	Boxboard (150 g/m <sup>2</sup> )	0.1067	m <sup>2</sup>
	<b>Total</b>	<b>0.0165</b>	<b>kg</b>

The average mass of cellulose acetate per pasta box can be calculated to be 0.0005 kg:

$$m_{cellulose\ acetate,product} = V_{cellulose\ acetate,product} \times density_{cellulose\ acetate}$$

$$m_{cellulose\ acetate,product} = \left((0.0077\ m^2) \times (50\ \mu m) \times \left(\frac{1\ m}{1,000,000\ \mu m}\right)\right) \times \left(1.3\ \frac{g}{cm^3}\right)$$

$$m_{cellulose\ acetate,product} = (0.000000385\ m^3) \times \left(1300\ \frac{kg}{m^3}\right)$$

$$m_{cellulose\ acetate,product} = 0.0005\ kg$$

If Company Y manufactures 10,000,000 units and places 9,006,020 units of the similar pasta boxes on the Canadian market, the quantity of cellulose acetate manufactured and placed on the market by Company Y is 5,000 kg and 4,504 kg, respectively:

$$m_{cellulose\ acetate,manufactured} = m_{average\ cellulose\ acetate,products} \times n_{products,manufactured}$$

$$m_{cellulose\ acetate,manufactured} = (0.0005\ kg/unit)(10,000,000\ units)$$

$$m_{cellulose\ acetate,manufactured} = 5,000\ kg$$

$$m_{\text{cellulose acetate,market}} = m_{\text{average cellulose acetate,products}} \times n_{\text{products,market}}$$

$$m_{\text{cellulose acetate,market}} = (0.0005 \text{ kg/unit}) (9,006,020 \text{ units})$$

$$m_{\text{cellulose acetate,market}} = 4,504 \text{ kg}$$

Company Y would report this as follows:

Table 20 – Average Bill of Materials Method Example for Packaging Reporting Table

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Manufactured in Canada (kg)	Quantity Placed on Canadian Market (kg)
Packaging	Single-use, flexible packaging – other (unfilled)	Residential	2811299 – all other thermoplastic resins	Virgin fossil-based conventional resin	5000	4504

## Fixed factor calculation method

Company Z imports and places plastic wrap on the market in Canada. The fixed factor weight per meter of linear low-density polyethylene (LLDPE):

$$\text{Surface Density}_{\text{LLDPE}} = \text{Density}_{\text{LLDPE}} \times \text{film thickness}$$

$$\text{Surface Density}_{\text{LLDPE,80 gauge}} = \left(0.93 \frac{\text{g}}{\text{cm}^3}\right) \times (0.0203 \text{ mm})$$

$$\text{Surface Density}_{\text{LLDPE,80 gauge}} = 0.0189 \frac{\text{kg}}{\text{m}^2}$$

Therefore, the fixed factor,  $F_{\text{LLDPE,80 gauge}}$  for 80-gauge plastic wrap is 0.0189 kg/m<sup>2</sup>.

If Company Z imports 21,003,000 meters and places 21,000,000 meters of plastic wrap with a width of 1.3 m on the Canadian market, the quantities of linear low-density polyethylene imported and placed on the market by Company Z are 515,470 kg and 515,397 kg, respectively:

$$w_{\text{LLDPE,imported}} = F_{\text{LLDPE,plastic wrap}} \times n_{\text{plastic wrap meters,imported}} \times \text{width}_{\text{plastic wrap}}$$

$$w_{\text{LLDPE,imported}} = \left(0.0189 \frac{\text{kg}}{\text{m}^2}\right) \times (21,003,000 \text{ m}) \times (1.3 \text{ m})$$

$$w_{\text{LLDPE,imported}} = 515,470 \text{ kg}$$



$$W_{LLDPE,market} = F_{LLDPE,plastic\ wrap} \times n_{plastic\ wrap\ meters,market} \times width_{plastic\ wrap}$$

$$W_{LLDPE,market} = \left(0.0189 \frac{kg}{m^2}\right) \times (21,000,000\ m) \times (1.3\ m)$$

$$W_{LLDPE,market} = 515,397\ kg$$

Company Z would report this as follows:

*Table 21 – Fixed Factor Calculation Method Example for Packaging Reporting Table*

<b>Category</b>	<b>Subcategory</b>	<b>Waste Stream</b>	<b>Resin</b>	<b>Resin Source</b>	<b>Quantity Imported into Canada (kg)</b>	<b>Quantity Placed on Market in Canada (kg)</b>
Packaging	Single-use, flexible packaging – other (unfilled)	Residential	2811222 – linear low-density polyethylene resins (LLDPE)	Virgin fossil-based conventional resin	515470	515397

## Appendix C – Example Calculations – Single Use and Disposable Products

This section provides three possible methods that can be used to calculate the required data points for single-use and disposable products (SUDP), which must be reported based on weight. The exact data points will vary, based on the SUDP product, and obligated reporters are responsible for their own calculations.

### Specific component identification method

Company X places single-use coffee pods on the market in Canada. The bill of materials for the formulation of this product are provided below.

*Table 22 – Bill of Materials for a Single-Use Coffee Pod*

Bill of Materials	Coffee Pods		
Material Code	Material	Quantity	Unit
R263220	Polypropylene	5.00	g
R211011	Low-density polyethylene	0.50	g
R332101	Aluminum	1	g
	<b>Total</b>	<b>6.50</b>	<b>g</b>

If Company X places 12 million coffee pods on the market in Canada, the quantity of polypropylene in coffee pods placed on the market by Company X is 60,000 kg:

$$W_{PP,market} = W_{PP,product} \times n_{product,market}$$

$$W_{PP,market} = (5 \text{ g/unit})(12,000,000 \text{ units})(1 \text{ kg}/1000 \text{ g})$$

$$W_{PP,market} = 60,000 \text{ kg}$$

The quantity of polyethylene in coffee pods placed on the market in Canada by Company X is 6,000 kg:

$$W_{PE,market} = W_{PE,product} \times n_{product,market}$$

$$W_{PE,market} = (0.50 \text{ g/unit})(12,000,000 \text{ units})(1 \text{ kg}/1000 \text{ g})$$

$$W_{PE,market} = 6,000 \text{ kg}$$

Company X would report this as follows:

Table 23 – Specific Component Identification Method Example for Single-Use or Disposable Products Reporting Table

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Placed on Canadian Market (kg)
Single-use or disposable products	Single-serve capsules and pods	Residential	2811293 – polypropylene resins	Virgin fossil-based conventional resin	60,000
Single-use or disposable products	Single-serve capsules and pods	Residential	2811221 – low-density polyethylene resins	Virgin fossil-based conventional resin	6,000

## Average bill of materials (ABOM) method

Company Y manufactures 24 diapers of various sizes and quality but with similar compositions. The bills of material for the formulation for a sample of these products are provided below.

Table 24 – Bill of Materials for Diaper A

Bill of Materials	Diaper A		
Material Code	Material	Quantity	Unit
R451334	Polyethylene terephthalate	10	g
R943405	Polypropylene	15	g
R472997	Low-density polyethylene	5	g
R429023	Adhesive	2	g
R609605	Fluff pulp	5	g
	<b>Total</b>	<b>37</b>	<b>g</b>

Table 25 – Bill of Materials for Diaper B

Bill of Materials	Diaper B		
Material Code	Material	Quantity	Unit
R451334	Polyethylene terephthalate	6	g
R943405	Polypropylene	12	g
R472997	Low-density polyethylene	10	g
R429023	Adhesive	2	g
R609605	Fluff pulp	7	g
	<b>Total</b>	<b>37</b>	<b>g</b>

Table 26 – Bill of Materials for Diaper C

Bill of Materials	Diaper C		
Material Code	Material	Quantity	Unit
R451334	Polyethylene terephthalate	7	g
R943405	Polypropylene	20	g
R472997	Low-density polyethylene	4	g
R429023	Adhesive	1	g
R609605	Fluff pulp	5	g
	<b>Total</b>	<b>37</b>	<b>g</b>

Using the bills of materials for this subset of products, Company Y creates an average bill of materials for the 24 similar diapers.

For example, the polyethylene terephthalate (PET) content in each of the provided bills of materials can be averaged over the three products weights to determine the average polyethylene terephthalate content:

$$W_{average\ PET,products} = \frac{\left(\frac{W_{PET,A}}{W_{Product\ A}} + \frac{W_{PET,B}}{W_{Product\ B}} + \frac{W_{PET,CF}}{W_{Product\ C}}\right)}{n_{products}} (W_{average\ product})$$

$$W_{average\ PET,products} = \frac{\left(\frac{10\ g}{37\ g} + \frac{6\ g}{37\ g} + \frac{7\ g}{37\ g}\right)}{3} (37\ g)$$

$$W_{average\ PET,products} = 7.66\ g$$

The average bill of materials is provided below:

Table 27 – Average Bill of Materials for a Diaper

Bill of Materials	Average		
Material Code	Material	Quantity	Unit
R451334	Polyethylene terephthalate	7.66	g
R943405	Polypropylene	15.67	g
R472997	Low-density polyethylene	6.33	g
R429023	Adhesive	1.67	g
R609605	Fluff pulp	5.67	g
	<b>Total</b>	<b>37</b>	<b>g</b>

If Company Y manufactures 551,880,000 units and places 315,360,000 units of the similar diapers on the Canadian market, the quantity of polyethylene terephthalate (PET) in diapers manufactured and placed on the market by Company Y is 4,227,401 kg and 2,415,658 kg, respectively:

$$m_{PET,manufactured} = m_{average\ PET,products} \times n_{products,manufactured}$$

$$m_{PET,manufactured} = (7.66\ g/unit)(551,880,000\ units)(1\ kg/1000\ g)$$

$$m_{PET,manufactured} = 4,227,401\ kg$$

$$m_{PET,market} = m_{average\ PET,products} \times n_{products,market}$$

$$m_{PET,market} = (7.66\ g/unit)(315,360,000\ units)(1\ kg/1000\ g)$$

$$m_{PET,market} = 2,415,658\ kg$$

The quantity of polypropylene (PP) in diapers manufactured and placed on the market by Company Y is 8,647,960 kg and 4,941,691 kg, respectively:

$$m_{PP,manufactured} = m_{average\ PP,products} \times n_{products,manufactured}$$

$$m_{PP,manufactured} = (15.67\ g/unit)(551,880,000\ units)(1\ kg/1000\ g)$$

$$m_{PP,manufactured} = 8,647,960\ kg$$

$$m_{PP,market} = m_{average\ PP,products} \times n_{products,market}$$

$$m_{PP,market} = (15.67\ g/unit)(315,360,000\ units)(1\ kg/1000\ g)$$

$$m_{PP,market} = 4,941,691\ kg$$

The quantity of low-density polyethylene (LDPE) in diapers manufactured and placed on the market by Company Y is 3,493,400 kg and 1,996,229 kg, respectively:

$$m_{LDPE,manufactured} = m_{average\ PP,products} \times n_{products,manufactured}$$

$$m_{LDPE,manufactured} = (6.33\ g/unit)(551,880,000\ units)(1\ kg/1000\ g)$$

$$m_{LDPE,manufactured} = 3,493,400\ kg$$

$$m_{LDPE,market} = m_{average\ PET,products} \times n_{products,market}$$

$$m_{LDPE,market} = (6.33\ g/unit)(315,360,000\ units)(1\ kg/1000\ g)$$

$$m_{LDPE,market} = 1,996,229\ kg$$

And the quantity of thermosetting adhesive in diapers manufactured and placed on the market by Company Y is 921,640 kg and 526,651 kg, respectively:

$$m_{adhesive,manufactured} = m_{average\ PP,products} \times n_{products,manufactured}$$

$$m_{adhesive,manufactured} = (1.67\ g/unit)(551,880,000\ units)(1\ kg/1000\ g)$$

$$m_{adhesive,manufactured} = 921,640\ kg$$

$$m_{adhesive,market} = m_{average\ PET,products} \times n_{products,market}$$

$$m_{adhesive,market} = (1.67\ g/unit)(315,360,000\ units)(1\ kg/1000\ g)$$

$$m_{adhesive,market} = 526,651\ kg$$

Company Y would report this as follows, where adhesives are reported under 2811399 – other thermosetting resins, n.e.c. if the adhesive is not already classified under the other thermosetting NAPCS codes:

Table 28 – Bill of Materials Method Example for Single-Use or Disposable Products Reporting Table

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Manufactured in Canada (kg)	Quantity Placed on Canadian Market (kg)
Single-use or disposable products	Disposable diapers and menstrual products	Residential	2811211 – polyethylene terephthalate resins	Virgin fossil-based conventional resin	4227401	2415658
Single-use or disposable products	Disposable diapers and menstrual products	Residential	2811293 – polypropylene resins	Virgin fossil-based conventional resin	8647960	4941691
Single-use or disposable products	Disposable diapers and menstrual products	Residential	2811221 – low-density polyethylene resins	Virgin fossil-based conventional resin	3493400	1996229
Single-use or disposable products	Disposable diapers and menstrual products	Residential	2811399 – other thermosetting resins, n.e.c	Virgin fossil-based conventional resin	921640	526651

## Fixed factor calculation method

Company Z imports and places nylon floss on the market in Canada in containers that contain 40 m of floss. The fixed factor for weight per meter of nylon in standard floss sold in Canada is determined to be 0.4 g/m. Therefore, there is approximately 16 g of nylon per container of floss that Company Z imports and sells.

$$w_{Nylon,product} = F_{Nylon,floss} \times Length_{floss,product}$$

$$w_{Nylon,product} = \left(0.4 \frac{g}{m}\right) \times (40 m)$$

$$w_{Nylon,product} = 16 g$$

If Company Z imports 3,110,200 containers of floss and places 2,521,000 containers of floss on the Canadian market, the quantities of nylon imported and placed on the market by Company Z are 515,470 kg and 515,397 kg, respectively:

$$W_{Nylon,imported} = W_{Nylon,product} \times n_{product,manufactured}$$

$$W_{Nylon,imported} = (16 \text{ g/unit}) \times (3,110,200 \text{ units}) \times (1 \text{ kg}/1000 \text{ g})$$

$$W_{Nylon,imported} = 49,763 \text{ kg}$$

$$W_{Nylon,market} = W_{Nylon,product} \times n_{product,market}$$

$$W_{Nylon,market} = (16 \text{ g/unit}) \times (2,521,000 \text{ m}) \times (1 \text{ kg}/1000 \text{ g})$$

$$W_{Nylon,market} = 40,336 \text{ kg}$$

Company Z would report this as follows, where nylon is reported under 2811295 – Polyamide resins:

*Table 29 – Fixed Factor Calculation Method Example for Single-Use or Disposable Products Reporting Table*

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Imported into Canada (kg)	Quantity Placed on Market in Canada (kg)
Single-use or disposable products	Dental floss and flossers	Residential	2811295 – Polyamide resins	Virgin fossil-based conventional resin	49763	40336



## Appendix D – Example Calculations – Electronic and Electrical Equipment

This section provides a repository of the three different methods that can be used to calculate the required data points for electronic and electrical equipment (EEE), which must be reported based on weight. The examples provided for each are for illustrative purposes only. The exact data points will vary, based on the EEE product, and obligated reporters are responsible for their own calculations.

### Specific Component Identification Method

Company X manufactures electronic toys intended for residential use. The bill of materials for the formulation of this product are provided below, where Parts A and B are manufactured individually, then assembled with additional materials to produce the finished toy. Note that while Part A is manufactured in batches of 1 kg, 2 kg of Part A are included for every unit of the electronic toy.

*Table 30 – Bill of Materials for an Electronic Toy*

<b>Bill of Materials</b>	<b>Electronic toy</b>		
<b>Material Code</b>	<b>Material</b>	<b>Quantity</b>	<b>Unit</b>
P703221	Part A	2.00	kg
P703100	Part B	1.00	kg
R402001	Polypropylene (PP)	0.50	kg
R262344	Aluminum	0.20	kg
	<b>Total</b>	<b>3.70</b>	<b>kg</b>

*Table 31 – Bill of Materials for Part A in the Electronic Toy*

<b>Bill of Materials</b>	<b>P703221 – Part A</b>		
<b>Material Code</b>	<b>Material</b>	<b>Quantity</b>	<b>Unit</b>
R402001	Polypropylene (PP)	0.40	kg
R400235	Poly(ethylene vinyl acetate) (EVA)	0.50	kg
R316532	Plasticizer for EVA	0.10	kg
	<b>Total</b>	<b>1.00</b>	<b>kg</b>

Table 32 – Bill of Materials for Part B in the Electronic Toy

Bill of Materials	P703100 – Part B		
Material Code	Material	Quantity	Unit
R372165	Polypropylene (PP)	0.95	kg
R553221	Red pigment	0.05	kg
	<b>Total</b>	<b>1.00</b>	<b>kg</b>

Company X calculates the quantities of each resin in a single unit of product sold as follows:

For polypropylene (PP):

$$W_{PP,product} = \frac{W_{Part A \text{ in product}} \times W_{PP,Part A}}{W_{Part A,BOM \text{ total}}} + \frac{W_{Part B \text{ in product}} \times W_{PP,Part B}}{W_{Part B,BOM \text{ total}}} + W_{PP,product \text{ BOM}}$$

$$W_{PP,product} = \frac{\left(2.00 \frac{kg}{unit}\right) (0.40 \text{ kg})}{(1.00 \text{ kg})} + \frac{\left(1.00 \frac{kg}{unit}\right) (0.95 \text{ kg})}{(1.00 \text{ kg})} + \left(0.50 \frac{kg}{unit}\right)$$

$$W_{PP,product} = 2.25 \frac{kg}{unit}$$

For poly(ethylene vinyl acetate) (EVA):

$$m_{EVA,product} = \frac{m_{Part A \text{ in product}} \times (m_{EVA,Part A} + m_{plasticizer \text{ for EVA,Part A}})}{m_{Part A,BOM \text{ total}}}$$

$$m_{EVA,product} = \frac{\left(2.00 \frac{kg}{unit}\right) ((0.50 \text{ kg}) + (0.10 \text{ kg}))}{(1.00 \text{ kg})}$$

$$m_{EVA,product} = 1.20 \frac{kg}{unit}$$

If Company X manufactures 15,500 units and places 15,000 units of the electronic toy on the market in Canada, the quantity of polypropylene in toys manufactured and placed on the market in Canada by Company X is 34,875 and 33,750 kg, respectively:

$$m_{PP,manufactured} = m_{PP,product} \times n_{product,manufactured}$$

$$m_{PP,manufactured} = \left(2.25 \frac{kg}{unit}\right) (15,500 \text{ units})$$

$$m_{PP,manufactured} = 34,875 \text{ kg}$$

$$m_{PP,market} = m_{PP,product} \times n_{product,market}$$

$$m_{PP,market} = \left(2.25 \frac{kg}{unit}\right) (15,000 \text{ units})$$

$$m_{PP,market} = 33,750 \text{ kg}$$

And the quantity of poly(ethylene vinyl acetate) in toys manufactured and placed on the market in Canada by Company X is 18,600 kg and 18,000 kg, respectively:

$$m_{EVA,manufactured} = m_{EVA,product} \times n_{product,manufactured}$$

$$m_{EVA,manufactured} = \left(1.20 \frac{kg}{unit}\right) (15,500 \text{ units})$$

$$m_{EVA,manufactured} = 18,600 \text{ kg}$$

$$m_{EVA,market} = m_{EVA,product} \times n_{product,market}$$

$$m_{EVA,market} = \left(1.20 \frac{kg}{unit}\right) (15,000 \text{ units})$$

$$m_{EVA,market} = 18,000 \text{ kg}$$

Company X would report this as follows:

*Table 33 – Specific Component Identification Method Example for Electronic and Electrical Equipment Reporting Table*

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Manufactured in Canada (kg)	Quantity Placed on Market in Canada (kg)
Electronic and Electrical Equipment	Electronic or electrical toys	Residential	2811293 – polypropylene resins	Virgin fossil-based conventional resin	34875	33750
Electronic and Electrical Equipment	Electronic or electrical toys	Residential	2811299 – all other thermoplastic resins	Virgin fossil-based conventional resin	18600	18000

## Average bill of materials (ABOM) method

Company Y manufactures 5 drills of different quality but with similar compositions. The bills of material for the formulation of a sample of these drills (Products D, E, and F) are provided below.

Table 34 – Bill of Materials for Drill D

<b>Bill of Materials</b>	<b>Drill D</b>		
<b>Material Code</b>	<b>Material</b>	<b>Quantity</b>	<b>Unit</b>
P599762	Acrylonitrile butadiene styrene casing	0.205	kg
P762409	Thermoplastic elastomer overmoulding	0.121	kg
P701342	Nylon Trigger	0.052	kg
P466334	Nylon Speed switch	0.013	kg
P138839	Nylon Direction switch	0.018	kg
P907559	Polyvinyl chloride cabling	0.008	kg
P958451	Acrylonitrile butadiene styrene torque adjuster	0.083	kg
P255209	Nylon chuck grip	0.064	kg
P878903	Acrylonitrile butadiene styrene battery terminal	0.033	kg
P231809	Battery	0.700	kg
P300996	Motor	0.800	kg
P117422	Chuck	0.400	kg
P648523	Nylon gear train	0.011	kg
P415681	Screws	0.007	kg
P237636	Ball bearings	0.018	kg
	<b>Total</b>	<b>2.533</b>	<b>kg</b>

Table 35 – Bill of Materials for Drill E

<b>Bill of Materials</b>	<b>Drill E</b>		
<b>Material Code</b>	<b>Material</b>	<b>Quantity</b>	<b>Unit</b>
P599762	Acrylonitrile butadiene styrene casing	0.193	kg
P762409	Thermoplastic elastomer overmoulding	0.114	kg
P701342	Nylon Trigger	0.052	kg
P466334	Nylon Speed switch	0.013	kg
P138839	Nylon Direction switch	0.018	kg
P907559	Polyvinyl chloride cabling	0.009	kg
P958451	Acrylonitrile butadiene styrene torque adjuster	0.08	kg
P255209	Nylon chuck grip	0.06	kg
P878903	Acrylonitrile butadiene styrene battery terminal	0.044	kg
P231809	Battery	0.7	kg
P300996	Motor	0.81	kg
P117422	Chuck	0.4	kg
P648523	Nylon gear train	0.015	kg
P415681	Screws	0.007	kg
P237636	Ball bearings	0.018	kg
	<b>Total</b>	<b>2.533</b>	<b>kg</b>

Table 36 – Bill of Materials for Drill F

Bill of Materials	Drill F		
Material Code	Material	Quantity	Unit
P599762	Acrylonitrile butadiene styrene casing	0.186	kg
P762409	Thermoplastic elastomer overmoulding	0.134	kg
P701342	Nylon Trigger	0.052	kg
P466334	Nylon Speed switch	0.013	kg
P138839	Nylon Direction switch	0.018	kg
P907559	Polyvinyl chloride cabling	0.008	kg
P958451	Acrylonitrile butadiene styrene torque adjuster	0.08	kg
P255209	Nylon chuck grip	0.06	kg
P878903	Acrylonitrile butadiene styrene battery terminal	0.036	kg
P231809	Battery	0.7	kg
P300996	Motor	0.81	kg
P117422	Chuck	0.4	kg
P648523	Nylon gear train	0.011	kg
P415681	Screws	0.007	kg
P237636	Ball bearings	0.018	kg
	<b>Total</b>	<b>2.533</b>	<b>kg</b>

Due to the similarities in the product compositions, Company Y decides to average the bills of materials to create the average composition of plastics in one drill below:

Table 37 – Average Bill of Materials for a Drill

Bill of Materials	Average		
Material Code	Material	Quantity	Unit
<b>P599762 or P958451 or P878903</b>	Acrylonitrile-butadiene-styrene (ABS)	0.313	kg
<b>P762409</b>	Thermoplastic elastomer	0.123	kg
<b>P907559</b>	Polyvinyl chloride (PVC)	0.008	kg
<b>R334176</b>	Nylon	0.157	kg
	<b>Total</b>	<b>0.601</b>	<b>kg</b>

If Company Y manufactures 800,000 drills and places 735,547 drills on the market in Canada, the quantity of acrylonitrile-butadiene-styrene (ABS) in drills manufactured and placed on the market by Company Y is 250,400 kg and 230,226 kg, respectively:

$$W_{ABS,manufactured} = W_{average\ ABS,products} \times n_{products,manufactured}$$

$$W_{ABS,manufactured} = \left(0.313 \frac{kg}{unit}\right) (800,000\ units)$$

$$W_{ABS,manufactured} = 250,400\ kg$$

$$W_{ABS,market} = W_{average\ ABS,products} \times n_{products,market}$$

$$W_{ABS,market} = \left(0.313 \frac{kg}{unit}\right) (735,547\ units)$$

$$W_{ABS,market} = 230,226\ kg$$

The quantity of thermoplastic elastomer in drills manufactured and placed on the market in Canada by Company Y is 98,400 kg and 90,472 kg, respectively:

$$W_{TPE,manufactured} = W_{average\ TPE,products} \times n_{products,manufactured}$$

$$W_{TPE,manufactured} = \left(0.123 \frac{kg}{unit}\right) (800,000\ units)$$

$$W_{TPE,manufactured} = 98,400\ kg$$

$$W_{TPE,market} = W_{average\ TPE,products} \times n_{products,market}$$

$$W_{TPE,market} = \left(0.123 \frac{kg}{unit}\right) (735,547\ units)$$

$$W_{TPE,market} = 90,472\ kg$$

The quantity of polyvinyl chloride (PVC) in drills manufactured and placed on the market in Canada by Company Y is 6,400 kg and 5,884 kg, respectively:

$$W_{PVC,manufactured} = W_{average\ PVC,products} \times n_{products,manufactured}$$

$$W_{PVC,manufactured} = \left(0.008 \frac{kg}{unit}\right) (800,000\ units)$$

$$W_{PVC,manufactured} = 6,400\ kg$$

$$W_{PVC,market} = W_{average\ PVC,products} \times n_{products,market}$$

$$W_{PVC,market} = \left(0.008 \frac{kg}{unit}\right) (735,547\ units)$$

$$W_{PVC,market} = 5,884\ kg$$

And the quantity of nylon in drills manufactured and placed on the market in Canada by Company Y is 125,600 kg and 115,481 kg, respectively:

$$W_{nylon,manufactured} = W_{average\ nylon,products} \times n_{products,manufactured}$$

$$W_{nylon,manufactured} = \left(0.157 \frac{kg}{unit}\right) (800,000\ units)$$

$$W_{nylon,manufactured} = 125,600\ kg$$

$$W_{nylon,market} = W_{average\ nylon,products} \times n_{products,market}$$

$$W_{nylon,market} = \left(0.157 \frac{kg}{unit}\right) (735,547\ units)$$

$$W_{nylon,market} = 115,481\ kg$$

Company Y would report this as follows:



Table 38 – Average Bill of Materials Method Example for Electronic and Electrical Equipment Reporting Table

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Manufactured in Canada (kg)	Quantity Placed on Market in Canada (kg)
Electronic and Electrical Equipment	Electronic or electrical tools, other than large-scale stationary industrial tools	Residential	2811291 – acrylonitrile-butadiene-styrene resins	Virgin fossil-based conventional resin	250400	230226
Electronic and Electrical Equipment	Electronic or electrical tools, other than large-scale stationary industrial tools	Residential	2811299 – all other thermoplastic resins	Virgin fossil-based conventional resin	98400	90472
Electronic and Electrical Equipment	Electronic or electrical tools, other than large-scale stationary industrial tools	Residential	2811292 – polyvinyl chloride resins	Virgin fossil-based conventional resin	6400	5884
Electronic and Electrical Equipment	Electronic or electrical tools, other than large-scale stationary industrial tools	Residential	2811295 – polyamide resins	Virgin fossil-based conventional resin	125600	115481

## Fixed factor calculation method

Company Z imports printers and places them on the market in Canada. By disassembling a range of printers, it was determined that on average, a standard printer is composed of 60% plastic. Of that

plastic, roughly 21% is polycarbonate, 29% is nylon, 12% is polypropylene, and 38% is acrylonitrile-butadiene-styrene.

The fixed factors for each resin can be determined by multiplying the overall percentage of plastic by the percentage of each resin in the plastic portion of the printer:

*Table 39 – Fixed Factors for a Printer*

Resin	Percentage of resin in plastic portion, w/w	Calculation, where a printer contains 60% plastic by weight	Fixed Factor for a printer, (w/w)
Polycarbonate	21%	21% × 60%	12.6%
Acrylonitrile-butadiene-styrene resins (ABS)	38%	38% × 60%	22.8%
Polyamide resins	29%	29% × 60%	17.4%
Polypropylene resins (PP)	12%	12% × 60%	7.2%

If Company Z imports, 770,000 printers and places 768,900 printers on the market in Canada and each unit weighs 20 kg, the quantity of polycarbonate in printers imported and placed on the market in Canada by Company Z is 1,940,400 kg and 1,937,628 kg, respectively:

$$w_{polycarbonate,imported} = F_{polycarbonate,printer} \times n_{printer,imported} \times w_{printer}$$

$$w_{polycarbonate,imported} = (12.6\%) \times (770,000 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$w_{polycarbonate,imported} = 1,940,400 \text{ kg}$$

$$w_{polycarbonate,market} = F_{polycarbonate,printer} \times n_{printer,market} \times w_{printer}$$

$$w_{polycarbonate,market} = (12.6\%) \times (768,900 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$w_{polycarbonate,market} = 1,937,628 \text{ kg}$$

The quantity of acrylonitrile-butadiene-styrene (ABS) in printers imported and placed on the market in Canada by Company Z is 3,511,200 kg and 3,506,184 kg, respectively:

$$w_{ABS,imported} = F_{ABS,printer} \times n_{printer,imported} \times w_{printer}$$

$$w_{ABS,imported} = (22.8\%) \times (770,000 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$w_{ABS,imported} = 3,511,200 \text{ kg}$$

$$W_{ABS,market} = F_{ABS,printer} \times n_{printer,market} \times w_{printer}$$

$$W_{ABS,market} = (22.8\%) \times (768,900 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$W_{ABS,market} = 3,506,184 \text{ kg}$$

The quantity of polyamide in printers imported and placed on the market in Canada by Company Z is 2,679,600 kg and 2,625,772 kg, respectively:

$$W_{polyamide,imported} = F_{polyamide,printer} \times n_{printer,imported} \times w_{printer}$$

$$W_{polyamide,imported} = (17.4\%) \times (770,000 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$W_{polyamide,imported} = 2,679,600 \text{ kg}$$

$$W_{polyamide,market} = F_{polyamide,printer} \times n_{printer,market} \times w_{printer}$$

$$W_{polyamide,market} = (17.4\%) \times (768,900 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$W_{polyamide,market} = 2,675,772 \text{ kg}$$

The quantity of polypropylene (PP) in printers imported and placed on the market in Canada by Company Z is 1,108,800 kg and 1,107,216 kg, respectively:

$$W_{PP,imported} = F_{PP,printer} \times n_{printer,imported} \times w_{printer}$$

$$W_{PP,imported} = (7.2\%) \times (770,000 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$W_{PP,imported} = 1,108,800 \text{ kg}$$

$$W_{PP,market} = F_{PP,printer} \times n_{printer,market} \times w_{printer}$$

$$W_{PP,market} = (7.2\%) \times (768,900 \text{ units}) \times \left(20 \frac{kg}{unit}\right)$$

$$W_{PP,market} = 1,107,216 \text{ kg}$$

Company Z would report this as follows:

Table 40 – Fixed Factor Calculation Method for Electronic and Electrical Equipment Reporting Table

Category	Subcategory	Waste Stream	Resin	Resin Source	Quantity Imported into Canada (kg)	Quantity Placed on Market in Canada (kg)
Electronic and Electrical Equipment	Electronic or electrical information technology or telecommunication devices or equipment	Residential	2811299 – all other thermo-plastic resins	Virgin fossil-based conventional resin	1940400	1937628
Electronic and Electrical Equipment	Electronic or electrical information technology or telecommunication devices or equipment	Residential	2811291 – acrylonitrile-butadiene-styrene resins	Virgin fossil-based conventional resin	3511200	3506184
Electronic and Electrical Equipment	Electronic or electrical information technology or telecommunication devices or equipment	Residential	2811295 – polyamide resins	Virgin fossil-based conventional resin	2679600	2675772
Electronic and Electrical Equipment	Electronic or electrical information technology or telecommunication devices or equipment	Residential	2811293 – poly-propylene resins	Virgin fossil-based conventional resin	1108800	1107216