



## 2021 Proposed producer responsibility regulation for Hazardous and Special Products (HSP)

The Canadian Propane Association (CPA) is the national industry association for Canada's propane sector, representing over 400 member companies across the country.

CPA members include producers (of propane), wholesalers, transporters, retailers, and manufacturers of appliances and equipment. Most of CPA's members are small and medium-sized enterprises whose customers comprise primarily residential and industrial users, who use propane fuel to heat homes, businesses and power business operations.

The CPA does not represent the following retailers who sell consumer and recreational propane products and cylinders: Costco, Canadian Tire, Home Depot, Home Hardware, Lowes, RONA and Walmart.

### Ontario's Propane Sector

The CPA's Ontario membership is made up of approximately 125 businesses employing over 4,000 people in communities across the province. With sales of almost \$1.6 billion, the propane sector supports over \$400 million in economic activity in Ontario. Representing a small percentage of the province's energy mix, and funded entirely by the industry itself, propane delivers disproportionately large benefits to rural and remote communities and businesses. Just over 37% of Canada's overall propane use occurs in Ontario.

Propane is a primary and supplementary fuel used in residential, industrial and agricultural applications province-wide. It is a low emission, cost effective energy option for many remote and rural users. Propane has similar greenhouse gas emissions as natural gas, but unlike natural gas, emits no fugitive emissions before combustion.

### Comments on the draft regulation

As the Ontario Ministry of the Environment Conservation and Parks (MOECP) is seeking input on their draft regulation for hazardous and special products, and specifically on pressurized containers, the Canadian Propane Association (CPA) is extremely satisfied that the ministry is proposing to exempt propane that is marketed in refillable pressurized containers from collection, management or P&E requirements in recognition of their long lifespan (refilled and reused for many years) and existing closed-loop collection system for these products.

The CPA would like to point out that retailers represented by the Retail Council of Canada also support this position as per a letter they addressed to Minister Yurek.

The CPA supports the draft regulation which would focus only on those non-refillable propane cylinders which cannot be reused or recycled. Again, it is the CPA's understanding that retailers selling these containers are ready to be responsible for these containers as first importers into Ontario.

The ministry is interested in input and feedback to better understand the current management and recovery of these products and implications if these products were to be exempt from regulatory requirements.

As outlined below, there is no structural or safety reason for refillable propane cylinders to ever be found in Ontario's landfills because they are valuable assets and vessels designed and manufactured to be reused for decades and recycled upon decommissioning. Refillable propane cylinders contribute to the province's circular economy as they are used, refilled and reused as a matter of course, and the containers and pressure relief valves (PRVs) on these cylinders are recertified every 10 years as per Transport Canada requirements. It is common for 40-year-old cylinders to be in circulation.

### REASONS TO EXCLUDE REFILLABLE CYLINDERS AND TANKS

Most refillable propane cylinders are reused and recycled safely for decades because:

- They are made of heavy steel and the valves are brass; both valuable materials.
- Large American Society of Mechanical Engineers (ASME) tanks are made of even heavier metal than cylinders, rendering them even more valuable.
- Refillable cylinders are uniformly heat-treated after all forming and welding operations. The steel is thicker than non-refillable containers and the cylinder itself is equipped with an overflow protection device. This heat treatment increases the elasticity of the cylinder allowing it to be refilled time after time.
- They are usually owned by propane suppliers as they constitute a tangible asset.
- In Canada, refillable propane cylinders must be replaced or inspected and requalified by a Transport Canada registered requalifier every 10 years.
- It is illegal to fill an expired or damaged cylinder. Therefore, propane suppliers get their cylinders and tanks refurbished – sandblasted/repainted, restamped (as per Transport Canada's regulatory requirements) - every 10 years and they are then reused for another 10 years.
- Typically, a cylinder will be in circulation for 30 years, and an ASME tank up to 40 years.



- For homeowners using 5 to 20 lb. propane cylinders for BBQs, there are thousands of exchange sites in the province which will ensure old cylinders are taken off the market, refurbished and

then offered again to consumers. Those cylinders deemed no longer qualifiable are purged (emptied), the valve removed, and the metal recycled.

- Consumers may also purchase a cylinder and exchange it for a new one once it needs to be requalified (after 10 years).
- A typical 100 lb. propane cylinder is used primarily in the construction sector and has a 30-year lifespan; they cost approximately \$140 empty.
- 420 lb. cylinders are used in the residential and commercial sectors (for restaurants, cottages, homes, etc.) are safely installed close to homes and typically last 40 years. Made of heavy steel they cost approximately \$600 empty.
- A typical ASME tank will last more than 40 years and costs \$500 to \$700 empty.
- Propane suppliers ensure larger tanks are well-maintained because they are valuable and may be reused or relocated.
- The propane industry provides fuel in refillable containers which are regularly requalified, refurbished and reused. Once decommissioned, they are safely purged, and the metal recycled.

### NON-REFILLABLE CONTAINERS

The CPA believes that the MOECP is correct in regulating only non-refillable containers (1, 2 lb. or  $\leq$  5 lb.) because:

- More and more Canadians are purchasing small, non-refillable propane containers every year for heating and cooking during outdoor activities and for torch fuel use. In 2006, it was estimated that over 2.2 million single-use containers are consumed annually in Canada<sup>1</sup>.
- However, due to the lack of a comprehensive recycling system for this product, these containers can pose a fire and explosion risk due to improper handling at time of disposal.
- Non-refillable propane cylinders have thin walls and are not heat-treated. Therefore, they cannot be refilled as they will rupture under the stress of refilling.
- Non-refillable cylinders are often referred to as “single use cylinders”. They cannot be requalified and must be disposed of once empty (according to manufacturing specification numbers TC-39M, DOT-2P and TC-2P).
- These are indeed the containers that should be captured in Ontario’s regulatory regime.

The CPA recommends the new regulation include the following two types of single-use propane containers:

- 465 g (16.4 oz) camp size capacity cylinders (Figure 1 below) that are used for camp stove cooking; and

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<sup>1</sup> Estimates based on Stewardship Ontario Annual Reports.

- 400 g (14.1 oz) tall skinny cylinders (Figure 2 below) that are used for torch fuel, soldering, heating and lighting<sup>2</sup>.

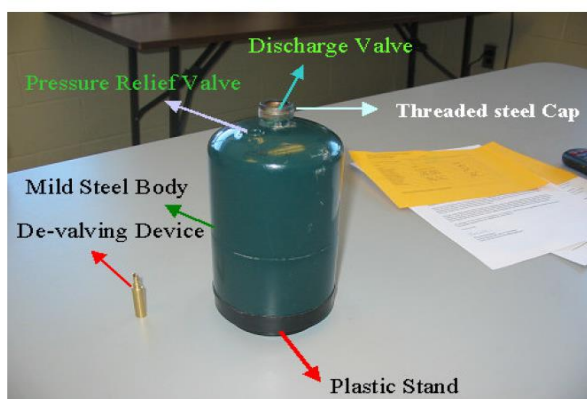


Figure 1: 465 g (16.4 oz) capacity single-use propane cylinder



Figure 2: 400 g (14.1 oz) capacity single-use torch fuel propane cylinder

- These are recognized as non-refillable single-use containers by Transport Canada (TC) under the guideline TC 39M NRC 16/20 M33. In the United States, the Department of Transportation recognizes non-refillable containers under the D.O.T. 39 NRC 228/286 M1003 guideline.

### Additional Comments

The CPA is looking forward to working with the Ministry of the Environment, Conservation and Parks to provide further input and feedback on the current management and recovery of these products and implications if these products were to be exempt from regulatory requirements.

The CPA is ready to provide data on a number of items to demonstrate that 90% of the cylinders in Ontario are refurbished and or recertified and, when not possible, are recycled after being purged (recuperation of the propane). As we noted, refillable propane cylinders are valuable for their steel or aluminum content and the brass content of PRVs for metal recyclers. Cylinders reach the end of their Liquid Propane (LP) cylinder service life when they are no longer able to meet the inspection requirements established by the Compressed Gas Association (CGA Pamphlet C-6) which sets out criteria for continued cylinder service. To safely recycle propane cylinders, the propane must be purged, the brass valves removed and a hole punched in the side.

While the previous collection model under Orange Drop depended on municipal depots for some of the collection of containers (170 tonnes out of the 415 tonnes collected (as per the Stewardship Ontario 2019 report and information provided by AMO), the CPA would like to point out that currently, 60% of expired propane cylinders are re-certified and put back into the system annually (by exchange firms) and 40% of expired cylinders, which do not pass re-certification, are de-valved, hole punched and scrapped. Brass is recycled and metal steel is recycled. Residues of propane are recaptured and remarketed. Cylinders collected through municipal depots are included in the above numbers considering that once collected most of these containers were handled by our industry.

<sup>2</sup> 2006 Feasibility Study of Comprehensive Collection and Recycling Programs for Single-use Propane Cylinders in Canada, The Nova Scotia Department of Environment and Labour, <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/mineralsmetals/pdf/mms-smm/busi-indu/rad-rad/pdf/prop-tan-fr-eng.pdf>

There are no tanks left behind due to the commodity value of the metals. Residual propane left in old tanks is recaptured and resold. Propane doesn't expire and has a lifespan of 50 years.

The CPA is prepared to provide confidential (commercially sensitive) data to the ministry supporting the fact that the management and recovery of the cylinders from consumers in Ontario can be achieved through the propane industry's network of retailers, Cylinder Exchange Businesses and Cylinder Refurbishing and Recertification Operations

The propane sector, including in Ontario, has a long-standing history of reusing pressurized containers used to hold and dispense valuable, reliable propane fuel safely to thousands of homes and businesses throughout the province.

While the CPA supports the inclusion of only those non-refillable propane cylinders in the regulation, our industry is asking that the province's propane sector be afforded the exemption as a long-standing recycler and significant contributor to the province's circular economy.

The CPA will contact the ministry directly to provide the above-mentioned information.

Sincerely,



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