

2020 TOXICS REDUCTION ACT

**Report on Toxic Substance
Accounting Requirements**

VERSION 1.0

Petro-Canada Lubricants Inc.
385 Southdown Road
Mississauga, Ontario
L5J 2Y3

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1.0 INTRODUCTION

Petro-Canada Lubricants Inc. (PCLI), a HollyFrontier business, is a world-scale supplier of products ranging from automobile lubricants to white oils for the pharmaceutical market. Our lubricants facility in Mississauga, Ontario, is the largest North American producer of high margin Group III base oils. The site also produces finished lubricants, specialty fluids, greases, process oils, and white oils. These products are marketed in 80 countries worldwide to a diverse customer base through a global sales force and distributor network.

The Lubricants Centre is located on the shore of Lake Ontario beside a residential community in Mississauga, Ontario.

Protection of the environment is a fundamental PCLI value. It is our responsibility to determine and manage the impacts of our business through programs like the Toxics Reduction Act (Act).

This annual toxics substance accounting report has been prepared to meet the regulatory obligations specified in Section 10 of the Act and has been prepared in accordance with the requirements of Section 27(1) of Ontario Regulation (O. Reg.) 455/09, as amended from time to time. It summarizes the relevant reporting requirements and will be updated, as required by the Act and O. Reg. 455/09.

For more information on the Act and O. Reg. 455/09 visit: <https://www.ontario.ca/page/toxics-reduction-program>.

2.0 REPORTING CRITERIA

Section 3(1) of the Act specifies the criteria requiring the preparation of a toxic substance plan. These criteria are as follows:

3. (1) The owner and the operator of a facility shall ensure that a toxic substance reduction plan is prepared for a toxic substance in accordance with this Act and the regulations if all of the following criteria are met:

- 1. The facility belongs to a class of facilities prescribed by the regulations.*
- 2. The number of persons employed at the facility exceeds the number of persons prescribed by the regulations.*
- 3. The toxic substance is used or created at the facility and the amounts of the substance that are used or created meet the criteria prescribed by the regulations.*
- 4. Such other criteria as are prescribed by the regulations. 2009, c. 19, s. 3 (1).*

Specific criteria are outlined in O. Reg. 455/09. The following sections detail the criteria and applicability to the PCLI facility.

2.1 Class of Facility

Section 4(1) of O. Reg. 455/09 specifies the types of facilities subject to toxic substance reduction planning and includes facilities that begin in North American Industry Classification System code “31”, “32” or “33” and “212”.

The PCLI facility carries out processes and activities related to “Petroleum and Coal Product Manufacturing”, which begins in NAICS code “32”, which is a code identified in O. Reg. 455/09.

2.2 Number of Persons

Section 5 of O. Reg. 455/09 specifies the numbers of persons at a facility must be greater than zero. As of December 31, 2020, the PCLI facility employed 439 persons.

2.3 Amounts of Toxic Substance Used or Created

Section 6 of O. Reg. 455/09 specifies that amounts of a toxic substance used or created must exceed zero. The use or creation of toxic substances for which accounting is required is greater than zero (refer to Section 4).

2.4 Other Criteria

Section 7(1) of O. Reg. 455/09 requires the owner and operator of a facility provide information on National Pollutant Release Inventory (NPRI) substances if reporting to the NPRI is required; or if

the substance is acetone and reporting under Ontario Regulation 127/01 (Airborne Contaminant Discharge Monitoring and Reporting) made under the Environmental Protection Act applies.

In 2020, PCLI was required to report to the NPRI. Specifically, PCLI met the reporting requirements for the following substances listed in Schedule A of O. Reg. 455/09:

NPRI Part 1A Substances:

- 1,2,4-Trimethylbenzene
- Asbestos
- Benzene
- Biphenyl
- Cyclohexane
- Diethanolamine
- Ethylbenzene
- Hexane (-n)
- Hydrogen Sulphide
- Methanol
- Methyl Ethyl Ketone
- Molybdenum Trioxide
- Naphthalene
- Nickel compounds
- Propylene
- Sulphuric Acid
- Toluene
- Total Reduced Sulphur
- Xylene (all isomers)
- Zinc compounds

NPRI Part 4 Substances:

- Carbon Monoxide
- Nitrogen Oxides
- Total Particulate Matter
- PM10 - Particulate Matter <10 Microns
- PM2.5 - Particulate Matter <2.5 Microns
- Sulphur Dioxide

NPRI Part 5 Substances:

- Butane (all isomers)
- Hexane (-n) *(also reported as a Part 1A Substance)*
- Isopropyl Alcohol
- Methanol *(also reported as a Part 1A Substance)*
- Methyl Ethyl Ketone *(also reported as a Part 1A Substance)*
- Propane
- Propylene *(also reported as a Part 1A Substance)*
- Pentane (all isomers)
- Toluene *(also reported as a Part 1A Substance)*

3.0 GENERAL FACILITY INFORMATION

Table 3-1 summarizes the general facility information with reference to the Act and/or O. Reg. 455/09.

Table 3-1: General Facility Information

Reporting Requirement	Facility Information	Reference to Act and/or O. Reg. 455/09
Parent Company Name	HollyFrontier Corporation	O. Reg. 455/09 s.18(2) subparagraph 14
Parent Company Address	2828 N. Harwood, Suite 1300 Dallas, TX 75201	O. Reg. 455/09 s.18(2) subparagraph 14
Facility Name	Mississauga Lubricants Centre	O. Reg. 455/09 s.18(2) subparagraph 4
Facility Address	385 Southdown Road Mississauga, Ontario L5J 2Y3	O. Reg. 455/09 s.18(2) subparagraph 4
Universal Transverse Mercator (UTM) in North American Datum (NAD83)	Zone 17 X [m] 612097 Y [m] 4817199	O. Reg. 455/09 s.18(2) subparagraph 13
National Pollutant Release Inventory Identification Number	3899	O. Reg. 455/09 s.18(2) subparagraph 2
Ontario Regulation 127/01 Identification Number	5119	O. Reg. 455/09 s.18(2) subparagraph 3
Two Digit North American Industry Classification System (NAICS) Code	32 – Manufacturing	O. Reg. 455/09 s.18(2) subparagraph 6
Four Digit North American Industry Classification System (NAICS) Code	3241 – Petroleum and Coal Product Manufacturing	O. Reg. 455/09 s.18(2) subparagraph 6
Six Digit North American Industry Classification System (NAICS) Code	324190 – Other Petroleum and Coal Product Manufacturing CAN	O. Reg. 455/09 s.18(2) subparagraph 6
Number of Full-time Employee Equivalents at the Facility	439 (as of December 31, 2020)	O. Reg. 455/09 s.18(2) subparagraph 5
Facility Public Contact	Corinn Smith Director, Communications & Public Affairs 2310 Lakeshore Road W Mississauga, Ontario, L5J 1K2 Tel: 905-491-0397 Email: Corinn.Smith@hollyfrontier.com	O. Reg. 455/09 s.18(2) subparagraph 7

4.0 SUBSTANCE REPORTING

In accordance with s. 26(1) subparagraphs 2 and 7, PCLI made determinations for each substance reportable under the Act as follows:

- 1) The amount of the substance that enters a process as the substance itself or as a constituent of another substance.
- 2) The amount of the substance that is created.
- 3) If the substance is a NPRI substance,
 - i. quantifications relating to its release, disposal and transfer that,
 - A. are required to be provided under the NPRI Notice, or
 - B. are determined through mass balance, published emission factors, site specific emission factors or engineering estimates, if no quantifications were required to be provided under the NPRI Notice, and
 - ii. the amount of the substance that is contained in product, other than a substance that is identified as a criteria air contaminant or a volatile organic compound in the NPRI Notice.
- 4) If the toxic substance is acetone, the calculations mentioned in subsection 4 (3) of Ontario Regulation 127/01 (Airborne Contaminant Discharge Monitoring and Reporting) made under the Environmental Protection Act.

For the purposes of maintaining confidentiality, PCLI has reported 'Use', 'Created' and 'Contained in Product' quantities in the bands and ranges prescribed by the Ontario Ministry of the Environment. The band and ranges specified by the Ontario Ministry of the Environment are summarized as follows:

- >0 to 1
- >1 to 10
- >10 to 100
- >100 to 1,000
- >1,000 to 10,000
- >10,000 to 100,000
- >100,000 to 1,000,000

The units of measure depend upon the substance being reported under the NPRI and O. Reg. 127/01. Generally, release, disposal and recycling quantities are reported in tonnes. However, for substances with alternate reporting thresholds, these quantities are reported in kilograms or grams.

- NPRI Part 1A – Substances listed at the original NPRI threshold [tonnes]
- NPRI Part 1B – Metals listed at an alternate threshold [kilograms]
- NPRI Part 2 – Polycyclic aromatic compounds (PAHs), [kilograms]
- NPRI Part 3 – Hexachlorobenzene (HCB), Dioxins/furans (toxic equivalent), [grams]
- NPRI Part 4 – Criteria Air Contaminants (CACs) [tonnes]
- NPRI Part 5 – Speciated volatile organic compounds [tonnes]
- O. Reg. 127/01 – Acetone [tonnes]

The following sections summarize the information outlined above for each substance.

Note:

‘—’ is equal to zero in the tables below.

‘0.0000’ is a value greater than zero and greater than four (4) decimal places.

4.1 1,2,4-Trimethylbenzene (CAS Number 95-63-6)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	3%	62.94	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	8%	372.03	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	6%	434.97	No significant change
All Media Releases (tonnes)	0.06	0.06	-4%	-<0.01	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.2 Asbestos (CAS Number 1332-21-4)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	—	—	—	—	No significant change
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	4.89	6.60	-26%	-1.71	Facility opted to decrease disposal of substance this year
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.3 Benzene (CAS Number 71-43-2)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	42.88	No significant change
Created (tonnes)	>10,000 to 100,000	>1,000 to 10,000	8%	840.28	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>1,000 to 10,000	7%	883.50	No significant change
All Media Releases (tonnes)	0.21	0.24	-13%	-0.03	Reduced fugitive emissions from Hydrobon, Pumping and Shipping
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.4 Biphenyl (CAS Number 92-52-4)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-3%	-142.39	No significant change
Created (tonnes)	>0 to 1	>0 to 1	-9%	0.0006	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-2%	-38.39	No significant change
All Media Releases (tonnes)	0.013	0.013	-4%	-0.0005	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.5 Cyclohexane (CAS Number 110-82-7)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	4%	200.08	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	-25%	-76.15	Decreased throughput to Catalytic Dewax Unit
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	0%	0.16	No significant change
All Media Releases (tonnes)	0.125	0.129	-3%	-0.004	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.6 Diethanolamine (CAS Number 111-42-2)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	27%	14.13	Increased quantity purchased
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
All Media Releases (tonnes)	0.19	0.19	2%	<0.01	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.7 Ethylbenzene (CAS Number 100-41-4)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	33.34	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	8%	250.82	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	6%	284.40	No significant change
All Media Releases (tonnes)	0.11	0.14	-19%	-0.03	Reduced fugitive emissions from Tank Farm and LDAR emissions from Hydrobon and Pumping and Shipping
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.8 Hexane (-n) (CAS Number 110-54-3)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	4%	353.98	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-16%	-1213.82	Decreased throughput to Catalytic Dewax Unit
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-9%	-1462.72	No significant change
Air Releases (tonnes)	4.84	4.96	-2%	-0.12	No significant change
Water Releases (tonnes)	—	—	N/A	N/A	No significant change
Land Releases (tonnes)	—	—	N/A	N/A	No significant change
On-site Disposal (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Disposal (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Treatment (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Recycling (tonnes)	—	—	N/A	N/A	No significant change

4.9 Hydrogen Sulphide (CAS Number 7783-06-4)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	1%	127.66	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	-28%	-0.10	Decrease in sulphur production
All Media Releases (tonnes)	0.70	0.63	11%	0.07	Increased throughput of plant slop and sour water
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.10 Methanol (CAS Number 67-56-1)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	12%	1.39	More methanol was purchased for the fuel gas system
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	1.30	1.16	13%	0.15	Increased methanol usage in plant air system
Water Releases (tonnes)	—	—	N/A	N/A	No significant change
Land Releases (tonnes)	—	—	N/A	N/A	No significant change
On-site Disposal (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Disposal (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Treatment (tonnes)	—	—	N/A	N/A	No significant change
Transferred for Recycling (tonnes)	—	—	N/A	N/A	No significant change

4.11 Methyl Ethyl Ketone (CAS Number 78-93-3)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-8%	-25.27	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	0.24	0.38	-38%	-0.14	Lower Dewax LDAR fugitive emissions
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.12 Molybdenum Trioxide (CAS Number 1313-27-5)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	92%	20.88	Catalyst turnarounds in 2020
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	—	—	—	—	No significant change
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	20.68	0	100%	20.68	Catalyst turnarounds in 2020
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.13 Naphthalene (CAS Number 91-20-3)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	7%	273.04	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	>100 to 1,000	>100 to 1,000	-5%	-20.18	No significant change
All Media Releases (tonnes)	0.032	0.035	-9%	-0.003	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.14 Nickel (CAS Number, Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1 to 10	>1 to 10	83%	7.34	Catalyst turnarounds in 2020
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
All Media Releases (tonnes)	0.08	0.12	-35%	-0.04	Decreased usage of fuel oil
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	6.29	0	100%	6.29	Catalyst turnarounds in 2020
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	0	0	0	No significant change

4.15 Propylene (CAS Number 115-07-1)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	19%	29.63	More propylene purchased
Created (tonnes)	>1 to 10	>1 to 10	-14%	-0.58	Decreased production in Hydrobon Platformer
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	35.32	12.16	190%	23.16	Release during turnaround
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.16 Sulphuric Acid (CAS Number 7664-93-9)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	63%	30.13	Increased use in wastewater treatment
Created (tonnes)	>10 to 100	>10 to 100	-37%	-3.86	Decreased sulphur content in liquid refinery fuel
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	15.22	20.22	-25%	-4.99	Decreased sulphur content in liquid refinery fuel
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.17 Toluene (CAS Number 108-88-3)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	0%	3.70	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	8%	1,829.90	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	6%	1,914.53	No significant change
Air Releases (tonnes)	0.57	0.79	-27%	-0.21	Lower Hydrobon and Pumping and Shipping LDAR fugitive emissions
Water Releases (tonnes)	0.0057	0.0052	10%	0.0005	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.18 Total Reduced Sulphur (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	1%	127.66	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	-28%	-0.10	Lower sulphur content in VGO feed
Air Releases (tonnes)	0.70	0.63	11%	0.07	Increased throughput of plant slop and sour water
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.19 Xylene (CAS Number 1330-20-7)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	157.23	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	9%	901.23	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	6%	1,059.69	No significant change
All Media Releases (tonnes)	0.39	0.48	-18%	-0.08	Lower Hydrobon and Pumping and Shipping LDAR fugitive emissions
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.20 Zinc (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-29%	-14.21	Decrease in production
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	>10 to 100	>10 to 100	-45%	-14.19	Decrease in production
All Media Releases (tonnes)	0.10	0.12	-14%	-0.02	Decreased throughput of liquid refinery fuel
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	—	—	—	—	No significant change

4.21 Carbon Monoxide (CAS Number 630-08-0)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-6%	-4.21	No significant change
Air Releases (tonnes)	67.29	71.49	-6%	-4.21	No significant change

4.22 Nitrogen Oxides (CAS Number 11104-93-1)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	-2	-14.61	No significant change
Air Releases (tonnes)	650.28	664.89	-2%	-14.61	No significant change

4.23 Total Particulate Matter (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-17%	-8.74	Decreased sulphur content in liquid refinery fuels
Air Releases (tonnes)	41.79	50.53	-17%	-8.74	Decreased sulphur content in liquid refinery fuels

4.24 PM10 – Particulate Matter <10 Microns (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-30%	-8.22	Decreased sulphur content in liquid refinery fuels
Air Releases (tonnes)	19.11	27.34	-30%	-8.22	Decreased sulphur content in liquid refinery fuels

4.25 PM2.5 – Particulate Matter <2.5 Microns (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-33%	-5.52	Decreased sulphur content in liquid refinery fuels
Air Releases (tonnes)	11.43	16.95	-33%	-5.52	Decreased sulphur content in liquid refinery fuels

4.26 Sulphur Dioxide (CAS Number 7446-09-5)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	-33%	-250.12	Decreased sulphur content in liquid refinery fuel
Air Releases (tonnes)	510.24	760.36	-33%	-250.12	Decreased sulphur content in liquid refinery fuel

4.27 Butane (all isomers) (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	10%	51.98	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	123.44	No significant change
Air Releases (tonnes)	2.42	8.97	-73%	-6.56	Reduced fugitive emissions from Hydrobon Pumping and Shipping

4.29 Isopropyl Alcohol (CAS Number 67-63-0)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>1 to 10	>1 to 10	-34%	-2.22	Decreased production in Hydrobon Platformer
Air Releases (tonnes)	4.32	6.53	-34%	-2.22	Reduced fugitive emissions from Hydrobon Pumping and Shipping

4.30 Pentane (all isomers) (CAS Number Not Applicable)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	6%	196.31	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	3%	305.37	No significant change
Air Releases (tonnes)	2.99	10.25	-71%	-7.26	Reduced fugitive emissions from Hydrobon, Pumping and Shipping

4.31 Propane (CAS Number 74-98-6)

Required Information	2020 Reporting Year	2019 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	4%	17.27	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	57.77	No significant change
Air Releases (tonnes)	1.84	7.14	-74%	-5.3	Reduced fugitive emissions from Hydrobon, Pumping and Shipping

5.0 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY

As described in the Toxic Substance Reduction Plan Summaries dated [December 1, 2013](#) and [December 3, 2012](#), there were no options identified for implementation, above and beyond the actions the Lubricants Centre has already taken, at this time. The plan will be reviewed in accordance with the Act and regulation, at which time, new options may be identified and considered for implementation.

Finally, there have been no amendments to the Toxic Substance Reduction Plan Summaries dated December 1, 2013 and December 3, 2012.

6.0 ANNUAL CERTIFICATION STATEMENT

In accordance with s.19 of O. Reg. 455/09, the highest ranking employee at the facility electronically certified the toxic substance plan. A copy of the electronic certification is provided in Attachment 1.

Attachment 1: Copy of Electronic Certification

Report Submission and Electronic Certification

NPRI - Electronic Statement of Certification

Specify the language of correspondence

English

Comments (optional)

I hereby certify that I have exercised due diligence to ensure that the submitted information is true and complete. The amounts and values for the facility(ies) identified below are accurate, based on reasonable estimates using available data. The data for the facility(ies) that I represent are hereby submitted to the programs identified below using the Single Window Reporting Application.

I also acknowledge that the data will be made public.

Note: Only the person identified as the Certifying Official or the authorized delegate should submit the report(s) identified below.

Company Name

Petro-Canada Lubricants Inc.

Certifying Official (or authorized delegate)

Jeffrey Danielson

Report Submitted by

Jeffrey Danielson

I, the Certifying Official or authorized delegate, agree with the statements above and acknowledge that by pressing the "Submit Report(s)" button, I am electronically certifying and submitting the facility report(s) for the identified company to its affiliated programs.

ON MECP TRA - Electronic Certification Statement

Annual Report Certification Statement

As of 2021-09-29, I, Jeffrey Danielson, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

TRA Substance List*

CAS RN	Substance Name
95-63-6	1,2,4-Trimethylbenzene
1332-21-4	Asbestos (friable form only)
71-43-2	Benzene
92-52-4	Biphenyl
NA - 24	Butane (all isomers)
630-08-0	Carbon monoxide
110-82-7	Cyclohexane
111-42-2	Diethanolamine (and its salts)
100-41-4	Ethylbenzene
7783-06-4	Hydrogen sulphide
67-63-0	Isopropyl alcohol
67-56-1	Methanol
78-93-3	Methyl ethyl ketone

1313-27-5	Molybdenum trioxide
91-20-3	Naphthalene
110-54-3	n-Hexane
NA - 11	Nickel (and its compounds)
11104-93-1	Nitrogen oxides (expressed as NO2)
NA - 35	Pentane (all isomers)
NA - M09	PM10 - Particulate Matter <= 10 Microns
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns
74-98-6	Propane
115-07-1	Propylene
7446-09-5	Sulphur dioxide
7664-93-9	Sulphuric acid
108-88-3	Toluene
NA - M08	Total Particulate Matter
NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)
1330-20-7	Xylene (all isomers)
NA - 14	Zinc (and its compounds)

Company Name

Petro-Canada Lubricants Inc.

Highest Ranking Employee

Jeffrey Danielson

Report Submitted by

Jeffrey Danielson

Website address

<https://hollyfrontier.com/operations/facilities/mississauga-lubricants-centre/default.aspx>

I, the highest ranking employee, agree with the certification statement(s) above and acknowledge that by checking the box I am electronically signing the statement(s). I also acknowledge that by pressing the 'Submit Report(s)' button I am submitting the facility record(s)/report(s) for the identified facility to the Director under the Toxics Reduction Act, 2009. I also acknowledge that the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 provide the authority to the Director under the Act to make certain information as specified in subsection 27(5) of Ontario Regulation 455/09 available to the public.

Submitted Report

Period	Submission Date	Facility Name	Province	City	Programs
2020	2021-09-29	Mississauga Lubricants Centre	Ontario	Mississauga	NPRI, ON MECP TRA, NFPRER

Note: If there is a change in the contact information for the facility, a change in the owner or operator of the facility, if operations at the facility are terminated, or if information submitted for any previous year was mistaken or inaccurate, please update this information through SWIM or by contacting the National Pollutant Release Inventory directly.