

**2018 TOXICS REDUCTION ACT**

**Report on Toxic Substance  
Accounting Requirements**

**VERSION 1.0**

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

July 2019



July 11, 2019  
Version 1.0



## Version Control

Version	Date Issued	Modifications
Original	July 2019	Original version made available to the public and employees

# Table of Contents

**1.0 INTRODUCTION ..... 3**

**2.0 REPORTING CRITERIA..... 4**

2.1 Class of Facility ..... 4

2.2 Number of Persons..... 4

2.3 Amounts of Toxic Substance Used or Created..... 4

2.4 Other Criteria ..... 4

**3.0 GENERAL FACILITY INFORMATION ..... 7**

**4.0 SUBSTANCE REPORTING ..... 8**

4.1 1,2,4-Trimethylbenzene (CAS Number 95-63-6) ..... 9

4.2 Asbestos (CAS Number 1332-21-4) .....10

4.3 Benzene (CAS Number 71-43-2).....11

4.4 Biphenyl (CAS Number 92-52-4).....12

4.5 Cyclohexane (CAS Number 110-82-7).....13

4.6 Diethanolamine (CAS Number 111-42-2).....14

4.7 Ethylbenzene (CAS Number 100-41-4) .....15

4.8 Hexane (-n) (CAS Number 110-54-3).....16

4.9 Hydrogen Sulphide (CAS Number 7783-06-4) .....17

4.10 Methanol (CAS Number 67-56-1).....18

4.11 Methyl Ethyl Ketone (CAS Number 78-93-3).....19

4.12 Molybdenum Trioxide (CAS Number 1313-27-5).....20

4.13 Naphthalene (CAS Number 91-20-3) .....21

4.14 Nickel (CAS Number, Not Applicable) .....22

4.15 Propylene (CAS Number 115-07-1).....23

4.16 Sulphuric Acid (CAS Number 7664-93-9).....24

4.17 Toluene (CAS Number 108-88-3).....25

4.18 Total Reduced Sulphur (CAS Number Not Applicable) .....26

4.19 Xylene (CAS Number 1330-20-7).....27

4.20 Zinc (CAS Number Not Applicable) .....28

4.21 Carbon Monoxide (CAS Number 630-08-0) .....29

4.22 Nitrogen Oxides (CAS Number 11104-93-1).....29

4.23 Total Particulate of Matter (CAS Number Not Applicable).....29

4.24 PM10 – Particulate Matter <10 Microns (CAS Number Not Applicable) .....30

4.25 PM2.5 – Particulate Matter <2.5 Microns (CAS Number Not Applicable) .....30

4.26 Sulphur Dioxide (CAS Number 7446-09-5) .....31

4.27 Butane (all isomers) (CAS Number Not Applicable) .....31

4.29 Isopropyl Alcohol (CAS Number 67-63-0) .....32

4.30 Pentane (all isomers) (CAS Number Not Applicable) .....32

4.31 Propane (CAS Number 74-98-6) .....32

**5.0 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY .....33**

**6.0 ANNUAL CERTIFICATION STATEMENT .....34**

**LIST OF ATTACHMENTS**

**ATTACHMENT 1: COPY OF ELECTRONIC CERTIFICATION**



## 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, 2018, the PCLI facility employed 475 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 2018, 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	475 (as of December 31, 2018)	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@petrocanadalsp.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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-20%	-357.85	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-25%	-1,258.72	Decreased naphtha production
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-24%	-1,616.58	Decreased platformate production
Air Releases (tonnes)	0.07	0.06	19%	0.01	Higher 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

## 4.2 Asbestos (CAS Number 1332-21-4)

Required Information	2018 Reporting Year	2017 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)	19.10	27.77	-31.22%	-8.67	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-19%	-305.78	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>10,000 to 100,000	-25%	-2,662.24	Decreased naphtha production
Contained in Product (tonnes)	>1,000 to 10,000	>10,000 to 100,000	-24%	-2,964.87	Decreased platformate production
Air Releases (tonnes)	0.35	0.32	10%	0.03	Higher fugitive emissions and increased wastewater treatment
Water Releases (tonnes)	0.00	0.35	-99%	-0.34	Heat exchanger leak in 2017. No leaks in 2018.
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

#### 4.4 Biphenyl (CAS Number 92-52-4)

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-12%	-638.08	Decreased naphtha throughput
Created (tonnes)	>0 to 1	>0 to 1	-4%	-0.0003	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	-220.34	Decreased platformate production
Air Releases (tonnes)	0.01	0.01	34%	0.004	Higher 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

## 4.5 Cyclohexane (CAS Number 110-82-7)

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-21%	-928.90	Decreased naphtha throughput
Created (tonnes)	>100 to 1,000	>100 to 1,000	22%	51.78	Increased LSR production
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-16%	-551.29	Decreased platformate production
Air Releases (tonnes)	0.09	0.08	13%	0.01	Higher 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

#### 4.6 Diethanolamine (CAS Number 111-42-2)

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	0.4%	0.20	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	0.20	0.20	-3%	-0.01	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)	—	—	—	—	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-19%	-236.16	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-25%	-858.698	Decreased naphtha production
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-23%	-1,094.08	Decreased platformate production
Air Releases (tonnes)	0.15	0.15	2%	0.003	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)	—	—	—	—	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-21%	-1,643.43	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	0.05%	2.72	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-9%	-1,045.42	No significant change
Air Releases (tonnes)	4.90	5.14	-5%	-0.24	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	>0 to 1	—	—	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	0.1%	20.76	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	36%	0.13	Increased liquid sulphur in 2018
Air Releases (tonnes)	0.53	1.00	-47%	-0.46	Decreased 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

**4.10 Methanol (CAS Number 67-56-1)**

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	45%	7.84	Increased usage of methanol onsite
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	2.54	3.52	-28%	-0.97	Decreased 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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	8%	25.05	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	1.19	1.22	-2%	-0.03	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)	—	—	—	—	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	23%	4.87	Two plant turnarounds leading to the changing of catalyst with higher MoO <sub>3</sub> content
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)	3.67	—	100%	3.67	Two plant turnarounds leading to the disposal of catalyst
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	10.84	—	100%	10.84	Two plant turnarounds leading to the recycling of catalyst

**4.13 Naphthalene (CAS Number 91-20-3)**

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	0.4%	17.10	No significant change
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	>100 to 1,000	>100 to 1,000	1%	1.97	No significant change
Air Releases (tonnes)	0.04	0.04	20%	0.01	Higher 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

**4.14 Nickel (CAS Number, Not Applicable)**

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-14%	-1.58	Decreased usage of fuel oil
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	0.11	0.12	-10%	-0.01	Decreased usage of fuel oil
Water Releases (tonnes)	—	—	—	—	No significant change
Land Releases (tonnes)	—	—	—	—	No significant change
On-site Disposal (tonnes)	—	—	—	—	No significant change
Transferred for Disposal (tonnes)	0.58	—	100%	0.58	Two plant turnarounds leading to the disposal of catalyst
Transferred for Treatment (tonnes)	—	—	—	—	No significant change
Transferred for Recycling (tonnes)	12.42	—	100%	12.42	Two plant turnarounds leading to the recycling of catalyst



**4.15 Propylene (CAS Number 115-07-1)**

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	79%	130.70	Increased propylene addition in dewax process
Created (tonnes)	>1 to 10	>1 to 10	-2%	-0.07	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	57.68	56.17	3%	1.52	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)	—	—	—	—	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	50%	23.78	Increased use in wastewater treatment
Created (tonnes)	>10 to 100	>10 to 100	8%	1.49	No significant change
Contained in Product (tonnes)	—	—	—	—	No significant change
Air Releases (tonnes)	20.72	19.23	8%	1.49	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)	—	—	—	—	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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-15%	-823.45	Decreased naphtha throughput
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-25%	-6,061.14	Decreased naphtha production
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-24%	-6,924.64	Decreased platformate production
Air Releases (tonnes)	1.46	1.46	-0.2%	-0.003	No significant change
Water Releases (tonnes)	0.00	1.71	-100%	-1.70	Heat exchanger leak in 2017. No leaks in 2018.
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	2018 Reporting Year	2017 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	0.1%	20.76	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	36%	0.13	Increased liquid sulphur in 2018
Air Releases (tonnes)	0.53	1.00	-47%	-0.46	Decreased 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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-19%	-1,113.00	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>10,000 to 100,000	-27%	-2,823.90	Decreased naphtha production
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-24%	-3,933.32	Decreased platformate production
Air Releases (tonnes)	0.53	0.45	20%	0.09	Increased wastewater treatment
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

**4.20 Zinc (CAS Number Not Applicable)**

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 1,00	>100 to 1,000	-40%	-53.56	Reduced use of additives containing zinc.
Created (tonnes)	—	—	—	—	No significant change
Contained in Product (tonnes)	>10 to 100	>100 to 1000	-53%	-61.69	Lower addition of Zn contained in additives to finished lube oils and greases
Air Releases (tonnes)	0.11	0.12	-7%	-0.01	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)	8.14	—	100%	8.14	Two plant turnarounds leading to the disposal of catalyst
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	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-6%	-4.01	No significant change
Air Releases (tonnes)	68.64	72.65	-6%	-4.01	No significant change

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	1%	4.53	No significant change
Air Releases (tonnes)	647.23	642.70	1%	4.53	No significant change

#### 4.23 Total Particulate of Matter (CAS Number Not Applicable)

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-3%	-1.51	No significant change
Air Releases (tonnes)	46.12	47.63	-3%	-1.51	No significant change

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-8%	-1.92	No significant change
Air Releases (tonnes)	22.34	24.26	-8%	-1.92	No significant change

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>10 to 100	>10 to 100	-9%	-1.34	No significant change
Air Releases (tonnes)	13.50	14.84	-9%	-1.34	No significant change



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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	14%	88.19	Increased sulphur content in fuel oil and feedstock
Air Releases (tonnes)	700.82	612.63	14%	88.19	Increased sulphur content in fuel oil and feedstock

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-25%	-108.22	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-3%	-188.59	No significant change
Air Releases (tonnes)	6.75	7.12	-5%	-0.37	No significant change

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	—	—	—	—	No significant change
Created (tonnes)	>1 to 10	>1 to 10	-4%	-0.23	No significant change
Air Releases (tonnes)	5.53	5.76	-4%	-0.23	No significant change

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

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-21%	-428.66	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-9%	-258.76	No significant change
Air Releases (tonnes)	7.36	7.74	-5%	-0.37	No significant change

### 4.31 Propane (CAS Number 74-98-6)

Required Information	2018 Reporting Year	2017 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-11%	-36.00	Decreased naphtha throughput
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	2%	52.23	No significant change
Air Releases (tonnes)	5.42	5.65	-4%	-0.23	No significant change

## 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)

J Gordon Pinard

Report Submitted by

J Gordon Pinard

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 30/05/2019, I, J Gordon Pinard, 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
NA - 32	Hexane (all isomers excluding n-hexane)
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 NO <sub>2</sub> )
NA - 35	Pentane (all isomers)
NA - M09	PM10 - Particulate Matter
NA - M10	PM2.5 - Particulate Matter
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)

\*Due to reporting system limitations, for the 2018 annual report the TRA Substance List may included new Volatile Organic Compounds (VOCs) and/or Dioxins and Furans congeners reported to NPRI only.

Company Name

Petro-Canada Lubricants Inc.

Highest Ranking Employee

J Gordon Pinard

Report Submitted by



J Gordon Pinard

Website address

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
2018	30/05/2019	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.