

#### **2014 TOXICS REDUCTION ACT**

# Report on Toxic Substance Accounting Requirements

**VERSION 1.0** 

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

July 2015



\*Marque de commense Préro-Caraka - Daderrais



### **Version Control**

Version	Date Issued	Modifications
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#### 1.0 INTRODUCTION

Petro-Canada Lubricants Inc. (PCLI), a Suncor Energy business, is a world-scale supplier of products ranging from automobile lubricants to white oils for the pharmaceutical market. Finished goods are shipped nationally and internationally to customers familiar with our growing reputation for high quality, environment-friendly fluids.

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: <a href="http://www.ontario.ca/environment-and-energy/toxic-substance-reduction-planner-licence">http://www.ontario.ca/environment-and-energy/toxic-substance-reduction-planner-licence</a>.



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#### 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, 2014, the PCLI facility employed 435 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).





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#### 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 2014, 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
- 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</p>
- 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** 

Tak	ole 3-1: General Facility Information	I
Reporting Requirement	Facility Information	Reference to Act and/or O. Reg. 455/09
Parent Company Name	Suncor Energy Inc.	O. Reg. 455/09 s.18(2) subparagraph 14
Parent Company Address	150 6 <sup>th</sup> Avenue Southwest Calgary, Alberta T2P 3E3	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)	X [m] 612417.51 Y [m] 4817383.76	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	435 (as of December 31, 2013)	O. Reg. 455/09 s.18(2) subparagraph 5
Facility Public Contact	Joel Thompson Director, Corporate Communications 150 6 <sup>th</sup> Avenue Southwest Calgary, Alberta T2P 3E3 Tel: 403-296-6637 Email: jjthompson@suncor.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:

- 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]



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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	2014	2013	Change	Change	Rationale For Change
rtoquilou illiorination	Reporting Year	Reporting Year	(%)	(tonnes)	randinale i di dilange
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	241.2158	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-13%	789.6436	Decrease in the flow to the wastewater treatment plant.
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-13%	1,030.8515	Decrease in the flow to the wastewater treatment plant.
Air Releases (tonnes)	0.0610	0.0688	-11%	0.0079	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

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

Required Information	2014 Reporting Year	2013 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)	17.9800	29.0200	-38%	11.04	Less asbestos was removed from site as part of our asbestos abatement program
Transferred for Treatment (tonnes)	_	_	_	_	No significant change
Transferred for Recycling (tonnes)	_	_	_	_	No significant change



### 4.3 Benzene (CAS Number 71-43-2)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	219.2375	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-13%	1,654.1717	Decrease in the flow to the wastewater treatment plant
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-13%	1,872.8270	Decrease in the flow to the wastewater treatment plant
Air Releases (tonnes)	0.0359	0.3670	-7%	-0.0260	No significant change
Water Releases (tonnes)	0.0057	0.0049	16.08%	0.0008	An exchanger leak in 2014 caused a minor increase in release to water
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	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-5%	310.0926	No significant change
Created (tonnes)	>0 to 1	>0 to 1	12%	0.0007	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	252.7594	No significant change
Air Releases (tonnes)	0.0109	0.0102	7%	0.0007	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



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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	604.1986	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	-15%	29.0597	Some units were in shutdown for maintenance in 2013 vs no planned shutdown in 2014
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	437.7757	No significant change
Air Releases (tonnes)	0.1985	0.1949	2%	0.0036	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



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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-14%	8.395	Decreased usage due to process demands
Created (tonnes)	_	_	_	_	No significant change
Contained in Product (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	0.2044	0.1887	8%	0.0157	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	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	170.4893	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-13%	539.5872	No significant change
Contained in Product (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-13%	709.6447	No significant change
Air Releases (tonnes)	0.1470	0.1465	0%	0.0005	No significant change
Water Releases (tonnes)	_	_	_		
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	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	1,068.977	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-8%	494.5069	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-10%	1,501.3413	No significant change
Air Releases (tonnes)	4.9238	4.7485	4%	0.1753	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	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>0 to 1	>0 to 1	-3%	0.0160	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	2%	242.1861	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	52%	0.1464	Increase in production levels
Air Releases (tonnes)	0.5664	0.6449	-12%	0.0786	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



### 4.10 Methyl Ethyl Ketone (CAS Number 78-93-3)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-22%	119.6200	Less power outages and less equipment maintenance in 2014 resulting in lower use when compared to 2013
Created (tonnes)	_	_	_	_	No significant change
Contained in Product (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	3.2280	2.6656	21%	0.5624	Lower repair success rate in LDAR for some units resulting in more fugitive emissions from those units in 2014 compared to 2013.
Water Releases (tonnes)	_	ı	_	_	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



### 4.11 Molybdenum Trioxide (CAS Number 1313-27-5)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-26%	5.2006	Less catalyst containing molybdenum trioxide handled
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)	_	_	_	_	No significant change
Transferred for Treatment (tonnes)	_	_	_	_	No significant change
Transferred for Recycling (tonnes)	0.00	5.2006	-100%	-5.2006%	No catalyst containing molybdenum trioxide was recycled



### 4.12 Naphthalene (CAS Number 91-20-3)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-2%	-56.3630	No significant change
Created (tonnes)	_	_	_	_	No significant change
Contained in Product (tonnes)	>100 to 1,000	>100 to 1,000	9%	24.1376	No significant change
Air Releases (tonnes)	0.0595	0.0404	47%	0.0191	Lower repair success rate in LDAR for some units resulting in more fugitive emissions from those units in 2014 compared to 2013
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



### 4.13 Nickel (CAS Number, Not Applicable)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-24%	4.0346	Less catalyst containing nickel handled
Created (tonnes)	_	_	_	_	No significant change
Contained in Product (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	0.1337	0.0672	98.76%	0.0664	Higher fuel consumption
Water Releases (tonnes)	_	_	_	_	No significant change
Land Releases (tonnes)	_	_	_	_	No significant change
On-site Disposal (tonnes)	_	_	_	_	No significant change
Transferred for Disposal (tonnes)	0.0	4.1010	-100%	-4.1010	No catalyst containing nickel was disposed
Transferred for Treatment (tonnes)	_	_	_	_	No significant change
Transferred for Recycling (tonnes)	_	_	_	_	No significant change



### 4.14 Propylene (CAS Number 115-07-1)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-71%	360.9859	A leak identified in 2013 resulted in higher usage and higher emissions in 2013. Once repaired this resulted in reduced usage and reduced emissions
Created (tonnes)	>1 to 10	>1 to 10	32%	0.8376	Increase in production levels
Contained in Product (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	28.5205	45.8777	-38%	17.3571	A leak identified in 2013 resulted in higher usage and higher emissions in 2013. Once repaired this resulted in reduced usage and reduced 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



### 4.15 Sulphuric Acid (CAS Number 7664-93-9)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	-35%	-16.7205	Decreased usage of sulphuric acid in the cooling towers
Created (tonnes)	>10 to 100	>10 to 100	7%	1.1654	No significant change
Contained in Product (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	18.2727	17.1073	7%	1.1654	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 Toluene (CAS Number 108-88-3)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-13%	837.9266	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-13%	3,790.9645	No significant change
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-13%	4,494.6024	No significant change
Air Releases (tonnes)	3.0553	2.5369	20%	0.5118	Higher fugitive emissions from certain units as detected by LDAR program.
Water Releases (tonnes)	0.0053	0.0050	5%	0.0003	No significant change
Land Releases (tonnes)	_	_	_	_	No significant change
On-site Disposal (tonnes)	_	_	_	_	No significant change
Transferred for Disposal (tonnes)	0.0	0.0016	-100%	-0.0016	No sludge and filter cake containing toluene disposed
Transferred for Treatment (tonnes)	_	_	_	_	No significant change
Transferred for Recycling (tonnes)	_	_	_	_	No significant change



### 4.17 Total Reduced Sulphur (CAS Number Not Applicable)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>0 to 1	>0 to 1	-3%	0.016	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	2%	242.1861	No significant change
Contained in Product (tonnes)	>0 to 1	>0 to 1	52%	0.1464	Changes in emissions due to changes in tank constituents from 2013 to 2014
Air Releases (tonnes)	0.5664	0.6449	-12%	0.0786	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



### 4.18 Xylene (CAS Number 1330-20-7)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-11%	803.6395	No significant change
Created (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-14%	1,779.4865	Increase in production levels
Contained in Product (tonnes)	>10,000 to 100,000	>10,000 to 100,000	-13%	2,581.0895	No significant change
Air Releases (tonnes)	0.4750	0.4732	0.32%	0.0015	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)	0.0	0.0002	-100%	-0.0002	No sludge and filter cake containing xylene disposed
Transferred for Treatment (tonnes)	_	_	_	_	No significant change
Transferred for Recycling (tonnes)	_	_	_	_	No significant change



### 4.19 Zinc (CAS Number Not Applicable)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	16%	20.2580	Increase in production levels
Created (tonnes)	_	_	_	_	No significant change
Contained in Product (tonnes)	>100 to 1000	>100 to 1000	18%	20.2326	Increase in production levels
Air Releases (tonnes)	0.1187	0.0934	27%	0.0253	Higher fuel consumption
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 Carbon Monoxide (CAS Number 630-08-0)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	_	_	_	_	No significant change
Created (tonnes)	>10 to 100	>10 to 100	9%	5.9545	No significant change
Air Releases (tonnes)	>10 to 100	>10 to 100	9%	5.9545	No significant change

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	_	-	_	ı	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	12%	66.7502	No significant change
Air Releases (tonnes)	>100 to 1,000	>100 to 1,000	12%	66.7502	No significant change

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>10 to 100	22%	4.3054	Higher fuel consumption
Created (tonnes)	>10 to 100	>10 to 100	59%	11.0989	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.
Air Releases (tonnes)	53.9300	38.5257	40%	15.4043	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.





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# 4.23 PM10 - Particulate Matter <10 Microns (CAS Number Not Applicable)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1 to 10	>1 to 10	22%	0.5154	Higher fuel consumption
Created (tonnes)	>10 to 100	>10 to 100	72%	9.6315	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.
Air Releases (tonnes)	25.9361	15.7892	64%	10.1469	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>0 to 1	>0 to 1	21%	0.0405	Higher fuel consumption
Created (tonnes)	>10 to 100	>10 to 100	69%	6.2981	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.
Air Releases (tonnes)	15.6044	9.2658	68%	6.3386	Higher fuel consumption, higher TDS measurement in cooling tower water and lower precipitation to mitigate road dust.

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#### 4.25 Sulphur Dioxide (CAS Number 7446-09-5)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	_	-	_	_	No significant change
Created (tonnes)	>100 to 1,000	>100 to 1,000	7%	41.3677	No significant change
Air Releases (tonnes)	614.6202	573.2526	7%	41.3677	No significant change

#### 4.26 Butane (all isomers) (CAS Number Not Applicable)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-11%	59.5933	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	12%	658.2701	No significant change
Air Releases (tonnes)	7.1931	6.4213	12%	0.7718	No significant change

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	_	_	_	_	No significant change
Created (tonnes)	>10 to 100	>1 to 10	117%	5.5472	Increase in production levels
Air Releases (tonnes)	10.2741	4.7270	117%	5.5472	Increase in production levels

### 4.29 Methanol (CAS Number 67-56-1)

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>10 to 100	>1 to 10	108%	7.7871	More methanol used
Created (tonnes)	_	_	_	_	No significant change
Air Releases (tonnes)	2.9947	1.4322	109%	1.5625	More methanol used

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-12%	398.6501	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	-7%	691.9038	No significant change
Air Releases (tonnes)	7.4029	7.0923	4%	0.3105	No significant change

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

Required Information	2014 Reporting Year	2013 Reporting Year	Change (%)	Change (tonnes)	Rationale For Change
Use (tonnes)	>100 to 1,000	>100 to 1,000	-5%	19.7768	No significant change
Created (tonnes)	>1,000 to 10,000	>1,000 to 10,000	31%	656.1071	Increase in production levels
Air Releases (tonnes)	5.9136	5.2599	12%	0.6537	No significant change



#### 5.0 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY

As described in the Toxic Substance Reduction Plan Summaries dated <u>December 1, 2013</u> and <u>December 3, 2012</u>, 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**



\*Manus do commente ProtoCanada - Trademak

June 2015

Report Submission and E	ectronic Certification			
NPRI - Electronic Statement of Certifi	cation			
Specify the language of correspondence				
English				
Comments (optional)				
I hereby certify that I have exercised due diligence to exemplete. The amounts and values for the facility(ies) estimates using available data. The data for the facility programs identified below using the Single Window Relation acknowledge that the data will be made public. Note: Only the person identified as the Certifying Officing report(s) identified below.	identified below are accurate, based on reasonable (ies) that I represent are hereby submitted to the eporting Application.			
Company Name				
Petro-Canada Lubricants Inc.				
Certifying Official (or authorized delegate)				
Ken Bisgrove				
Report Submitted by				
Gord 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 MOE TRA - Electronic Certification Statement				
Annual Report Certification Statemen	t			
TRA Substance List				
CAS RN	Substance Name			

CAS RN	Substance Name
100-41-4	Ethylbenzene
108-88-3	Toluene
110-54-3	n-Hexane

110-82-7	Cyclohexane
111-42-2	Diethanolamine (and its salts)
11104-93-1	Nitrogen oxides (expressed as NO2)
115-07-1	Propylene
1313-27-5	Molybdenum trioxide
1330-20-7	Xylene (all isomers)
1332-21-4	Asbestos (friable form only)
630-08-0	Carbon monoxide
67-56-1	Methanol
71-43-2	Benzene
7446-09-5	Sulphur dioxide
7664-93-9	Sulphuric acid
7783-06-4	Hydrogen sulphide
78-93-3	Methyl ethyl ketone
91-20-3	Naphthalene
92-52-4	Biphenyl
95-63-6	1,2,4-Trimethylbenzene

NA - 11	Nickel (and its compounds)		
NA - 14	Zinc (and its compounds)		
NA - M08	Total Particulate Matter		
NA - M09	PM10 - Particulate Matter		
NA - M10	PM2.5 - Particulate Matter		
NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)		
NA - M16	Volatile Organic Compounds (VOCs)		
Company Name			
Petro-Canada Lubricants Inc.			
Highest Ranking Employee			
Gord Pinard			
Report Submitted by			
Gord Pinard			

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
2014	29/05/2015	Mississauga Lubricants Centre	Ontario	Mississauga	NPRI,ON MOE 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.