Substance Reporting

Toyota Motor Manufacturing Canada (Woodstock)

In 2009, the Government of Ontario passed a legislation known as the Toxics Reduction Act, 2009. The purpose of this Act, and supporting regulation, is to:
1) prevent pollution and protect human health and environment by reducing the use and creation of specific substances and
2) inform the public
The Ministry of Environment (MOE) requires facilities to report on the specific substances that have been defined by the Act and make this information available to the public on the internet.

Facility Information

Site	Toyota Motor Manufacturing Canada (Woodstock)
Address	1717 Dundas Street Woodstock, ON

General Information - Woodstock Plant

National Pollutant Release Inventory (NPRI) ID:	11579
Ministry of Environment (MOE) ID for Ontario Regulation 127	11209
Full time employees	Over 3000
Canada SIC 4 digit code	Motor Vehicle Mfg (3231)
U.S. SIC Code	Motor Vehicles and Car Bodies (3711)
NAICS 6 digit code	Automobile & Light-Duty Motor Vehicle Mfg (336110)
UTM	525258 (easting), 4776708 (northing), Zone 17
Canadian Parent Company	Not applicable to Toyota Motor Manufacturing Canada

Ideal Gas stream behaves as an ideal gas (correct)

Mr. Scott Mackenzie
Senior Manager, Government Affairs
(519) 653-1111 ext 2380
Scott.Mackenzie@toyota.com

Reduction Plan Objectives

TMMC is committed to protecting the environment and ensuring that its automobile manufacturing operations are safe for its team members, the community and the environment. To support this commitment, TMMC will continue to lead pollution prevention and continual improvement activities for each reportable substance.

As per the plans created under Ontario Regulation 455/09, TMMC did not intend to implement any options identified through the Toxics Reduction Act Plan as no new activities were identified through the Act. TMMC will continue to evaluate potential opportunities for reduction of toxic substances through the ISO 14001 Environmental Management System and Environmental Policy. Therefore, no summary or quantification of actions taken will be made under section 27 (1) paragraph 6 of O. Reg 455/09. Additionally, no amendments have been made to the toxics reduction plan during the reporting period.

ON MECP TRA - Electronic Certification Statement

Annual Report Certification Statement

As of 2020-07-21, I, Frank Vandine, 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.

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.

7/22/20

General Information

Substance Name	CAS Number	Primary Use in the Facility	Enters (tonnes) 2019 Quantity (tonnes)	Enters Change In Percent (%)	Enters Change in Mass (tonnes)	Created (tonnes) 2019 Quantity (tonnes)	Created Change in Percent (%)	Created Change in Mass (tonnes)	Released (tonnes) 2019 Quantity (tonnes)	Released Change in Percent (%)	Released Change in Mass (tonnes)	Disposal (tonnes) 2019 Quantity (tonnes)	Disposal Change in Percent (%)	Disposal Change in Mass (tonnes)	Transfers (tonnes) 2019 Quantity (tonnes)	Transfers Change in Percent (%)	Transfers Change in Mass (tonnes)	Contained in Product 2019 Quantity (tonnes)	Contained in Product Change in Percent (%)	Contained in Product Change in Mass (tonnes)	Reason for Changes	NPRI Part
PM_{10}	*	Byproduct of painting processes and combustion sources	N/A	N/A	N/A	1 to 10	8%	<1	1 to 10	19%	<1	Data for disposal, transfer and contained in product are not required under O. Reg 455 for substances belonging to Part 4 and Part 5 of NPRI									Production related	4
$PM_{2.5}$	*	Byproduct of painting processes and combustion sources	N/A	N/A	N/A	1 to 10	-3%	<1	1 to 10	-29%	<1										Production related	4
Carbon monoxide	630-08-0	Byproduct of stationary combustion units	N/A	N/A	N/A	10 to 100	5%	1	10 to 100	4%	1										No significant change	4
Nitrogen oxides (expressed as nitrogen dioxide)	11104-93-1	Byproduct of stationary combustion units	N/A	N/A	N/A	10 to 100	6%	2	10 to 100	3%	1										No significant change	4
Manganese (and its compounds)	*	Manganese is a component in the steel used to make the vehicle body	1,000 to 10,000	7%	111	N/A	N/A	N/A	0 to 1	6%	N/A	N/A	N/A	N/A	10 to 100	151%	11	1,000 to 10,000	5%	80	No significant change	1
Zinc (and its compounds)	*	Vehicle bodies are made of steel. Zinc is a crucial component in the steel for its corrosion prevention properties. It is also used in the coating process to pre-treat the steel body prior to applying the paint	100 to 1,000	5%	44	N/A	N/A	N/A	0 to 1	-1%	<1	0 to 1	0%	N/A	1 to 10	1%	<1	100 to 1,000	5%	44	No significant change	1
Nitrate ion in solution at pH ≥ 6.0	*	Byproduct of wastewater treatment operation, contained in engine coolant in assembled vehicles	1 to 10	17%	0	1 to 10	99%	4	N/A	N/A	N/A	N/A	N/A	N/A	0 to 1	167%	<1	1 to 10	17%	<1	Production related	1
Xylene (all isomers)	1330-20-7	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	1%	0	N/A	N/A	N/A	10 to 100	58%	5	0 to 1	2%	<1	10 to 100	35%	8	N/A	N/A	N/A	Production related	1,5
Methanol	67-56-1	The primary ingredient in windshield washer fluid added to the assembled vehicle	100 to 1,000	14%	77	N/A	N/A	N/A	1 to 10	-2%	<1	0 to 1	255%	<1	0 to 1	33%	<1	100 to 1,000	14%	35	Production related	1,5
Isopropyl alcohol	67-63-0	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	-49%	-4	N/A	N/A	N/A	1 to 10	2%	0	0 to 1	142%	<1	1 to 10	39%	<1	N/A	N/A	N/A	Material reformulation, no longer reportable as Part 1	1,5
n-Butyl alcohol	71-36-3	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	-11%	-4	N/A	N/A	N/A	10 to 100	5%	1	0 to 1	-42%	<1	0 to 1	85%	<1	N/A	N/A	N/A	Material reformulation	1
1,2,4-Trimethylbenzene	95-63-6	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	-10%	-3	N/A	N/A	N/A	1 to 10	8%	1	0 to 1	-60%	<1	0 to 1	89%	<1	N/A	N/A	N/A	Material reformulation	1,5
4,4'-Methylenediphenyl Diisocyanate	101-68-8	A component used to manufacture plastic instrumentation panels for the vehicle	10 to 100	N/A	11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0 to 1	N/A	<1	N/A	N/A	N/A	New reportable	1
Ethylene glycol	107-21-1	The primary ingredient in long life coolant added to the assembled vehicle	100 to 1,000	17%	129	N/A	N/A	N/A	0 to 1	-4%	0	N/A	N/A	N/A	1 to 10	131%	2	100 to 1,000	17%	129	Production related	1
Methyl isobutyl ketone	108-10-1	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	11%	-2	N/A	N/A	N/A	1 to 10	6%	<1	0 to 1	0%	N/A	1 to 10	35%	1	N/A	N/A	N/A	Material reformulation	1,5
2-Butoxyethanol	111-76-2	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	16%	2	N/A	N/A	N/A	1 to 10	96%	5	0 to 1	137%	<1	1 to 10	66%	<1	N/A	N/A	N/A	Material reformulation	1,5
Methyl tert-butyl ether	1634-04-4	A secondary ingredient in gasoline added to the assembled vehicle	100 to 1,000	14%	14	N/A	0%	N/A	0 to 1	0%	0%	0 to 1	0	<1	N/A	N/A	N/A	100 to 1,000	17%	N/A	Production related	1
Sulphuric acid	7664-93-9	Used to treat wastewater primarily generated by painting operations to meet municipal discharge quality requirements. It is completely neutralized and it therefore not released	10 to 100	22%	7	N/A	N/A	N/A	N/A	N/A	N/A	0 to 1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	Production related	1
Polymethylene polyphenyl isocyanate	9016-87-9	A component used to manufacture plastic instrumentation panels for the vehicle	10 to 100	231%	0	N/A	N/A	N/A	N/A	N/A	N/A	0 to 1	100%	<1	N/A	N/A	N/A	N/A	N/A	<1	Production related	1
Nonylphenol and its ethoxylates and derivatives	N520	A component used to manufacture plastic instrumentation panels for the vehicle	1 to 10	-3%	0	N/A	0%	N/A	0 to 1	97%	<1	0 to 1	N/A	N/A	0 to 1	0%	N/A	1 to 10	-5%	<1	Production related	1B
Butyl acetate (all isomers) Except CAS 540-88-5	N558	A VOC which is a component of vehicle paint and materials used in the painting process	100 to 1,000	1%	2	N/A	0%	N/A	10 to 100	67%	21	Data for disposal, transfer and contained in product are not required under O. Reg 455 for substances belonging to Part 4 and Part 5 of NPRI									Production related	5
NPRI Other Glycol Ethers and Acetates (isomers)	N524	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	8%	1	N/A	0%	N/A	10 to 100	28%	6										Production related	5
Methyl ethyl ketone	78-93-3	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	-5%	<1	N/A	N/A	N/A	1 to 10	-6%	<1										Material reformulation	5
Propylene glycol methyl ether acetate	108-65-6	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	-10%	-3	N/A	N/A	N/A	1 to 10	-10%	-1										Material reformulation	5
Toluene	108-88-3	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	-3%	0	N/A	N/A	N/A	1 to 10	2%	0										Production related	5
Stoddard solvent	8052-41-3	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	45%	8	N/A	N/A	N/A	1 to 10	12%	0										Production related	5
Odorless Mineral Spirits	64741-65-7	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	N/A	4	N/A	0%	N/A	1 to 10	N/A	2										New reportable	6
Hydrotreated light distillate	64742-47-8	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	-18%	-5	N/A	N/A	N/A	1 to 10	4%	<1										Material reformulation	6
Hydrotreated heavy naphtha	64742-48-9	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	45%	29	N/A	N/A	N/A	10 to 100	25%	2										Production related	5
Solvent naphtha light aliphatic	64742-89-8	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	2%	0	N/A	N/A	N/A	1 to 10	65%	2										Production related	5
Light aromatic solvent naphtha	64742-95-6	A VOC which is a component of vehicle paint and materials used in the painting process	10 to 100	-3%	-5	N/A	N/A	N/A	10 to 100	21%	3										Material reformulation	5
Heptane (all isomers)	*	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	-6%	-2	N/A	N/A	N/A	0 to 1	-53%	<1										No longer reportable	5
Trimethylbenzene (all isomers)	25551-13-7	A VOC which is a component of vehicle paint and materials used in the painting process	1 to 10	-9%	0	N/A	N/A	N/A	1 to 10	15%	<1										Material reformulation	5

2017 Toxic Substance Plan Summary

Toyota Motor Manufacturing Canada (Woodstock)

The Ontario Ministry of Environment and Climate Change (MOECC) has passed a new Act. The purpose of this Act, and supporting regulation, is to:
1) Prevent pollution and protect human health and environment by reducing the use and creation of specific substances and
2) Inform the public

Substances with Prepared Plans

Substance and CAS number:

Sulphuric acid CAS No.:(7664-93-9)
Manganese (and its compounds) CAS No.: (N/A)
CO CAS No.:(630-08-0)
NOX CAS No.:(N/A)
PM-2.5 CAS No.:(N/A)
PM-10 CAS No.:(N/A)
Sodium nitrite CAS No.:(7632-00-0)
Phosphorus CAS No.: (N/A)
Nitrate ion CAS No.:(N/A)
Zinc (and its compounds) CAS No.:(N/A)
Toluene CAS No.:(108-88-3)
Acetone CAS No.:(67-64-1)
Isopropyl alcohol CAS No.:(67-63-0)
Methanol CAS No.:(67-56-1)
Formaldehyde CAS No.: (50-00-00)
Propylene Glycol Monomethyl Ether Acetate (108-65-6)
Nitric acid CAS No.:(7697-37-2)
1-Butoxy-2-Propanol CAS No. (5131-66-8)
n-Butyl alcohol CAS No.:(71-36-3)
1,2,4-Trimethylbenzene CAS No. (95-63-6)
Methyl Isobutyl Ketone CAS No.:(108-10-1)
Butyl cellosolve CAS No.:(111-76-2)
Xylene Isomers CAS No.:(1330-20-7)
Ethylene Glycol CAS No.:(107-21-1)
Methyl Ethyl Ketone CAS No.:(78-93-3)
n-Butyl acetate CAS No. (123-86-4)
Petroleum distillate, hydrotreated light CAS No.:(64742-47-8)
Naphtha, hydrotreated heavy CAS No.:(64742-48-9)
Solvent naphtha, light aliphatic CAS No.:(64742-89-6)
Solvent naphtha, light aromatic CAS No.:(64742-95-6)
Stoddard Solvent CAS No.: (8052-32-4)
Heptane Isomers CAS No.: (N/A)
Trimethylbenzene (25551-13-7)

Facility Information

Site:	Toyota Motor Manufacturing Canada (Woodstock)
Address:	1717 Dundas Street Woodstock, ON
Mailing Address:	1055 Fountain Street North, P.O. Box 5002 Cambridge ON N3H 5K2

General Information - Woodstock Plant

National Pollutant Release Inventory (NPRI) ID:	11576
Ministry of Environment (MOE) ID:	11209
Full time employees:	3100
NAICS 2-digit code:	Transportation Equipment Industries (32)
NAICS 4-digit code:	Motor Vehicle Ind (3231)
U.S. SIC Code:	Motor Vehicles and Car Bodies (3711)
NAICS 6-digit code:	Automobile & Light-Duty Motor Vehicle Mfg. (336110)
UTM:	525258 (easting), 4776708 (northing), Zone 17
Public Contact:	Mr. Scott Mackenzie Manager, Government Affairs (519) 653-1111 ext 2380 Scott.Mackenzie@toyota.com
Toxic Substance Reduction Planner License No. (Recommendations & Certifying):	Beth Rhyno, P.Eng. TRSP #0273

Toxic Reduction Plan Information

Reduction Plan Objectives

TMMC is committed to protecting the environment and ensuring that its automobile manufacturing operations are safe for its team members, the community and the environment. To support this commitment, TMMC will continue to lead pollution prevention and continual improvement activities for each reportable substance.

Reduction Plan Statement of Intent

In accordance with TMMC's ISO 14001 Environmental Management System (EMS) and Corporate Objectives, the facility will continue to set and regularly assess environmental objectives and targets in order to ensure the continuation of proactive environmental procedures and practices. Through these practices, the facility will strive to reduce the use of toxic substances, whenever technically and economically feasible. It is also TMMC's policy to actively promote environmental awareness among team members through continual education and training and strive to comply with all municipal, provincial and federal legislation as well as other requirements related to the environment.

Substance Name	CAS Number	Description of Primary Use in the Facility	Statement of Intent
Sulphuric acid	7664-93-9	Sulphuric acid is used to treat wastewater primarily generated by painting operations to meet municipal discharge quality requirements. It is completely neutralized and it therefore not released.	In accordance with s. 4(1)5 of the Toxics Reduction Act, the facility does not intend to implement any options because currently there are no known alternative options that achieve the treatment levels necessary to meet the municipal discharge criteria. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Nitric acid	7697-37-2	Nitric acid is used to treat wastewater primarily generated by painting operations to meet municipal discharge quality requirements. It is completely neutralized and it therefore not released.	

Manganese (and its compounds)	*	Manganese is a component in the steel used to make the vehicle body.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options because manganese is a core component of the steel used for the vehicle body and is required to maintain the quality and safety of the product. Additionally, re-design of the vehicle is not within the control of the facility. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Methanol	67-56-1	Primary ingredient in windshield washer fluid which is topped up in each vehicle.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options because methanol is a core component of the windshield washer fluid required for the safety of product use by the consumer and no technically feasible alternatives have been identified at this time. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Toluene	108-88-3	Toluene is a VOC which is a component of the vehicle paint.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options because the coatings have been strategically selected to maintain product quality and particular model specifications. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
CO	630-08-0	Created by as a by-product of diesel combustion equipment at the facility.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options identified through the Toxic Reduction Act Plan as no technically feasible options were identified. As by-products of natural gas and diesel combustion, the creation of these substances cannot be avoided by the use of natural gas and diesel generators. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
NOX	*		
PM-10	*	Created from production emissions and combustion equipment at the facility. Emissions are discharged to air.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options identified through the Toxic Reduction Act Plan as no technically feasible options were identified. As by-products of diesel combustion, the creation of these substances cannot be avoided by the use of diesel generators. PM is also generated as a by-product of automotive manufacturing processes. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
PM-2.5	*		
Sodium nitrite	7632-00-0	Sodium nitrite is a component in the materials used to maintain the pH of the phosphate pre-treatment process.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options identified through the Toxic Reduction Act Plan as no technically feasible options were identified. This substance is required to maintain the pH of the paint pre-treatment process. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Phosphorus Total	*	Phosphorous is a component in the materials used in the coating process to pre-treat the steel body prior to applying the paint.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options identified through the Toxic Reduction Act Plan as no technically feasible options were identified. This substance is the critical component required to prepare the surface of the vehicle in the industry standard method for the painting process pre-treatment process. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Nitrate ion	*	Nitrate ion is a component in the materials used in the coating process to pretreat the steel body prior to applying the paint.	
1,2,4-Trimethylbenzene	95-63-6	1,2,4-Trimethylbenzene is a VOC which is a component of the vehicle paint.	
1-Butoxy-2-Propanol	5131-66-8	2-propanol, 1-butoxy is a VOC which is a component of the vehicle paint.	
Acetone	67-64-1	Acetone is a VOC which is a component of the vehicle paint.	
Butyl cellosolve	111-76-2	Butyl cellosolve is a VOC which is a component of the vehicle paint.	
Ethylene Glycol	107-21-1	Primary ingredient in the long life coolant which is added to the engine of each vehicle.	
Formaldehyde	50-00-00	Formaldehyde is a VOC which is a component of the vehicle paint.	
Heptane Isomers	*	Heptane is a VOC which is a component of the vehicle paint.	
Isopropyl alcohol	67-63-0	Isopropyl alcohol is a VOC which is a component of the vehicle paint.	
Methyl Ethyl Ketone	78-93-3	Methyl ethyl ketone is a VOC which is a component of the vehicle paint.	
Methyl Isobutyl Ketone	108-10-1	Methyl isobutyl ketone is a VOC which is a component of the vehicle paint.	In accordance with s. 4(1)6 of the Toxics Reduction Act, the facility does not intend to implement any options identified through the Toxics Reduction Act Plan as no new technically feasible options were identified. The feasible options noted in the plan have been previously identified through existing ISO 14001 programs at the Facility. In accordance with TMMC's ISO 14001 Environmental Management System and Environmental Policy, potential opportunities for reduction will continue to be evaluated on a regular basis.
Naphtha, hydrotreated heavy	64742-48-9	Naphtha, hydrotreated heavy is a VOC which is a component of vehicle paint and sealers.	
n-Butyl acetate	123-86-4	n-Butyl acetate is a VOC which is a component of the vehicle paint.	
n-Butyl alcohol	71-36-3	n-Butyl alcohol is a VOC which is a component of the vehicle paint.	
Petroleum distillate, hydrotreated light	64742-47-8	Naphtha, hydrotreated heavy is a VOC which is a component of vehicle paint and sealers.	

Solvent naphtha, light aliphatic	64742-89-8	Solvent naphtha, light aliphatic is a VOC which is a component of the vehicle paint.
Solvent naphtha, light aromatic	64742-95-6	Solvent naphtha, light aromatic is a VOC which is a component of the vehicle paint.
Stoddard Solvent	8052-32-4	Stoddard Solvent is a VOC which is a component of the vehicle paint.
Trimethylbenzene	25551-13-7	Trimethylbenzene is a VOC which is a component of the vehicle paint.
Propylene Glycol Monomethyl Ether Acetate	108-65-6	Propylene Glycol Monomethyl Ether Acetate is a VOC which is a component of the vehicle paint.
Xylene Isomers	1330-20-7	Xylene is a VOC which is a component of the vehicle paint
Zinc (and its compounds)		Car bodies are made of steel. Zinc is a crucial component in the steel for its corrosion prevention properties. It is also used in the coating process to pre-treat the steel body prior to applying the paint.

In addition to the facility's ISO 14001 certified systems and corporate objectives, Toyota has also prioritized environmental programs for its operations worldwide through the Toyota Global Vision and Guiding Principles and Earth Charter. Toyota's Earth Charter has been in place since 1992 and exemplifies the company's comprehensive approach to environmental programs. Environmental improvements at the facility are guided by the Policies and Action Guidelines stated within the charter, which is adhered to by all Toyota's operations worldwide. Within North America, Toyota's Action Plan highlights the environmental key performance indicators for energy, VOC emissions, waste, and water reduction. Toyota Motor Manufacturing Canada's targets for reduction are incorporated within the North American Action Plan. For more information on Toyota's Environmental Sustainability Report and Earth Charter please visit the following sites:

1) http://www.toyota.com/usa/environmentreport2016/

2) http://www.toyota-global.com/sustainability/

Plan Summary Statement

This Plan Summary accurately reflects the content of the toxic substance reduction plans, prepared by Karina Kenigsberg for the following substances:

- Manganese (and its compounds), 13 December 2013
- Methanol, 2 December 2016
- Toluene, 13 December 2013
- CO, 13 December 2013
- NOX, 13 December 2013
- PM-10, 13 December 2013
- PM-2.5, 13 December 2013
- Sodium Nitrite, 13 December 2013
- Phosphorus (and its compounds), 13 December 2013
- Nitrate ion, 30 November 2015
- 1,2,4-Trimethylbenzene, 2 December 2016
- Acetone, 13 December 2013
- Butyl Cellosolve, 13 December 2013
- Sulphuric Acid, 2 December 2016
- Stoddard Solvent, 2 December 2014
- *Propylene Glycol Monomethyl Ether Acetate, 2 December 2016*
- Nitric Acid, 17 December 2019
- Heptane Isomers, 2 December 2014
- Methyl Ethyl Ketone, 13 December 2013
- Methyl Isobutyl Ketone, 13 December 2013
- Naphtha, hydrotreated heavy, 13 December 2013
- n-Butyl acetate, 13 December 2013
- n-Butyl alcohol, 13 December 2013
- Petroleum distillate, hydrotreated light, 30 November 2015
- Solvent naphtha, light aliphatic, 13 December 2013
- Zinc (and its compounds) , 13 December 2013
- Solvent naphtha, light aromatic, 13 December 2013
- Xylene Isomers, 13 December 2013
- Ethylene Glycol, 13 December 2013
- Isopropyl Alcohol, 13 December 2013
- Formaldehyde, 2 December 2014
- 1-Butoxy-2-Propanol, 30 November 2015
- *Trimethylbenzene Isomers without 95-63-6, 2 December 2016*

Copy of Certifications

Certification by Highest Ranking Employee

As of **June 20, 2019 I, Derek Kidnie**, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

- Manganese (and its compounds), 13 December 2013
- Methanol, 2 December 2016
- Toluene, 13 December 2013
- CO, 13 December 2013
- NOX, 13 December 2013
- PM-10, 13 December 2013
- PM-2.5, 13 December 2013
- Sodium Nitrite, 13 December 2013
- Phosphorus (and its compounds), 13 December 2013
- Nitrate ion, 30 November 2015
- 1,2,4-Trimethylbenzene, 2 December 2016
- Acetone, 13 December 2013
- Butyl Cellosolve, 13 December 2013
- Sulphuric Acid, 2 December 2016
- Stoddard Solvent, 2 December 2014
- *Propylene Glycol Monomethyl Ether Acetate, 2 December 2016*
- ***Nitric acid CAS No.:(7697-37-2)***
- Heptane Isomers, 2 December 2014
- Methyl Ethyl Ketone, 13 December 2013
- Methyl Isobutyl Ketone, 13 December 2013
- Naphtha, hydrotreated heavy, 13 December 2013
- n-Butyl acetate, 13 December 2013
- n-Butyl alcohol, 13 December 2013
- Petroleum distillate, hydrotreated light, 30 November 2015
- Solvent naphtha, light aliphatic, 13 December 2013
- Zinc (and its compounds) , 13 December 2013
- Solvent naphtha, light aromatic, 13 December 2013
- Xylene Isomers, 13 December 2013
- Ethylene Glycol, 13 December 2013
- Isopropyl Alcohol, 13 December 2013
- Formaldehyde, 2 December 2014
- 1-Butoxy-2-Propanol, 30 November 2015
- *Trimethylbenzene Isomers without 95-63-6, 2 December 2016*

Signed by: 

Certification by Licensed Planner

As of **June 19, 2019, I, Beth Rhyno (TRSP #0273)** , certify that I am familiar with the processes at Toyota Motor Manufacturing Canada that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in the toxic substance reduction plans referred to below for the toxic substances and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

- Manganese (and its compounds), 13 December 2013
- Methanol, 2 December 2016
- Toluene, 13 December 2013
- CO, 13 December 2013
- NOX, 13 December 2013
- PM-10, 13 December 2013
- PM-2.5, 13 December 2013
- Sodium Nitrite, 13 December 2013
- Phosphorus (and its compounds), 13 December 2013
- Nitrate ion, 30 November 2015
- 1,2,4-Trimethylbenzene, 2 December 2016
- Acetone, 13 December 2013
- Butyl Cellosolve, 13 December 2013
- Sulphuric Acid, 2 December 2016
- Stoddard Solvent, 2 December 2014
- *Propylene Glycol Monomethyl Ether Acetate, 2 December 2016*
- ***Nitric acid CAS No.:(7697-37-2)***
- Heptane Isomers, 2 December 2014
- Methyl Ethyl Ketone, 13 December 2013
- Methyl Isobutyl Ketone, 13 December 2013
- Naphtha, hydrotreated heavy, 13 December 2013
- n-Butyl acetate, 13 December 2013
- n-Butyl alcohol, 13 December 2013
- Petroleum distillate, hydrotreated light, 30 November 2015
- Solvent naphtha, light aliphatic, 13 December 2013
- Zinc (and its compounds) , 13 December 2013
- Solvent naphtha, light aromatic, 13 December 2013
- Xylene Isomers, 13 December 2013
- Ethylene Glycol, 13 December 2013
- Isopropyl Alcohol, 13 December 2013
- Formaldehyde, 2 December 2014
- 1-Butoxy-2-Propanol, 30 November 2015
- *Trimethylbenzene Isomers without 95-63-6, 2 December 2016*

Signed by