

## REPORT ON TOXIC SUBSTANCE REDUCTION PLANS (May 2019)

This Report on Toxic Substance Reduction Plans has been prepared in accordance with, and satisfies the requirements of Section 10 of the *Toxics Reduction Act* (TRA) and Section 27 of Ontario Regulation (O.Reg.) 455/09 for all TRA toxic substances for which Toxic Substance Reduction Plans have been prepared to date.

### Basic Facility Information

Mandatory Basic Facility Information Item	Details
Substance Name and Chemical Abstracts Service (CAS) Registry Number, if any	This Report on Toxic Substance Reduction Plans applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: <b>PM<sub>10</sub></b> , <b>PM<sub>2.5</sub></b> (Per O.Reg.455/09; “no single CAS numbers apply to these substances”), <b>Carbon Monoxide</b> (CAS Number 630-08-0), <b>Nitrogen Oxides</b> (CAS Number 11104-93-1)
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 5828
The legal and trade names of the owner and the operator of the facility, the street address of the facility and the mailing address of the facility, if different	Sanofi Pasteur Ltd. 1755 Steeles Avenue West Toronto, Ontario M2R 3T4
The number of full time employee equivalents at the facility	1178
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	32 - Manufacturing 3254 – Pharmaceutical and Medicine Manufacturing 325410 – Pharmaceutical and Medicine Manufacturing
Public contact	Murray Fulmer 1755 Steeles Avenue West Toronto, Ontario M2R 3T4 416 667-2700 x 2719
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 17 623548, 4849339
Parent Company Information	N/A

### List of All Substances for which Toxic Substance Reduction Plans Have Been Prepared at the Facility

The Facility has prepared Toxic Substance Reduction Plans for the following prescribed Toxic Substances:

PM<sub>10</sub>\*

PM<sub>2.5</sub>\*

Nitrogen Oxides (CAS Number 11104-93-1)

Carbon Monoxide (CAS Number 630-08-0)

\*Per O.Reg.455/09, “no single CAS numbers apply to these substances”

## **Toxic Substance Accounting Information**

Refer to Appendix A: TRA Toxic Substance Quantification and Accounting Summary for the information required under s.12(1) of O.Reg.455/09.

## **Comparison of Toxic Substance Accounting to the Previous Calendar Year**

Refer to Appendix B: Comparison of Toxic Substance Quantification and Accounting to the Previous Calendar Year for the information required by s.26(2) of O.Reg.455/09.

Changes in quantities of nitrogen oxides, carbon monoxide, PM<sub>2.5</sub> and PM<sub>10</sub> created at the facility could be attributed to the following reasons:

- 1) Change in natural gas consumption on site;
- 2) The Natural Gas calculator published by the Government of Canada was used in quantifying each substance created this year. Even though quantification methods have not been changed from the previous reporting year, results were made more accurate by using the approved calculator. The calculator publication and methodology can be referenced at <https://www.canada.ca/en/environment-climate-change/services/national-pollutant-release-inventory/report/sector-specific-tools-calculate-emissions/request-natural-gas-combustion-calculator.html>

## **Changes in Quantification Methods**

There were no changes made to any quantification methods since the preparation of the Toxic Substance accounting information for the previous calendar year and therefore no changes outlined in the above comparison occurred due to changes in quantification methods.

## **Substances removed from the report**

No substances were removed from the report.

## **Objectives of Toxic Substance Reduction Plans**

The Objectives of the Plans are as follows:

- provide support for the Facility's position with respect to the Statement of Intent; and
- document how the Facility has fulfilled the applicable requirements under the TRA and O. Reg. 455/09 with respect to the Toxic Substance.

## **Toxic Substance Reduction Options Identified in Toxic Substance Reduction Plans**

As required by s.18(4) of O. Reg. 455/09 (as amended by s.9(3) of O. Reg. 214/11), a Plan must contain an explanation of why no toxic substance reduction options will be implemented.

Facility personnel have considered each of the seven categories for toxic substance reduction options, and, in light of the information provided in the Statement of Intent section of this Plan, the Facility feels that no toxic substance reduction options can be identified in any of the seven toxic substance reduction categories. This result is due mainly to the proactive approach employed by Facility personnel to maximize fuel use efficiency, which has resulted in potential reductions of toxic substance creation and subsequent savings having been realized prior to this exercise.

Therefore, the rationale for not implementing toxic substance reduction options is that no toxic substance reduction options could be identified. Facility personnel will continue to evaluate and assess future potential reduction options as they become available through the advancement of materials technology, manufacturing process and management.

Therefore the information required by s.26(2)4, s.26(2)5 and s.26(2)6 is not applicable for this Report.

## **Amendments to Toxic Substance Reduction Plans**

No Amendments have been made to any Toxic Substance Reduction Plans.

## **Certification Statement**

As of May 31<sup>st</sup>, 2019, I certify that I have read the Report on the toxic substance reduction plans for the substances listed below and am familiar with its content and to my knowledge the information contained in the Report is factually accurate and the Report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

PM<sub>10</sub>\*

PM<sub>2.5</sub>\*

Nitrogen Oxides (CAS Number 11104-93-1)

Carbon Monoxide (CAS Number 630-08-0)

\*Per O.Reg.455/09, "no single CAS numbers apply to these substances"

DOUG KUBE Sr. Director, Health, Safety & Environment  
Name and Position

Doug Kube  
Signature

30 MAY 2019  
date

## APPENDIX A: TRA TOXIC SUBSTANCE QUANTIFICATION AND ACCOUNTING SUMMARY

Contaminant	CAS Number	TRA Values [tonne/yr]		
		Enters the Facility	Creation	Contained in Product
Carbon monoxide	630-08-0	>0 to 1	>10 to 100	>0 to 1
Nitrogen oxides	11104-93-1	>0 to 1	>100 to 1000	>0 to 1
PM10 (includes road dust)	N/A - M09	>0 to 1	>0 to 1	>0 to 1
PM2.5 (includes road dust)	N/A - M10	>0 to 1	>0 to 1	>0 to 1

## APPENDIX B: COMPARISON OF TOXIC SUBSTANCE QUANTIFICATION AND ACCOUNTING TO THE PREVIOUS CALENDAR YEAR

### TRA Quantification, Accounting and Reporting Comparison

The table below provides a comparison between the three TRA reportable activity quantities for each substance (Use, Creation, Contained in Product) for the current and previous reported yearly quantities. The TRA requires a comment in the SWIM report for increases or decreases in these activities as compared to the previous year and therefore the comment provided on the column on the far right of each table should be provided within SWIM.

#### USE

Toxic Substance	CAS*	Reporting Units	Change in Reported Value from the Previous Year	% Change	Comment if Change +/- 10%
Nitrogen oxides	11104-93-1	Tonnes	0.000	—	—
Carbon Monoxide	630-08-0	Tonnes	0.000	—	—
PM10 (includes road dust)	N/A - M09	Tonnes	0.000	—	—
PM2.5 (includes road dust)	N/A - M10	Tonnes	0.000	—	—

#### CREATION

Toxic Substance	CAS*	Reporting Units	Change in Reported Value from the Previous Year	% Change	Comment if Change +/- 10%
Nitrogen oxides	11104-93-1	Tonnes	52.61	<b>91.67</b>	See comments under Comparison of Toxic Substance Accounting to the Previous Calendar Year.
Carbon Monoxide	630-08-0	Tonnes	13.62	<b>63.70</b>	See comments under Comparison of Toxic Substance Accounting to the Previous Calendar Year.
PM10 (includes road dust)	N/A - M09	Tonnes	-1.40	<b>-93.40</b>	See comments under Comparison of Toxic Substance Accounting to the Previous Calendar Year.
PM2.5 (includes road dust)	N/A - M10	Tonnes	-0.37	<b>-78.91</b>	See comments under Comparison of Toxic Substance Accounting to the Previous Calendar Year.

**CONTAINED IN  
PRODUCT**

Toxic Substance	CAS*	Reporting Units	Change in Reported Value from the Previous Year	% Change	Comment if Change +/- 10%
Nitrogen oxides	11104-93-1	Tonnes	0.000	—	—
Carbon Monoxide	630-08-0	Tonnes	0.000	—	—
PM10 (includes road dust)	N/A - M09	Tonnes	0.000	—	—
PM2.5 (includes road dust)	N/A - M10	Tonnes	0.000	—	—