



**ENVIRONMENTAL REPORTING
SYSTEMS LIMITED**

**NESTLÉ CONFECTIONARY
NESTLÉ CANADA INC.**
STERLING ROAD FACTORY
72 Sterling Road, Toronto, Ontario M6R 2B6

Toxic Substance Reduction Plan Summary: PM10, PM2.5

Toxics Reduction Act & O. Reg. 455/09

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NESTLÉ CONFECTIONARY
NESTLÉ CANADA INC. - STERLING ROAD FACTORY

Toxic Substance Reduction Plan Summary: PM10, PM2.5

Toxics Reduction Act & O. Reg. 455/09

For: Mike Perpete
Facility Manager
Nestlé Canada Inc.

Dec. 16, 2013

Toxic Substance Reduction Plan Summary – PM10 & PM2.5 Toxics Reduction Act & Ontario Regulation 455/09

Basic Facility Information

Nestlé Confectionary, a division of Nestlé Canada Inc., (Nestlé) located in Toronto, Ontario is a manufacturer of quality chocolate products. The main facility activities include receiving, storage, mixing, production, warehousing and shipping. Nestlé is a prescribed facility with NAICS code 311330: Confectionary Manufacturing from Purchased Chocolate.

Nestlé Canada Inc. has a publicly stated environmental sustainability program, which is available via their corporate website. (<http://www.corporate.nestle.ca/en/aboutus/community/theenvironment>).

“At Nestlé, we believe that for a business to be successful in the long term it has to create value, not only for its shareholders but also for society. This approach – which we call Creating Shared Value – is at the heart of everything we do, including our approach to the environment.

To learn about how Nestlé Canada is working to minimize its impact on the environment, download [“The Nestlé Canada Creating Shared Value Report” \(PDF\)](#)”. (excerpt)

Nestlé manufactures chocolate confectionary products to industry standards that include food safety (HAACP), worker health and safety (OSHAS18001) and the environment (NEMS – ISO 14001 EMS). Plant operations including heating, cooling and dust collection lead to the creation of the prescribed Phase 2 toxic substances; Particulate Matter 10 microns and less (PM10), Particulate Matter 2.5 microns and less (PM2.5). This plan addresses both PM10 and PM2.5 as they are descriptors of the same substance and are created together.

Nestlé Canada Inc. owns and operates Nestlé Confectionary at 72 Sterling Road, Toronto where several buildings and properties make up the facility. It is located in an industrial area with natural gas and electric power, municipal water and sewer services. The total area of the facility is over nine acres in size. It operates 24 hrs per day, 7 days per week, 50 weeks per year, with statutory holidays and occasional shutdown periods.

Facility Name: Nestlé Confectionary, a division of Nestlé Canada Inc., (Nestlé)

Location: 72 Sterling Road, Toronto, Ontario, M6R 2B6

NPRI Identification Number: 7250

CRA B/N: 119360063

Two Digit NAICS Code: 31

Four Digit NAICS Code: 3113

Six Digit NAICS Code: 311330 - Confectionary Manufacturing from Purchased Chocolate

Number of Full-time Employees: 442

UTM Spatial Coordinates (NAD83): Zone 17 625462 m E; 4834439 m N

(physical location of main entrance)

Owner of Facility: Nestlé Canada Inc., 25 Sheppard Avenue West, Toronto, M2N 6S8

(100% ownership)

Substance 1: Particulate Matter PM10 (10 microns and less)

CAS Number: NA-09

Substance 2: Particulate Matter PM2.5 (2.5 microns and less)

CAS Number: NA-10

Public Contact

Name: Mike Perpete, Facility Manager

Address: 72 Sterling Road, Toronto, Ontario, M6R 2B6

Phone Number: Tel. (416) 538-5513

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Statement of Intent

Nestlé creates and releases to air Particulate Matter (PM10 and PM2.5) from the receiving, transfer and use of raw materials as well as the combustion of fuels used in the manufacturing of confectionary products. It is the intent to reduce the creation and release to air of Particulate Matter wherever possible.

Objective of the Plan

The plan objective is to develop options for the reduction of the creation and release to air of Particulate Matter at the facility. Further, this plan will determine the technical and economic feasibility of each option to determine which, if any, are practical for implementation.

Target & Timeline

Nestlé intends to reduce the creation and release to air of substances, Particulate Matter (PM10 and PM2.5). The plan establishes the reduction of the creation and release to air of the toxic substances by process and equipment according to the targets and timelines set out in this plan.

Description of Toxic Substance Use

The substances are created in the Receiving Stage and the Production Stage. In the receiving stage, shipments of raw materials (sugar and flour) are received from trucks into silos for production needs. Fine ingredient (milk powder and sugar) is also received in 'supersac' containers for production. Material is transferred to production areas for use. During the receiving and production stages, substances are created during transfer as emissions to air. The substances are also created from the combustion of natural gas to fuel boilers, ovens, comfort heat equipment and plant cooling, as well as from two ancillary activities, emergency diesel generators and maintenance welding.

Nestlé manufactures chocolate confectionary products. Ingredients are industry standard mixed to product recipes. The substances; PM10 and PM2.5 are created from the raw material receiving process from equipment designed to collect dust and minimize emissions to air during the delivery of dry ingredients. Similarly, the substances are created during the transfer of ingredients in the preparation process and during the mixing of ingredients in the mixing process. The substances are also created from fuel combustion (natural gas) and ancillary activities; emergency power generators (diesel) and maintenance welding (rod & wire).

TRA Summary Table

Nestle Confectionary - Sterling Road, Toronto - 2012 TRA Substance Accounting

Substance	CAS#	Use	Used tonnes	Created tonnes	Transformed tonnes	Released tonnes	Recycled tonnes	Disposed tonnes	Contained in Product tonnes
PM10	NA-09	Process & Ancillary	-	1 - 10	-	1 - 10	-	-	-
PM2.5	NA-10	Process & Ancillary	-	1 - 10	-	1 - 10	-	-	-

Description of Options, Schedule and Timetable for Implementation

After careful assessment of all options, the following list of options were chosen to be implemented. A description of the option and a schedule and timetable for implementation was completed and is presented in the following table;

Equipment	Option Type*	Option	Implementation Step	Timetable	Air Release Reduction			
					PM10 (t/yr)	Percent	PM2.5 (t/yr)	Percent
Boilers (2)	3.	Economiser heat recovery	Engineering Design	Aug. 2013	0.010	5%	0.003	5%
			Supplier Selection	mid-Oct. 2013				
			Order Submitted	end Oct. 2013				
			Installation Contract offer	end Nov. 2013				
			Installer Selected	Dec. 2013				
			Installation	Jan. 2014				
Operational	Feb. 2014							
Cooling Towers (3)	3.	Install side stream filtration for sump tank	Engineering Design	Mar. 2015	0.630	85%	0.378	85%
			Supplier Selection	mid-May 2015				
			Order Submitted	end May 2015				
			Installation Contract offer	end June 2015				
			Installer Selected	July 2015				
			Installation	Aug. 2015				
Operational	Sept. 2015							
Silos (3)	3.	Decommissioned	Completed	end 2012	0.019	37%	0.013	37%
Dust Collector (1)	2.	New formulation will not produce dust	Assess new formulation	end Mar. 2016	0.213	100%	0.145	100%
			Begin Decommissioning	Apr. 2016				
			Disconnect mech./elec.	Apr. 2016				
			Clean-out equip.	May 2016				
			Relocate to storage	May 2016				
			Place on co. Intranet for sale	June 2016				
TOTALS					0.872	43%	0.539	44%

*2. Product Design or Reformulation

*3. Equipment or Process Modification

The facility has therefore decided that the Plan be implemented.

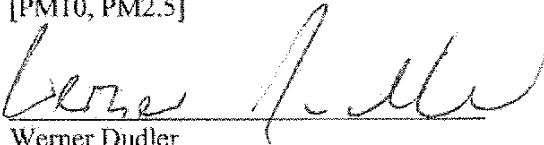
This Toxic Substance Reduction Plan Summary accurately reflects the Plan it summarizes.

Plan Certifications

TOXIC SUBSTANCE REDUCTION PLAN

NESTLE CONFECTIONARY, NESTLE CANADA INC., TORONTO, ON


As of Dec. 18, 2013, I, Werner Dudler, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.
[PM10, PM2.5]



Werner Dudler
Factory Manager - Nestle Confectionary, Nestle Canada Inc. – Toronto
(Highest Ranking Employee)

Dec 18/13
Date

As of Dec. 18, 2013, I, Grahaem Capaldi certify that I am familiar with the processes at Nestle Confectionary, Nestle Canada Inc. 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 plan dated Dec. 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.
[PM10, PM2.5]



Grahaem Capaldi
President - Environmental Reporting Systems Limited (Toxic Substance Reduction Planner)

0063
TSRP#

Dec. 18, 2013.
Date



**ENVIRONMENTAL REPORTING
SYSTEMS LIMITED**