

TRA PLAN SUMMARY – PARTICULATE MATTER <10µm

BASIC FACILITY INFORMATION

Name & CAS # of Substance	PM10	NA
Substance for which other Plans have been prepared	PM2.5	NA
Facility Identification and Site Address		
Company Name	Mondelez Canada Inc.	
Facility Name	Gladstone Confectionary	
Facility Address	277 Gladstone Avenue Toronto, ON M6J 3L9	
Spatial Coordination of Facility	626597m Easterly 4834312m Northerly	
Number of Employees	412	
NPRI ID	10156	
Parent Company (PC) Information		
PC Name & Address	Mondelez International	
Percent Ownership for each PC	(100% owned)	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	31-33 - Manufacturing	
4 Digit NAICS Code	3113 – Sugar and Confectionary Product Manufacturing	
6 Digit NAICS Code	311330- Confectionary Manufacturing from Purchased Chocolate	
Company Contact Information		
Facility Public/Technical Contact	Wendy Keenan, EHS Manager	
	Wendy.keenan@mdlz.com	
	Phone: (416)-530-4055 ext 5303438	
	Fax: (416)-530-5911	
Person who Prepared the Plan: (if different from the Coordinator)	Kaitlin Ryan, P.Eng	
	Conestoga-Rovers & Associates Limited	
	651 Colby Drive, Waterloo ON N2V 1C2	
	kryan@croworld.com	
Highest Ranking Employee	Phone: (519) 884-0510	
	David Heaven, Plant Manager	
	Dave.heaven@mdlz.com	
	Phone: (416)-530-4055 ext 5303281	
	Fax: (416)-530-5911	

Planner Information:	
Planner Responsible for Making Recommendations	Kaitlin Ryan, P.Eng
	Conestoga-Rovers & Associates Limited 651 Colby Drive, Waterloo ON N2V 1C2
	Planner License No: TSRP0009
	kryan@croworld.com
	Phone: (519) 884-0510
Planner Responsible for Certification	Kaitlin Ryan, P.Eng (Licence TSRP0009)
	kryan@croworld.com
	Phone: (519) 884-0510
	Fax: (555) 555-5050

TOXIC REDUCTION POLICY STATEMENT OF INTENT

Mondelez Canada Inc. (Mondelez) Gladstone Confectionary facility (Facility) creates Particulate Matter <10 µm (PM10) in four processes. The Facility does not intend to reduce the creation of this toxic substance at the Facility.

REDUCTION OBJECTIVES

Mondelez produces high quality products in an environmentally responsible manner. Mondelez's manufacturing operation has been optimized to minimize the use of raw materials. Mondelez will strive to reduce the creation of PM10 at the Facility in the future should an option become available.

DESCRIPTION OF FACILITY

The Mondelez Facility is a chocolate confectionary plant. The Facility uses a variety of raw materials that are mixed with chocolate to produce a variety of products, before being packaged and shipped to customers.

The North American Industry Classification System (NAICS) Code that applies to this Facility is 311330 – Confectionary Manufacturing from Purchased Chocolate.

In 2012, the Facility operates their manufacturing process 24 hours per day, 7 days per week for 52 weeks per year.

TOXIC SUBSTANCE REDUCTION OPTIONS

After looking into the seven categories of toxic substance reduction options, no options were identified. Explanations are provided in the table below to detail why an option could not be identified in each category.

<i>Toxic Substance Reduction Category</i>	<i>Option: Identification and Description</i>
1) Materials or feedstock substitution	No option identified: The Gladstone Facility uses specific quantities of ingredients to manufacture final products with the desired properties. Substituting these products would compromise the product characteristics and quality of the products and therefore would require extensive testing and analysis from the Research and Development Department. Material or feedstock substitutions are not currently possible for Gladstone's production.
2) Product design or reformulation	No option identified: The Facility's formulation for the production of goods is based on past research, trialing and analysis used to create products which appeal to their customers. A change to the product design or reformulation is not possible under the current conditions at the Facility.
3) Equipment or Process Modification	No option identified: The existing boilers operate at specific set parameters to produce the correct amount of steam to aid the manufacturing process. Therefore, there are no process modifications options available such as condensing and re-using the steam produced. As a result, equipment or process modifications aimed to reduce the use of PM10 are not possible.
4) Spill and Leak prevention	No option identified: The dust collectors, boilers and comfort heating equipment have maintenance schedules that ensure efficient operation and avoidance of spills or leaks. The Facility is already doing everything possible to reduce the creation and release of PM10.
5) On-site reuse or recycling	No option identified: The PM10 that is created in the boilers and dust collectors cannot be reused in the manufacturing process or recycled. Therefore, no options were identified.

<i>Toxic Substance Reduction Category</i>	<i>Option: Identification and Description</i>
6) Improve inventory management or purchasing techniques	No option identified: Gladstone uses a data base management system which is a daily encountering computer system to track quantities of products being received on-site and production demands. The production schedule is known for a minimum of two weeks in advance, therefore no surplus storage exists at the Facility. The Facility is unable to identify a reduction option related to improved inventory management or purchasing techniques, as they are already doing everything possible in this category.
7) Training or improved operating practices	No option identified: The staff is trained to inspect and monitor process operations to ensure all process equipment is operating properly. Equipment maintenance programs and training on Standard Operating Procedures (SOPs) to ensure efficient operating practices. The Facility operates with a fairly high human interaction as approximately 70% of the process being monitored closely by floor workers. There is potential for the implementation of further training for the floor workers that would result in improved operational efficiency and limit off-spec products. The Facility's operational schedule is 7 days per week and 24 hours per day. Therefore, even if employee training and SOPs are improved to reduce Facility waste, the creation of PM10 will not be reduced due to the continual operation of the manufacturing process.

PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for PM10.

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

Attached.

CERTIFICATION BY LICENSED PLANNER

Attached.

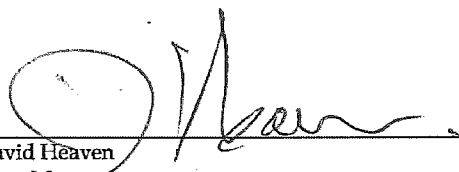
2.0 PLAN CERTIFICATIONS

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 11, 2013, I, David Heaven, certify that I have read the toxic substance reduction plan for the toxic substance 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.

Particulate Matter <10 µm

Particulate Matter <2.5 µm



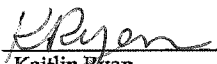
David Heaven
Plant Manager
Mondelez Canada- Gladstone Confectionary

CERTIFICATION BY LICENSED PLANNER

As of December 11, 2013, I, Kaitlin Ryan, certify that I am familiar with the processes at Mondelez Canada that use or create the toxic substance 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 December 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Particulate Matter <10 µm

Particulate Matter <2.5 µm



Kaitlin Ryan
Licensed Toxic Reduction Planner, License # TSRP0009
Conestoga-Rovers & Associates Limited

TRA PLAN SUMMARY – PARTICULATE MATTER <2.5µm

BASIC FACILITY INFORMATION

Name & CAS # of Substance	PM2.5	NA
Substance for which other Plans have been prepared	PM10	NA
Facility Identification and Site Address		
Company Name	Mondelez Canada Inc.	
Facility Name	Gladstone Confectionary	
Facility Address	277 Gladstone Avenue Toronto, ON M6J 3L9	
Spatial Coordination of Facility	626597m Easterly 4834312m Northerly	
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Person who Prepared the Plan: (if different from the Coordinator)	Kaitlin Ryan, P.Eng	
	Conestoga-Rovers & Associates Limited 651 Colby Drive, Waterloo ON N2V 1C2	
	kryan@croworld.com	
	Phone: (519) 884-0510	
Highest Ranking Employee	David Heaven, Plant Manager	
	Dave.heaven@mdlz.com	
	Phone: (416)-530-4055 ext 5303281	
	Fax: (416)-530-5911	

Planner Information:	
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	Planner License No: TSRP0009
	kryan@croworld.com
	Phone: (519) 884-0510
Planner Responsible for Certification	Kaitlin Ryan, P.Eng (Licence TSRP0009)
	kryan@croworld.com
	Phone: (519) 884-0510
	Fax: (555) 555-5050

TOXIC REDUCTION POLICY STATEMENT OF INTENT

Mondelez Canada Inc. (Mondelez) Gladstone Confectionary facility (Facility) creates Particulate Matter <2.5 µm (PM2.5) in four processes. The Facility does not intend to reduce the creation of this toxic substance at the Facility.

REDUCTION OBJECTIVES

Mondelez produces high quality products in an environmentally responsible manner. Mondelez's manufacturing operation has been optimized to minimize the use of raw materials. Mondelez will strive to reduce the creation of PM2.5 at the Facility in the future should an option become available.

DESCRIPTION OF FACILITY

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TOXIC SUBSTANCE REDUCTION OPTIONS

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4) Spill and Leak prevention	No option identified: The dust collectors, boilers and comfort heating equipment have maintenance schedules that ensure efficient operation and avoidance of spills or leaks. The Facility is already doing everything possible to reduce the creation and release of PM2.5.
5) On-site reuse or recycling	No option identified: The PM2.5 that is created in the boilers and dust collectors cannot be reused in the manufacturing process or recycled. Therefore, no options were identified.

<i>Toxic Substance Reduction Category</i>	<i>Option: Identification and Description</i>
6) Improve inventory management or purchasing techniques	No option identified: Gladstone uses a data base management system which is a daily encountering computer system to track quantities of products being received on-site and production demands. The production schedule is known for a minimum of two weeks in advance, therefore no surplus storage exists at the Facility. The Facility is unable to identify a reduction option related to improved inventory management or purchasing techniques, as they are already doing everything possible in this category.
7) Training or improved operating practices	No option identified: The staff is trained to inspect and monitor process operations to ensure all process equipment is operating properly. Equipment maintenance programs and training on Standard Operating Procedures (SOPs) to ensure efficient operating practices. The Facility operates with a fairly high human interaction as approximately 70% of the process being monitored closely by floor workers. There is potential for the implementation of further training for the floor workers that would result in improved operational efficiency and limit off-spec products. The Facility's operational schedule is 7 days per week and 24 hours per day. Therefore, even if employee training and SOPs are improved to reduce Facility waste, the creation of PM2.5 will not be reduced due to the continual operation of the manufacturing process.

PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for PM2.5.

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Attached.

CERTIFICATION BY LICENSED PLANNER

Attached.

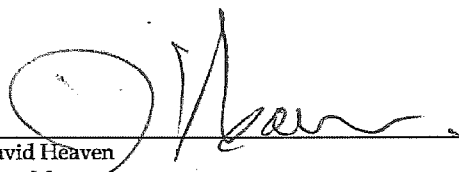
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Particulate Matter <10 µm

Particulate Matter <2.5 µm



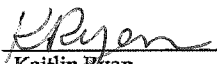
David Heaven
Plant Manager
Mondelez Canada- Gladstone Confectionary

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Particulate Matter <10 µm

Particulate Matter <2.5 µm



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