

# **Phase II Toxic Substance Reduction Plan**

## **Summary**

**Niagara Structural Steel  
23 Smith Street  
St. Catharines, ON  
L2P 3J7**

## Toxic Substance Reduction Plan for 2014

### Plan Summary Statement

This plan summary reflects the content of the toxic substance reduction plan for Particulate Matter prepared for Niagara Structural Steel, dated February 7<sup>th</sup>, 2017.

### Facility Information

Basic Facility Information			
Facility Name		Niagara Structural Steel	
NPRI Identification Number		27783	
Number of Full-time Employees		21	
NAICS Code			
Two Digit:	33	Four Digit:	3323
		Six Digit:	332312
UTM Spatial Coordinates			
UTM Spatial Coordinates		Datum	
Latitude:	43.16705	NAD83	
Longitude:	-79.21377		

### Facility Owner Information

Facility Owner Information	
Name	Canerector Inc.
Phone Number	416-225-6240
Fax Number	416-225-1232
E-mail	<a href="mailto:inquiries@canerector.com">inquiries@canerector.com</a>
Address	1 Sparks Avenue, North York, ON M2H 2W1

### Facility Operator Information

Facility Operator Information	
Name	Iain Fox
Phone Number	905-684-2022
Fax Number	905-684-4926
E-mail	<a href="mailto:ifox@niagarastructuralsteel.com">ifox@niagarastructuralsteel.com</a>
Address	23 Smith Street, St. Catharines, ON L2P 3J7

## Toxic Substance Reduction Plan for 2014

### Highest Ranking Employee Information

Highest Ranking Employee Information	
<b>Name</b>	Iain Fox
<b>Title</b>	General Manager
<b>Phone Number</b>	905-684-2022
<b>Fax Number</b>	905-684-4926
<b>E-mail</b>	ifox@niagarastructuralsteel.com
<b>Address</b>	23 Smith Street, St. Catharines, ON L2P 3J7

### Parent Company Information

- This facility is owned by Canerector Inc.

### Toxic Substance for Which Facility Must Prepare Plan:

- *(covered by this plan):* Particulate Matter (PM<sub>10</sub>)
  - CAS Number: N/A

### Plan Contacts

Plan Contacts		
	Person Coordinating the Preparation of the Plan	Person Who Prepared the Plan
<b>Name</b>	Iain Fox	Fil Barillaro P.Eng. QP, Robert Wade B.Sc
<b>Position</b>	General Manager	Plan Preparers
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	Public Contact	Technical Contact
<b>Name</b>	Iain Fox	Fil Barillaro P.Eng., Robert Wade B.Sc
<b>Position</b>	General Manager	Plan Preparers
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<b>Fax Number</b>	905-684-4926	(905) 988-1887
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<b>Address</b>	23 Smith Street, St. Catharines, ON L2P 3J7	16 Walnut Street, St. Catharines ON L2T 1H3

### **Statement of Intent and Objective of the Plan**

Particulate Matter (PM) is created as a result of various operations at Niagara Structural Steel (NSS). NSS intends to reduce the creation of this toxic substance at the Facility. The Facility does not use the above toxic substance; therefore, this plan will not address reducing its use.

NSS prides itself on technological innovation in order to produce high quality products in an environmentally responsible manner. NSS will strive to reduce the creation and release of PM. Furthermore, this plan will determine the technical and economic feasibility of reduction options to determine which, if any, are viable for implementation at this time.

NSS's objective is to reduce the creation and release of particulate matter, where technically and economically feasible. Several options were identified as being technically and economically feasible, albeit with no direct financial or operational benefit to NSS.

Through the implementation of a number of reduction options pertaining to equipment and process modifications, the creation and onsite air release of particulate matter can be reduced as follows:

#### **Particulate Matter:**

- Creation of Particulate Matter at the facility will be 1.76 tonnes per year accounting for a 0% reduction compared to Particulate Matter created in year 2014; and
- On site air releases of Particulate Matter will be 0.382 tonnes per year accounting for a 69.8% reduction compared to Particulate Matter released to air in year 2014.

The facility intends to implement the above reductions within the next 2 years.

### **Description of the Toxic Substances Found at Niagara Structural Steel**

As per the criteria set out in the Toxics Reduction Act, 2009 and Ontario Regulation 455/09, this phase II toxic reduction plan contains one Phase II toxic substance. This substance is created by the facility as a byproduct of regular operations.

## Toxic Substance Reduction Plan for 2014

The manufacturing operation at NSS consists of four stages. For the year 2014, Particulate Matter was created in five (5) processes – the “Metal Cutting” process (Metal Working stage), the “Welding” process (Metal Working stage), the “Grinding” process (Metal Working stage), the “Shot Abrasion” process (Surface Finishing stage), and the “Primer Application” process (Surface Finishing stage).

### Toxic Substance Reduction Options to be Implemented

To reduce the creation and air release of PM from the Facility, NSS plans to implement the options 1 and 2 under Category 3. Since the implementation of these options is expensive to NSS, it is beneficial to implement them in stages.

Unfortunately, option 1 under category 7 for employee training to reduce over spray and optimized use of high-efficiency spray guns cannot be implemented by NSS at this time. This is due to the fact that the impact to Particulate Matter generation is not deemed to be financially feasible for the amount of reduction.

### Category 3 – Equipment or Process Modifications; Time Table for Implementation

Step	Description	Estimated Timeline
1	Installation of fume extraction equipment to serve all Welding and Grinding operations.	1-2 years
2	Addition of after filters to increase the efficiency of Wheelabrator dust collector.	1-2 years

### Summary – Facility Level Quantifications for Particulate Matter

Form of Involvement	PM Released Before Reduction Options (MT/yr)	PM Released After Implementation of Reduction Options (MT/yr)
Enters the Facility	0	0
Created at the Facility	1.76	1.76
Released (air) from the Facility	1	0.382
Destroyed at the Facility	0.76	1.378

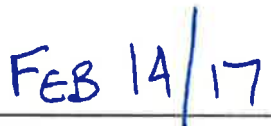
Toxic Substance Reduction Plan for 2014

**Plan Confirmation**

As of February 14, 2017, I, Iain Fox, confirm that I have read the toxic substance reduction plan for the toxic substances referred below and I am familiar with its contents. 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 with the exclusion of the Regulatory deadline, the reason for the late submission is that data equitation for the preparation of the plan took longer than expected.

- **Particulate Matter, CAS Number: N/A**

  
Iain Fox  
General Manager  
Niagara Structural Steel

  
Date

As of February 14, 2017, I, Fil Barillaro confirm that I am familiar with the processes at Niagara Structural Steel that use 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 August 20, 2014 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act with the exclusion of the Regulatory deadline.

- **Particulate Matter, CAS Number: N/A**

  
F. C. BARILLARO  
Fil Barillaro, M.A.Sc., P.Eng., QP  
Principal, Oakhill Environmental Inc.  
Toxic Substance Reduction Planner  
Certification Number: TSRP0233

  
Date