

# Toxic Reduction Plan Summary for PM10

## Basic Facility Information

Name & CAS of Substance	PM10	N/A
Substances for which other plans have been prepared	N/A	N/A
<b>Facility Identification and Site Address</b>		
Company Name	Hendrickson International Limited	
Facility Name		
Facility Address	532 Romeo Street, Stratford, Ontario N5A 7X1	
Spatial Coordinates of Facility	43.36150N, -80.96420E	<i>Expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum</i>
Number of Employees	227	
NPRI ID Number	3778	
Ontario MOE ID Number	n/a	
Business Number	102324621	
<b>Primary North American Industrial Classification System Code (NAICS)</b>		
2 Digit NAICS Code	33	
4 Digit NAICS Code	3326	
6 Digit NAICS Code	332611	
<b>Company Contact Information</b>		
Facility Public Contact	Mr. Claude Grenier	Environmental, Health & Safety Manager
	<a href="mailto:cgrenier@hendrickson-intl.com">cgrenier@hendrickson-intl.com</a>	Hendrickson International Limited
	Phone: 519-273-8749	Same address as facility

## Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for PM10, prepared by Hendrickson International Limited and dated December 10, 2013.

## Statement of Intent

PM10 is produced during process at Hendrickson International Limited (Hendrickson) in our processes. Whenever feasible we plan to eliminate or reduce the creation and discharge of PM10 in full compliance with all Federal and Provincial Regulations.

### **Reduction Objectives**

Our goal is to reduce the use of natural gas which through combustion creates PM10 at our facility by approximately 5% percent within five years of preparing this plan.

### **Description of Substance**

PM10 is created during process and heating through the use of natural gas and various other processes.

### **Toxic Substance Reduction Options to be Implemented**

The following options have been identified for implementation to reduce the use or releases of PM10:

#### **Category 3 – Equipment or Process Modification**

PM10 reductions due to implementing the option above will result in the following:

Company Name: Hendrickson International Limited

Substance: PM10

CAS #: n/a

Reduction Option:

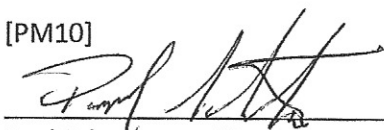
- a) Ensure that furnace and oven walls and doors are well insulated so as to minimize heat losses.
- b) Reduce or eliminate water-cooled parts inside a furnace or oven where possible
- c) Control make-up air for ovens and other heating equipment to keep it at the minimum value required to meet process and equipment safety requirements.
- d) Reduce or eliminate openings in furnace walls and doors to minimize heat losses and prevent air leaks into the furnace
- e) Clean heat transfer surfaces frequently to maintain high heat transfer efficiency in heat exchangers (2-5% reduction)
- f) Heat recovery from exhaust or flue gases for use in heating air, water and oils or in preheating material prior to heating in furnace or oven
- g) Preheat combustion air by using a recuperator or a regenerator to recover the heat of exhaust gases from a furnace or oven.
- h) Use of efficient operating practices such as operating heating equipment at close to full load or design load capacity, avoiding delays between cycles.
- i) Harvesting of waste heat to include pre-heat of process water, pre-heat of combustion air to burners, utilizing high heat exhaust to supplement tempering operations.
- j) Investigate the possibility to incorporate more efficient burners.
- k) Investigate direct feed of product from Hille 1 to Heat Treat 5.

	Used (tonnes/ yr)	Created (tonnes/yr)	Contained in Product (tonnes/yr)	On-Site Releases (tonnes/yr)			Disposal (tonnes/yr)		Off-Site Recycling (tonnes/yr)
				Air	Water	Land	On-site	Off-site	
Baseline	0	0.710	0	0.710	0	0	0	0	0
Estimated Reduced Total	0	0.674	0	0.674	0	0	0	0	0
Reduction	0	0.036	0	0.036	0	0	0	0	0
% Reduction	0%	5%	0	5%	0	0	0	0	0

### Plan Certification for PM10

As of December 10, 2013, I, Paul Schouwstra 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 Toxic Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

[PM10]



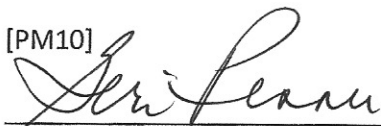
Paul Schouwstra, Plant Manager  
Hendrickson International Limited  
(Highest Ranking Employee)

12.13.13

Date

As of December 10, 2013, I, Geri Penner certify that I am familiar with the process at Hendrickson International Limited 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 Toxic Reduction Act, 2009 that are set out in the plan dated December 10<sup>th</sup>, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

[PM10]



Geri Penner  
Toxic Substance Reduction Planner  
Licence # TRSP0240

Dec 13, 2013

Date

## Toxic Reduction Plan Summary for PM2.5

### Basic Facility Information

Name & CAS of Substance	PM2.5	N/A
Substances for which other plans have been prepared	N/A	N/A
Facility Identification and Site Address		
Company Name	Hendrickson International Limited	
Facility Name		
Facility Address	532 Romeo Street, Stratford, Ontario N5A 7X1	
Spatial Coordinates of Facility	43.36150N, -80.96420E	<i>Expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum</i>
Number of Employees	227	
NPRI ID Number	3778	
Ontario MOE ID Number	n/a	
Business Number	102324621	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	33	
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6 Digit NAICS Code	332611	
Company Contact Information		
Facility Public Contact	Mr. Claude Grenier	Environmental, Health & Safety Manager
	<a href="mailto:cgrenier@hendrickson-intl.com">cgrenier@hendrickson-intl.com</a>	Hendrickson International Limited
	Phone: 519-273-8749	Same address as facility

### Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for PM2.5, prepared by Hendrickson International Limited and dated December 10, 2013.

### Statement of Intent

PM2.5 is produced during process at Hendrickson International Limited (Hendrickson) in our processes. Whenever feasible we plan to eliminate or reduce the creation and discharge of PM2.5 in full compliance with all Federal and Provincial Regulations.

### **Reduction Objectives**

Our goal is to reduce the use of natural gas which through combustion creates PM2.5 at our facility by approximately 5% percent within five years of preparing this plan.

### **Description of Substance**

PM2.5 is created during process and heating through the use of natural gas and various other processes.

### **Toxic Substance Reduction Options to be Implemented**

The following options have been identified for implementation to reduce the use or releases of PM2.5:

#### **Category 3 – Equipment or Process Modification**

PM10 reductions due to implementing the option above will result in the following:

Company Name: Hendrickson International Limited

Substance: PM2.5

CAS #: n/a

Reduction Option:

- a) Ensure that furnace and oven walls and doors are well insulated so as to minimize heat losses.
- b) Reduce or eliminate water-cooled parts inside a furnace or oven where possible
- c) Control make-up air for ovens and other heating equipment to keep it at the minimum value required to meet process and equipment safety requirements.
- d) Reduce or eliminate openings in furnace walls and doors to minimize heat losses and prevent air leaks into the furnace
- e) Clean heat transfer surfaces frequently to maintain high heat transfer efficiency in heat exchangers (2-5% reduction)
- f) Heat recovery from exhaust or flue gases for use in heating air, water and oils or in preheating material prior to heating in furnace or oven
- g) Preheat combustion air by using a recuperator or a regenerator to recover the heat of exhaust gases from a furnace or oven.
- h) Use of efficient operating practices such as operating heating equipment at close to full load or design load capacity, avoiding delays between cycles.
- i) Harvesting of waste heat to include pre-heat of process water, pre-heat of combustion air to burners, utilizing high heat exhaust to supplement tempering operations.
- j) Investigate the possibility to incorporate more efficient burners.
- k) Investigate direct feed of product from Hille 1 to Heat Treat 5.

	Used (tonnes/ yr)	Created (tonnes/yr)	Contained in Product (tonnes/yr)	On-Site Releases (tonnes/yr)			Disposal (tonnes/yr)		Off-Site Recycling (tonnes/yr)
				Air	Water	Land	On-site	Off-site	
Baseline	0	0.234	0	0.234	0	0	0	0	0
Estimated Reduced Total	0	0.222	0	0.222	0	0	0	0	0
Reduction	0	0.012	0	0.012	0	0	0	0	0
% Reduction	0%	5%	0	5%	0	0	0	0	0

### Plan Certification for PM2.5

As of December 10, 2013, I, Paul Schouwstra 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 Toxic Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.


[PM2.5]

  
 Paul Schouwstra, Plant Manager  
 Hendrickson International Limited  
 (Highest Ranking Employee)

12.13.13  
 Date

As of December 10, 2013, I, Geri Penner certify that I am familiar with the process at Hendrickson International Limited 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 Toxic Reduction Act, 2009 that are set out in the plan dated December 10<sup>th</sup>, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

[PM2.5]

  
 Geri Penner  
 Toxic Substance Reduction Planner  
 Licence # TRSP0240

Dec. 13, 2013  
 Date