

# **Phase II Toxic Substance Reduction Plan**

## **Summary**



**Niagara Energy Products  
4749 Buttrey Street  
Niagara Falls, ON  
L2E 7K7**

## Phase II Toxic Substance Reduction Plan Summary

### Plan Summary Statement

This plan summary reflects the content of the toxic substance reduction plan for Particulate Matter prepared for Niagara Energy Products, dated August 15, 2014.

### Facility Information

<b>Facility Name</b>	Niagara Energy Products				
<b>NPRI Identification Number</b>	10887				
<b>Number of Full-time Employees</b>	46				
<b>NAICS Code</b>					
Two Digit:	33	Four Digit:	3329	Six Digit:	332999
<b>UTM Spatial Coordinates</b>		<b>Datum</b>			
Latitude:	43.11240	NAD83			
Longitude:	-79.07220				

### Facility Owner Information

<b>Name</b>	2231409 Ontario Inc.	2231435 Ontario Inc.
<b>Phone Number</b>	-	-
<b>Fax Number</b>	-	-
<b>E-mail</b>	-	-
<b>Address</b>	7-B Pleasant Blvd., Suite 1138	40 Jenet Street
	Toronto, ON M4T 1K2	Fort Erie, ON L2A 4B9

### Facility Operator Information

<b>Name</b>	Robert Dimitrieff
<b>Phone Number</b>	905-371-2500 Ext. 233
<b>Fax Number</b>	905-371-2235
<b>E-mail</b>	neprd@vaxxine.com
<b>Address</b>	4749 Buttrey St., Niagara Falls, ON L2E 7K7

### Highest Ranking Employee Information

<b>Name</b>	Robert Dimitrieff
<b>Title</b>	President/General Manager
<b>Phone Number</b>	905-371-2500 Ext. 233
<b>Fax Number</b>	905-371-2235
<b>E-mail</b>	neprd@vaxxine.com
<b>Address</b>	4749 Buttrey St., Niagara Falls, ON L2E 7K7

## Phase II Toxic Substance Reduction Plan Summary

### Parent Company Information

Owned by two holding companies: 2231409 Ontario Inc. located at 7-b Pleasant Blvd., Suite 1138, Toronto, ON and 2231435 Ontario Inc. located at 40 Jennet Street, Fort Erie, ON.

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

One (1) Substance

- Particulate Matter (PM<sub>10</sub>), CAS Number: N/A

### Plan Contacts

	Person Coordinating the Preparation of the Plan	Person Who Prepared the Plan
<b>Name</b>	Robert Dimitrieff	Fil Barillaro, P.Eng & Samuel Pendyala, M.Eng
<b>Position</b>	General Manager	Plan Preparers
<b>Phone Number</b>	905-371-2500 Ext. 233	(905) 988-1243
<b>Fax Number</b>	905-371-2235	(905) 988-1887
<b>E-mail</b>	neprd@vaxxine.com	fil@oakhillenvironmental.com sam@oakhillenvironmental.com
<b>Address</b>	4749 Buttrey St., Niagara Falls, ON L2E 7K7	530A Eastchester Ave. St. Catharines ON L2M 7P3
	Public Contact	Technical Contact
<b>Name</b>	Robert Dimitrieff	Fil Barillaro, P.Eng & Samuel Pendyala, M.Eng
<b>Position</b>	General Manager	Plan Preparers
<b>Phone Number</b>	905-371-2500 Ext. 233	(905) 988-1243
<b>Fax Number</b>	905-371-2235	(905) 988-1887
<b>E-mail</b>	neprd@vaxxine.com	fil@oakhillenvironmental.com sam@oakhillenvironmental.com
<b>Address</b>	4749 Buttrey St., Niagara Falls, ON L2E 7K7	530A Eastchester Ave. St. Catharines ON L2M 7P3

### Toxic Substance Reduction Planner

<b>Name</b>	Fil Barillaro, M.A.Sc., P.Eng., QP.
<b>Title</b>	Principal Engineer
<b>Phone Number</b>	905-988-1243
<b>Fax Number</b>	905-988-1887
<b>E-mail</b>	<a href="mailto:fil@oakhillenvironmental.com">fil@oakhillenvironmental.com</a>
<b>License No.</b>	TSRP0233

## Phase II Toxic Substance Reduction Plan Summary

---

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

Particulate Matter (PM) is created as a resultant of various operations at Niagara Energy Products (NEP). NEP intends to reduce the creation of this toxic substance at the Facility. This Facility does not use the above toxic substance; therefore, this plan will not address reducing its use.

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

Our objective is to implement a number of reduction options pertaining to equipment and process modifications and employee training to reduce the creation and onsite air release as follows:

- Creation of Particulate Matter at the facility will be 6.78 tonnes per year accounting for 5% reduction compared to Particulate Matter created in year 2012; and
- On site air release of Particulate Matter will be 0.41 tonnes per year accounting for 65% reduction compared to Particulate Matter released to air in year 2012.

The facility intends to implement the above reductions within the next 2 to 4 years.

### **Description of the Toxic Substances found at Niagara Energy Products**

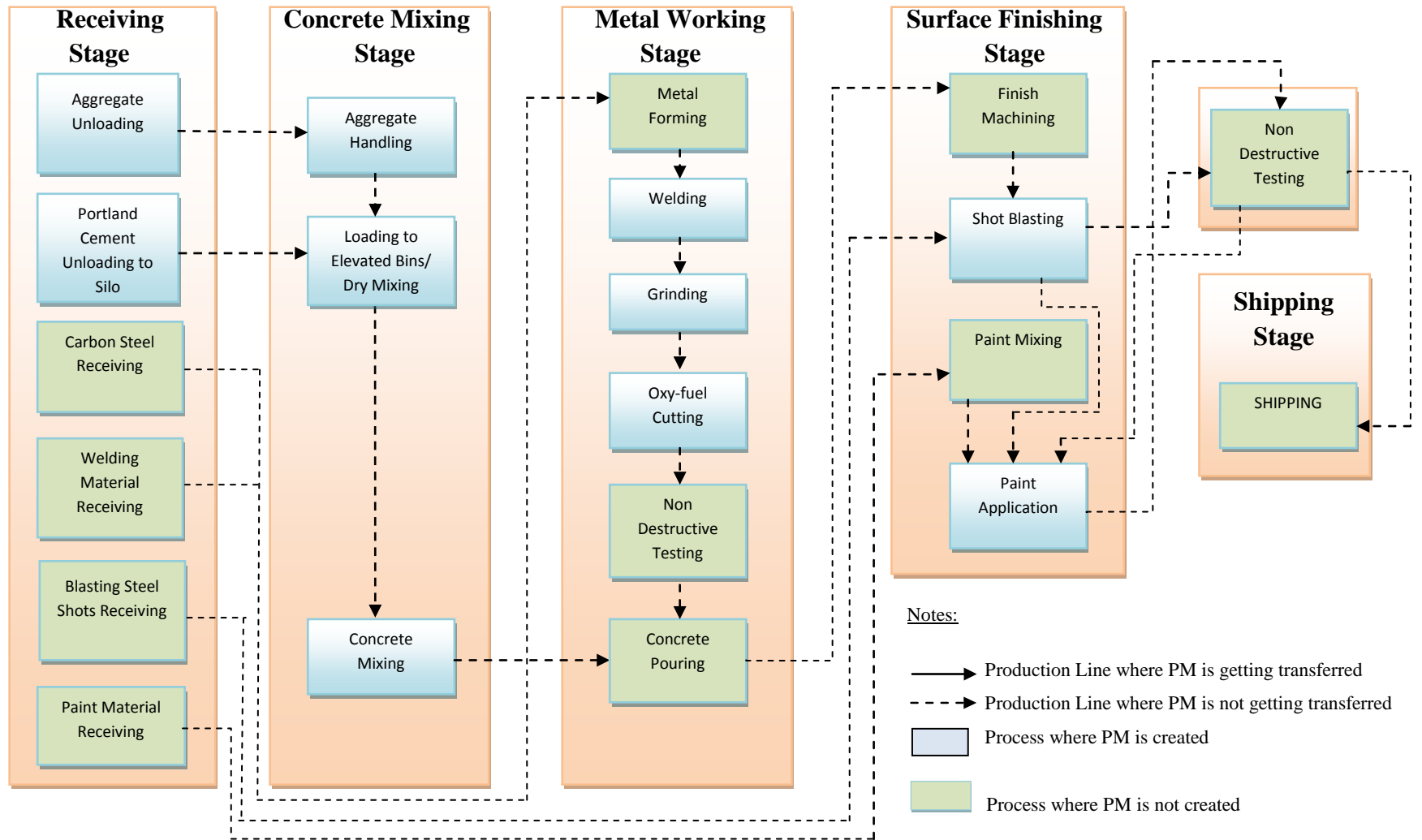
There is one (1) Phase II toxic substance that requires the development of a toxic substance reduction plan based on the criteria set out in the Toxics Reduction Act, 2009 and Ontario Regulation 455/09.

The substance is:

- Particulate Matter (CAS Number: N/A): created and released during various production stages.

The manufacturing operation at NEP consists of five (5) stages – the “Raw Material Receiving Stage” “Concrete Batching Stage”, “Metal Working Stage”, “Surface Finishing Stage” and “Shipping Stage”, as shown in Figure 1 below. This figure and the accompanying description are prepared as part of the records produced during the accounting process.

## Phase II Toxic Substance Reduction Plan Summary



**Figure 1: Process Flow Diagram – Particulate Matter through all the stages**

## Phase II Toxic Substance Reduction Plan Summary

---

### Toxic Substance Reduction Options to be Implemented

To reduce the creation and air release of Particulate Matter from the facility, NEP plans to implement the options 1 and 3 under Category 3 in TRA plan. Since the implementation of these options is expensive to NEP, it is beneficial to implement them in stages.

### Implementation Schedule of Options

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

Step	Description	Estimated Timeline	Estimated Reduction in Air Release (MT/yr)
1	Upgrading Emission Control Equipment	2-4 years	0.72
2	Acquiring Electrostatic Spray guns	1-2 years	0.02

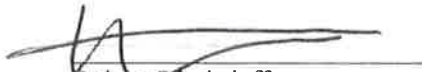
## Phase II Toxic Substance Reduction Plan Summary

---

### Plan Confirmation for Particulate Matter

As of Aug 15, 2014, I, Robert Dimitrieff, confirm that I have read the toxic substance reduction plan for the toxic substance referred to below and I 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.

### [Particulate Matter (PM<sub>10</sub>)]



Robert Dimitrieff  
President/General Manager (Highest Ranking Employee)  
Niagara Energy Products

Aug 13 2014  
Date

As of Aug 15, 2014, I, Fil Barillaro confirm that I am familiar with the processes at Niagara Energy Products 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 February 3, 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 (PM<sub>10</sub>)]



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

Aug 13/2014  
Date