

Toxics Reduction Act Public Annual Report 2014

The legal and trade names of the owner and the operator of the facility, the street address of the facility and, if the mailing address of the facility is different from the street address, the mailing address.(See below)	PanAbrasive Inc. 650 Rusholme Road Welland ON L3B 5R4	
Facility NPRI identification number	11118	
The identification number assigned to the facility by the Ministry of the Environment for the purposes of Ontario Regulation 127/01.	-	
Number of full-time employees	60	
North American Industry Classification System (NAICS) - 2, 4, and 6 digit codes	31 - 33 Manufacturing 3279 - All other non-metallic mineral product manufacturing 327910 - Abrasive product manufacturing	
If applicable, the name, position and telephone number of the individual who is the contact at the facility for the public: Public Contact (if applicable)	Brett Evans	
Title	Quality and Environmental Manager	
Phone Number	(905) 735-4691	
Address of each person below if not the same as the facility		
Facility Name	PanAbrasive Inc.	
Address 1	650 Rusholme Road	
Address 2	0	
City	Welland	
Province	ON	
Postal Code	L3B 5R4	
UTM coordinates, x and y	X 645669.68	Y 4758822
Datum	WGS84	
Legal name of Canadian parent company, if your facility is a subsidiary of a Canadian parent company		
Parent company name	PanAbrasive Inc.	
Address 1	650 Rusholme Road	
Address 2		
City	Welland	
Province	ON	
Postal Code	L3B 5R4	
Percent Ownership	100%	

Substance Accounting

Substance:	Particulate Matter (10)
CAS Number:	NA - M09
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.000 Mg
The amount of substance that was created:	4.856 Mg
The amount of substance that was contained in product:	NA Mg
<p>On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</p>	

Substance:	Particulate Matter (2.5)
CAS Number:	NA - M10
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.000 Mg
The amount of substance that was created:	2.774 Mg
The amount of substance that was contained in product:	NA Mg
<p>On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</p>	

Substance:	Manganese and its compounds
CAS Number:	NA - 09
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units >100 to 1000 Mg
The amount of substance that was created:	0.000 Mg
The amount of substance that was contained in product:	>100 to 1000 Mg
<p>On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</p>	

Substance:	Hexachlorobenzene
CAS Number:	118-74-1
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.0000 g
The amount of substance that was created:	0.0000 g
The amount of substance that was contained in product:	0.0000 g
<p>On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</p>	

Substance Accounting

Substance:	Polychlorinated Dibenzo-P-Dioxins & Polychlorinated Dibenzofurans
CAS Number:	NA - M11
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g TEQ
The amount of substance that was created:	0.0151 g TEQ
The amount of substance that was contained in product:	0.0000 g TEQ
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	2,3,7,8 -TCCD
CAS Number:	1746-01-6
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0029 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,7,8 - PeCDD
CAS Number:	40321-76-4
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0048 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,4,7,8 - HxCDD
CAS Number:	39227-28-6
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0002 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance Accounting

Substance:	1,2,3,6,7,8 - HxCDD
CAS Number:	57653-85-7
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0015 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,7,8,9 - HxCDD
CAS Number:	19408-74-3
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0006 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,4,6,7,8 - HpCDD
CAS Number:	35822-46-9
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0020 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	OCDD
CAS Number:	3268-87-9
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units
	0.0000 g
The amount of substance that was created:	0.0032 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance Accounting

Substance:
CAS Number:

2,3,7,8 - TCDF
51207-31-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0122	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Substance:
CAS Number:

2,3,4,7,8 - PeCDF
57117-31-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0114	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Substance:
CAS Number:

1,2,3,7,8 - PeCDF
57117-41-6

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0281	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Substance:
CAS Number:

1,2,3,4,7,8 - HxCDF
70648-26-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0059	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Substance Accounting

Substance:	1,2,3,7,8,9 - HxCDF
CAS Number:	72918-21-9
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.0000 g
The amount of substance that was created:	0.0015 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,6,7,8 - HxCDF
CAS Number:	57117-44-9
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.0000 g
The amount of substance that was created:	0.0036 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	2,3,4,6,7,8 - HxCDF
CAS Number:	60851-34-5
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.0000 g
The amount of substance that was created:	0.0022 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance:	1,2,3,4,6,7,8 - HpCDF
CAS Number:	67562-39-4
On a facility-wide basis:	
Amount that entered the facility as the substance itself or as a constituent of another substance:	Amount Units 0.0000 g
The amount of substance that was created:	0.0039 g
The amount of substance that was contained in product:	0.0000 g
On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en	

Substance Accounting

Substance:
CAS Number:

1,2,3,4,7,8,9 - HpCDF
55673-89-7

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0000	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Substance:
CAS Number:

OCDP
39001-02-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Amount Units

0.0000	g
--------	---

The amount of substance that was created:

0.0012	g
--------	---

The amount of substance that was contained in product:

0.0000	g
--------	---

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Annual Progress Report - Calendar 2014

Substances for which toxic substance reduction plans have been prepared:

Substance	CASRN
Particulate Matter less than or equal to 10 microns (PM ₁₀)	NA - M09
Particulate Matter less than or equal to 2.5 microns (PM _{2.5})	NA - M10
Manganese (and its compounds)	NA - 09
Hexachlorobenzene	118-74-1
PCCD/F	Not Applicable
2,3,7,8 -TCCD	1746-01-6
1,2,3,7,8 - PeCDD	40321-76-4
1,2,3,4,7,8 - HxCDD	39227-28-6
1,2,3,6,7,8 - HxCDD	57653-85-7
1,2,3,7,8,9 - HxCDD	19408-74-3
1,2,3,4,6,7,8 - HpCDD	35822-46-9
OCDD	3268-87-9
2,3,7,8 - TCDF	51207-31-9
2,3,4,7,8 - PeCDF	57117-31-4
1,2,3,7,8 - PeCDF	57117-41-6
1,2,3,4,7,8 - HxCDF	70648-26-9
1,2,3,7,8,9 - HxCDF	72918-21-9
1,2,3,6,7,8 - HxCDF	57117-44-9
2,3,4,6,7,8 - HxCDF	60851-34-5
1,2,3,4,6,7,8 - HpCDF	67562-39-4
1,2,3,4,7,8,9 - HpCDF	55673-89-7
OCDF	39001-02-0

Plan Objectives

PanAbrasive's goal is to reduce the creation and release of Particulate Matter less than 10 microns (PM₁₀) Particulate Matter less than or equal to 2.5 Microns (PM_{2.5}), Manganese (and its compounds), hexachlorobenzene and dioxin and furan isomers where technically and economically feasible. Based on currently available information and technologies, there are no technically and economically reduction options currently available for these substances. The facility will continue to monitor technological advancements to ensure that reduction options that are both technological and financially viable are implemented at our facility. In terms of the metal species noted above, Panabrasive cannot reduce the use of these substances as they are integral components of the alloys produced by the facility. However, we will ensure the sound management and use of these substances that minimizes significant adverse impacts on human health and the environment.

Toxics Reduction Progress

Overall the quantities of dioxins, furans and hexachlorobenzene released and created by the facility increased due to a slight increase in the facility's overall production in 2014. The values of manganese used decreased due to the slight decrease in the facility's cyclone and baghouse dust collected in 2014 but the amount of manganese contained in the end product increased to do a slight increase in production. A change in process resulted in a significant increase in the amount of manganese sent off-site for recycling as the furnace slag and steel skulls scrap were no longer stored on-site as it was in 2013. Particulate Matter less than or equal to 10 microns (PM₁₀) and Particulate Matter less than 2.5 microns (PM_{2.5}) released to the air and created quantities increased in 2014 as the quantity of natural gas combusted and overall production by the facility increased.

Plan Implementation Progress

There were no reduction options identified in any of the plans for the above noted substances that were identified as being both technically and economically feasible. As such, there were no timelines presented in the reduction plans for the above noted substances. However, Panabrasive will continue to explore and investigate potential reduction options as they arise as part of their sustainability program.

As there were no anticipated reductions noted in each of the plans for the toxic substances noted above, there were no reductions of any toxic substances during the reporting period that would be attributable to any reduction plan.

Certification Statement

As of May 14, 2015, I certify that I have read the reports on the toxic substance reduction plans for Manganese (and its compounds), PM10, PM2.5, Hexachlorobenzene, Polychlorinated Dibenzo-P-Dioxins & Polychlorinated Dibenzofurans and their 17 congeners and am familiar with their contents and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

The original version of this report is signed off by:

Highest Ranking Employee:

Title:

Phone Number:

Jeff Glaser
VP North American Operations
(905) 735-4691