

PANABRASIVE INC.

650 RUSHOLME ROAD, WELLAND, ONTARIO L3B 5N7

TOXICS REDUCTION ACT TOXIC SUBSTANCE REDUCTION PLAN SUMMARIES 2013

REPORT PREPARED BY:
O2E INC.

REPORT PREPARED FOR:
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QUALITY & ENVIRONMENTAL MANAGER
PANABRASIVE INC.

DECEMBER 5, 2013

LONDON

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ONTARIO

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CANADA

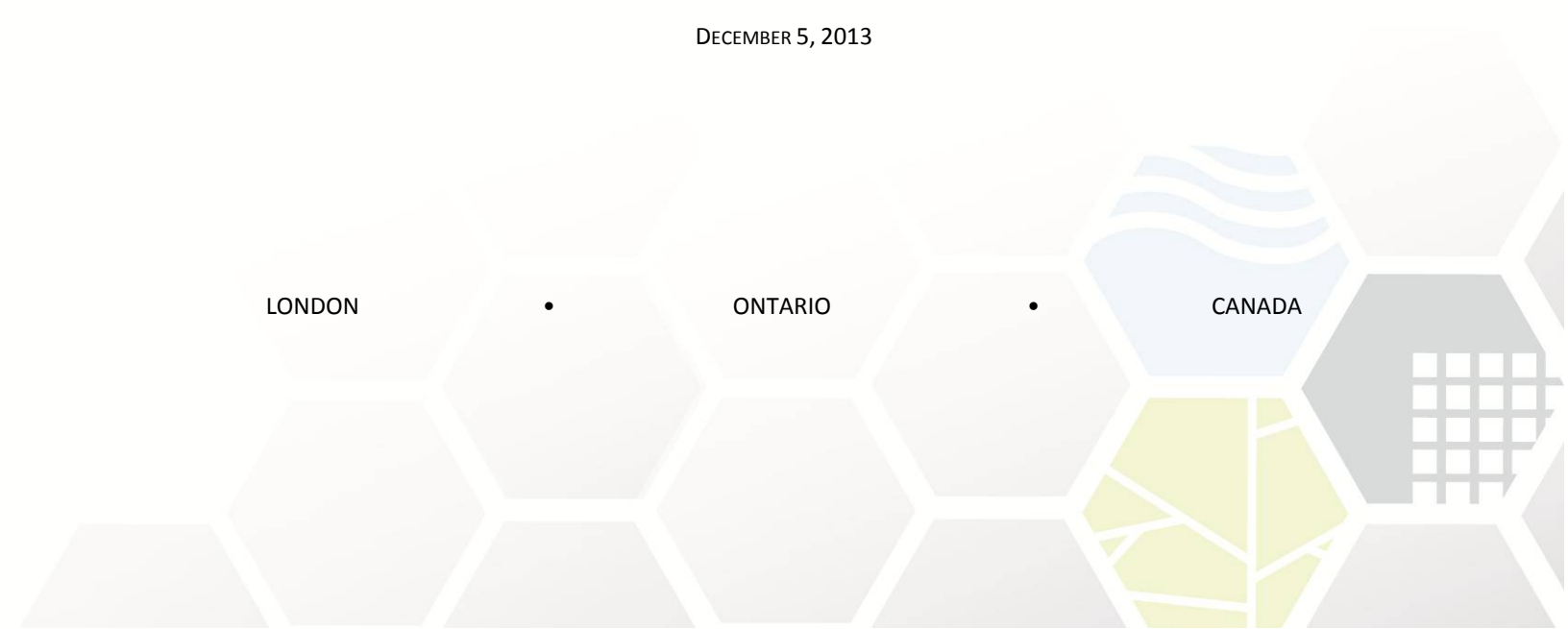


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1. PLAN SUMMARY – PARTICULATE MATTER ≤2.5 MICRONS (PM_{2.5})

Name and CASRN of Substance	PM _{2.5}	NA-M10
Substances for which other plans have been prepared	Manganese (and its compounds)	Not Applicable
	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
	PM ₁₀	NA-M09

1.1 Basic Facility Information

Basic facility information has been included in Section 3 of this document.

1.2 Toxic Reduction Policy Statement of Intent

Eco-citizenship is an integral part of Panabrasive’s corporate ethics. They strive to use natural resources efficiently and respect their environment by minimizing waste generation and impacts on the air, water and land. From the first step of their manufacturing process, they use a recovered material, scrap.

Panabrasive respects the environment in their process and products by sorting and reusing production wastes, by very tight management of their supply chain, by being as near as possible to their customers, and by offering green services to their clients.

Panabrasive is committed to achieving operational excellence by continuously improving on existing business processes. Whenever technically and economically feasible they intend to reduce the use, and release of Particulate Matter ≤ 2.5 microns (PM_{2.5}) in full compliance with

all federal and provincial regulations. Toxic use reduction will be an ongoing effort for Panabrasive; they will continue to evaluate all options available to achieve this.

1.3 Reduction Objectives

Panabrasive's goal is to reduce the creation and release of PM_{2.5} where technically and economically feasible. No technically or economically feasible reduction options for PM_{2.5} were identified. The facility will continue to monitor new technological improvements to ensure that reduction options that are both technologically and financially viable are implemented at our facility.

1.4 Description of Substance

PM_{2.5} is a by-product of several processes at the facility. It is not intentionally produced or used in any process. PM_{2.5} is believed to be created by the metal melting and alloying stage, casting and cooling stage, metal treatment and final product stage and by the natural gas fired equipment at the facility.

1.5 Toxic Substance Reduction Option to be Implemented

There are currently no reduction options that have been identified as being both technically and economically feasible for this substance.

1.6 Plan Summary Statement

This plan accurately reflects the content of the toxic substance reduction plan for PM_{2.5}, prepared on behalf of Panabrasive, and dated November 15, 2013.

1.7 Copy of Plan Certification

A copy of the plan certification is presented in Section 4 of this document.

2. PLAN SUMMARY – PARTICULATE MATTER ≤10 MICRONS (PM₁₀)

Name and CASRN of Substance	PM ₁₀	NA-M09
Substances for which other plans have been prepared	Manganese (and its compounds)	Not Applicable
	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
		PM _{2.5}

2.1 Basic Facility Information

Basic facility information has been included in Section 3 of this document.

2.2 Toxic Reduction Policy Statement of Intent

Eco-citizenship is an integral part of Panabrasive’s corporate ethics. They strive to use natural resources efficiently and respect their environment by minimizing waste generation and impacts on the air, water and land. From the first step of their manufacturing process, they use a recovered material, scrap.

Panabrasive respects the environment in their process and products by sorting and reusing production wastes, by very tight management of their supply chain, by being as near as possible to their customers, and by offering green services to their clients.

Panabrasive is committed to achieving operational excellence by continuously improving on existing business processes. Whenever technically and economically feasible they intend to reduce the creation, and release of Particulate Matter of ≤10 Microns (PM₁₀) in full compliance

with all federal and provincial regulations. Toxic use reduction will be an ongoing effort for Panabrasive; they will continue to evaluate all options available to achieve this.

2.3 Reduction Objectives

Panabrasive's goal is to reduce the creation and release of PM₁₀ where technically and economically feasible. No technically or economically feasible reduction options for reducing PM₁₀ were identified. The facility will continue to monitor new technological advancements to ensure that reduction options that are both technologically and financially viable are implemented at our facility.

2.4 Description of Substance

PM₁₀ is a by-product of several processes at the facility. It is not intentionally produced or used in any process. PM₁₀ is believed to be created by the metal melting and alloying stage, casting and cooling stage, metal treatment and final product stage and by the natural gas fired equipment at the facility.

2.5 Toxic Substance Reduction Option to be Implemented

There are currently no reduction options that have been identified as being both technically and economically feasible for this substance.

2.6 Plan Summary Statement

This plan accurately reflects the content of the toxic substance reduction plan for PM₁₀, prepared on behalf of Panabrasive, and dated November 15, 2013.

2.7 Copy of Plan Certification

A copy of the plan certification is presented in Section 4 of this document.

3. BASIC FACILITY INFORMATION

Facility Identification and Site Address		
Company Name	Panabrasive Inc.	
Facility Name	Panabrasive Inc.	
Facility Address	Physical Address:	Mailing Address
	650 Rusholme Road Welland, ON L3B 5N7	650 Rusholme Road Welland, ON L3B 5N7
Spatial Coordinates (UTM)	645669.68	4758822
Datum	WGS84	
Number of Employees	69	
NPRI ID	11118	
ON MOE ID		
Parent Company Information		
Parent Company Name & Address	Panabrasive Inc. 650 Rusholme Road Welland, ON L3B 5N7	
Percent Ownership	100%	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	31-33 Manufacturing	
4 Digit NAICS Code	3279 - All other non-metallic mineral product manufacturing	
6 Digit NAICS Code	327910 - Abrasive product manufacturing	
Company Contact Information		
Facility Public Contact	Brett Evans Environmental & Quality Manager	Contact Address 650 Rusholme Road Welland, ON L3B 5N7
	Brett.Evans@Panabrasive.com	Panabrasive Inc. 650 Rusholme Road Welland, ON L3B 5N7
	Phone: (905) 735-4691	
	Fax: 416 621-3119	

4. COPY OF PLAN CERTIFICATION

Certification by the Highest Ranking Employee

As of December 5, 2013, I, Jeff Glaser, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Particulate Matter ≤ 2.5 microns ($PM_{2.5}$)

Particulate Matter ≤ 10 microns (PM_{10})



Jeff Glaser
VP North American Operations
PanAbrasive Inc.

Certification by Licensed Planner

As of December 5, 2013, I, Tim Logan certify that I am familiar with the processes at PanAbrasive's Welland facility that use or create the toxic substances 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 plans dated November 15, 2013 and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Particulate Matter ≤ 2.5 microns ($PM_{2.5}$)

Particulate Matter ≤ 10 microns (PM_{10})



Tim Logan (License No. TSRP0003)
President
O2E Inc. Environmental Consultants