

**Toxics Reduction Plan Summary for Chemtura,
West Hill**
**(Prepared in Compliance with the Toxics Reduction Act, 2009
& Ontario Regulation 455/09)**

December 2013

Ref: 3204-03

Prepared for:



Chemtura
West Hill, Ontario

Prepared by:



Enviro-Stewards
Engineers & Scientists

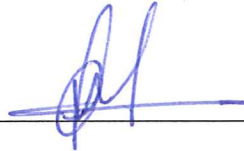
Enviro-Stewards Inc.
1 Union Street
Elmira, Ontario

CERTIFICATIONS

Toxics Reduction Planner Certification *As of December 18, 2013,*

I, Cylma Foxtton certify that I am familiar with the processes at Chemtura Canada West Hill 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 December 2012 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under that Act.

- PM2.5 & PM10
- Naphtha



Planner Name: Cylma Foxtton
License No.: TSRP0028

Highest Ranking Employee Certification *As of December 18, 2013, I, Mark Timbres certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and I 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 that Act.*

- PM2.5 & PM10
- Naphtha



Highest Ranking Employee Name: Mark Timbres

BASIC FACILITY INFORMATION

Substance name(s) & CAS No.(s)	Substance Name	CAS No.
	PM2.5	N/A
	PM10	N/A
	Naphtha	8030-30-6
NPRI ID No.	3553	
O. Reg 127/01 ID No.	-	
Legal name of owner	Chemtura Canada Co.	
Trade name of owner	-	
Legal name of operator (if different)	-	
Trade name of operator (if different)	-	
Mailing address of owner	10 Chemical Court, Scarborough, ON M1E 3X7	
Mailing address of operator (if different)	-	
2-digit NAICS code	32	
4-digit NAICS code	3251	
6-digit NAICS code	325189	
Spatial coordinates (UTM & NAD83)	Latitude: 43.7630 Longitude: -79.1635 Zone: 17 Easting: 647826 Northing: 4847189	
Parent Company (if applicable)	-	
Legal name	-	
Mailing address (if different from facility)	-	
Percent owned by parent company	-	
Canada Customs & Revenue Agency No.	-	
Mailing address	-	

TECHNICAL CONTACT

Name	Cylma Foxton
Position	HSE
Phone number	(416) 724-3617
Email	Cylma.Foxton@chemtura.com
Mailing address (if different)	-

PERSON WHO COORDINATED THE PLAN

Name	Cylma Foxton
Position	HSE
Phone number	(416) 724-3617
Email	Cylma.Foxton@chemtura.com
Mailing address (if different)	-

PERSON WHO PREPARED THE PLAN

Name	Lloyd Hipel
Position	Project Manager
Phone number	(519) 578-5100
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Mailing address (if different)	1 Union Street, Elmira, ON N3B 3J9

HIGHEST RANKING EMPLOYEE

Name	Mark Timbres
Position	Plant Manager
Phone number	416-724-3586
Email	Mark.timbres@chemtura.com
Mailing address (if different)	-

PLAN SUMMARY

Substance name	Substance Name	CAS No.
	PM2.5	N/A
Statement of Intent & Objectives	Chemtura Canada West Hill intends to reduce the use of PM2.5 onsite reuse or recycling and training and improved operating practices.	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Attachment A.	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Attachment B.	
Implementation Plan of Options		
Implementation Category	v. Onsite reuse or recycling	
Implementation Option	Reusing hot methanol column bottoms back into process to reduce natural gas consumption	
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014 	
Estimated Reduction	PM2.5:	0.2 kg/year (0.02%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved within one year (December 2014) 	
Implementation Category	vii. Training or improved operating practices	
Implementation Option	Routinely clean off dryer (reduce loading on dust collector)	
Steps to Implement	<ul style="list-style-type: none"> • Develop standard operating procedures: Q1 to Q2 2014 • Implement SOPs: Q3 to Q4 2014 	
Estimated Reduction	PM2.5:	0.23 kg/year (0.02%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved in one year 	
Implementation Category	vii. Training or improved operating practices	
Implementation Option	Investigate bulk loading of lime (Neutral Process)	
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2015 	
Estimated Reduction	PM2.5:	1.22 kg/year (0.1%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved in 2016 	

Substance name	Substance Name	CAS No.
	PM10	N/A
Statement of Intent & Objectives	Chemtura Canada West Hill intends to reduce the use of PM10 onsite reuse or recycling and training and improved operating practices.	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Attachment A.	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction	Refer to Attachment B.	

estimates, technical & economic feasibility analyses, etc.)	
Implementation Plan of Options	
Implementation Category	v. Onsite reuse or recycling
Implementation Option	Reusing hot methanol column bottoms back into process to reduce natural gas consumption
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	PM10: 0.2 kg/year (0.02%) created
Dates for achieving reduction	• Reductions should be achieved within one year (December 2014)
Implementation Category	vii. Training or improved operating practices
Implementation Option	Routinely clean off dryer (reduce loading on dust collector)
Steps to Implement	<ul style="list-style-type: none"> • Develop standard operating procedures: Q1 to Q2 2014 • Implement SOPs: Q3 to Q4 2014
Estimated Reduction	PM10: 0.23 kg/year (0.02%) created
Dates for achieving reduction	• Reductions should be achieved in one year
Implementation Category	vii. Training or improved operating practices
Implementation Option	Investigate bulk loading of lime (Neutral Process)
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	PM10: 1.23 kg/year (0.1%) created
Dates for achieving reduction	• Reductions should be achieved in one year
Substance name	Substance Name
	Naphtha
	CAS No.
	8030-30-6
Statement of Intent & Objectives	Chemtura Canada West Hill intends to reduce the use of naphtha product design or reformulation, equipment or process modification, onsite reuse or recycling and training and improved operating practices.
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Attachment A.
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Attachment B.
Implementation Plan of Options	
Implementation Category	ii. Product design or reformulation
Implementation Option	Increase soap content in intermediate product which will reduce undesirable by product (dryer cake) containing naphtha.
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	Naphtha: 1,652 kg/year (0.5%) used
Dates for achieving reduction	• Reductions should be achieved by 2015
Implementation Category	iii. Equipment or process modification
Implementation Option	Dryer optimization to reduce naphtha in cake (six sigma project)
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	Naphtha: 6,608 kg/year (2%) used
Dates for achieving reduction	• Reductions should be achieved by 2015

Implementation Category	v. Onsite reuse or recycling
Implementation Option	Optimize SVR performance to be able to recover more naphtha (six sigma)
Steps to Implement	<ul style="list-style-type: none"> • Planning & testing: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	Naphtha: 6,608 kg/year (2%) used
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved in one year

Implementation Category	vii. Training or improved operating practices
Implementation Option	Internal MI (mechanical integrity) inspection on all tanks (identifying leaks)
Steps to Implement	<ul style="list-style-type: none"> • Inspection planning: Q1 to Q3 2014 • Implementation: Q4 2014
Estimated Reduction	Naphtha: 330 kg/year (0.1%) used
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved in one year