

CHEMTURA CANADA CO./CIE Elmira, Ontario

Annual Toxic Reduction Public Report Reporting Year 2013

INTRODUCTION

Chemtura Canada Co./Cie. Elmira manufactures specialty chemicals for the oil and plastics industry as well as agricultural chemicals. In the process of producing these chemicals, some substances used fall under the toxic reduction act, therefore reduction plans were generated to ensure efficient use of the substances with minimal environmental impact.

As per the Ontario's *Toxics Reduction Act and Regulation (O. Reg 455/09)*, reduction plans were generated for the following substances:

Phase 1 -

Methanol

Hydrochloric Acid Sulphuric Acid

Toluene

Phase 2 -

Acetone

Ammonia

Aniline

Diphenyl Amine Isopropyl Alcohol Ethylene Glycol Phthalic Anhydride

PM 10 PM 2.5 Styrene

Toluene Diisocyanate

These toxics substance reduction plan summaries have been prepared to meet the regulatory requirements Section 27(1) of the Ontario Regulation 455/09.

As of June 1, 2014 I certify that I have read the report on the toxic substance reduction plans for the toxics listed above and am familiar with their contents and to my knowledge the information contained in the reports is factually accurate and complies with the Toxics Reduction Act 2009 and Ontario Regulation 455/09 (general) made under the Act.

COMPANY INFORMATION

Chemtura Canada Co./ Cie. Elmira Facility 25 Erb Street Elmira ON N3B 3A3

National Pollutant Release Inventory (NPRI) identification number: 0000002322

Ontario Regulation 127/01 identification number: 6801

Number of full-time employee equivalents: 187

North American Industry Classification System (NAICS) codes:

2 digit - 32 4 digit - 3259 6 digit - 325999

Spatial coordinates in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83): (NAD83) 17-536120-4827144

PUBLIC CONTACT

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METHANOL CAS # 67-56-1

	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	% (2013- 2011)	% (2013- 2012)
Use:	10 – 100	10 – 100	10 – 100	-50	-52.5
Created:	0	0	0		
In product:	0	0	0		
Release to air:	0 – 1	0 – 1	0 – 1	0	0
Disposed of offsite:	0	0	0		
Offsite for recycle:	0	0	0		

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

None

Hydrochloric Acid

CAS # 7647-01-0

	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	% (2013- 2011)	% (2013- 2012)
Use:	10 – 100	10 – 100	10 – 100	-4.0	-12.4
Created:	0	0	0		
In product:	0	0	0		
Release to air:	0 – 1	0 – 1	0 – 1	-11.5	-11.5
Disposed of offsite:	0	0	0		
Offsite for recycle:	0	0	0		

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

TOLUENE CAS # 108-88-3

	2011	2012	2013	% (2013-	% (2013-
	(tonnes)	(tonnes)	(tonnes)	2011)	2012)
Use:	101 – 1000	100 – 1,000	100 – 1,000	9.7	36.6
Created:	0	0	0		
In product:	0	0 - 1	0 - 1	73.7	21.0
Release to air:	10 – 100	10 -100	10 -100	46.7	7.7
Disposed of offsite:	100 - 1000	100 - 1,000	100 - 1,000	-2.7	32.3
Offsite for recycle:	0	0	0		

Reduction options: Equipment or process modifications and training

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

Installed new process control system. Additional modifications are ongoing.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

None

ACETONE CAS # 67-64-1

	2012	2013	% (2013-
	(tonnes)	(tonnes)	2012)
Use:	100 - 1,000	100 - 1,000	17.8
Created:	0	0	
In product:	0	0	
Release to air:	0 - 1	0 – 1	0.00
Disposed of offsite:	1 -10	1 -10	21.7
Offsite for recycle:	0	0	

Reduction options: Instrument control improvements

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

Segregated some waste acetone for reused on site. Remainder of waste acetone cannot be segregated.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions. None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

AMMONIA CAS # NA-16

	2012	2013	% (2013-
	(tonnes)	(tonnes)	2012)
Use:	100 - 1,000	100 - 1,000	2.0
Created:	0	0	
In product:	0	0	
Release to air:	0 - 1	0 - 1	1.41
Disposed of offsite:	100 -1,000	100 -1,000	-6.0
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

None

ANILINE CAS # 62-53-3

N X	2012	2013	% (2012-
	(tonnes)	(tonnes)	2013)
Use:	0 – 1	0 - 1	79.7
Created:	10 – 100	10 – 100	-12.1
In product:	0	0	
Release to air:	0 – 1	0 – 1	-550
Disposed of offsite:	10 -100	10 -100	-10.9
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

DIPHENYLAMINE CAS # 122-39-4

	2012 (tonnes)	2013 (tonnes)	% (2013-2012)
Use:	1,000 - 10,000	1,000 - 10,000	-2.7
Created:	0	0	* I
In product:	100 - 1,000	100-1,000	-9.7
Release to air:	0 - 1	0 – 1	4.7
Disposed of offsite:	10 -100	10 -100	69.4
Offsite for recycle:	1 - 10	1 - 10	0

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan.

Description of amendments to the plan. None

ETHYELENE GLYCOL

CAS # 107-21-1

	2012	2013	% (2013-
	(tonnes)	(tonnes)	2012)
Use:	100 – 1,000	100 – 1,000	5.2
Created:	0	0	
In product:	100 - 1,000	100-1,000	0.8
Release to air:	0 - 1	0 – 1	0
Disposed of offsite:	1 - 10	0 - 1	-438
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions. None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

ISOPROPYL ALCOHOL (

CAS # 67-63-0

	2012 (tonnes)	2013 (tonnes)	% (2013- 2012)
Use:	10 – 100	100 - 1,000	37.5
Created:	0	0	
In product:	0	0	
Release to air:	1 - 10	1 – 10	8.1
Disposed of offsite:	10 -100	10 -100	24.5
Offsite for recycle:	0	0	

Reduction options: Equipment or process modifications and training

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

Continuing equipment modifications

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

None

PM 10

	2012 (tonnes)	2013 (tonnes)	% (2013- 2012)
Use:	0	0	
Created:	10 – 100	10 – 100	16.9
In product:	0	0	
Release to air:	1 – 10	1 – 10	2.1
Disposed of offsite:	0	0	
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

Not Applicable

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions. Not Applicable

Summary of differences between steps taken and those set out in the plan. Not Applicable

Description of amendments to the plan.

Not Applicable

PM 2.5

	2012	2013	% (2013-
	(tonnes)	(tonnes)	2012)
Use:	0	0	
Created:	10 – 100	10 – 100	0
In product:	0	0	
Release to air:	1 - 10	1 – 10	0
Disposed of offsite:	0	0	
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

Not Applicable

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions. Not Applicable

Summary of differences between steps taken and those set out in the plan. Not Applicable

Description of amendments to the plan.

Not Applicable

PHTHALIC ANHYDRIDE CAS # 85-44-9

	2012 (tonnes)	2013 (tonnes)	% (2013- 2012)
Use:	10 – 100	10 – 100	18.4
Created:	0	0	
In product:	10 – 100	10 - 100	13.9
Release to air:	0 - 1	0 - 1	0
Disposed of offsite:	0	1 - 10	100
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan.

STYRENE CAS # 100-42-5

	2012 (tonnes)	2013 (tonnes)	% (2013- 2012)
Use:	10 – 100	10 – 100	-38.6
Created:	0	0	
In product:	0	0	
Release to air:	0 - 1	0 - 1	0
Disposed of offsite:	0	0	
Offsite for recycle:	0	0	

Reduction options: None identified

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.

None.

Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.

None

Summary of differences between steps taken and those set out in the plan. None

Description of amendments to the plan. None

Toluene Diisocyanate

CAS # 584-84-9

	2012 (tonnes)	2013 (tonnes)	% (2013- 2012)
Use:	10 – 100	0	-100
Created:	0	0	
In product:	10 – 100	0	-100
Release to air:	0 - 1	0	-100
Disposed of offsite:	0	0	
Offsite for recycle:	0	0	

Reduction options: Substance is no longer used on site