

**Toxics Reduction Plan Summary for
Viasystems (formerly DDi Toronto Corp.)
(Prepared in Compliance with the Toxics Reduction Act, 2009
& Ontario Regulation 455/09)**

December 2012

Ref: 3197-01

Prepared for:



8150 Sheppard Avenue East, Toronto, Ontario M1B 5K2

Prepared by:



Enviro-Stewards
Engineers & Scientists

Enviro-Stewards Inc.
1 Union Street
Elmira, Ontario

BASIC FACILITY INFORMATION

Substance name(s) & CAS No.(s)	Substance Name	CAS No.
	• Hydrochloric acid	7647-01-0
	• Sulphuric Acid	7664-93-9
	• Copper (and its compounds)	NA – 06
	• Lead (and its compounds)	NA-08
	• Formaldehyde	50-00-0
NPRI ID No.	11606	
O.Reg 127/01.	-	
MOE HWIN	ON0761503	
Legal name of owner	DDi TORONTO CORP.	
Trade name of owner	Viasystems	
Legal name of operator (if different)	-	
Trade name of operator (if different)	-	
Mailing address of owner	8150 Sheppard Avenue East, Toronto, ON M1B 5K2	
Number of Employees	475	
Mailing address of operator (if different)	-	
2-digit NAICS code	33	
4-digit NAICS code	3344	
6-digit NAICS code	334410	
Spatial coordinates (UTM & NAD83)	Latitude: 43.8031 Longitude: -79.1952 Datum: 1983	
Parent Company (if applicable)	USA company	
Legal name	-	
Mailing address (if different from facility)	-	
Percent owned by parent company	-	
Canada Customs & Revenue Agency No.	-	
Mailing address	-	

TECHNICAL CONTACT

Name	Mark Scruton
Position	Director, EHSS
Phone number	(416) 208-2127
Email	mark.scruton@viasystems.com
Mailing address (if different)	-

PERSON WHO COORDINATED THE PLAN

Name	Deepak Adhikari
Position	Pollution Prevention Expert
Phone number	(519) 578-5100
Email	dadhikari@enviro-stewards.com
Mailing address (if different)	1 Union Street, Elmira, ON N3B 3J9

PERSON WHO PREPARED THE PLAN

Name	Deepak Adhikari
Position	Pollution Prevention Expert
Phone number	(519) 578-5100
Email	dadhikari@enviro-stewards.com
Mailing address (if different)	1 Union Street, Elmira, ON N3B 3J9

HIGHEST RANKING EMPLOYEE AT THE FACILITY

Name	JON PEREIRA
Position	General Manager
Phone number	416-208-21
Email	Jon.pereira@viasystems.com
Mailing address (if different)	-

PLAN SUMMARY FOR HYDROCHLORIC ACID

Substance name (s) and CAS No.(s):	Substance Name	CAS No.
	Hydrochloric acid (HCL)	7647-01-0
Statement of Intent	DDi intends to reduce the use of HCL through process or equipment modification while not adversely impacting product quality or manufacturing capacity. HCL is not created.	
Statement of Objectives	DDi intends to reduce HCL but additional research and testing is required prior to the commitment	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, "Pollution Prevention & Toxics Reduction Assessment Report, November 2012"	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, "Pollution Prevention & Toxics Reduction Assessment Report, November 2012"	
Implementation Plan of Options		
Implementation Option	Install spent HCL recovery unit	
Intent to implement option	DDi does not intend to implement this option at this time.	
Rationale for not implementing	The payback period is over 4 years and possible product quality, safety and space constraints need full assessment.	
Implementation Steps & timeline	NA	
Estimated Reduction	NA	
Dates for achieving reduction	NA	

PLAN SUMMARY FOR SULPHURIC ACID

Substance name (s) and CAS No.(s):	Substance Name	CAS No.
	Sulphuric acid (H ₂ SO ₄)	7664-93-9
Statement of Intent	DDi intends to reduce the use of H ₂ SO ₄ through process or equipment modification while not adversely impacting product quality and manufacturing capability. H ₂ SO ₄ is not created.	
Statement of Objectives	DDi intends to reduce H ₂ SO ₄ but additional research and testing is required prior to the commitment	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, "Pollution Prevention & Toxics Reduction Assessment Report, November 2012"	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, "Pollution Prevention & Toxics Reduction Assessment Report, November 2012"	
Implementation Plan of Options		
Implementation Option	Install spent sulphuric acid recovery system	
Intent to implement option	DDi does not intend to implement this option at this time	
Rationale for not implementing	Recycled product quality requires comprehensive study. Space constraints challenging. Also company is undergoing new corporate management and financial resources are now spread over 12 facilities worldwide.	
Implementation Steps & timeline	NA	
Estimated Reduction	NA	
Dates for achieving reduction	NA	

PLAN SUMMARY FOR COPPER

Substance name (s) and CAS No.(s):	Substance Name	CAS No.
	Copper	NA-06
Statement of Intent	DDi intends to reduce the use of copper through process or equipment modification while not adversely impacting product quality or manufacturing capability. Copper is not created.	
Statement of Objectives	DDi has successfully implemented the toxic reduction option	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, " <i>Pollution Prevention & Toxics Reduction Assessment Report, November 2012</i> "	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, " <i>Pollution Prevention & Toxics Reduction Assessment Report, November 2012</i> "	
Implementation Plan of Options	N/A	
Implementation Option	Extend bath life	
Intent to implement option	DDi has already implemented this option	
Rationale for not implementing	NA	
Implementation Steps & timeline	Already implemented in 2012	
Estimated Reduction	1.032 tonnes/year of Copper (0.6%)	
Dates for achieving reduction	Already achieved in 2012	

PLAN SUMMARY FOR LEAD

Substance name (s) and CAS No.(s):	Substance Name	CAS No.
	Lead	NA-08
Statement of Intent	DDi intends to reduce the use of Lead through process or equipment modification while not adversely impacting product quality or manufacturing capability. Lead is not created.	
Statement of Objectives	DDi intends to reduce the use of Lead in the HASL process.	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, " <i>Pollution Prevention & Toxics Reduction Assessment Report, November 2012</i> "	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, " <i>Pollution Prevention & Toxics Reduction Assessment Report, November 2012</i> "	
Implementation Plan of Options		
Implementation Option	Coat solder mask to panel edges	
Intent to implement option	DDi intends to implement this option	
Rationale for not implementing	NA	
Implementation Steps & timeline	<ul style="list-style-type: none"> • Conduct performance trials to coat solder mask to panel edges: Q4 2013 • Write standard operating procedures (SOPs) for option: Q4 2013 • Train operators: Q2 2014 • Order necessary hardware required for option: Q4 2013 • Install the system: Q2 2014 	
Estimated Reduction	90.826 kg/year of Lead (5.0%)	
Dates for achieving reduction	Reductions should be achieved in Q3 2014	

PLAN SUMMARY FOR FORMALDEHYDE

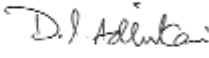
Substance name (s) and CAS No.(s):	Substance Name	CAS No.
	Formaldehyde	50-00-0
Statement of Intent	DDi intends to reduce the use and creation of Formaldehyde while not adversely impacting product quality or manufacturing capability.	
Statement of Objectives	DDi intends to conduct further research to identify new reduction options	
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, <i>"Pollution Prevention & Toxics Reduction Assessment Report, November 2012"</i>	
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Section 5.0 & Appendix A of the report entitled, <i>"Pollution Prevention & Toxics Reduction Assessment Report, November 2012"</i>	
Implementation Plan of Options		
	research to identify reduction options	
Rationale for not implementing	NA	
Implementation Steps & timeline	NA	
Estimated Reduction	NA	
Dates for achieving reduction	NA	

CERTIFICATIONS

Toxics Reduction Planner Certification

As of 19/12/2012, I, Deepak Adhikari, certify that I am familiar with the processes at DDi 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 plan dated November 2012 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under that Act.

- *Hydrochloric acid, Sulphuric acid, Copper (and its compounds), Lead (and its compounds), and Formaldehyde.*

X 

Planner Name: Deepak Adhikari
License No.: TSRP0109

Highest Ranking Employee Certification

As of Dec 19, 2012, I, Jon Pereira, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below 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 that Act.

- *Hydrochloric acid, Sulphuric acid, Copper (and its compounds), Lead (and its compounds), and Formaldehyde.*

X 

Highest Ranking Employee Name: