

Toxics Reduction Plan Summary for Larsen & Shaw Ltd.
(Prepared in Compliance with the Toxics Reduction Act, 2009
& Ontario Regulation 455/09)

December 2012

Ref: 3172-04

BASIC FACILITY INFORMATION

Substance name(s) & CAS No.(s)	Substance Name	CAS No.
	Chromium (and its compounds)	N/A – 04
	Copper (and its compounds)	N/A – 06
	Manganese (and its compounds)	N/A – 09
	Nickel (and its compounds)	N/A – 11
	Zinc (and its compounds)	N/A – 14
NPRI ID No.	10751	
O. Reg 127/01 ID No.	-	
Legal name of owner	Larsen & Shaw Ltd.	
Trade name of owner	-	
Legal name of operator (if different)	-	
Trade name of operator (if different)	-	
Mailing address of owner	575 Durham Street, Walkerton, ON, N0G 2V0	
Mailing address of operator (if different)	-	
2-digit NAICS code	33	
4-digit NAICS code	3325	
6-digit NAICS code	332510	
Spatial coordinates (UTM & NAD83)	Latitude: 44.1321 Longitude: -81.1620 Datum: 1983	
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	John Larsen
Position	President
Phone number	(800) 265-3078
Email	jlarsen@larsenhinge.com
Mailing address (if different)	-

PERSON WHO COORDINATED THE PLAN

Name	Lloyd Hipel
Position	Project Manager
Phone number	(519) 578-5100
Email	lhipel@enviro-stewards.com
Mailing address (if different)	1 Union Street, Elmira, ON N3B 3J9

PERSON WHO PREPARED THE PLAN

Name	Alicia Wind
Position	Resource Conservation Specialist
Phone number	(519) 578-5100
Email	awind@enviro-stewards.com
Mailing address (if different)	1 Union Street, Elmira, ON N3B 3J9

HIGHEST RANKING EMPLOYEE

Name	John Larsen
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Position	President
Phone number	(800) 265-3078
Email	jlarsen@larsenhinge.com
Mailing address (if different)	-

PLAN SUMMARY

Substance name	Substance Name	CAS No.
	Chromium (and its compounds)	N/A – 04
	Copper (and its compounds)	N/A – 06
	Manganese (and its compounds)	N/A – 09
	Nickel (and its compounds)	N/A – 11
	Zinc (and its compounds)	N/A – 14

Statement of Intent & Objectives Larsen & Shaw intends to reduce the use of chromium, copper, manganese, nickel, and zinc (and their compounds) in their facility. The objective is to reduce the amount of each substance used.

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 iii. Equipment or Process Modification

Implementation Option Modify racks to have two securing points instead of one

Steps to Implement

- Began in 2012
- Commission new racks – Q1 2012 to Q2 2014

Estimated Reduction

Chromium: 0.2 kg/year (0.0001%) to WWTP
 Nickel: 1 kg/year (0.001%) to WWTP
 Copper: 0.01 kg/year (0.0001%) to WWTP
 Zinc: 0.2 kg/year (0.001%) to WWTP

Dates for achieving reduction

- Reductions should be achieved within one and a half years (June 2014)

Implementation Option Install in-die sensing system

Steps to Implement

- Part of ongoing program of installing sensors – Q1 2013 onward

Estimated Reduction

Manganese: 2 kg/year (0.01%) to offsite recycling
 Nickel: 9 kg/year (0.01%) to offsite recycling

Dates for achieving reduction

- Reductions should be achieved in 8 years (December 2020)

Implementation Option Install zinc plating solution storage tank

Steps to Implement

- Began in 2012 and completed in June 2012

Estimated Reduction

Zinc: 2,060 kg/year (13%) to WWTP

Dates for achieving reduction

- Reductions should be achieved this year (December 2012)

Implementation Category vii. Training or improved operating practices

Implementation Option Remove fallen parts regularly from BPA plating bath

Steps to Implement

- Began in 2012
- Commission new false floors – Q1 to Q4 2013

Estimated Reduction

Chromium: 2 kg/year (0.001%) to WWTP

Dates for achieving reduction

- Reductions should be achieved within one year (December 2013)

Implementation Option Add ammonium chloride to zinc plating tank

Steps to Implement

- Trial option – Q4 2012
- Analyze results – Q2 2013

- Extend to line or discontinue – Q4 2013

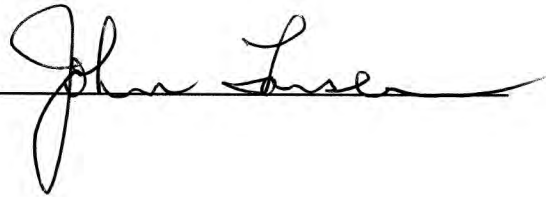
Estimated Reduction Zinc: 33 kg/year (0.2%) to offsite recycling

Dates for achieving reduction • Reductions should be achieved in one year if trial is successful (December 2013)

Highest Ranking Employee Certification

As of December 28, 2012 I, John Larsen, 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.

- Chromium, manganese, nickel, copper, zinc

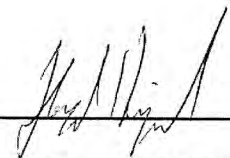
X 

Toxics Reduction Planner Certification

As of December 28, 2012,

I, Lloyd Hipel certify that I am familiar with the processes at Larsen & Shaw 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 21, 2012 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under that Act.

- Chromium, manganese, nickel, copper, zinc

X 

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