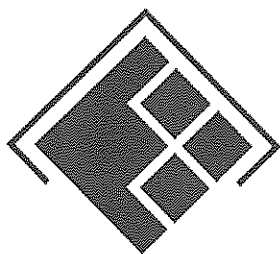


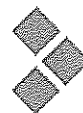
# **Toxic Substance Reduction Plan Summary**

Linex Manufacturing, Division of Linamar Corporation



# **LINAMAR**

**Power to Perform**



## BASIC FACILITY INFORMATION

Name & CAS # of Substance	Chromium	N/A
<b>Facility Identification and Site Address</b>		
Company Name	Linamar Corporation	
Facility Name	Linex Manufacturing	
Facility Address	Physical Address	Mailing Address (if different):
	355 Massey Road, Guelph, ON N1K 1B2	Same as physical address
Spatial Coordinates of Facility (UTM)	17T 555924 4820612	
Number of Employees	393	
NPRI ID	007125	
Ontario MOE ID Number	6361	
<b>Parent Company (PC) Information</b>		
Name & Address	Linamar Corporation 287 Speedvale Ave. West Guelph, ON N1K 1C5	
Percent Ownership	100%	
Business Number	103333662	
<b>Primary North American Industrial Classification System Code (NAICS)</b>		
2 Digit NAICS Code	33	
4 Digit NAICS Code	3361	
6 Digit NAICS Code	336110 - Automotive and Light-Duty Motor Vehicle Manufacturing	
<b>Facility Contact Information</b>		
Public Contact	Tim Feil, General Manager Phone: 519-837-0880, x.600 Fax: 519-837-0832	
	<a href="mailto:Tim.Feil@linamar.com">Tim.Feil@linamar.com</a>	Same address as facility
Technical Contact	Barb Herron, Environmental Coordinator Phone: 519-837-0880, x.252 Fax: 519-837-0832	
	<a href="mailto:Barb.Herron@linamar.com">Barb.Herron@linamar.com</a>	Same address as facility
Plan Coordinator Contact	Jonathan Holland, Project Engineer Phone: 519-837-0880, x.336 Fax: 519-837-0832	



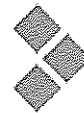
	<a href="mailto:Jonathan.Holland@linamar.com">Jonathan.Holland@linamar.com</a>	Same address as facility
Person who Prepared the Plan	Jonathan Holland, Project Engineer Phone: 519-837-0880, x.336 Fax: 519-837-0832	
	<a href="mailto:Jonathan.Holland@linamar.com">Jonathan.Holland@linamar.com</a>	Same address as facility
Highest Ranking Employee	Tim Feil, General Manager Phone: 519-837-0880, x.600 Fax: 519-837-0832	
	<a href="mailto:Tim.Feil@linamar.com">Tim.Feil@linamar.com</a>	Same address as facility
<b>Parent Company Contact Information</b>		
Public Contact	Melissa Kaufman, Occupational Health & Safety Manager Phone: 519-836-7550, x.2055 Fax: 519-836-4478	
	<a href="mailto:Melissa.Kaufman@linamar.com">Melissa.Kaufman@linamar.com</a>	Same address as parent facility
<b>Certified Planner Contact Information</b>		
Licensed Planner	Jonathan Holland, Project Engineer Phone: 519-837-0880, x.336 Fax: 519-837-0832	License Number TSRP0244
	<a href="mailto:Jonathan.Holland@linamar.com">Jonathan.Holland@linamar.com</a>	Same address as facility

### STATEMENT OF INTENT

Linex Manufacturing is committed to playing a leadership role in protecting the environment. Wherever feasible, Linex will work to eliminate or reduce the use, creation and discharge of chromium in full compliance with all Provincial and Federal Regulations. This will help Ontario be well positioned to complete in an increasingly green global economy.

### PLAN OBJECTIVES

The objectives of this plan is to reduce the use and creation of the prescribed toxic substance listed above using methods which are technically and economically feasible while providing a benefit to the environment. The goal is to reduce the use and recycling of chromium by 5% within 2-3 years of completing this plan.



## **DESCRIPTION OF SUBSTANCE**

Linex Manufacturing is a world leading manufacturer of precision machined metallic components for transmissions in the automotive industry. Linex provides made to print machined parts to its customers by machining raw aluminum and iron castings to drawing specifications. The prescribed toxic substance chromium is a constituent of the raw material purchased and received by Linex Manufacturing. Chromium is a pass-through substance from raw material to the finished product. Linex Manufacturing purchases and receives raw material in the form of 206 Aluminum, 354 Aluminum, 355 Aluminum, 356 Aluminum, 380 Aluminum, G3000 Gray Iron, D5506 Ductile Iron, and various grades of steel alloys.

## **TOXIC SUBSTANCE REDUCTION OPTIONS TO BE IMPLEMENTED**

The following options have been identified for implementation to reduce the use, and recycling of chromium:

- Reduce machining stock on raw material
- Improve machining processes to reduce scrap
- Improve supplier processes to reduce returned material
- Implement ERP system to improve inventory management

## **REDUCTION ESTIMATES**

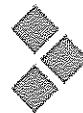
Reducing machining stock varies from part to part with an estimated range of 1-3.5% reduction for chromium. This would equate to a recycling reduction range of 230.14-805.49 kg.

Process improvement/modification to reduce scrap to corporate targets would result in an estimated 1% reduction of recycled material. This would reduce the recycled quantities of chromium by 230.14 kg.

Process improvement/modification at the suppliers to achieve corporate targets would result in a reduction in the use of raw material and an estimated 1.2% reduction in the quantity of material recycled. This would reduce the quantity recycled for chromium by 880.88 kg.

Implementing an ERP system to manage inventory would result in an estimated 3-5% reduction in the use of raw material at the facility. This would result in the reduction in use of 2202.21-3670.35 kg of chromium.

Linex Manufacturing estimates the reduction in recycling of chromium to be approximately 5% within 2-3 years of preparing this plan or 1150.70 kg.



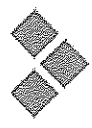
Linex Manufacturing estimates the reduction in the use of this substance to be approximately 3-5% within 2-3 years of preparing this plan. This would result in the reduction in use of 2202.21-3670.35 kg of chromium.

Implementation will occur in stages where possible with the earliest implementation beginning in Q1 2013.

Please note reduction estimates are based on the same product mix and sales volume as 2011 data.

#### **PLAN SUMMARY STATEMENT**

This plan summary accurately reflects the content of the toxic substance reduction plan for chromium prepared by Linex Manufacturing, dated December 10, 2012.



**COPY OF CERTIFICATIONS**

**CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 10th, 2012, I, Tim Feil certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the act.

Chromium

  
\_\_\_\_\_

12/10/12

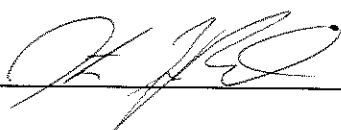
Tim Feil  
General Manager  
Linex Manufacturing

Date

**CERTIFICATION BY LICENSED PLANNER**

As of December 10<sup>th</sup>, 2012, I, Jonathan Holland certify that I am familiar with the processes at Linex Manufacturing 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 December 10<sup>th</sup>, 2012 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under the act.

Chromium

  
\_\_\_\_\_

12/10/12

Jonathan Holland [Planner License # TSRP0244]  
Project Engineer/Toxic Substance reduction Planner  
Linex Manufacturing

Date