

**Toxics Reduction Plan Summary for Toyota
Boshoku Canada, Elmira**
(Prepared in Compliance with the Toxics Reduction Act, 2009
& Ontario Regulation 455/09)

December 2013

Ref: 3134-10

Prepared for:



Toyota Boshoku Canada
Elmira, Ontario

Prepared by:



Enviro-Stewards
Engineers & Scientists

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1.0 Toyota Boshoku

Toyota Boshoku Canada, Inc.'s (Toyota Boshoku's) Elmira facility manufactures seats and door trim components for the automotive industry. These automotive interior products are assembled from components made here on site as well as from parts sourced from suppliers. Using various manual and robotic processes including metal inert gas (MIG) and resistance spot welding; vibration welding, compression and injection molding, high quality assemblies made to exacting standards are tested and shipped to our customers.

Toyota Boshoku's Elmira site is actively engaged in seeking environmentally sustainable opportunities including:

- Work on reducing our energy intensity
- Reducing our landfill output by increased diversion
- Reducing our CO₂ output
- Reducing our water consumption

2.0 Introduction to the Toxics Reduction Act

The Ontario Ministry of the Environment (MOE) describes the Toxics Reduction Act as follows:

"The Toxics Reduction Act, 2009 is the cornerstone of Ontario's strategy to reduce the use and creation of prescribed toxic substances. The goal of the Toxics Reduction Program is to help protect human health and the environment by:

- reducing prescribed toxic substances in air, land, water and consumer products
- informing people in Ontario about toxic substances in their communities
- giving Ontarians the information they need to make informed choices supporting shifts in domestic market to greener products
- positioning Ontario's manufacturing and mineral processing sectors to compete in an increasingly green global economy

The Act requires the owners and operators of all facilities subject to the Act and Regulation, to take the following steps:

1. track and quantify the toxic substances, prescribed in Regulation, that are used, created, transformed, destroyed, released, disposed of, transferred and contained in product at the facility (Toxic Substance Accounting)
2. prepare plans to reduce the use and creation of the toxic substances prescribed in Regulation (Toxic Substance Reduction Planning) and have the plans certified

both by the highest ranking employee at the facility with management responsibilities and by a person with qualifications set out in the regulation (a toxic substance reduction planner)

3. provide summaries of their plans to the public and the Ministry and notify
4. employees the same day those summaries are made public
5. report annually to the Ministry and the public on their progress in reducing the prescribed toxic substances and notify employees the same day those reports are made public
6. review their plans in specific years"

The Act applies to manufacturers in Ontario whose NAICS code begins with "31", "32", "33", or "212" and use or create acetone or one or more of the substances listed in the most current National Pollutant Release Inventory (NPRI).

3.0 Plan Summary

The following pages present Toyota Boshoku's Plan Summary, as required by the Act & Regulation.

BASIC FACILITY INFORMATION

Substance name(s) & CAS No.(s)	Substance Name	CAS No.
	PM2.5	N/A
	Methyl ethyl ketone	78-93-3
NPRI ID No.	11074	
O. Reg 127/01 ID No.	-	
Legal name of owner	Toyota Boshoku Canada Inc.	
Trade name of owner	-	
Legal name of operator (if different)	-	
Trade name of operator (if different)	-	
Mailing address of owner	45 Southfield Drive Drive, Elmira, ON N3B 3L6	
Mailing address of operator (if different)	-	
2-digit NAICS code	33	
4-digit NAICS code	3329	
6-digit NAICS code	332999	
Spatial coordinates (UTM & NAD83)	Latitude: 43.5825 Longitude: -80.5557 Zone: 17 Easting: 535870 Northing: 4825600	
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	Jason Psutka
Position	Plant Engineering and Environmental Officer
Phone number	-
Email	jason.psutka@tbamerica.com
Mailing address (if different)	-

PERSON WHO COORDINATED THE PLAN

Name	Jason Psutka
Position	Plant Engineering and Environmental Officer
Phone number	-
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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	Max Willsie
Position	General Manager
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Mailing address (if different)	-

PLAN SUMMARY

Substance name	Substance Name	CAS No.
	PM2.5	N/A
Statement of Intent & Objectives	Toyota Boshoku Elmira intends to reduce the use of PM2.5 through product design, equipment modification, 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		
Total Reductions	PM2.5	26 kg/yr (23%)
Implementation Category	ii. Product design or reformulation	
Implementation Option	Weld length reduction to minimum length required	
Steps to Implement	<ul style="list-style-type: none"> • Implemented in October 2013 	
Estimated Reduction	PM2.5:	50 kg/year (13%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved within one year (October 2014) 	
Implementation Category	v. Equipment or process modification	
Implementation Option	Optimize or reduce the exhaust requirements for Kenaf lamination process	
Steps to Implement	<ul style="list-style-type: none"> • Benchmarking: January 2014 • Implement changes: Q2 to Q3 2014 • Implementation, if feasible: 2015 	
Estimated Reduction	PM2.5:	2 kg/year (1%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved by 2017 if alternate substrate can be identified 	
Implementation Category	vii. Training or improved operating practices	
Implementation Option	Procedure for weld exhaust manual shut off	
Steps to Implement	<ul style="list-style-type: none"> • Develop standard operating procedure: Q1 to Q3 2014 • Integrate SOP into training: Q4 2014 	
Estimated Reduction	PM2.5:	34 kg/year (9%) created
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved by Q2 2015 	
Substance name	Substance Name	CAS No.
	Methyl ethyl ketone	78-93-3
Statement of Intent & Objectives	Toyota Boshoku Elmira intends to reduce the use of MEK through spill and leak prevention, on-site recycling, and improved inventory techniques.	

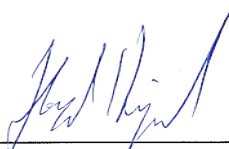
Toxic Substance Accounting Records (methods used to track & quantify, quantifications, input output balance, etc.)	Refer to Attachment A.
Toxic Substance Reduction Plan (cost estimates, options to reduce, reduction estimates, technical & economic feasibility analyses, etc.)	Refer to Attachment B.
Implementation Plan of Options	
Total Reductions	MEK 686 kg/yr (29%)
Implementation Category	iv. Spill & leak prevention
Implementation Option	Reduce volume of MEK used for spray booth cleanout
Steps to Implement	<ul style="list-style-type: none"> • Develop standard operating procedure: Q1 to Q2 2014 • Integrate SOP into training: Q3 2014
Estimated Reduction	MEK: 34 kg/year (1%) used
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved by 2015
Implementation Category	v. Onsite reuse or recycling
Implementation Option	Place lid on MEK clean-out collection bucket & recycle in onsite still
Steps to Implement	<ul style="list-style-type: none"> • Develop standard operating procedure: Q1 2014 • Integrate SOP into training: Q3 2014
Estimated Reduction	MEK: 686 kg/year (29%) used
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved by 2015
Implementation Category	vi. Improved inventory or purchasing techniques
Implementation Option	Optimize pick-up tube depth to empty adhesive cans
Steps to Implement	<ul style="list-style-type: none"> • Test new tube length: Q1 2014 • Implementation, if feasible: Q3 2014
Estimated Reduction	MEK: 32 kg/year (1%) used
Dates for achieving reduction	<ul style="list-style-type: none"> • Reductions should be achieved by 2015 if new tube length works

CERTIFICATIONS

Toxics Reduction Planner Certification As of December 4, 2013,

I, Lloyd Hipel certify that I am familiar with the processes at Toyota Boshoku Elmira 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, methyl ethyl ketone

X 

Planner Name: Lloyd Hipel
License No.: TSRP0211

Highest Ranking Employee Certification As of December 4, 2013 I, Max Willsie, 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.

- PM2.5, methyl ethyl ketone

X 

Highest Ranking Employee Name: Max Willsie