

**Toxics Reduction Plan Summary for Krug
Furniture (Manitou Casegoods)**
**(Prepared in Compliance with the Toxics Reduction Act, 2009
& Ontario Regulation 455/09)**

December 2012

Ref: 3016-06

Prepared for:

krug

Krug Furniture Inc.
Kitchener, Ontario

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.
	Methanol	67-56-1
	Toluene	108-88-3
	Xylene	1330-20-7
NPRI ID No.	5881	
O. Reg 127/01 ID No.	-	
Legal name of owner	Krug Furniture Inc. – Manitou Casegoods	
Trade name of owner	-	
Legal name of operator (if different)	-	
Trade name of operator (if different)	-	
Mailing address of owner	421 Manitou Drive, Kitchener, ON, N2C 1L5	
Mailing address of operator (if different)	-	
2-digit NAICS code	33	
4-digit NAICS code	3372	
6-digit NAICS code	337213	
Spatial coordinates (UTM & NAD83)	Latitude: 43.4036 Longitude: -80.4495 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	Norah McGuire MacLeod
Position	Quality Assurance and Safety Facilitator
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PERSON WHO COORDINATED THE PLAN

Name	Lloyd Hipel
Position	Project Manager
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PERSON WHO PREPARED THE PLAN

Name	Alicia Wind
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HIGHEST RANKING EMPLOYEE

Name	Rob Hawes
Position	Vice President
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Mailing address (if different) -

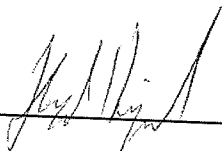
PLAN SUMMARY

Substance name	Substance Name	CAS No.
	Methanol	67-56-1
	Toluene	108-88-3
	Xylene	1330-20-7
Statement of Intent & Objectives	Krug intends to reduce the use of methanol, toluene and xylene in their facility. The objective is to reduce the use of all three substances through equipment modification and improved inventory management and purchasing 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		
Implementation Option	Install solvent saver paint line & gun cleaner	
Steps to Implement	<ul style="list-style-type: none">• Purchase one solvent saver• Trial of solvent saver• Purchase solvent saver for each booth• Install solvent savers• Operator training	
Estimated Reduction	Toluene: 179 kg/year (1.5%) to air, 82 kg/year (0.7%) to off-site recycling Xylene: 37 kg/year (0.5%) to air, 17 kg/year (0.2%) to off-site recycling Methanol: 39 kg/year (1%) to air, 18 kg/year (0.5%) to off-site recycling	
Dates for achieving reduction	<ul style="list-style-type: none">• The solvent saver will be ordered and a trial performed during the third and fourth quarters of 2013• The remaining solvent savers will be installed in 2014	
Implementation Option	Mix only the quantity of catalyzed materials needed	
Steps to Implement	<ul style="list-style-type: none">• Already implemented as an internal procedure in 2012	
Estimated Reduction	Toluene: 256 kg/year (2.2%) to air, 117 kg/year (1%) to off-site recycling Xylene: 294 kg/year (3.9%) to air, 135 kg/year (1.8%) to off-site recycling Methanol: 29 kg/year (0.7%) to air, 13 kg/year (0.3%) to off-site recycling	
Dates for achieving reduction	<ul style="list-style-type: none">• Reductions should be achieved in one year (December 2013)	
Implementation Option	Ensure AMSOL cleaning solvent is used for gun cleaning rather than virgin thinner	
Steps to Implement	<ul style="list-style-type: none">• Train operators to use AMSOL rather than thinner	
Estimated Reduction	Toluene: 39 kg/year (0.3%) to air, 18 kg/year (0.2%) to off-site recycling Methanol: 67 kg/year (1.7%) to air, 31 kg/year (0.8%) to off-site recycling	
Dates for achieving reduction	<ul style="list-style-type: none">• Reductions should be achieved in one year (December 2013)	

Toxics Reduction Planner Certification for Krug Manitou

As of December 21, 2012, I, Lloyd Hipel, certify that I am familiar with the processes at Krug Furniture (Manitou Caseloads) 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 21, 2012 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under that Act.

- Methanol, toluene, xylene

X 

Planner Name: Lloyd Hipel

License No.: TSRP0211

Highest Ranking Employee Certification for Krug Manitou

As of December 21, 2012, I, Rob Hawes, 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.

- Methanol, toluene, xylene

X 