

# Ontario Toxics Reduction Act Public Report

December 31, 2014

# STATEMENT OF INTENT

Canadian Bank Note Company, Limited (CBN) intends to reduce the use of Sulfuric Acid as well as reduce the creation of Hexavalent Chromium and also comply with the Chromium Electroplating, Chromium Anodizing and Reverse Etching Federal Regulations.

# **OBJECTIVES AND TARGETS**

Canadian Bank Note Company, Limited (CBN)'s objective is to reduce the usage of Sulfuric Acid in their processes. The target is to reduce the use of Sulfuric Acid by 5 % by the end of the 2013 fiscal year. This will be achieved by reducing the concentration of Caustic washing solution from a 1 % to a 0.9 % solution of sodium hydroxide, thereby reducing the amount of sulphuric acid required to neutralize waste washing solution.

CBN's objective relative to Hexavalent Chromium is to reduce the creation of Hexavalent Chromium within its manufacturing facility. The target is to reduce the creation of Hexavalent Chromium by 1.7 % and to comply with the Chromium Electroplating, Chromium Anodizing and Reverse Etching Federal Regulations. This will be achieved by maintaining the surface tension of the chromic acid tank at  $\leq$ 40 dynes/cm thereby reducing misting above the tank.

#### DESCRIPTION OF WHY CONTAMINANT IS USED AT THE FACILITY

Sulphuric Acid at Canadian Bank Note Company, limited is used in a process that deals solely with the cleaning of inks from printing plates. The printing plates are cleaned using a highly alkaline solution, which needs to be neutralized before being expelled from the facility as sewage to the Sanitary Sewer. This neutralization is achieved through the addition of Sulphuric Acid to the alkaline solution (in approximately a 1:2 ratio).

Hexavalent chromium is used at Canadian Bank Note Company, limited in the Chromium plating process. In this process, a chrome treatment is applied to nickel plates.

### TOXIC REDUCTION OPTIONS IMPLEMENTED

Targets to reduce the use of Sulfuric Acid by 5 % and to reduce the creation of Hexavalent Chromium by 1.7 % were met in 2013.

Basic facility information

Name & CAS # of Substance(s)						
Sulphuric Acid	7664-93-9					
Hexavalent Chromium (and its	N/A					
compounds)						
Facility Identification and Site Address						
Company Name Canadian Bank Note Co. Ltd.						
Facility Name	Canadian Bank Note Company, Limited Richmond Division					
Facility Address	Physical Address:					
	145 Richmond Road, Ottawa, ON K1Z 1A1					
Spatial Coordinates of Facility	441584 E, 5027261 N					
Number of Employees	596					
NPRI ID	10631					
Primary North American Industrial Classification System Code (NAICS)						
2 Digit NAICS Code	32 – Manufacturing					
4 Digit NAICS Code	3231 – Printing and Related Support Activities					
6 Digit NAICS Code	323119 – Other Printing					
Company Contact Information						
Facility Public Contact	Gordon McKechnie, Vice-President Corporate Affairs					
	Email: gmckechn@cbnco.com					
	Phone: 613-722-3421					
	Fax: 613-722-3334					

Reporting	Facility-wide Sulphuric Acid Quantities (tonnes)						
Year	Used	Created	Contained	Released	Off-Site	Off-Site	Reasons for Change
			in Product	to Air	Disposal	Recycling	From Previous Year
2012	>10 to	0	0	0	0	0	-
	100						
2013	>10 to	0	0	0	0	0	Changes in

#### TRACKING AND QUANTIFICATION

	100						production level
2014	>10 to	0	0	0	0	0	Changes in
	100						production level
Percent	-20.6%	-	-	-	-	-	-
change							
from							
previous							
year							

Reporting	Facility-wide Hexavalent Chromium Quantities (kg)						
Year	Used	Created	Contained	Released	Off-Site	Off-Site	Reasons for Change
			in Product	to Air	Disposal	Recycling	From Previous Year
2012	>100 to	> 100 to	0	4.478	234.867	0	-
	1000	1000					
2013	>100 to	> 10 to	0	4.478	4.920	0	Changes in
	1000	100					production level
2014	>100 to	> 10 to	0	4.478	15.129	0	Changes in
	1000	100					production level
							and introduction of
							new plating
							process without the
							Hexavalent
							Chromium
Percent	0%	-75.01%	-	0%	207.5%	-	-
change							
from							
previous							
year							

Used, created and contained in product can be expressed in the following ranges:

- > > 0 to 1
- > > 1 to 10
- > 10 to 100
- > 100 to 1,000
- > 1,000 to 10,000

#### ANNUAL REPORT CERTIFICATION STATEMENT

As of 30/05/2015, I, Ronald Arends, 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 the Act.

- Sulphuric Acid (7664-93-9)
- Hexavalent chromium (and its compounds)

Ron Arends

Date: May 30, 2015

Signed copy available for viewing at the Corporation's head office located at 145 Richmond Road, Ottawa, Ontario CANADA