

**TOXICS REDUCTION ACT, O. REG. 455/09
2015RY PUBLIC REPORT**

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 ≤ 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 compounds)	N/A
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	557
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

TRACKING AND QUANTIFICATION

Reporting Year	Facility-wide Sulphuric Acid Quantities (tonnes)						Reasons for Change From Previous Year
	Used	Created	Contained in Product	Released to Air	Off-Site Disposal	Off-Site Recycling	
2012	>10 to 100	0	0	0	0	0	-
2013	>10 to 100	0	0	0	0	0	Changes in production level
2014	>10 to 100	0	0	0	0	0	Changes in production level
2015	>10 to 100	0	0	0	0	0	
Percent change from previous year	> 1 to 10 (+)23.5%	-	-	-	-	-	The concentration of the caustic solution increased from 2014 to 2015 and more sulphuric acid was used to neutralize the solution.

Reporting Year	Facility-wide Hexavalent Chromium Quantities (kg)						Reasons for Change From Previous Year
	Used	Created	Contained in Product	Released to Air	Off-Site Disposal	Off-Site Recycling	
2012	>100 to 1000	> 100 to 1000	0	4.478	234.867	0	-
2013	>100 to 1000	> 10 to 100	0	4.478	4.920	0	Changes in production level
2014	>100 to 1000	> 10 to 100	0	4.478	15.129	0	Changes in production level
2015	>100 to 1000	> 10 to 100	0	4.478	20.500	0	
Change from previous year (2015 : 2014)	0%	> 10 to 100 (+) 131.8%	0%	0%	5.371 (+) 35.5%	-	The new Chrome plating process (that does not use chromium salt) was phased in during 2014. For the majority of 2015 it was not operational, resulting in an increase in the use of the chrome plating tank and thus an increase in the creation of chromium for 2015.

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