Toxics Reduction Act – Public Summary Report – 2017 Reporting Year

1.0 Basic Facility Information

NPRI Number	11782
O Reg 127/01 Number	N/A
Number of full time employee equivalents	71
NAICS Code (2 digit)	31-33 - Manufacturing
NAICS Code (4 digit)	3323 - Architectural & Structural Metal Mfg.
NAICS Code (6 digit)	332319 – Other Plate Work & Structural Metal Mfg.
UTM Coordinates	17 N 602996 m E, 4787848 m N
Facility Name	Samuel Son and Co. Limited – Stoney Creek
Legal Name of Parent Company	Samuel Son & Co. Limited
Address of Parent Company	2360 Dixie Rd Mississauga, ON L4Y 1Z7
Public Contact	Alf Keddy Regional Operations Manager 12 Teal Avenue Stoney Creek, ON L8E 3Y5 Tel: (905) 279-5110 x 12109 akeddy@samuel.com

Facility Description:

Samuel Son and Co. Limited – Stoney Creek (hereafter "Samuel") produces cut-to-order steel plate from cold and hot rolled sheet steel. Large sheets of carbon steel plate ranging in thickness from ½ inch to 6 inches are received and cut into specific sizes and shapes at the facility. Physical processes such as cutting and grinding (as required) are used at the facility, with cuts made by plasma or flame gas (oxygen). Stainless steel is also cut using a plasma cutter at the facility.

2.0 Toxic Substance Accounting

(tonnes)	Manganese (and its compounds)	Chromium (and its compounds)	Nickel (and its compounds)
	CAS#: NA - 09	CAS#: NA - 04	CAS#: NA - 11
MPO	>10 to 100	>10 to 100	>10 to 100
Used	>10 to 100	>10 to 100	>10 to 100
Created	-	-	-
Air	>0 to 1	>0 to 1	>0 to 1
Disposed	-	-	-
Recycled	>10 to 100	>10 to 100	>1 to 10
Sewage	-	-	-
Spills	-	-	-
Landfill	-	-	-
On part	>10 to 100	>10 to 100	>10 to 100

Manganese is a component of carbon steel plate and stainless steel that is processed at the facility. Chromium and nickel are both components of stainless steel. The substances are released from the facility's product steel, as scrap or as slag/dust that are sent off-site for recycling.

For manganese, there were no reduction actions taken during this reporting period as they were completed in previous reporting years.

For chromium and nickel, there were no reduction actions taken during the reporting year. Samuel will continue to conduct further research to identify new reduction options and to keep up with industry standards with regards to pollution prevention of these substances.

Accounting and Comparisons – Amount Used (tonnes)

Substance	Year	Amount Used	Change
Manganese	2016	> 10 to 100	-6.38%,
	2017	> 10 to 100	-6.02 tonnes
Chromium	2016	> 10 to 100	+29.80%,
	2017	> 10 to 100	+11.13 tonnes
Nickel	2016	> 10 to 100	+29.82%,
	2017	> 10 to 100	+4.92 tonnes

Accounting and Comparisons – Amount Released to Air (tonnes)

Substance	Year	Amount Released to Air	Change
Manganese	2016	> 0 to 1	-16.67%, -0.0001 tonnes
	2017	> 0 to 1	
Chromium	2016	> 0 to 1	+50.0%, +0.0001 tonnes
	2017	> 0 to 1	
Nickel	2016	> 0 to 1	-50.0%, -0.0001 tonnes
	2017	> 0 to 1	

Accounting and Comparisons – Amount Recycled (tonnes)

Substance	Year	Amount Recycled	Change
Manganese	2016	> 10 to 100	+14.42%, +2.98 tonnes
	2017	> 10 to 100	
Chromium	2016	> 10 to 100	+37.58%, +5.31 tonnes
	2017	> 10 to 100	
Nickel	2016	> 1 to 10	+33.20%, +2.44 tonnes
	2017	> 1 to 10	

Accounting and Comparisons – Amount Contained in Product (tonnes)

Substance	Year	Amount Contained in Product	Change
Manganese	2016	> 10 to 100	-12.19%, -8.99 tonnes
	2017	> 10 to 100	
Chromium	2016	> 10 to 100	+25.06%, +5.82 tonnes
	2017	> 10 to 100	
Nickel	2016	> 1 to 10	+27.10%, +2.48 tonnes
	2017	> 10 to 100	

Changes that occurred from 2016 to 2017 are due to production from another facility being moved to this site.

Manganese Reduction Plan Objectives and Targets:

The Toxic Reduction Plan guides Samuel in finding methods to reduce the losses of residues of manganese (CAS Number 7439-96-5) from the production processes. As manganese is a key component in the steel brought into the facility, its' elimination is not a viable option. Manganese is an essential component providing the necessary strength to the steel processed at Samuel.

Manganese Progress on TRA Plan:

All actions put forth in the TRA plan have been completed in previous reporting years. However, training continues on a routine basis leading to scrap reduction. Training of staff allows for better utilization of all parts of the plate, resulting in scrap reduction. An annual review of Best Operating Practices occurs every year. No amendments were made to the Toxic Reduction Act Plan for Manganese.

Manganese Reduction Options under Consideration for Implementation:

Ongoing Best Operating Practices such as minimizing skeleton sizes for recycling and using remnants (drops) for secondary products will continue to be implemented. A "Filler Part Program" will be implemented, where applicable, to reduce scrap sent for recycling.

Manganese Additional Actions and their Impact on Substance Use, Creation and Discharge:

None

Signed Certification Statement

As of May 31, 2018, I, Alf Keddy, 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.

Manganese

Chromium

Nickel

Alf Keddy,
Regional Operations Manager
Samuel Son and Co. Limited - Stoney Creek

(Highest Ranking Employee)