

Ontario Toxics Reduction Plan Summary Public Disclosure – Year 2017

Facility Details

Facility Name: Samuel Strapping Systems
Address: 2370 Dixie Road, Mississauga, ON L4Y 1Z7
NPRI Identification Number: 3889
Two Digit NAICS Code: 31 – 33 - Manufacturing
Four Digit Naics Code: 3312 – Steel Product Mfg. From Purchased Steel
Six Digit NAICS Code: 331221 – Cold-Rolled Steel Shape Mfg.
Number of Full-Time Employees: 77
UTM Spatial Co-ordinates: X(E): 614725; Y(N): 4828750; (-79.5785, 43.6029)

Parent Company Details

Legal Name of Parent Company: Samuel, Son and Co. Limited
Address of Parent Company: 2360 Dixie Road, Mississauga, ON L4Y 1Z7
Percentage of facility Owned by Parent Company: 100 %

Public Contact at Facility

Name: Lee Mackie
Position: Plant Supervisor
Address: Samuel Strapping Systems, Mississauga, ON
Office Phone Number: (905) 279-9424 x 15024

Facility Description

Samuel Strapping produces heat-treated or standard duty steel strapping on one of two lines in the manufacturing facility. Coils of steel is received and is first uncoiled before processing. Heat-treated steel is produced by first pre-heating and then redirecting to the heat-treating oven where the steel is tempered to produce the desired properties. The steel is quenched in a lead pot and then passes through charcoal prior to entering a water bath for final cooling. The steel is then directed to a paint dip tank, a drying oven, a wax coating tank and the drying oven again before being recoiled for packaging and shipping out. In the case of standard duty steel strapping, the processes are similar in all but the pre-heat, heat-treating and quenching.

Substances Information

Lead is used in a key component of the rapid quenching operation at the facility. Zinc, as a component of the paint used at Samuel Strapping, is contained in the finished product. All zinc-based paint will end up on the specified product.

2-Butyoxyethanol (2BE), isobutyl alcohol (IBA), methyl ethyl ketone (MEK), xylene and diethylene glycol butyl ether (DGBE) are used and released at the facility from the painting and coating processes.

Substance Accounting Details

Process Type	Lead (tonnes/yr)			Zinc (tonnes/yr)		
	2017	2016	% Change	2017	2016	% Change
Enters (total)	>10 to 100	>10 to 100	-25.6%	>10 to 100	>10 to 100	-12.3%
Created	0	0		0	0	
In/on Product	0	0		>10 to 100	>10 to 100	-12.3%
Released, as Air Emissions	>0 to 1	>0 to 1	+8.5%	0	0	
Released on-site to land	0	0		0	0	
Released to water	0	0		0	0	
Released, for Recycling	>10 to 100	>10 to 100	+16%	0	0	
Released to Disposal	>1 to 10	>1 to 10	+3.09	0	0	

Process Type	2BE (tonnes/yr)			IBA (tonnes/yr)		
	2017	2016	% Change	2017	2016	% Change
Enters (total)	>1 to 10	>10 to 100	-11.2%	>10 to 100	>10 to 100	-24.9%
Created	0	0		0	0	
In/on Product	0	0		0	0	
Released, as Air Emissions	>1 to 10	>10 to 100	-11.2%	>10 to 100	>10 to 100	-24.9%
Released on-site to land	0	0		0	0	
Released to water	0	0		0	0	
Released, for Recycling	0	0		0	0	
Released to Disposal	0	0		0	0	

Process Type	MEK (tonnes/yr)			Xylene (tonnes/yr)		
	2017	2016	% Change	2017	2016	% Change
Enters (total)	>1 to 10	>1 to 10	-22%	>1 to 10	>1 to 10	-22%
Created	0	0		0	0	
In/on Product	0	0		0	0	
Released, as Air Emissions	>1 to 10	>1 to 10	-22%	>1 to 10	>1 to 10	-22%
Released on-site to land	0	0		0	0	
Released to water	0	0		0	0	
Released, for Recycling	0	0		0	0	
Released to Disposal	0	0		0	0	

Process Type	DGBE (tonnes/yr)			n-Butyl alcohol (tonnes/yr)		
	2017	2016	% Change	2017	2016	% Change
Enters (total)	>0 to 1	>0 to 1	-63%	0	>1 to 10	-100%
Created	0	0		0	0	
In/on Product	0	0		0	0	
Released, as Air Emissions	>0 to 1	>0 to 1	-63%	0	>1 to 10	-100%
Released on-site to land	0	0		0	0	
Released to water	0	0		0	0	
Released, for Recycling	0	0		0	0	
Released to Disposal	0	0		0	0	

Historical Comparison:

In general, due to lower production in 2017 uses and releases of most substances were lowered in 2017 compared to 2016.

In 2017 the use of n-butyl alcohol was eliminated from the production process.

Reduction Plan Objectives and Targets:

As the lead and zinc are in key operations in the production process, their elimination is not a viable option.

Samuel Strapping does not have a target for reducing the releases of 2-butyoxyethanol, isobutyl alcohol, n-butyl alcohol, methyl ethyl ketone, xylene or diethylene glycol butyl ether. Samuel Strapping will continue to monitor industry practices and standards and will apply innovative approaches to painting processes to maintain minimal use of the above listed VOCs.

Reduction Options Under Consideration for Implementation:

There were no technically feasible and economically acceptable options identified that would result in reduced usage and releases of lead or zinc from the facility.

Until there are technological advancements in minimizing VOC usage during painting, there are no further actions that can be undertaken at Samuel Strapping.

Additional Actions and Their Impact on Substance Use, Creation and Discharge:

Samuel Strapping will continue to follow best operating practices by providing Pollution Prevention training/updates for employees and to minimize excess storage of paints to eliminate disposal of excess paints or paints that expire as being out of date.

No additional actions have been implemented to reduce the usage of lead and zinc.

Amendments or Changes to Toxic Reduction Plans During Report Period:

No amendments or changes have been made to the facility's toxics reduction plans.

Certification:

As of date, I, Lee Mackie, certify that I have read the report on the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the information contained in the report is factually accurate and complies with the Toxics Reduction Act 2009 and Ontario Regulation 455/09 (General) made under that Act.

2-Butoxyethanol

Isobutyl alcohol

n-Butyl alcohol

Lead

Zinc

Methyl ethyl ketone

Xylene

Diethylene glycol butyl ether



Lee Mackie

Plant Supervisor, Samuel Strapping Systems
(Highest Ranking Employee)