

# Toxic Substance Reduction Plan for Mancuso Chemicals Limited 2015



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## **1.0 Introduction**

The TRA plan was prepared internally by Mancuso Chemicals Limited (MCL). A Toxic Substance Reduction Plan was prepared for ethylbenzene, a required material in use at MCL, in order to satisfy the requirements of the Toxics Reduction Act, 2009 and Ontario Regulation 455/09. Calculations for the amount each substance used, created, released, recycled, disposed of, transferred and contained in product(s) were extracted from NPRI, TRA reports and Greenhouse Gas 2015. This report was prepared in consultation with GHD. The plan covers the 2015 calendar year and was certified by the highest ranking employee of the facility and a licensed toxic substance reduction planner. The signed statements of certification are included. The Plan satisfies the requirements of the Act and Regulations:

- Plan review every 5 years (first review in 2018).
- Annual report submission to the Ministry of Environment and Climate Change/Ontario
- Accessibility of sections of the report to the public.
- Notification to employees when the report is available to the public.

## **1.1 Plan Preparation**

The plan was prepared by an internal Project Manager at Mancuso Chemicals Limited, reviewed by the General Manager and recommendation and certification of The Plan was carried out by a licensed toxic substance reduction planner at GHD Ltd.

## **1.2 Background**

Mancuso Chemicals' manufacturing process includes batch reactions where varying reactants are charged into a vessel. Reactions are carried out in heated reaction vessels (reactors), while intermediate and final products are stored in storage tanks at various required temperatures. The Facility's operations are identified under the North American Industrial Classification Service (NAICS) Code 32510 "Resin and Synthetic Rubber Manufacturing".

Mancuso Chemicals is a worldwide distributor of chemicals to the foundry, steel mill, paint and automotive industries. The facility currently has six reactors running 24 hours a day, five days a week. In addition to the six reactors there are two tank farms equipped to store raw materials and finished products.

Mancuso Chemicals supplies the foundry industry with a series of different binder systems used to coat sand and prepare molds that encase molten metal. These binders include polyurethane no-bake and cold box binders, which are three part binder systems: Part A consists of a phenol-formaldehyde polymer resin; Part B consists of an isocyanate resin that crosslinks with part A and; Part C consists of a liquid or gas amine-based catalyst. Mancuso also supplies three part polyol binders similar to the polyurethane binder system, with the exception of the first part, part A being a polyol and not a phenol-formaldehyde based binder. Furfuryl alcohol-based binders (furan) are another type of binder system manufactured at Mancuso. This is a two part binder

system that reacts a furan based resin with different acid catalysts to form a polymer used to coat sand in the preparation of foundry molds.

Mancuso Chemicals supplies products to the steel mill industries that are used as pickling agents, cleaning agents and inhibitors.

Mancuso Chemicals manufactures and supplies alkyd resins for the paint and coatings industry designed to meet customer's specific needs. Alkyds are vegetable oil-modified polyesters classified by the amount of oil used in the manufacturing process. The three classes of paint alkyds are long, medium and short oils.

More recently, Mancuso Chemicals has begun manufacturing automotive fluids. Supplying diesel exhaust fluid, windshield washer fluids and coolant.

## 2.0 Facility and Contact Information

### Facility Information

Legal Name	Mancuso Chemicals Limited
Trade Name	Mancuso
Facility Physical Address	5725 Progress St. Niagara Falls, ON, L2G 0C1
Facility Mailing Address	5725 Progress St. Niagara Falls, ON, L2G 0C1
UTM Spatial Coordinates of the Facility	Latitude 17T655760 Longitude 17T4768650
Number of Employees	43
NPRI ID	728
2 Digit NAICS ID	32
4 Digit NAICS ID	3252
6 Digit NAICS ID	325210
ON. Reg. 127/01 ID	200100
Business Number	103477485

### Facility Contact

Public/Technical Contact/Highest Ranking Employee	Dave Senior
Position	General Manager
Address	5725 Progress St. Niagara Falls, ON, L2G 0C1
Email	<a href="mailto:dsenior@mancusochemicals.com">dsenior@mancusochemicals.com</a>
Phone	905-357-3626 ext. 228
Fax	905-357-3631
Percentage of Ownership	100%

### Parent Company

Canadian Parent Company	No Parent Company
Legal Name	N/A
Facility Mailing Address	N/A

## 2.1 Plan Contacts

### TRA Plan Developer

Contact	Shari Rankin
Position	Project Manager
Address	5725 Progress St. Niagara Falls, ON, L2G 0C1
Email	<a href="mailto:srankin@mancusochemicals.com">srankin@mancusochemicals.com</a>
Phone	905-357-3626 ext. 222
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**Licensed Planner**

Facility	GHD Limited
Address	651 Colby Dr., Waterloo ON, N2V 1C2
Contact	Erik Martinez
Position	Licensed Planner
Email	<a href="mailto:erik.martinez@GHD.com">erik.martinez@GHD.com</a>
Phone	519-844-0510 ext.2342
Fax	519-844-0525
Planner License #	TSRP0005

### **3.0 Statement of Intent and Objective of the Plan**

#### **Xylene (CAS No. 1330-20-7)**

##### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of xylene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using xylene. Xylene is an important solvent used in processing and composition of numerous products and there is no cost effective substitute for xylene.

##### **Objectives**

Xylene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

##### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of xylene used at the facility and therefore there is no target reduction.

#### **1,2,4-Trimethylbenzene (CAS No. 95-63-6)**

##### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of 1,2,4-trimethylbenzene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using 1,2,4-trimethylbenzene. 1,2,4-Trimethylbenzene is an important profitable solvent used in several final products and there is no cost effective substitute for 1,2,4-trimethylbenzene.

##### **Objectives**

1,2,4-Trimethylbenzene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

##### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of 1,2,4-trimethylbenzene used at the facility and therefore there is no target reduction.

## **Toluene (CAS No. 108-88-3)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of toluene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using toluene. Toluene is an important profitable solvent used in several final products and there is no cost effective substitute for toluene.

### **Objectives**

Toluene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of toluene used at the facility and therefore there is no target reduction.

## **Acetone (CAS No. 67-64-1)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of acetone used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using acetone. Acetone is an important profitable solvent used in several final products and there is no cost effective substitute for acetone.

### **Objectives**

Acetone will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of acetone used at the facility and therefore there is no target reduction.

## **Ethylbenzene (CAS No. 100-41-4)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of ethyl benzene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using ethyl benzene. Ethyl benzene is an important profitable solvent used in several final products and there is no cost effective substitute for ethyl benzene.

### **Objectives**

Ethyl benzene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of ethyl benzene used at the facility and therefore there is no target reduction.

## **Cumene (CAS No. 98-82-8)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of cumene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using xylene. Cumene is an important profitable solvent used in several final products and there is no cost effective substitute for cumene.

### **Objectives**

Cumene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of cumene used at the facility and therefore there is no target reduction.

## **Naphthalene (CAS No. 91-20-3)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of naphthalene used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using naphthalene. Naphthalene is an important profitable solvent used in several final products and there is no cost effective substitute for naphthalene.

### **Objectives**

Naphthalene will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of naphthalene used at the facility and therefore there is no target reduction.

## **Methanol (CAS No. 67-56-1)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of methanol used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using methanol. Methanol is an important profitable solvent used in several final products and there is no cost effective substitute for methanol.

### **Objectives**

Methanol will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of methanol used at the facility and therefore there is no target reduction.

## **Ethylene Glycol Monobutyl Ether (CAS No. 111-76-2)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of ethylene glycol monobutyl ether used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using ethylene glycol monobutyl ether. Ethylene glycol monobutyl ether is an important profitable solvent used in several final products and there is no cost effective substitute for ethylene glycol monobutyl ether.

### **Objectives**

Ethylene glycol monobutyl ether will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of ethylene glycol monobutyl ether used at the facility and therefore there is no target reduction.

## **Bisphenol A (CAS No. 80-05-7)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of bisphenol A used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using bisphenol A. Bisphenol A is an important profitable raw material used in several final products and there is no cost effective substitute for bisphenol A.

### **Objectives**

Bisphenol A will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of bisphenol A used at the facility and therefore there is no target reduction.

## **Ethylene Glycol (CAS No. 107-21-1)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of ethylene glycol used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using ethylene glycol. Ethylene glycol is an important profitable raw material used in several final products and there is no cost effective substitute for ethylene glycol.

### **Objectives**

Ethylene glycol will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of ethylene glycol used at the facility and therefore there is no target reduction.

## **Polymeric Diphenylmethane Diisocyanate (pMDI) (CAS No. 9016-87-9)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of pMDI used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using pMDI. pMDI is an important profitable raw material used in several final products and there is no cost effective substitute for pMDI.

### **Objectives**

pMDI will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of pMDI used at the facility and therefore there is no target reduction.

## **4,4-Diphenylmethane Diisocyanate (MDI) (CAS No. 101-68-8)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of MDI used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using MDI. MDI is an important profitable solvent used in several final products and there is no cost effective substitute for MDI.

### **Objectives**

MDI will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of MDI used at the facility and therefore there is no target reduction.

## **Sulfuric Acid (CAS No. 7664-93-9)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of sulfuric acid used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using sulfuric acid. Sulfuric acid is an important profitable raw material used in several final products and there is no cost effective substitute for sulfuric acid.

### **Objectives**

Sulfuric acid will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of sulfuric acid used at the facility and therefore there is no target reduction.

## **Furfuryl Alcohol (CAS No. 98-00-0)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of furfuryl alcohol used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using furfuryl alcohol. Furfuryl alcohol is an important profitable raw material used in several final products and there is no cost effective substitute for furfuryl alcohol.

### **Objectives**

Furfuryl alcohol will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of furfuryl alcohol used at the facility and therefore there is no target reduction.

## **Phenol (CAS No. 108-95-2)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of phenol used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using phenol. Phenol is an important profitable raw material used in several final products and there is no cost effective substitute for phenol.

### **Objectives**

Phenol will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of phenol used at the facility and therefore there is no target reduction.

## **Phthalic Anhydride (CAS No. 85-44-9)**

### **Statement of Intent**

Mancuso Chemicals Limited does not intend to reduce the amount of phenol used at its facility; however we will continue to work in a compliant and efficient manner within all applicable environmental regulations when using phenol. Phenol is an important profitable raw material used in several final products and there is no cost effective substitute for phenol.

### **Objectives**

Phenol will continue to be used at Mancuso Chemicals Limited in a responsible manner following any environmental regulations.

### **Targets**

Mancuso Chemicals Limited does not intend to reduce the amount of phenol used at the facility and therefore there is no target reduction.