



Toxic Reduction

2016 Plan Summary

Ethylene Glycol

Date Issued: November 21, 2017

388 Goodyear Rd.

Napanee, Ontario



SUBSTANCE AND FACILITY INFORMATION

Toxic Substances	
Substance Name	Ethylene Glycol
Chemical Abstracts Service Registry Number	107-21-1
Other toxic substance plans	Zinc (7440-66-6), Ethanol (64-17-5), Methyl Iso-Butyl Ketone (108-10-1), Toluene (108-88-3), Xylene (1330-20-7), PM 2.5, PM 10, Cobalt (NA-05), Nitrogen Oxides (11104-93-1)
Facility Information	
Legal Company Name	Goodyear Canada Inc.
Facility Name	Napanee
Facility Address	388 Goodyear Road, R.R.7, Napanee, ON, K7R 3L2
Web Site Address	http://www.goodyear.ca/en-CA/tires-home
Spatial Coordinates of Facility	UTM Easting: 344558.90; UTM Northing: 4905595.73; UTM Zone 18T
Number of Full Time Employees (or equivalents)	764
NPRI ID#	1322
O.Reg 127/01 ID	NA
Primary North American Industrial Classification system Code (NAICS)	
2 Digit NAICS Code	31-33 - Manufacturing
4 Digit NAICS Code	3262 (Rubber Product Mfg.)
6 Digit NAICS Canada Code	326210 (Tire Manufacturing)
Facility Public Contact Information	
Name & Title	Julie McLachlan (Environmental Coordinator), 613-354-7835
Plan Developer / Coordinator and Technical Contact	
Name & Title	Julie McLachlan (Environmental Coordinator), 613-354-7835
Certified Planner Contact	
Name	Ted Bailey (ted@aurisi.ca , 613-893-3680, TSRP0031)
Highest Ranking Employee	
Name & Title	Lester Brooks (Plant Manager), 613-354-7701
Corporate Headquarter Contact Information	
Parent Company Contact	Carlton Williams (Regional Environmental Manager)
Address	The Goodyear Tire & Rubber Company 200 Innovation Way Akron, OH 44316, USA
Phone	330-796-0811
Percentage Ownership	100%



INTRODUCTION

Ontario's *Toxics Reduction Act* and Regulation (O.Reg 455/09) aims to protect the health of people and the environment by reducing the use and emission of toxic substances. The Act is the cornerstone of Ontario's Toxics Reduction Strategy, which is focused on:

- Managing and reducing the use and creation of toxic substances in order to protect the environment and human health
- Informing the public about toxics in their communities; and
- Helping ensure that Ontario is well-positioned to compete in an emerging green global economy.

This strategy supplements the traditional 'end of pipe' approach to managing toxic substances released into the environment by focusing on reducing the creation and use of these substances at the 'front end' of manufacturing processes.

The act requires regulated facilities to:

- Track and quantify the toxic substances that they use and create
- Develop plans to reduce the use and creation of these substances; and
- Make summaries of their plans available to the public.

Goodyear Canada Inc.'s (Goodyear's) facility located in Napanee, Ontario, Canada (Goodyear Napanee) has developed the following Toxic Reduction Plan for Ethylene Glycol pursuant to the Act.

This Plan Summary summarizes the Ethylene Glycol Toxic Reduction Plan for the Napanee facility. It has been prepared to meet the regulatory obligations specified in Section 10 of the Act and Section 27(1) of Ontario Regulation 455/09, as amended from time to time.

PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Ethylene Glycol, prepared by Goodyear (Napanee), and dated November 6, 2017.



FACILITY DESCRIPTION

Goodyear Napanee manufactures high quality tires for the North American Tire (NAT) market and is a certified ISO14001:2004 facility. The Napanee facility operates 24 hours per day, 7 days a week and ~360 days a year.

EXPLANATION FOR SUBSTANCE USE OR CREATION

Ethylene Glycol is added to the chilled water loops to prevent freezing of the process fluid as the chilled loops exit the facility to the chillers and cooling towers that are located just outside the building. The addition of glycol also inhibits the formation of scale and corrosion and protects the metal when a corrosion inhibitor is included with the glycol.

Chilled water is required for both process cooling and comfort cooling.

STATEMENT OF INTENT

It is not the intent of Goodyear to reduce the use of Ethylene Glycol because there are no technically feasible options. There are chilled water loops throughout the facility and the cost to dispose of all of the Ethylene Glycol and water to replace with an alternative would be cost prohibitive and environmentally unfriendly.

There are no ongoing emissions of Ethylene Glycol with regular use. There are controlled releases related to maintenance and unexpected releases related to equipment failures, however the environmental impact is low.

OPTIONS FOR IMPLEMENTATION

To reduce the use of Ethylene Glycol at the Goodyear Napanee facility, Goodyear Napanee has considered many options. While no options could be identified that were both technically and economically feasible at this time, Goodyear will continue to look at the use of Ethylene Glycol.

TOXIC REDUCTION OBJECTIVES & TARGETS

Goodyear Napanee is committed to playing a leadership role in protecting the environment. We will continue investigate options to reduce unexpected releases and insure that the impact to the environment is low.



CERTIFICATION

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 13, 2017, I, Lester Brooks, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Ethylene Glycol

A handwritten signature in black ink that reads 'Lester Brooks'.

Lester Brooks, Plant Manager
The Goodyear Tire & Rubber Company (Napanee)

CERTIFICATION BY LICENSED PLANNER

As of November 7, 2017, I, Ted Bailey, certify that I am familiar with the processes at Goodyear (Napanee) that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated November 6, 2017 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Ethylene Glycol

A handwritten signature in black ink that reads 'Ted Bailey'.

Ted Bailey [Planner License # TSRP0031]
Environmental Management Consultant / Toxic Substance Reduction Planner
Aureus Solutions Inc.
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