Introduction

The Goodyear Off-the-Road (OTR) Centre, located at 100 Booth Road in North Bay, Ontario, re-treads a wide range of OTR tires used for construction, mining, forestry and recycling purposes. Under the Canadian Environmental Protection Act (CEPA), the Goodyear OTR Centre is required to report to the National Pollutant Release Inventory (NPRI).

Facilities meeting the reporting thresholds for any substance listed in the NPRI Toxic Substances List are also required to report to the Ministry of the Environment and Climate Change's (MOECC's) *2009 Toxics Reduction Act* (TRA). The TRA requires facilities to examine how and why they use and/or create these substances, and to track and quantify their use and/or creation. Furthermore, facilities are required to develop plans for reduction and make summaries of their plans available to the public.

A Toxics Reduction Plan (Plan) was prepared and submitted by Jim Anderson (TRSP0127) of MBN Environmental Engineering Inc., on behalf of the Goodyear OTR Centre, in December 2013 for the following substance:

1. Zinc (and its compounds), Chemical Abstract Service Registry number: NA-14

Nigel Taylor of Novus Environmental Inc. was retained to assist with TRA reporting requirements.

The following Annual Report summarizes the status of zinc (and its compounds) at the Goodyear OTR Centre in North Bay during the 2018 reporting year, as required by the *Toxics Reduction Act, 2009* and *Ontario Regulation 455/09*.

Substance and Facility Information

Table 1: General Facility Information

Toxic Substances	
Substance Name as per 2018/19 NPRI Substance List	Zinc (and its compounds)
Chemical Abstracts Service Registry Number as per 2018/19 NPRI Substance List	NA-14
Other toxic substance plans	None
Facility Information	
Legal Company Name	Goodyear Canada Inc.
Facility Name	Goodyear OTR Centre
Physical and Mailing Address of Facility	100 Booth Road, North Bay ON, P1B 0B3
Number of Full Time Employees	46
UTM Zone	17
UTM Easting	621998.65
UTM Northing	5124529.96

NPRI ID	11761
O.Reg 127/01 ID	N/A
Primary North American Industrial Classification system Code (NAICS)	
2 Digit NAICS Code	33
4 Digit NAICS Code	3371
6 Digit NAICS Code	337123
Facility Public Contact Information	
Name, Title (e-mail address)	Keiven Boissonneault, Business Administrator (keiven.boissonneault@goodyear.com)
Certified Planner Contact Information	
Name, Planner License Number	Nigel Taylor, TSRP0284

Toxics Reduction Plan Update – Zinc (and its compounds)

Zinc oxide is a trace ingredient found in the rubber compounds applied during tire re-treading and buffing, as well as within steel belts of the radial tires re-treaded or recycled by the Goodyear OTR Centre. Zinc oxide falls within the substance classified as "zinc (and its compounds)" in the 2018 and 2019 NPRI Substance List.

The following strategies to reduce the amount of zinc oxide used, released to air, recycled, and/or contained in the final product were explored when preparing the 2013 Toxics Reduction Plan:

- Material or feedstock substitution
- Product design or reformulation
- Equipment or process modification
- Spill and leak prevention
- On-site reuse or recycling
- Improved inventory management or purchasing techniques
- Training or improved operating practices

The largest contribution to the amount of zinc transferred off-site for recycling is from the buffing of tires prior to the re-treading process. All rubber buffing material is collected during the buffing process and is transferred off-site for recycling. Analyses are continuously performed to determine the minimum acceptable amount of rubber material to be buffed from the tires prior to re-treading, however, the allowable reductions are insignificant from a waste perspective. Thus, no significant reduction to the amount of zinc contained in the rubber buffings transferred off-site for recycling has been made.

Zinc is also contained in the scrap tires that are not appropriate for re-treading and are transferred off-site to a tire retirement program, where they are transformed into new rubber products. The zinc content in the rubber of the scrap tires entering the Goodyear OTR Centre is not readily controllable, thus, significant reductions in the amount of zinc contained in the scrap tires transferred off-site for recycling have not been made.

Overall, it was determined that no significant improvements could be made in the expertise relied on in preparing the 2013 Plan, including the data and methods used to make the determinations, the records prepared and associated descriptions, and why the substance is used.

The 2013 Plan states that the Goodyear OTR Centre did not intend to reduce the use of zinc oxide and includes a supporting rationale for the statement. Since the submission of the 2013 Plan for zinc oxide, the Plan has not been amended, nor have Plans for additional substances been deemed as required.

A comparison of the tracking and quantification results of the 2019 reporting period with those in the previous 2018 reporting period is summarized in **Table 2** below.

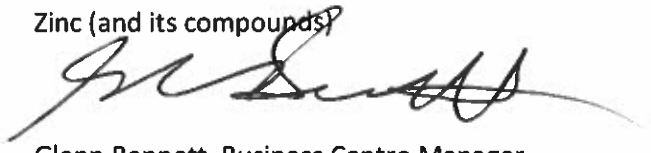
Table 2: Comparison of the Quantification and Tracking Results for Zinc Oxide in the 2018 and 2019 Reporting Periods

Form of Involvement	Amount of Zinc Oxide in Tonnes (2019)	Amount of Zinc Oxide in Tonnes (2018)	% Change	Reason for Change
Enters the facility (use)	47.16	46.02	2.4% increase	Slight increase in amount of buffings entering the facility
Created at the facility	None	None	-	-
Release (air) from the facility	0.15	0.13	No change	No change in amount of rubber buffings shredded
Release (land) from the facility	None	None	-	-
Release (water) from the facility	None	None	-	-
Disposed of (on-site) by the facility	None	None	-	-
Disposed of (off-site) by the facility	0	0.44	-100%	Scrap rubber sent to landfill in previous years was sent to recycling group in 2019
Transferred (for recycling) from the facility	25.35	24.16	4.8% increase	Slight increase in scrap tires recycled off-site
Contained in product that leaves the facility	21.66	21.26	1.9% decrease	Very slight increase in usage of certain rubber compounds used in re-treading

Certification by Highest Ranking Employee

As of July 23, 2020, I, Glenn Bennett, certify that I have read the report on the toxic substance reduction plan for the toxic substance 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.

Zinc (and its compounds)



Glenn Bennett, Business Centre Manager

The Goodyear OTR Centre (North Bay)