



Goodyear OTR Centre  
TSRP 2012 Final Report  
December 11, 2013

## **Public Plan Summary**

Zinc Oxide

**Basic Facility Information**

Name and CAS # of Substance	Zinc and its compounds	NA-14
Substances for which other plans have been prepared		
Facility Identification and Site Address		
Company Name	Goodyear	
Facility Name	Goodyear OTR Centre - North Bay Retread Plant	
Facility Address	Physical Address	Mailing Address
	100 Booth Road, North Bay ON P1B 0B3	same as physical address
Spatial Coordinates of Facility	UTM Easting	UTM Northing
	621998.65	5124529.96
Number of Employees	44	
NPRI ID	5897	
Ontario MOE ID Number	291700	
Parent Company (PC) Information		
PC Name & Address	Goodyear Canada Inc.	
	450 Kipling Avenue	
	Toronto ON M8Z 5E1	
Percent Ownership for each PC	100	
Business Number for PC	118941806	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	33	
4 Digit NAICS Code	3371	
6 Digit NAICS Code	337123	
Company Contact Information		
Facility Public Contact	Keiven Boissonneault, Business Administrator	
	keiven.boissonneault@goodyear.com	
	Phone: 705-476-9184	
	Fax: 705-4768439	
Parent Company Contact	N/A	

**Plan Summary Statement**

This plan summary accurately reflects the content of the toxic substance reduction plan for zinc and its compounds, prepared by MBN Environmental Engineering Inc. for the Goodyear OTR Centre facility located at 100 Booth Road, North Bay, Ontario, Canada, dated December 6, 2013.

**Statement of Intent**

Goodyear OTR Centre does not intend to reduce the use of zinc and its compounds as change to steel belt technology is not within our control. Additionally, continued recovery and retreading of tires is a responsible action that conserves natural resources, and our recycling practices with residual steel that contains zinc compounds avoids landfilling and benefits the environment.

**Reduction Objectives**

Goodyear OTR Centre does not intend to reduce the use of zinc and its compounds. Goodyear OTR Centre will continue responsible retreading of tires, and recycling of residual steel (containing Zinc) from the tires. Goodyear OTR Centre will continue to track industry standards for changes in technology that reduce the amount of Zinc contained in steel belts.

**Description of Substance**

Zinc and its compounds is a trace contaminant found in steel used as belt and radial cord plies.

**Toxic Substance Reduction Option to be Implemented**

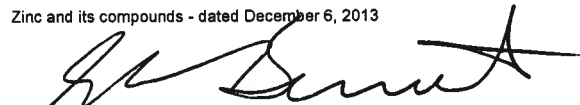
None

## Copy of Certifications

### Certification by highest ranking employee

As of December 6, 2013, I, Glenn Bennett certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Zinc and its compounds - dated December 6, 2013


  
\_\_\_\_\_  
Glenn Bennett  
Plant Manager  
Goodyear OTR Centre

06-Dec-13  
\_\_\_\_\_  
Date

### Certification by toxic substance reduction planner

As of December 6, 2013, I, Jim Anderson, M.Eng., P.Eng. certify that I am familiar with the processes at Goodyear OTR Centre that use or create the toxic substances 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 toxic substance reduction plans referred to below for the toxic substances and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Zinc and its compounds - dated December 6, 2013

  
\_\_\_\_\_  
Jim Anderson M.Eng., P.Eng.  
Toxic Substance Reduction Planner TSRP0127  
MBN Environmental Engineering Inc.

06-Dec-13  
\_\_\_\_\_  
Date

**Substances for which plans have been prepared at facility**

Substance	CAS
Zinc and its compounds	NA-14

**Statement of Intent to Reduce**

Substance	CAS	Statement of Intent to Reduce the Use and/or Creation of Toxic Substance (or reasons for not including one)
Zinc and its compounds	NA-14	Goodyear OTR Centre does not intend to reduce the use of zinc and its compounds as change to steel belt technology is not within our control. Additionally, continued recovery and retreading of tires is a responsible action that conserves natural resources, and our recycling practices with residual steel that contains zinc compounds avoids landfilling and benefits the environment.

**Objectives of the Plan**

Substance	CAS	Statement of Objectives
Zinc and its compounds	NA-14	Goodyear OTR Centre does not intend to reduce the use of zinc and its compounds. Goodyear OTR Centre will continue responsible retreading of tires, and recycling of residual steel (containing Zinc) from the tires. Goodyear OTR Centre will continue to track industry standards for changes in technology that reduce the amount of Zinc contained in steel belts.

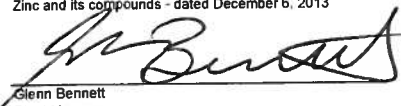
**Planner Recommendations and Rationale**

\* Please refer to document attached for planner recommendations and rationale related to each toxic substance listed above.

**Certification by highest ranking employee**

As of December 6, 2013, I, Glenn Bennett certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Zinc and its compounds - dated December 6, 2013


  
Glenn Bennett  
Plant Manager  
Goodyear OTR Centre

06-Dec-13  
Date

**Certification by toxic substance reduction planner**

As of December 6, 2013, I, Jim Anderson, M.Eng., P.Eng. certify that I am familiar with the processes at Goodyear OTR Centre that use or create the toxic substances 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 toxic substance reduction plans referred to below for the toxic substances and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Zinc and its compounds - dated December 6, 2013

  
Jim Anderson M.Eng., P.Eng.  
Toxic Substance Reduction Planner TSRP0127  
MBN Environmental Engineering Inc.

06-Dec-13  
Date



## **Toxic Substance Plan Technical Rationale(s)**

Zinc Oxide



## **INTRODUCTION**

This document outlines the technical feasibility of options identified in the toxic substance reduction plan for the 2012 reporting year for the Goodyear OTR facility located at 100 Booth Road, North Bay, Ontario.

Technical assessment of each option covers Zinc and its compounds.

### **1.0 MATERIAL OR FEEDSTOCK SUBSTITUTION**

Zinc and its compounds is a trace contaminant found in steel used as belt and radial cord plies. These trace contaminants are essential to the integrity of the base metal and therefore cannot be removed. Furthermore, an industry standard change would be required to substitute zinc free steel belts and remove existing steel-belted tires from service; and eliminate recovery and retreading of tires containing steel belts.

Changing to zinc free steel belts is not technically feasible.

### **2.0 PRODUCT DESIGN OR REFORMULATION**

No options were identified with respect to Zinc; please refer to the Toxic Substance Plan table of Reduction Options, product design or reformulation rationale.

Tire design is driven by industry standards, safety requirements, and customer requirements.

### **3.0 EQUIPMENT OR PROCESS MODIFICATION**

Loss of Zinc from recovered tires is minimized by through automated processes. Further, any residual Zinc is recycled and not disposed to landfill. Since processes are automated, waste generation is minimal and no reductions related to zinc can be achieved in this category.

### **4.0 SPILL AND LEAK PREVENTION**

No options are identified with respect to Zinc, please refer to the Toxic Substance Plan table of Reduction Options, spill and leak prevention rationale.



## **5.0 ON-SITE REUSE OR RECYCLING**

No options are identified with respect Zinc; please refer to the Toxic Substance Plan table of Reduction Options, on-site re-use or recycling rationale.

All steel and zinc material is collected from tires as part of retread and recycle process.

## **6.0 IMPROVED INVENTORY MANAGEMENT OR PURCHASING TECHNIQUES**

No options are identified with respect to Zinc; please refer to the Toxic Substance Plan table of Reduction Options, training or improved operating practices rationale.

## **7.0 TRAINING OR IMPROVED OPERATING PRACTICES**

No options are identified with respect to Zinc; please refer to the Toxic Substance Plan table of Reduction Options, training or improved operating practices rationale.



## **Planner Recommendations**

Zinc Oxide





## **INTRODUCTION**

This document outlines the recommendations and rationale for recommendations made by the planner, Mr. Jim Anderson, M.Eng., P.Eng. Licence Number TSRP0127. These recommendations and rationale are related to 2012 toxic substance plan for substances used, created, released or transferred off-site at the Goodyear OTR Center located at 100 Booth Road, North Bay, Ontario.

Planner recommendations and rationale for recommendations are in reference to Zinc and its compounds. The recommendations are provided, where applicable, for the purpose of improving all aspects of the plan. This includes the potential for reducing the use and creation of the toxic substance, and the business rationale for implementing the plan.

Overall no significant improvements could be made in the expertise relied on in preparing the plan, including the data and methods used to make the determinations, the records prepared and associated descriptions, and why the substance is used or created.

To our knowledge there are no technically and economically feasible options for reducing the use of the substance at the facility that have not been identified in the plan and that would result in reductions that are equal to or greater than those already identified in the plan.

The estimates of anticipated reduction provided are sufficient for the purposes of this plan and efforts to improve this will not result in a greater potential to reduce the use or creation of substances.

### **1.0 ZINC AND ITS COMPOUNDS**

Zinc and its compounds is a trace contaminant found in steel used as belt and radial cord plies. The plan summaries for the substance accurately reflect the plan.

Because this metal is a trace constituent in steel products, there is very little that can be done to reduce the substance. It is typically handled and worked in a manner that does not present a potential environmental or health impact.

Goodyear OTR Center does not intend to reduce the use of zinc and its compounds as change to steel belt technology is not within their control. Additionally, continued recovery and retreading of tires is a responsible action that conserves natural resources, and the recycling practices with residual steel that contains zinc compounds avoids landfilling and benefits the environment.