

## TOXIC SUBSTANCE REDUCTION PLAN SUMMARY

This Toxic Substance Reduction Plan Summary has been prepared in accordance with Section 8(2) of the Toxics Reduction Act and satisfies the minimum Plan Summary content requirements stipulated in Section 24 of Ontario Regulation 455/09.

### Basic Facility Information

Mandatory Basic Facility Information Item	Details
Substance Name and Chemical Abstracts Service (CAS) Registry Number, if any	This is a Master Document which provides supporting information for Toxic Substance Reduction Plans for the following Metal Substances: Chromium, and Mercury [Per O.Reg. 455/09; "no single CAS numbers apply to these substances"]
NPRI and O. Reg. 127/01 Identification Numbers	NPRI ID: 3541
The legal and trade names of the owner and the operator of the facility, the street address of the facility and the mailing address of the facility, if different	Essroc Italcementi Group - Picton Cement Plant 1370 Highway 49 Picton, Ontario K0K 2T0
The number of full time employee equivalents at the facility	137
The two- and four-digit North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	32 - Manufacturing 3273 - Cement and Concrete Product Manufacturing 327310 - Cement Manufacturing
Public contact	Mr. Anthony Jones Environmental Manager <a href="mailto:anthony.jones@essroc.com">anthony.jones@essroc.com</a>
Technical contact and person who is responsible for coordinating plan preparation	Mr. Anthony Jones Environmental Manager <a href="mailto:anthony.jones@essroc.com">anthony.jones@essroc.com</a>
The person who prepared the plan	Tracy Hodges Air Quality Specialist Golder Associates Ltd. 6925 Century Avenue, Suite #100 Mississauga, Ontario, Canada L5N 7K2 (905) 567 4444
Highest Ranking employee at the facility who has management responsibilities relating to the facility and who is responsible for making certification	Mr. Anthony Jones Environmental Manager <a href="mailto:anthony.jones@essroc.com">anthony.jones@essroc.com</a>
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	Latitude: 44.0553 Longitude: -77.1222 Datum: 1983
Parent Company Information	<b>Essroc Italcementi Group</b> - Corporate Office 3251 Bath Pike Nazareth, PA 18064

## **List of All Substances for which Toxic Substance Reduction Plans Have Been Prepared at the Facility**

The Facility has prepared Toxic Substance Reduction Plans for the following prescribed Toxic Substances:

- Chromium\*
- Mercury\*

\*Per O.Reg. 455/09, “no single CAS numbers apply to these substances”

## **Statement of Intent**

As required by s.4(1) of the TRA, a Plan must include either a statement of the Facility’s intent to reduce the use and/or creation of the Toxic Substance at the Facility, or the reasons for not including this statement.

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Toxic Substance is never created within the Facility’s process and therefore no statement with respect to intent to reduce creation of the Toxic Substance is required.

The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA’s definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 31-33 (manufacturing)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following MOE guidance, processing of raw material in which the Toxic Substance occurs naturally, at typical background concentrations and as a component of a mineral, meets the definition of MPO, despite the fact that the Toxic Substance’s presence is due to natural occurrence in the raw material at trace levels and the Toxic Substance travels through the Facility’s cement manufacturing process without undergoing any significant chemical change. The Facility processes millions of tonnes of natural raw materials and even small, trace concentrations can consequently trigger the reporting threshold.

Although the Toxic Substance is present in the final product of clinker, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of raw materials that are processed at the Facility on an annual basis.

As a result, and in accordance with the TRA, this specified quantity has been reported to the MOE as a “use” of the Toxic Substance as a part of a mandatory Toxic Substance quantification, accounting and reporting exercise.

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan

which are all requirements; the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

The Facility understands the benefits to reducing the use and creation of toxic substances, informing Ontarians about toxic substances in their community and helping Ontario position itself to compete in an increasingly green global economy. However, due to the fact that the only Facility activity which the TRA has defined as a “use” of the Toxic Substance is the manufacturing of cement, in which the Toxic Substance occurs naturally in the raw materials, there are no opportunities to reduce the “use” of the Toxic Substance aside from reducing the Facility’s cement production.

As a part of fulfilling its requirements under the TRA and O.Reg.455/09, the Facility has prepared a total two Toxic Substance Reduction Plans and Plan Summaries for naturally occurring elements which are prescribed toxic substances and whose “use” cannot be reduced based on the factors presented above.

The MOE has stated that the TRA is not intended to focus on “end of pipe” emissions as they don’t necessarily have any bearing on the amount of a substance that is “used” or “created,” however the Facility would like to take this opportunity to inform the reader of the fact that the Facility currently complies with all environmental regulations that control the release and disposal of the Toxic Substance; meeting or exceeding the strict release limits imposed by these regulations for the Toxic Substance.

### **Objectives of the Toxic Substance Reduction Plan**

The Objectives of the Plan are as follows:

- Provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRA’s definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;
- Provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a “use” of the Toxic Substance; and
- Document how the Facility has fulfilled the applicable requirements under the TRA and O. Reg. 455/09 with respect to the Toxic Substance.

### **Description of Why the Toxic Substance Is Used or Created**

As stated elsewhere in this Plan, the Facility activity that the MOE has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of quarried materials in which the Toxic Substance occurs naturally, at typical background concentrations in the region and as a component of a mineral. Since the Toxic Substance occurs naturally in trace levels in the limestone quarried at the site, and the Facility is a quarry extraction and cement manufacturing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s cement production. The Toxic Substance simply travels through the Facility process along with all other materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process, since the Toxic Substance is reportable under the TRA and O.Reg.455/09 as an elemental mass contribution to the material in which it may be a component.

### **Rationale for Not Implementing Toxic Substance Reduction Options**

As required by s.18(4) of O. Reg. 455/09 (as amended by s.9(3) of O. Reg. 214/11), a Plan must contain an explanation of why no toxic substance reduction options will be implemented.

Facility personnel have considered each of the seven categories for toxic substance reduction options, and, in light of the information provided in the Statement of Intent section of this Plan, the Facility feels that no toxic substance reduction options can be identified in any of the seven toxic substance reduction categories.

Therefore the rationale for not implementing toxic substance reduction options is that no toxic substance reduction options could be identified.

Many of the listed toxic substances found in the cement manufacturing process and inherent in the primary raw material and fuels used, are subject to similar behaviour, fate and reduction options. All of the listed toxic substances are found in the raw material mixture that enters the kiln, or present in the fuel that is introduced into the kiln during the clinker production stage. Many of these listed toxic substances make their way through the entire process and are ultimately bound into the final product, cement. Any attempt to mitigate the use or creation of one listed toxic substance will influence other listed toxic substances.

For the Facility, there are a small number of TSR Options that can significantly influence the use, creation and emission of listed toxic substances, and these are associated with the use of alternative fuels and alternative raw materials. Essroc is focused on exploring these alternatives through its participation in the Cement Sustainability Initiative through the World Business Council of Sustainable Development. Cement 2020 Initiative. At this point in time Essroc cannot commit to their implementation as this depends on the issuance of Environmental Compliance Approvals which are not under its legal ability to execute.

### **Statement that the Plan Summary Accurately Reflects the Current Version of the Plan**

As required by s.24(1)8 of O. Reg. 455/09 this Plan Summary accurately reflects the current version of the Plan.

### **Planner License Number**

As required by s.18(2) of O. Reg. 455/09 (as amended by s. 9(2) of O. Reg. 214/11), the Licensed Toxic Substance Reduction Planner responsible for providing Planner Recommendations on and certification of this Plan is as follows:

Michael Fabro  
Toxics Reduction Planner  
Golder Associates Ltd.  
Toxic Substance Reduction Planner License Number TSRP0189

### **Copies of the Certification**

Certification statements are provided in the following page.


**Toxic Substance Reduction Plans Certification by Highest Ranking Employee**

As required by s.4(2) of the *Toxics Reduction Act* (TRA), Toxic Substance Reduction Plans must contain a certification, signed by the highest ranking employee at the Facility who has management responsibilities relating to the Facility.

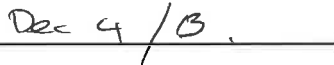
The following Certification Statement is being made under s.19(2) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) and satisfies the requirements of s.4(2) of the TRA for the Toxic Substance Plans that are assembled within this single document as of the date of this Certification Statement. Furthermore, the following Certification Statement is limited to the respective versions of the Plans which are dated as indicated in the Certification Statement:

As of December 4, 2013, I, Anthony Jones, 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.


- Chromium (dated December 4, 2013)
- Mercury (dated December 4, 2013)



Signature



(December 4, 2013)



Print Name

December 4, 2013

Project No. 12-1151-0335

Anthony Jones  
Essroc Italcementi Group (Essroc) Picton Cement Plant 1370 Highway 49  
Picton, Ontario  
K0K 2T0

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE I  
TOXIC SUBSTANCE REDUCTION PLANS FOR ESSROC PICTON CEMENT PLANT**

Dear Mr. Jones:

Golder Associates Ltd. (Golder) was retained by Essroc Italcementi Group (Essroc) Picton Cement Plant located in Picton, Ontario (the Facility) to provide various services pertaining to Phase I Toxic Substance Reduction Plan preparation under the *Toxic Reduction Act* (TRA), including Toxic Substance Reduction Planner (Planner) certification of Phase I Toxic Substance Reduction Plans (the Plans).

The following modified Planner Certification Statement which is made under s.19.1(4) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) satisfies the Planner Certification requirements for the Plans that are assembled as a single document as of the date of this Certification Statement. Furthermore, the following modified Certification Statement is limited to the respective versions of the Plans which are dated as indicated in the modified Certification Statement:

*As of December 4, 2013, I, Jonathan Michael Fabro, certify that I am familiar with the processes at the Essroc Italcementi Group Picton Cement Plant located in Picton, Ontario 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, with the exception of submitting this plan before the required date specified.*

- *Chromium Version 1.0*
- *Mercury Version 1.0*



\_\_\_\_\_  
J. Michael Fabro  
Toxic Substance Reduction Planner  
License No. TSRP0189

JMF/FSC/ng

\_\_\_\_\_  
December 4, 2013

Date

