

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 (O.Reg.) 455/09.

Basic Facility Information

Mandatory Basic Facility Information Item	Details
Substance Name and Chemical Abstracts Service (CAS) Registry Number for the Substance(s) whose Toxic Substance Reduction Plans are summarized by this this Plan Summary	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: <ul style="list-style-type: none"> ■ Particulate Matter; ■ PM₁₀; and ■ PM_{2.5} (Per O.Reg. 455/09; “no single CAS numbers apply to these substances”)
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 5850 O.Reg.127/01 ID: N/A
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	Lafarge Canada Inc. – Bath Cement Plant 6501 Highway 33 Bath, ON K0H 1G0 Canada
The number of full time employee equivalents at the facility	100
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	Robert Cumming Environmental and Public Affairs Manager
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	355881.94, 4891934.63, Zone 18
Parent Company Information	Lafarge Canada Inc. 6509 Airport Road Mississauga, ON L4V 1S7

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:

Cadmium*

Lead*

Manganese*

Mercury*

Zinc*

Particulate Matter*

PM₁₀*

PM_{2.5}*

CO (CAS No. 630-08-0)

NO_x (CAS No. 11104-93-1)

SO₂ (CAS No. 7446-09-5)

Ammonia (total)*

*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 "creation" of the Toxic Substances has not been included as a part of this Plan. The Toxic Substances cannot be "used" in the Facility process and therefore no statement with respect to intent to reduce use of the Toxic Substances is required.

The Toxic Substances have triggered reporting under the TRA and O. Reg. 455/09 due to two activities at the Facility which are interpreted as "creations" of the Toxic Substances under the TRA framework. The first activity that has been classified as a "creation" of the Toxic Substances for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substances is the generation by physical means of suspended particulate matter in various size fractions commonly referred to as dust; which is subsequently released either as stack or fugitive emissions.

The second activity that has been classified as a "creation" of the Toxic Substances is the generation of suspended particulate matter as a by-product of combustion of fuels.

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 in this case, "end of pipe" emissions of suspended particulate matter is the determining factor of the Facility's TRA reporting status with respect to the Toxic Substances.

Despite the Facility's reporting status with respect to the Toxic Substances, the Facility feels that it has previously optimized its control of the "creation" and subsequent release of the Toxic Substances to the greatest extent that can reasonably be expected. This opinion is supported by the following two aspects:

1) Compliance with Regulatory Requirements

It is well documented that release of suspended particulate matter is an inherent by-product of cement manufacturing and that the activities leading to the release of suspended particulate matter are essential to the process of cement manufacturing. In recognition of this, the MOE has imposed various regulatory requirements related to the release of suspended particulate matter, which include:

- Ontario Regulation 419/05, under which a Facility must demonstrate compliance with substance-specific ground-level concentration limits of emitted substances, including suspended particulate matter in all forms that are reportable under the NPRI and TRA reporting programs;
- The requirement for any Facility that may discharge any contaminant to the atmosphere to apply for and obtain an Environmental Compliance Approval (ECA) for air which approves the facility's emissions and provides performance limits, documentation requirements and reporting requirements which a Facility must meet in order to maintain compliance with the ECA on an ongoing basis;
- The requirement for a qualifying facility to prepare and implement a "Fugitive Dust Best Management Practices Plan." This document outlines controls in place with respect to minimizing suspended particulate matter releases in the form of fugitive dust at the facility, along with the decision making process that was used to identify fugitive dust emission sources and to develop appropriate best management practices for each type of source. A qualifying facility's Fugitive Dust Best Management Practices Plan must be approved by the MOE as a part of the ECA implementation process; and
- The requirement to prepare and implement an Operations and Maintenance Manual which outlines operating procedures and maintenance programs for processes with what the MOE refers to as "Significant Environmental Impacts." This document assists Facility personnel in operating the Facility in a manner that minimizes the potential for environmental impacts and is also a part of the ECA implementation process.

Lafarge currently meets and/or exceeds all of the above regulatory requirements which are designed to control the release of the Toxic Substances and minimize potential off-site impacts resulting from the release of the Toxic Substances.

2) Measures Currently in Place to Minimize Releases of Suspended Particulate Matter

As a result of satisfying all of the above noted regulatory requirements in addition to voluntary actions with respect to suspended particulate matter releases, Lafarge actively implements a variety of controls to minimize suspended particulate matter releases from different parts of its process components. These controls include, but are not limited to, the following:

- Implementation of the controls outlined in the Facility's Fugitive Dust Best Management Practices Plan, which was developed in consultation with the MOE; such as:
 - Dust suppressant application to Facility unpaved roadways;
 - Strategic placement of stockpiles with respect to windbreaks (buildings, hills, trees etc...) for material that is susceptible to wind erosion;
 - Optimization of material stockpile size, location and drop heights; and

- Reactive measures including curtailing operations in the event of visual disturbance of dust that may occur despite the above controls.
- Operation of numerous baghouses serving various process components to minimize suspended particulate matter. This equipment is actively maintained as outlined in the Facility’s Operations and Maintenance Manual, which was developed in consultation with the MOE.
- Exploration of the use of alternative low carbon fuels and alternative raw materials, through Lafarge’s Cement 2020 Initiative.
- Measures in place to minimize fuel consumption include:
 - Routine maintenance of fuel burning equipment; and
 - Exploration of the use of alternative low carbon fuels and alternative raw materials, through Lafarge’s Cement 2020 Initiative

Objectives of the Toxic Substance Reduction Plan

The Objectives of the Plan are as follows:

- Provide the reader with information on measures currently in place at the Facility which control the “creation” and subsequent release of the Toxic Substances;
- Provide support for the Facility’s position with respect to the Statement of Intent of the Plan; and
- Document how the Facility has fulfilled the applicable requirements under the TRA and O.Reg.455/09 with respect to the Toxic Substances.

Description of Why the Toxic Substance Is Used or Created

The Toxic Substances have triggered reporting under the TRA and O. Reg. 455/09 due to two activities at the Facility which are defined as “creations” of the Toxic Substances under the TRA framework. The first activity that has been classified as a “creation” of the Toxic Substances is the generation by physical means of suspended particulate matter in various size fractions as dust due to the handling and processing of quarried limestone materials. This is subsequently released either as stack or fugitive emissions. The second activity that has been classified as a “creation” of the Toxic Substances is the generation of particulate matter as a by-product of combustion of fuels. Due to the nature of the Toxic Substances, the substance can never be “used” in the Facility process.

For the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substances, the calculated “release” values have been assumed to be equal to the amount “created” for each emission source, despite the fact that some of these releases are controlled releases. S.12(6) of O. Reg. 455/09 provides considerations for determining the “Best Available Methods” for tracking and quantifying the Toxic Substances. MOE guidance pertaining to this section of O. Reg. 455/09 states that the importance of selecting Best Available Methods is to provide the best decision making information when determining which toxics reduction options, if any, are worthwhile to implement. It should be noted that, given the

Facility's decision to not include in this Plan a statement of its intent to reduce the "creation" of the Toxic Substances (as supported by the information provided in the Statement of Intent section of the Plan), no decisions will be made with respect to toxics reduction based on the calculated "creation" values for the Toxic Substances. Taking this into consideration, the Facility used judgement based on relevance and effort required to obtain information and feels that it has gone to reasonable efforts in identifying and applying the Best Available Methods for quantifications in this case.

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.

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:

Jonathan 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 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 (O.Reg.) 455/09.

Basic Facility Information

Mandatory Basic Facility Information Item	Details
Substance Name and Chemical Abstracts Service (CAS) Registry Number for the Substance(s) whose Toxic Substance Reduction Plans are summarized by this this Plan Summary	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: <ul style="list-style-type: none"> ■ Carbon Monoxide (CAS No. 630-08-0) ■ Nitrogen Oxides (CAS No. 11104-93-1) ■ Sulphur Dioxide (CAS No. 7446-09-5)
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 5850 O.Reg.127/01 ID: N/A
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	Lafarge Canada Inc. – Bath Cement Plant 6501 Highway 33 Bath, ON K0H 1G0 Canada
The number of full time employee equivalents at the facility	100
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	Robert Cumming Environmental and Public Affairs Manager
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	355881.94, 4891934.63, Zone 18
Parent Company Information	Lafarge Canada Inc. 6509 Airport Road Mississauga, ON L4V 1S7

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:

Cadmium*

Lead*

Manganese*

Mercury*

Zinc*

Particulate Matter*

PM₁₀*

PM_{2.5}*

CO (CAS No. 630-08-0)

NO_x (CAS No. 11104-93-1)

SO₂ (CAS No. 7446-09-5)

Ammonia (total)*

*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 Substances at the Facility, or the reasons for not including this statement.

A statement of the Facility's intent to reduce its "creation" of the Toxic Substances has not been included as a part of this Plan. The Toxic Substances cannot be "used" in the Facility process and therefore no statement with respect to intent to reduce use of the Toxic Substances is required.

The Toxic Substances have triggered reporting under the TRA and O.Reg.455/09 due to their generation as a by-product of the detonation of explosives and combustion of fuels, both of which are classified as a "creation" of the Toxic Substances for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substances.

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 in this case, "end of pipe" emission of the Toxic Substances are the determining factor of the Facility's TRA reporting status with respect to the Toxic Substances.

Despite the Facility's reporting status with respect to the Toxic Substances, the Facility feels that it has previously optimized its control of the "creation" and subsequent release of the Toxic Substances to the greatest extent that can reasonably be expected. This opinion is supported by the following two aspects:

1) Compliance with Regulatory Requirements

It is well documented that the release of combustion products such as the Toxic Substances is an inherent by-product of cement manufacturing and that the activities leading to the release of combustion products are essential to the process of cement manufacturing. In recognition of this, the MOE has imposed various regulatory requirements related to the release of combustion products, which include:

- Ontario Regulation 419/05, under which a Facility must demonstrate compliance with substance-specific ground-level concentration limits of emitted substances, including combustion products in all forms that are reportable under the NPRI and TRA reporting programs;
- The requirement for any Facility that may discharge any contaminant to the atmosphere to apply for and obtain an Environmental Compliance Approval (ECA) for air which approves the facility's emissions and provides performance limits, documentation requirements and reporting requirements which a Facility must meet in order to maintain compliance with the ECA on an ongoing basis;
- The requirement to monitor these emissions through routine testing activities (either spot measurements or continuous emission monitoring);
- The requirement to meet emission discharge limits for NO_x and SO₂ under Ontario Regulation 194/05 – Industry Emissions – Nitrogen Oxides and Sulphur Dioxide; and
- The requirement to prepare and implement an Operations and Maintenance Manual which outlines operating procedures and maintenance programs for processes with what the MOE refers to as "Significant Environmental Impacts." This document assists Facility personnel in operating the Facility in a manner that minimizes the potential for environmental impacts and is also a part of the ECA implementation process.

Lafarge currently meets and/or exceeds all of the above regulatory requirements which are designed to control the release of the Toxic Substances and minimize potential off-site impacts resulting from the release of the Toxic Substances.

2) Measures Currently in Place to Minimize Releases of Combustion Products

As a result of satisfying all of the above noted regulatory requirements in addition to voluntary actions with respect to combustion product releases, Lafarge actively implements a variety of controls to minimize combustion product releases from different parts of its process components. These controls include, but are not limited to, the following:

- Measures in place to minimize fuel consumption include:
 - Routine maintenance of fuel burning equipment;
 - Process optimization methods; and
 - Detailed monitoring.
- Exploration of the use of alternative low carbon fuels and alternative raw materials, through Lafarge's Cement 2020 Initiative.

Objectives of the Toxic Substance Reduction Plan

The Objectives of the Plan are as follows:

- Provide the reader with information on measures currently in place at the Facility which control the “creation” and subsequent release of the Toxic Substance;
- Provide support for the Facility’s position with respect to the Statement of Intent of this Plan; 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

The activity that has been classified as a “creation” of the toxic substances for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substances is the generation of the Toxic Substances as a by-product of combustion of fuels and detonation of explosives.

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.

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:

Jonathan 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 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 (O.Reg.) 455/09.

Basic Facility Information

Mandatory Basic Facility Information Item	Details
Substance Name and Chemical Abstracts Service (CAS) Registry Number for the Substance(s) whose Toxic Substance Reduction Plans are summarized by this this Plan Summary	This Plan Summary applies to the Toxic Substance Reduction Plan for the following prescribed Toxic Substances: ■ Ammonia (Total) (Per O.Reg. 455/09; “no single CAS number applies to this substance”)
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 5850 O.Reg.127/01 ID: N/A
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	Lafarge Canada Inc. – Bath Cement Plant 6501 Highway 33 Bath, ON K0H 1G0 Canada
The number of full time employee equivalents at the facility	100
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	Robert Cumming Environmental and Public Affairs Manager Bath Cement Plant 6501 Highway 33 Bath, ON K0H 1G0 Canada
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	355881.94, 4891934.63, Zone 18
Parent Company Information	Lafarge Canada Inc. 6509 Airport Road Mississauga, ON L4V 1S7

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:

Cadmium*

Lead*

Manganese*

Mercury*

Zinc*

Particulate Matter*

PM₁₀*

PM_{2.5}*

CO (CAS No. 630-08-0)

NO_x (CAS No. 11104-93-1)

SO₂ (CAS No. 7446-09-5)

Ammonia (total)*

*Per O.Reg. 455/09, "no single CAS number applies to this substance"

Statement of Intent

A statement of the Facility's intent to reduce the "creation" of the Toxic Substance has not been included as a part of this Plan. The Toxic Substance cannot be "used" in the Facility process and therefore no statement with respect to intent to reduce use of the Toxic Substance is required.

The activity that has been classified as a "creation" of the Toxic Substance for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance is the release of the Toxic Substance into the air when limestone is heated in a kiln during the process of cement clinker production. Due to its natural occurrence in limestone, which is the feedstock for the Facility's clinker production process, the creation of the Toxic Substance can only be reduced by reducing the Facility's production. Therefore, a statement of the Facility's intent to reduce the "creation" of the Toxic Substance has not been included as part of this Plan.

It should be noted that existing processes and systems in place at the Facility are capable of meeting or exceeding exposure and release limits imposed by applicable occupational and environmental regulations. This is supported by the following aspects:

- Ontario Regulation 419/05, under which a Facility must demonstrate compliance with substance-specific ground-level concentration limits of emitted substances, including substances that are reportable under the NPRI and TRA reporting programs;
- The requirement for any Facility that may discharge any contaminant to the atmosphere to apply for and obtain an Environmental Compliance Approval (ECA) for air which approves the facility's emissions and provides performance limits, documentation requirements and reporting requirements which a Facility must meet in order to maintain compliance with the ECA on an ongoing basis; and
- The requirement to monitor these emissions through routine testing activities (either spot measurements or continuous emission monitoring).

Objectives of the Toxic Substance Reduction Plan

The Objectives of this Plan are as follows:

- Provide support for the Facility's position with respect to the Statement of Intent of this Plan;
- Provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a "creation" 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

The activity that has been classified as a "creation" of the Toxic Substance for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance is the release of the Toxic Substance into the air when limestone is heated in a kiln during the process of cement clinker production.

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.

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:

Jonathan 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 20, 2013, I, Richard Sebastianelli, 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.

- *Particulate Matter Version 1.0* (dated, December 20, 2013)
- *PM₁₀ Version 1.0* (dated, December 20, 2013)
- *PM_{2.5} Version 1.0* (dated, December 20, 2013)
- *Oxides of Nitrogen Version 1.0* (dated, December 20, 2013)
- *Carbon Monoxide Version 1.0* (dated, December 20, 2013)
- *Sulphur Dioxide Version 1.0* (dated, December 20, 2013)
- *Ammonia (total) Version 1.0* (dated, December 20, 2013)



*Richard Sebastianelli
Plant Manager
Bath Cement Plant
Lafarge Canada Inc.*

December 20, 2013

December 20, 2013

Project No. 11-1151-0124

Robert Cumming
Lafarge Canada Inc.

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE II
TOXIC SUBSTANCE REDUCTION PLANS FOR LAFARGE CANADA INC. – BATH CEMENT PLANT**

Dear Mr. Cumming:

Golder Associates Ltd. (Golder) was retained by Lafarge Canada Inc.'s Bath Cement Plant facility located in Bath, Ontario (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxic Reduction Act* (TRA), including Toxic Substance Reduction Planner (Planner) certification of Phase II Toxic Substance Reduction Plans (the Plans).

The following 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 Certification Statement is limited to the respective versions of the Plans which are dated as indicated in the Certification Statement:

As of December 20, 2013, I, Jonathan Michael Fabro, certify that I am familiar with the processes at the Lafarge Canada Inc. Bath Cement Plant located in Bath, 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.

- *Particulate Matter Version 1.0*
- *PM₁₀ Version 1.0*
- *PM_{2.5} Version 1.0*
- *Sulphur Dioxide Version 1.0*
- *Oxides of Nitrogen Version 1.0*
- *Carbon Monoxide Version 1.0*
- *Ammonia (total) Version 1.0*



J. Michael Fabro, B.A.Sc., M.E.B.
Toxic Substance Reduction Planner
License No. TSRP0189

December 20, 2013

JMF/FSC/ng

