

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, if any	Nitric Acid [CAS Number 7697-37-2]
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 3197 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	Street: Williams Mine 3km West of Junction Hwy 417 and 614 High Hemlo, ON Mailing: Williams Operating Corporation (WOC) P.O. Bag 500 Marathon, ON P0T 2E0
The number of full time employee equivalents at the facility	436
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	21 - Mining & Oil & Gas Extraction 2122 - Metal Ore Mining 212220 - Gold & Silver Ore Mining
Public contact	Jeremy Dart Environmental Superintendent Williams Operating Corporation P.O. Box 500 Marathon, ON P0T 2E0 (807) 238-1100
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 16 579564 E, 5394026 N
Parent Company Information	Barrick Gold Corporation 161 Bay Street, Suite 3700 P.O. Box 212 Toronto, ON M5J 2S1 (416) 861-9911

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:

Antimony*

Arsenic*

Cadmium*

Chromium*

Cobalt*

Copper*

Lead*

Manganese*

Mercury*

Nickel*

Selenium*

Vanadium [CAS number 7440-62-2]

Zinc*

Cyanides (Ionic)* Particulate Matter*

PM10*

PM2.5*

Nitrogen Oxides [CAS number 11104-93-1]

Carbon Monoxide [CAS number 630-08-0]

Ammonia (Total)*

Nitrate Ion*

*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, as well as objectives of the Plan.

A statement of the Facility's intent to reduce 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 of the opinion that it has previously optimized its use of the Toxic Substance to the greatest extent that can reasonably be expected at this time. This opinion is supported by the following measures which are in place at the Facility and which control the use of the Toxic Substance:

- Implementation of several standard policies and procedures pertaining to the Toxic Substance, from operational and health and safety standpoints. These policies and procedures include the following:
 - Nitric Acid Handling;
 - Nitric Acid Mix Procedure;
 - Nitric Acid Wash Procedure; and
 - Nitric Acid Off-load Procedure
- The Facility also optimizes use of Nitric Acid by tracking calcium loadings on carbon (the phenomenon which necessitates the use of Nitric Acid as a carbon-washing agent in the Facility's process), thereby allowing the Facility to gauge when and how much nitric acid must be used at given times. This tracking is completed daily and minimizes waste of Nitric Acid.

It should be noted that the Facility currently complies with all environmental regulations that control the release and disposal of the Toxic Substance, and possesses all applicable environmental approvals. The MOE has stated that the TRA is not intended to focus on these "end of pipe" emissions, however, the fact that the Facility meets or exceeds the strict release limits imposed by these regulations, despite the relatively large amount of the Toxic Substance that is required to be used in order to operate the Facility, is a further indication of optimal use of the Toxic Substance at the Facility.

Objectives of the Toxic Substance Reduction Plan

The Objectives of this Plan are as follows:

- provide the reader with information on measures currently in place at the Facility which influence the way in which the Toxic Substance is used at the Facility;
- provide support for the Facility's position with respect to the Statement of Intent of this Plan; and
- document how, by preparing this Plan, 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 Toxic Substance is introduced into the acid wash process of the Facility's processing plant. The intended function of the acid is to react with impurities and free up active sites on carbon granules, thereby "washing" activated carbon prior to carbon reactivation for reuse in the gold leaching process. Although it is recycled to the greatest extent possible, nitric acid is ultimately destroyed by neutralization in the acid wash process. The Toxic Substance is never created at the Facility.

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:

Russell Polack

Air Quality Specialist

Golder Associates Ltd.

Toxic Substance Reduction Planner License Number TSRP0002

Copies of the Certification

Certification statements are provided in the following page.

December 19, 2013

Project No. 13-1192-0105

Jeremy Dart
Williams Mine

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR THE
DOCUMENT ENTITLED *TOXIC SUBSTANCE REDUCTION PLAN NITRIC ACID***

Dear Mr. Dart:

Golder Associates Ltd. (Golder) was retained by Williams Operating Corporation Williams Mine (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxics 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(3) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) satisfies the Planner Certification requirements for the document entitled *Toxic Substance Reduction Plan Nitric Acid*. Furthermore, the following Certification Statement is limited to the version of the Plan which is dated as indicated in the Certification Statement:

As of December 19, I, Russell Polack certify that I am familiar with the processes at the Williams Operating Corporation Williams Mine facility 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 December 19, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

- *Nitric Acid (December 19, 2013)*



Russell Polack
Toxic Substance Reduction Planner
License No. TSRP0002

RLP



Date



Toxic Substance Reduction Plan 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 Williams Operating Corporation Williams Mine (the Facility) who has management responsibilities relating to the Facility.

The following Certification Statement is being made under s.19(1) 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 Plan:

As of (insert date) December 19/13, I, (insert name) Andrew Baumen, 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.

- Nitric Acid



Signature



Date



Print Name

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, if any	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: Ammonia (Total) [Per O.Reg.455/09 no CAS Number applies to this substance]
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 3197 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	Street: Williams Mine 3km West of Junction Hwy 417 and 614 High Hemlo, ON Mailing: Williams Operating Corporation (WOC) P.O. Bag 500 Marathon, ON P0T 2E0
The number of full time employee equivalents at the facility	436
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	21 - Mining & Oil & Gas Extraction 2122 - Metal Ore Mining 212220 - Gold & Silver Ore Mining
Public contact	Jeremy Dart Environmental Superintendent Williams Operating Corporation P.O. Box 500 Marathon, ON P0T 2E0 (807) 238-1100
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 16 579564 E, 5394026 N
Parent Company Information	Barrick Gold Corporation 161 Bay Street, Suite 3700 P.O. Box 212 Toronto, ON M5J 2S1 (416) 861-9911

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:

- Antimony*
- Arsenic*
- Cadmium*
- Chromium*

Cobalt*
Copper*
Lead*
Manganese*
Mercury*
Nickel*
Selenium*
Vanadium [CAS number 7440-62-2]
Zinc*
Cyanides (Ionic)* Particulate Matter*
PM10*
PM2.5*
Nitrogen Oxides [CAS number 11104-93-1]
Carbon Monoxide [CAS number 630-08-0]
Ammonia (Total)*
Nitrate Ion*
Nitric Acid [CAS Number 7697-37-2]

*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 the “creation” of the Toxic Substance has not been included as a part of this Plan. The Toxic Substance is not used within the Facility’s process and therefore no statement with respect to intent to reduce use of the Toxic Substance is required.

The Toxic Substance has 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 Substance under the TRA framework. The first 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 Substances is the generation of the Toxic Substance as an airborne or a dissolved by-product of explosives detonation within the underground mining operations at the Facility.

The Facility is of the opinion that it has previously optimized its use of explosives to greatest extent that can reasonably be expected. Furthermore, the use of explosives is directly linked to the Facility's production and therefore, given the previously optimized use of explosives, the use of explosives cannot be reduced without negatively impacting Facility production.

In addition, the Facility also implements more than twenty Standard Operating Procedures (SOPs) which focus on safe and effective use of explosives, thereby minimizing their usage and consequent creation of the toxic substance.

The second activity that has been classified as a "creation" of the Toxic Substance is the generation and subsequent release to air of the Toxic Substance as a by-product of the breakdown of cyanide in the Facility's process. As noted in the document entitled "Toxic Substance Reduction Plan Cyanides (Ionic)" (Version 1.0), the Facility is of the opinion that it has optimized its use of the product which contains cyanide, the breakdown of which is responsible "creating" some amounts of the Toxic Substance, to the greatest extent that can reasonably be expected at this time.

It should also be noted that Facility currently meets and/or exceeds all regulatory requirements which are designed to control the release of the Toxic Substance and minimize potential off-site impacts resulting from the release of the Toxic Substance.

Objectives of the Toxic Substance Reduction Plan

The Objectives of this Plan are as follows:

- provide the reader with information on measures currently in place at the Facility which control the "creation" 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 Toxic Substance has 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 Substance under the TRA framework. The first 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 Substances is the generation of the Toxic Substance as an airborne or a dissolved by-product of explosives detonation within the underground mining operations at the Facility. The second activity that has been classified as a "creation" of the Toxic Substance is the generation and subsequent release to air of the Toxic Substance as a by-product of the breakdown of cyanide in the Facility's process.

For the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance, the calculated "release" values have been assumed to be equal to the amount "created," despite the fact that the amount released could differ from the amount created due to natural

attenuation before release to air or final off-site discharge in water. Section 12(6) of O.Reg.455/09 provides considerations for determining the “Best Available Methods” for tracking and quantifying the Toxic Substance. 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 Substance (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 Substance. 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:

Russell Polack
Air Quality Specialist
Golder Associates Ltd.
Toxic Substance Reduction Planner License Number TSRP0002

Copies of the Certification

Certification statements are provided in the following page.

December 2003

Project No. 13-1192-0105

Jeremy Dart
Williams Mine

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE II
TOXIC SUBSTANCE REDUCTION PLANS FOR THE WILLIAMS OPERATING CORPORATION WILLIAMS
MINE**

Dear Mr. Dart:

Golder Associates Ltd. (Golder) was retained by Williams Operating Corporation Williams Mine (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxics 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:

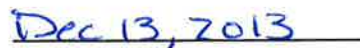
As of December 13, 2013, I, Russell Polack certify that I am familiar with the processes at the Williams Operating Corporation Williams Mine facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (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 (December 13, 2013)*
- *PM2.5 (December 13, 2013)*
- *Carbon Monoxide (December 13, 2013)*
- *Ammonia (Total) (December 13, 2013)*
- *PM10 (December 13, 2013)*
- *Nitrogen Oxides (December 13, 2013)*
- *Nitrate Ion (December 13, 2013)*



Russell Polack
Toxic Substance Reduction Planner
License No. TSRP0002

HJ/RLP



Date



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 Williams Operating Corporation Williams Mine (the Facility) who has management responsibilities relating to the Facility.

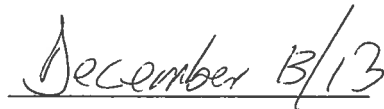
The following Certification Statement is being made under s.19(2) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) and satisfies the requirements of s.4(2) of the TRA for the Toxic Substance Plans that are assembled within this single document as of the date of this Certification 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 (insert date) December 13/13, I, (insert name) Andrew Baumen 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.

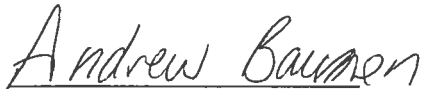
- *Particulate Matter (December 2013)*
- *PM2.5 (December 2013)*
- *PM10 (December 2013)*
- *Nitrogen Oxides (December 2013)*
- *Carbon Monoxide (December 2013)*
- *Nitrate Ion (December 2013)*
- *Ammonia (Total) (December 2013)*



Signature



Date



Print Name

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, if any	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: Nitrate Ion [Per O.Reg.455/09 no CAS Number applies to this substance]
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 3197 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	Street: Williams Mine 3km West of Junction Hwy 417 and 614 High Hemlo, ON Mailing: Williams Operating Corporation (WOC) P.O. Bag 500 Marathon, ON P0T 2E0
The number of full time employee equivalents at the facility	436
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	21 - Mining & Oil & Gas Extraction 2122 - Metal Ore Mining 212220 - Gold & Silver Ore Mining
Public contact	Jeremy Dart Environmental Superintendent Williams Operating Corporation P.O. Box 500 Marathon, ON P0T 2E0 (807) 238-1100
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 16 579564 E, 5394026 N
Parent Company Information	Barrick Gold Corporation 161 Bay Street, Suite 3700 P.O. Box 212 Toronto, ON M5J 2S1 (416) 861-9911

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:

Antimony*

Arsenic*

Cadmium*

Chromium*

Cobalt*

Copper*

Lead*

Manganese*

Mercury*

Nickel*

Selenium*

Vanadium [CAS number 7440-62-2]

Zinc*

Cyanides (Ionic)* Particulate Matter*

PM10*

PM2.5*

Nitrogen Oxides [CAS number 11104-93-1]

Carbon Monoxide [CAS number 630-08-0]

Ammonia (Total)*

Nitrate Ion*

Nitric Acid [CAS Number 7697-37-2]

*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 the "creation" of the Toxic Substance has not been included as a part of this Plan. The Toxic Substance is not used within the Facility's 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 Substances is the generation of the Toxic Substance as a dissolved residue in effluent which is a by-product of explosives detonation within the underground mining operations at the Facility.

The Facility is of the opinion that it has previously optimized its use of explosives to greatest extent that can reasonably be expected. Furthermore, the use of explosives is directly linked to the Facility’s production and therefore, given the previously optimized use of explosives, the use of explosives cannot be reduced without negatively impacting Facility production.

In addition, the Facility also implements more than twenty Standard Operating Procedures (SOPs) which focus on safe and effective use of explosives, thereby minimizing their usage and consequent creation of the toxic substance.

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.

Objectives of the Toxic Substance Reduction Plan

The Objectives of this Plan are as follows:

- provide the reader with information on measures currently in place at the Facility which control the “creation” 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 Substance for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance is the appearance of the Toxic Substance as a dissolved residue in effluent which results from explosives detonation within the underground mining operations. The Toxic Substance is not used within the Facility’s process.

For the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance, the calculated “release” values have been assumed to be equal to the amount “created,” despite the fact that the amount released could differ from the amount created due to natural attenuation before final off-site discharge. Section 12(6) of O.Reg.455/09 provides considerations for determining the “Best Available Methods” for tracking and quantifying the Toxic Substance. 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 Substance (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 Substance. 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

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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:

Russell Polack
Air Quality Specialist
Golder Associates Ltd.
Toxic Substance Reduction Planner License Number TSRP0002

Copies of the Certification

Certification statements are provided in the following page.

December 2003

Project No. 13-1192-0105

Jeremy Dart
Williams Mine

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE II
TOXIC SUBSTANCE REDUCTION PLANS FOR THE WILLIAMS OPERATING CORPORATION WILLIAMS
MINE**

Dear Mr. Dart:

Golder Associates Ltd. (Golder) was retained by Williams Operating Corporation Williams Mine (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxics Reduction Act* (TRA), including Toxic Substance Reduction Planner (Planner) certification of Phase II Toxic Substance Reduction Plans (the Plans).

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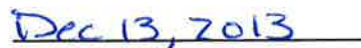
As of December 13, 2013, I, Russell Polack certify that I am familiar with the processes at the Williams Operating Corporation Williams Mine facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (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 (December 13, 2013)*
- *PM2.5 (December 13, 2013)*
- *Carbon Monoxide (December 13, 2013)*
- *Ammonia (Total) (December 13, 2013)*
- *PM10 (December 13, 2013)*
- *Nitrogen Oxides (December 13, 2013)*
- *Nitrate Ion (December 13, 2013)*



Russell Polack
Toxic Substance Reduction Planner
License No. TSRP0002

HJ/RLP



Date



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 Williams Operating Corporation Williams Mine (the Facility) who has management responsibilities relating to the Facility.

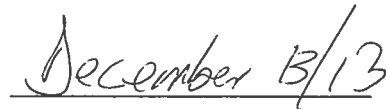
The following Certification Statement is being made under s.19(2) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) and satisfies the requirements of s.4(2) of the TRA for the Toxic Substance Plans that are assembled within this single document as of the date of this Certification 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 (insert date) December 13/13, I, (insert name) Andrew Baumen 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.

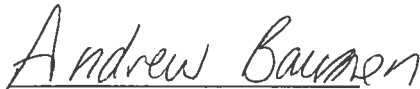
- *Particulate Matter (December 2013)*
- *PM2.5 (December 2013)*
- *PM10 (December 2013)*
- *Nitrogen Oxides (December 2013)*
- *Carbon Monoxide (December 2013)*
- *Nitrate Ion (December 2013)*
- *Ammonia (Total) (December 2013)*



Signature



Date



Print Name

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, if any	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: Nitrogen Oxides [CAS Number 11104-93-1], Carbon Monoxide [CAS Number 630-08-0]
National Pollutant Release Inventory (NPRI) and O.Reg.127/01 Identification Numbers	NPRI ID: 3197 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	Street: Williams Mine 3km West of Junction Hwy 417 and 614 High Hemlo, ON Mailing: Williams Operating Corporation (WOC) P.O. Bag 500 Marathon, ON POT 2E0
The number of full time employee equivalents at the facility	436
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	21 - Mining & Oil & Gas Extraction 2122 - Metal Ore Mining 212220 - Gold & Silver Ore Mining
Public contact	Jeremy Dart Environmental Superintendent Williams Operating Corporation P.O. Box 500 Marathon, ON POT 2E0 (807) 238-1100
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 16 579564 E, 5394026 N
Parent Company Information	Barrick Gold Corporation 161 Bay Street, Suite 3700 P.O. Box 212 Toronto, ON M5J 2S1 (416) 861-9911

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:

- Antimony*
- Arsenic*
- Cadmium*
- Chromium*
- Cobalt*

Copper*

Lead*

Manganese*

Mercury*

Nickel*

Selenium*

Vanadium [CAS number 7440-62-2]

Zinc*

Cyanides (Ionic)* Particulate Matter*

PM10*

PM2.5*

Nitrogen Oxides [CAS number 11104-93-1]

Carbon Monoxide [CAS number 630-08-0]

Ammonia (Total)*

Nitrate Ion*

Nitric Acid [CAS Number 7697-37-2]

*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 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 Toxic Substance has triggered reporting under the TRA and O.Reg.455/09 due to its generation as a by-product of combustion of fuels in stationary equipment or detonation of explosives, both of which are classified as a "creation" of the Toxic Substance for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance.

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 Substance are the determining factor of the Facility's TRA reporting status with respect to the Toxic Substance.

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

Compliance with Regulatory Requirements

It is well documented that the release of combustion products such as the Toxic Substance is an inherent by-product of mining and mineral processing and that the activities leading to the release of combustion products are essential to the process of mining and mineral processing. 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.

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

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, WOC Williams Mine 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, including but not limited to:
 - idle free policies (including underground hauling equipment); and
 - use of best available technologies in mine fleet equipment.
- Implementation of several Standard Operating Procedures (SOPs) which focus on safe and effective use of explosives, thereby minimizing their usage and consequent creation of the toxic substance.

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" 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 substance for the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance is the generation of the Toxic Substance as a by-product of combustion of fuels in stationary equipment and detonation of explosives. The Toxic Substance is never used in the Facility process.

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:

Russell Polack
Air Quality Specialist
Golder Associates Ltd.
Toxic Substance Reduction Planner License Number TSRP0002

Copies of the Certification

Certification statements are provided in the following page.

December 2003

Project No. 13-1192-0105

Jeremy Dart
Williams Mine

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE II
TOXIC SUBSTANCE REDUCTION PLANS FOR THE WILLIAMS OPERATING CORPORATION WILLIAMS
MINE**

Dear Mr. Dart:

Golder Associates Ltd. (Golder) was retained by Williams Operating Corporation Williams Mine (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxics 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:

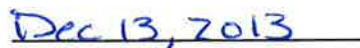
As of December 13, 2013, I, Russell Polack certify that I am familiar with the processes at the Williams Operating Corporation Williams Mine facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (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 (December 13, 2013)*
- *PM2.5 (December 13, 2013)*
- *Carbon Monoxide (December 13, 2013)*
- *Ammonia (Total) (December 13, 2013)*
- *PM10 (December 13, 2013)*
- *Nitrogen Oxides (December 13, 2013)*
- *Nitrate Ion (December 13, 2013)*



Russell Polack
Toxic Substance Reduction Planner
License No. TSRP0002

HJ/RLP



Date




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 Williams Operating Corporation Williams Mine (the Facility) who has management responsibilities relating to the Facility.

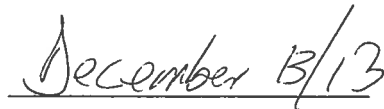
The following Certification Statement is being made under s.19(2) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) and satisfies the requirements of s.4(2) of the TRA for the Toxic Substance Plans that are assembled within this single document as of the date of this Certification 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 (insert date) December 13/13, I, (insert name) Andrew Baumen 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.

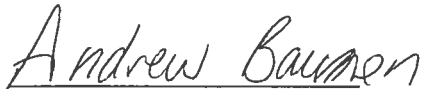
- *Particulate Matter (December 2013)*
- *PM2.5 (December 2013)*
- *PM10 (December 2013)*
- *Nitrogen Oxides (December 2013)*
- *Carbon Monoxide (December 2013)*
- *Nitrate Ion (December 2013)*
- *Ammonia (Total) (December 2013)*



Signature



Date



Print Name

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, if any	This Plan Summary applies to the Toxic Substance Reduction Plans for the following prescribed Toxic Substances: Particulate Matter, PM10, PM2.5 (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: 3197 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	Street: Williams Mine 3km West of Junction Hwy 417 and 614 High Hemlo, ON Mailing: Williams Operating Corporation (WOC) P.O. Bag 500 Marathon, ON P0T 2E0
The number of full time employee equivalents at the facility	436
North American Industry Classification System (NAICS) codes and the six-digit NAICS Canada code	21 - Mining & Oil & Gas Extraction 2122 - Metal Ore Mining 212220 - Gold & Silver Ore Mining
Public contact	Jeremy Dart Environmental Superintendent Williams Operating Corporation P.O. Box 500 Marathon, ON P0T 2E0 (807) 238-1100
The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) datum	UTM Zone 16 579564 E, 5394026 N
Parent Company Information	Barrick Gold Corporation 161 Bay Street, Suite 3700 P.O. Box 212 Toronto, ON M5J 2S1 (416) 861-9911

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:

Antimony*

Arsenic*

Cadmium*

Chromium*

Cobalt*

Copper*

Lead*

Manganese*

Mercury*

Nickel*

Selenium*

Vanadium [CAS number 7440-62-2]

Zinc*

Cyanides (Ionic)* Particulate Matter*

PM10*

PM2.5*

Nitrogen Oxides [CAS number 11104-93-1]

Carbon Monoxide [CAS number 630-08-0]

Ammonia (Total)*

Nitrate Ion*

Nitric Acid [CAS Number 7697-37-2]

*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 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 Toxic Substance has 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 Substance under the TRA framework. The first 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 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 Substance is the generation of suspended particulate matter as a by-product of combustion of fuels in stationary equipment.

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 Substance.

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

Compliance with Regulatory Requirements

It is well documented that release of suspended particulate matter is an inherent by-product of mining and mineral processing and that the activities leading to the release of suspended particulate matter are essential to the process of mining and mineral processing. 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 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.

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

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, WOC Williams Mine 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:
 - regular road watering, sweeping of Facility paved roadways and dust suppressant application to Facility unpaved roadways;
 - optimization of material stockpile size, location and drop heights; and
 - reactive measures including limiting operations in the event of visual disturbance of dust that may occur despite the above controls.
- Operation of several baghouses and/or dust collectors serving various process components to minimize suspended particulate matter.
- Electronic management system in place for the management of the overall operation of the site, including tracking scheduled maintenance of above noted dust control equipment.
- Measures in place to minimize fuel consumption and consequent release of particulate from combustion, including:
 - idle free policies (including underground hauling equipment); and
 - use of best available technologies in mine fleet equipment.

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 Toxic Substance has 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 Substance under the TRA framework. The first activity that has been classified as a “creation” of the Toxic Substance is the generation by physical means of suspended particulate matter in various size fractions 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 Substance is the generation of particulate matter as a by-product of combustion of fuels in stationary equipment. The Toxic Substance cannot be “used” in the Facility process.

For the purpose of the required TRA Quantification, Accounting and Reporting exercise for the Toxic Substance, 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. Section 12(6)

of O.Reg.455/09 provides considerations for determining the “Best Available Methods” for tracking and quantifying the Toxic Substance. 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 Substance (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 Substance. 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:

Russell Polack
Air Quality Specialist
Golder Associates Ltd.
Toxic Substance Reduction Planner License Number TSRP0002

Copies of the Certification

Certification statements are provided in the following page.

December 2003

Project No. 13-1192-0105

Jeremy Dart
Williams Mine

**LICENSED TOXIC SUBSTANCE REDUCTION PLANNER CERTIFICATION STATEMENT FOR PHASE II
TOXIC SUBSTANCE REDUCTION PLANS FOR THE WILLIAMS OPERATING CORPORATION WILLIAMS
MINE**

Dear Mr. Dart:

Golder Associates Ltd. (Golder) was retained by Williams Operating Corporation Williams Mine (the Facility) to provide various services pertaining to Phase II Toxic Substance Reduction Plan preparation under the *Toxics 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:

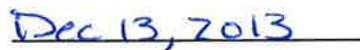
As of December 13, 2013, I, Russell Polack certify that I am familiar with the processes at the Williams Operating Corporation Williams Mine facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (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 (December 13, 2013)*
- *PM2.5 (December 13, 2013)*
- *Carbon Monoxide (December 13, 2013)*
- *Ammonia (Total) (December 13, 2013)*
- *PM10 (December 13, 2013)*
- *Nitrogen Oxides (December 13, 2013)*
- *Nitrate Ion (December 13, 2013)*



Russell Polack
Toxic Substance Reduction Planner
License No. TSRP0002

HJ/RLP



Date




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 Williams Operating Corporation Williams Mine (the Facility) who has management responsibilities relating to the Facility.

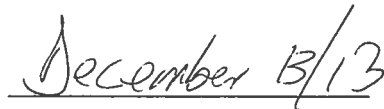
The following Certification Statement is being made under s.19(2) of Ontario Regulation (O.Reg.) 455/09 (as amended by s.11 of O.Reg.214/11) and satisfies the requirements of s.4(2) of the TRA for the Toxic Substance Plans that are assembled within this single document as of the date of this Certification 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 (insert date) December 13/13, I, (insert name) Andrew Baumen 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.

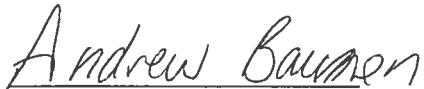
- *Particulate Matter (December 2013)*
- *PM2.5 (December 2013)*
- *PM10 (December 2013)*
- *Nitrogen Oxides (December 2013)*
- *Carbon Monoxide (December 2013)*
- *Nitrate Ion (December 2013)*
- *Ammonia (Total) (December 2013)*



Signature



Date



Print Name