Plan Summary Preview

Company Details

Company Legal Name
Northern Sun Mining Corp.

Company Address
Stringer's Road, South Porcupine (Ontario)

Report Details

Facility Name
Redstone Mine

Facility Address
Stringer's Road, South Porcupine (Ontario)

Update Comments

Activities

Contacts
Select the Facility Contacts

Facility Contacts
Please assign the appropriate contact under each category below.

Public Contact: *
Brian Kett

Highest Ranking Employee
Mark Trevisiol

Person responsible for Toxic Substance Reduction Plan preparation
Russell Polack

Organization Validation

Company and Parent Company Information

Company Details
Company Legal Name: * Northern Sun Mining Corp.
Company Trade Name: * Norther Sun Mining Corp.

Business Number: * 891339566

**Mailing Address**

Delivery Mode Post Office Box

PO Box 5114

Rural Route Number

Address Line 1 Stringer's Road

City * South Porcupine

Province/Territory ** Ontario

Postal Code: ** P0N1H0

**Physical Address**

Address Line 1 Stringer's Road

City South Porcupine

Province/Territory Ontario

Postal Code P0N1H0

Additional Information

Land Survey Description

National Topographical Description

**Parent Companies**

Empty

**Facility Validation**

The information in this section was copied from the Single Window Information Manager (SWIM) at the time the plan summary was created. Please verify the information and update it where required. Please note that any changes made here will only be reflected in this plan summary. To ensure updates reflected in future reports, please ensure the information is updated in SWIM. After making updates in SWIM, return here and click the "Refresh" button to trigger a reload of the SWIM information. Please note all previously entered data...
Facility Information

<table>
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<th>Redstone Mine</th>
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<tr>
<td>NAICS Code: *</td>
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Facility Mailing Address

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<tr>
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<td>City *</td>
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<td>Province/Territory **</td>
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Physical Address

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<tr>
<th>Address Line 1</th>
<th>Stringer's Road</th>
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Geographical Address

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Contact Validation

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Contacts

Public Contact

First Name: * Brian
Last Name: * Kett
Position: * Environmental Coordinator
Telephone: * 7052406450
Ext 5052
Fax 7052406452
Email: * bkett@northernsunmining.ca

Mailing Address

Delivery Mode Post Office Box
PO Box 5114
Rural Route Number
Address Line 1 Road
City * South Porcupine
### Highest Ranking Employee

<table>
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<tr>
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#### Mailing Address

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<td><strong>Address Line 1</strong></td>
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<td>**City **</td>
<td>South Porcupine</td>
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<td>Ontario</td>
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<td>P0N 1H0</td>
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</table>

#### Person responsible for the Toxic Substance Reduction Plan preparation

<table>
<thead>
<tr>
<th>**First Name: **</th>
<th>Russell</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Last Name: **</td>
<td>Polack</td>
</tr>
<tr>
<td>**Position: **</td>
<td>Air Quality Specialist</td>
</tr>
<tr>
<td>**Telephone: **</td>
<td>7055246861</td>
</tr>
</tbody>
</table>
Mailing Address

Delivery Mode: General Delivery

PO Box

Rural Route Number

Address Line 1: 1010 Lorne Street

City: Sudbury

Province/Territory: Ontario

Postal Code: P3C4R9

Employees

Number of Full-time Employees: 33

Substances

NA - 02, Arsenic (and its compounds)

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **
If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

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

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA’s definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following the Ontario Ministry of the Environment and Climate Change (MOECC) guidance, processing of feedstocks in which the Toxic Substance is present due to natural deposition in previously mined and/or processed materials, meets the definition of MPO, despite the fact that the Toxic Substance travels through the Facility’s concentration process without undergoing any significant chemical change.

Although the Toxic Substance is present in the feedstocks at relatively low concentrations, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of feedstock that is processed at the Facility on an annual basis.

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

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan which are all requirements; the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

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

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

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **
Objectives, Targets and Description

Objectives

Objectives in plan: *

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

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
<th>Quantity</th>
<th>Unit</th>
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<tbody>
<tr>
<td>✓</td>
<td>or</td>
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What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
<th>No timeline target</th>
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<tbody>
<tr>
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<td>or</td>
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</table>

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

<table>
<thead>
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</tr>
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<tbody>
<tr>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is the targeted timeframe for this reduction? *

| No timeline target | years
|---------------------|-------|

X or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg. 455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **
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.

Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan
NA - 03, Cadmium (and its compounds)

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
As required by s.4(1) of the TRA, a Plan must include either a statement of the Facility’s intent to reduce the use and/or creation of the Toxic Substance at the Facility, or the reasons for not including this statement.

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRAs definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following MOECC guidance, processing of feedstocks in which the Toxic Substance is present due to natural deposition in previously mined and/or processed materials, meets the definition of MPO, despite the fact that the Toxic Substance travels through the Facility’s concentration process without undergoing any significant chemical change. Although the Toxic Substance is present in the feedstocks at relatively low concentrations, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of feedstock that is processed at the Facility on an annual basis.

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

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan which are all requirements; the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

As a part of fulfilling its requirements under the TRA and O.Reg.455/09, the Facility has prepared a total of nine Toxic Substance Reduction Plans and Plan Summaries for naturally occurring elements which are prescribed toxic substances and whose “use” cannot be reduced based on the factors presented above. The MOECC has stated that the TRA is not intended to focus on “end of pipe” emissions as they don’t necessarily have any bearing on the amount of a substance that is “used” or “created,” however the Facility would like to take this opportunity to inform the reader of the fact that the Facility currently complies with all environmental regulations that control the release and disposal of the Toxic Substance; meeting or exceeding the strict release limits imposed by these regulations for the Toxic Substance.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

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.
Objectives, Targets and Description

Objectives

Objectives in plan: *

The Objectives of the Plan are as follows:
• provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRAs definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;

• provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a “use” of the Toxic Substance; and

• document how the Facility has fulfilled the applicable requirements under the TRA and O.Reg.455/09 with respect to the Toxic Substance.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

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What is the targeted timeframe for this reduction? *

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Description of targets

Creation Targets

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**Reasons for Use**

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

**Reasons for Creation**

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

**Toxic Reduction Options for Implementation**

**Description of the toxic reduction option(s) to be implemented**

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.

Explanation of the reasons why no option will be implemented: **

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Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *
TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *
TSRP0002

What version of the plan is this summary based on?: *
New Plan

NA - 04, Chromium (and its compounds)

Substances Section Data

Statement of Intent
Are the following included in the Facility’s TRA Plan?
Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

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Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility's TRA Plan to reduce the creation of the toxic substance at the facility: **

If 'no', reason in the facility's TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

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.

Objectives, Targets and Description

Objectives

Objectives in plan: *

The Objectives of the Plan are as follows:
• provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRAs definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;
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Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
<th>Quantity</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
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</table>

What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
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Description of targets
Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target

<table>
<thead>
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<th>Unit</th>
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What is the targeted timeframe for this reduction? *

No timeline target

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<th>years</th>
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</thead>
<tbody>
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</table>

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation
Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *
Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.
Explanation of the reasons why no option will be implemented: **

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.

Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *
TSRP0002
License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan

NA - 05, Cobalt (and its compounds)

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
As required by s.4(1) of the TRA, a Plan must include either a statement of the Facility’s intent to reduce the use and/or creation of the Toxic Substance at the Facility, or the reasons for not including this statement.

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA’s definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following MOECC guidance, processing of feedstocks in which the Toxic Substance is present due to natural deposition in previously mined and/or processed materials, meets the definition of MPO, despite the fact that the Toxic Substance travels through the Facility’s concentration process without undergoing any significant chemical change. Although the Toxic Substance is present in the feedstocks at relatively low concentrations, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of feedstock that is processed at the Facility on an annual basis.

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

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, and preparation of a Toxic Substance Reduction Plan which are all requirements, the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

As a part of fulfilling its requirements under the TRA and O.Reg.455/09, the Facility has prepared a total of nine Toxic Substance Reduction Plans and Plan Summaries for naturally occurring elements which are prescribed toxic substances and whose “use” cannot be reduced based on the factors presented above. The MOECC has stated that the TRA is not intended to focus on “end of pipe” emissions as they don’t necessarily have any bearing on the amount of a substance that is “used” or “created,” however the Facility would like to take this opportunity to inform the reader of the fact that the Facility currently complies with all environmental regulations that control the release and disposal of the Toxic Substance; meeting or exceeding the strict release limits imposed by these regulations for the Toxic Substance.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

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.

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Objectives, Targets and Description

Objectives

Objectives in plan: *

The Objectives of the Plan are as follows:
• provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRAs definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;

• provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a “use” of the Toxic Substance; and

• document how the Facility has fulfilled the applicable requirements under the TRA and O.Reg.455/09 with respect to the Toxic Substance.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
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<th>Quantity</th>
<th>Unit</th>
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What is the targeted timeframe for this reduction? *

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Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

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What is the targeted timeframe for this reduction? *

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</table>
Reasons for Use
Why is the toxic substance used at the facility?: *
As a by-product

Summarize why the toxic substance is used at the facility: **
As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation
Why is the toxic substance created at the facility?: *
This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation
Description of the toxic reduction option(s) to be implemented
Is there a statement that no option will be implemented?: *
Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.
Explanation of the reasons why no option will be implemented: **
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.
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<td>Good operator practice or training</td>
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**Rationale for why the listed options were chosen for implementation**

**General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan**

**License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX):** *TSRP0002*

**License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX):** *TSRP0002*

**What version of the plan is this summary based on?:** *New Plan*

**NA - 06, Copper (and its compounds)**

**Substances Section Data**

**Statement of Intent**

Are the following included in the Facility's TRA Plan?
Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

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

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA's definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following the Ontario Ministry of the Environment and Climate Change (MOECC) guidance, processing of feedstocks in which the Toxic Substance is present due to natural deposition in previously mined and/or processed materials meets the definition of MPO, despite the fact that the Toxic Substance travels through the Facility’s concentration process without undergoing any significant chemical change.

Although the Toxic Substance is present in the feedstocks at relatively low concentrations, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of feedstock that is processed at the Facility on an annual basis.

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

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan which are all requirements, the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

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

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

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If 'no', reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

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.

Objectives, Targets and Description

Objectives

Objectives in plan: *

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

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
<tr>
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<th>Quantity</th>
<th>Unit</th>
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</table>

or

What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
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<tbody>
<tr>
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or

Description of targets
Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

<table>
<thead>
<tr>
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What is the targeted timeframe for this reduction? *

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<tr>
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Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.

Explanation of the reasons why no option will be implemented: **

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.

Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002
License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan

NA - 08, Lead (and its compounds)
NA - 08, Lead (and its compounds)

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility's TRA Plan to reduce the use of the toxic substance at the facility: **

If 'no', reason in the facility's TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
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This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan which are all requirements; the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

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

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **
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.

Objectives, Targets and Description

Objectives

Objectives in plan: *

The Objectives of the Plan are as follows:
• provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRAs definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;

• provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a “use” of the Toxic Substance; and

• document how the Facility has fulfilled the applicable requirements under the TRA and O.Reg.455/09 with respect to the Toxic Substance.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

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What is the targeted timeframe for this reduction? *

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Description of targets

Creation Targets

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Description of Target


Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **
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.

<table>
<thead>
<tr>
<th>Materials or feedstock substitution</th>
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</tr>
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<tbody>
<tr>
<td>Product design or reformulation</td>
<td>Empty</td>
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<tr>
<td>Equipment or process modifications</td>
<td>Empty</td>
</tr>
<tr>
<td>Spill or leak prevention</td>
<td>Empty</td>
</tr>
<tr>
<td>On-site reuse, recycling or recovery</td>
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</tr>
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<td>Empty</td>
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<tr>
<td>Good operator practice or training</td>
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</tr>
</tbody>
</table>

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan
NA - 09, Manganese (and its compounds)

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

**Use**

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
As required by s.4(1) of the TRA, a Plan must include either a statement of the Facility’s intent to reduce the use and/or creation of the Toxic Substance at the Facility, or the reasons for not including this statement.

A statement of the Facility’s intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA’s definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

Per guidance pertaining to the Toxic Substance, reporting is triggered if the Toxic Substance was “manufactured, processed, or otherwise used” (MPO) in the previous calendar year in an amount that is greater than a specified quantity. In the Facility’s case, and following the Ontario Ministry of the Environment and Climate Change (MOECC) guidance, processing of feedstocks in which the Toxic Substance is present due to natural deposition in previously mined and/or processed materials, meets the definition of MPO, despite the fact that the Toxic Substance travels through the Facility’s concentration process without undergoing any significant chemical change. Although the Toxic Substance is present in the feedstocks at relatively low concentrations, the Toxic Substance’s “use”-based reporting threshold was exceeded due to the large quantity of feedstock that is processed at the Facility on an annual basis.

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

This document satisfies the additional TRA requirement of Toxic Substance Reduction Plan preparation, which requires the Facility to systematically examine opportunities to reduce its “use” of the Toxic Substance. Unlike tracking, accounting, reporting and preparation of a Toxic Substance Reduction Plan which are all requirements; the implementation toxic substance reduction options identified in the Plan (if any) is not a requirement of the TRA or O.Reg.455/09.

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

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

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

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **
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.

Objectives, Targets and Description

Objectives

Objectives in plan: *

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

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
<th>Quantity</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒ or</td>
<td></td>
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</table>

What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
<th>No timeline target</th>
<th>years</th>
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<tbody>
<tr>
<td>☒ or</td>
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</table>

Description of targets


Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

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<tr>
<th>No quantity target</th>
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</thead>
<tbody>
<tr>
<td>☒ or</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is the targeted timeframe for this reduction? *

No timeline target years

☒ or

Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.

Explanation of the reasons why no option will be implemented: **
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.

<table>
<thead>
<tr>
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Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

```
TSRP0002
```

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

```
TSRP0002
```

What version of the plan is this summary based on?: *

```
New Plan
```
NA - 11, Nickel (and its compounds)
NA - 11, Nickel (and its compounds)

Substances Section Data

Statement of Intent
Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
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.

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---

**Creation**

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

**No**

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **
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Objectives, Targets and Description

Objectives

Objectives in plan: *

The Objectives of the Plan are as follows:
• provide support for the Facility’s position with respect to the Statement of Intent by providing an explanation of how the TRAs definition of the word “use”, as applied to the Toxic Substance, renders it impossible to reduce the “use” of the Toxic Substance without reducing Facility production;

• provide the reader with an understanding of the nature of the Facility activity which the TRA has defined as a “use” of the Toxic Substance; and

• document how the Facility has fulfilled the applicable requirements under the TRA and O.Reg.455/09 with respect to the Toxic Substance.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
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<tr>
<th>No quantity target</th>
<th>Quantity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>☒ or</td>
<td></td>
<td></td>
</tr>
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</table>

What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
<th>No timeline target</th>
<th>years</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Description of targets


Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
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<tbody>
<tr>
<td>☒ or</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is the targeted timeframe for this reduction? *

No timeline target

or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **
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Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan
NA - 22, Phosphorus (total)

Substances Section Data

Statement of Intent

Are the following included in the Facility’s TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **
As required by s.4(1) of the TRA, a Plan must include either a statement of the Facility's intent to reduce the use and/or creation of the Toxic Substance at the Facility, or the reasons for not including this statement.

A statement of the Facility's intent to reduce its “use” of the Toxic Substance has not been included as a part of this Plan. The Facility is captured by the requirements of the TRA pertaining to the Toxic Substance since the Facility meets the TRA definition of target facilities “with North American Industry Classification System (NAICS) codes commencing with the digits 212 (mining – except oil and gas – that processes minerals, but only if the mineral processing at the facility involves the use of chemicals to separate, refine, smelt or concentrate metallic or non-metallic minerals from an ore)” and also triggered the Toxic Substance’s TRA reporting threshold, which was adopted by the TRA from National Pollutant Release Inventory (NPRI).

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As a part of fulfilling its requirements under the TRA and O.Reg.455/09, the Facility has prepared a total of nine Toxic Substance Reduction Plans and Plan Summaries for naturally occurring elements which are prescribed toxic substances and whose “use” cannot be reduced based on the factors presented above. The MOECC has stated that the TRA is not intended to focus on “end of pipe” emissions as they don’t necessarily have any bearing on the amount of a substance that is “used” or “created,” however the Facility would like to take this opportunity to inform the reader of the fact that the Facility currently complies with all environmental regulations that control the release and disposal of the Toxic Substance; meeting or exceeding the strict release limits imposed by these regulations for the Toxic Substance.

### Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

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.
Objectives, Targets and Description

Objectives

Objectives in plan: *

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

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
<th>Quantity</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒ or ▬</td>
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<td></td>
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</table>

What is the targeted timeframe for this reduction? *

<table>
<thead>
<tr>
<th>No timeline target</th>
<th>years</th>
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</table>

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

<table>
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<tr>
<th>No quantity target</th>
<th>Quantity</th>
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<tr>
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<table>
<thead>
<tr>
<th>No timeline target</th>
<th>years</th>
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</table>
Reasons for Use

Why is the toxic substance used at the facility?: *

As a by-product

Summarize why the toxic substance is used at the facility: **

As stated elsewhere in this Plan, the Facility activity that the MOECC has defined for the purpose of the TRA as a “use” of the Toxic Substance is the handling and processing of previously mined and/or processed materials in which the Toxic Substance is present due to natural deposition. Since the Toxic Substance occurs naturally in mined materials, and the Facility is a mining and mineral processing facility, it is impossible to reduce this “use” of the Toxic Substance without reducing the Facility’s production. The Toxic Substance simply travels through the Facility process along with all other non-desired materials without undergoing any significant chemical change. It is impossible for the Toxic Substance to be created within the Facility process. The reason the Toxic Substance is reportable under the TRA and O.Reg.455/09 is because the substance is a minor elemental mass contribution to the ore that is processed in a large quantity in the Facility.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.

Explanation of the reasons why no option will be implemented: **

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Therefore the rationale for not implementing toxic substance reduction options is that no toxic substance reduction options could be identified.
Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Empty

Spill or leak prevention
Empty

On-site reuse, recycling or recovery
Empty

Improved inventory management or purchasing techniques
Empty

Good operator practice or training
Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan

<table>
<thead>
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Substances Section Data

Statement of Intent
Are the following included in the Facility's TRA Plan?
## Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

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.

## Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **
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 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 MOECC 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 MOECC 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 qualifying a 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 MOECC as a part of the ECA implementation process. Northern Sun Mining Corporation 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. As a result of satisfying all of the above noted regulatory requirements in addition to voluntary actions with respect to suspended particulate matter releases (Fugitive Dust Management, Dust Collectors).

Objectives, Targets and Description

Objectives

Objectives in 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" 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.

Use Targets

What is the targeted reduction in use of the toxic substance at the
facility? *

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What is the targeted timeframe for this reduction? *

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Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

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Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

This substance is not used at the facility

Summarize why the toxic substance is used at the facility: **

Reasons for Creation
Why is the toxic substance created at the facility?: *

As a by-product

Summarize why the toxic substance is created at the facility: **

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. MOECC 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 this 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.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

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.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications
Spill or leak prevention

On-site reuse, recycling or recovery

Improved inventory management or purchasing techniques

Good operator practice or training

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan

NA - M09, PM10 - Particulate Matter <= 10 Microns

Substances Section Data

Statement of Intent

Are the following included in the Facility's TRA Plan?

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **
If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

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.

**Creation**

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **
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 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.

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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**

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- 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 qualifying a 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 MOECC as a part of the ECA implementation process. Northern Sun Mining Corporation 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. As a result of satisfying all of the above noted regulatory requirements in addition to voluntary actions with respect to suspended particulate matter releases (Fugitive Dust Management, Dust Collectors).

### Objectives, Targets and Description

#### Objectives

Objectives in 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” 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.

#### Use Targets

What is the targeted reduction in use of the toxic substance at the
facility? *

<table>
<thead>
<tr>
<th>No quantity target</th>
<th>Quantity</th>
<th>Unit</th>
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<tbody>
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or

What is the targeted timeframe for this reduction? *

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or

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

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or

What is the targeted timeframe for this reduction? *

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<tr>
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<th>years</th>
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</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

This substance is not used at the facility

Summarize why the toxic substance is used at the facility: **

Reasons for Creation
Why is the toxic substance created at the facility?: *
As a by-product

Summarize why the toxic substance is created at the facility: **
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.
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Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *
Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **
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.

Materials or feedstock substitution
Empty

Product design or reformulation
Empty

Equipment or process modifications
Spill or leak prevention

On-site reuse, recycling or recovery

Improved inventory management or purchasing techniques

Good operator practice or training

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *
	TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *
	TSRP0002

What version of the plan is this summary based on?: *
	New Plan

NA - M10, PM2.5 - Particulate Matter <= 2.5 Microns

Substances Section Data

Statement of Intent
Are the following included in the Facility's TRA Plan?

Use
Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If 'yes', exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **
If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

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.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

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Objectives, Targets and Description

Objectives

Objectives in 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” 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.

Use Targets

What is the targeted reduction in use of the toxic substance at the
facility? *

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What is the targeted timeframe for this reduction? *

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Description of targets

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Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

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Description of Target

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Reasons for Use

Why is the toxic substance used at the facility?: *

This substance is not used at the facility

Summarize why the toxic substance is used at the facility: **

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Reasons for Creation
Why is the toxic substance created at the facility?: *

As a by-product

Summarize why the toxic substance is created at the facility: **

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.

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Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

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Materials or feedstock substitution

Empty

Product design or reformulation

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Equipment or process modifications
Spill or leak prevention

On-site reuse, recycling or recovery

Improved inventory management or purchasing techniques

Good operator practice or training

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0002

What version of the plan is this summary based on?: *

New Plan