Ontario Toxics Reduction Program

A Guide For Regulated Facilities

Ontario

PIBS 8695e

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Ontario's Toxics Reduction Act

A guide for regulated facilities

Important: It may be useful to read this guide together with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09.

This guide should not be considered legal advice. In the event of a conflict between this guide and the requirements of the legislation, the legislation shall govern.

This resource is to be used for guidance purposes only. It is intended to:

- explain the requirements set out in the Toxics Reduction Act, 2009 (the "Act") and Ontario Regulation 455/09 (the "Regulation")
- describe the scope of the legislation
- introduce key terms

For any addenda or revisions to this guide please visit the MOE website at: www.ene.gov.on.ca/
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Introduction

The Toxics Reduction Act, 2009 is the cornerstone of Ontario's strategy to reduce the use and creation of prescribed toxic substances. The goal of the Toxics Reduction Program is to help protect human health and the environment by:

- reducing prescribed toxic substances in air, land, water and consumer products
- informing people in Ontario about toxic substances in their communities
- giving Ontarians the information they need to make informed choices
- supporting shifts in domestic market to greener products
- positioning Ontario's manufacturing and mineral processing sectors to compete in an increasingly green global economy

Purpose of the Legislation

- to prevent pollution and protect human health and the environment by reducing the use and creation of prescribed toxic substances
- to inform Ontarians about prescribed toxic substances

The Act and Regulation set out the:

- class of facilities to which the Act and Regulation apply
- prescribed toxic substances
- timelines and rules for tracking, quantifying, planning and reporting on prescribed toxic substances
- exemptions to certain requirements

The Act and Regulation require facilities to examine how they are using or creating prescribed toxic substances and to consider opportunities for reducing prescribed toxic substances while recognizing that there may be essential and beneficial uses for some prescribed toxic substances.

The Act and Regulation do not restrict the use, creation, or release of prescribed toxic substances. Implementation of toxic substance reduction plans is voluntary.

Rationale

The Government of Ontario will support the transformation to a greener economy as regulated facilities are encouraged to:

- explore practical solutions to reduce the use and creation of prescribed toxic substances
- reduce the use and creation of prescribed toxic substances at the front end of industrial processes
- replace prescribed toxic substances with greener options

Other North American jurisdictions have seen successes in reducing prescribed toxic substances. This success has led to direct cost savings for some industries.

For instance, the state of Massachusetts achieved the following benefits through actions by industries under its Toxics Use Reduction Act:

- achieved a 55 per cent reduction in use of toxic chemicals, with 9 per cent increase in production from 1990 to 2005[1]
- reduced generation of toxic waste by 50 per cent between 1989 and 1998[2]
- reduced large quantity toxics users' use of toxic chemicals by 40 per cent, toxic byproducts by 71 per cent, toxics shipped in product by 41 per cent, and on-site releases of toxic chemicals by 91 per cent from 1990 to 2005[3]

[1] Until 2005, the TURA program analyzed changes in use of toxics by a core group of facilities that were in the program from 1990. 2005 Toxics Use Reduction Information Release (April 2008), available at www.mass.gov/dep/toxics/priorities/05relin.doc

[2] Toxics Use Reduction Act (TURA) Program Overview – Massachusetts Department of Environmental Protection – www.mass.gov/dep/toxics/tura/turaover.htm

[3] Until 2005, the TURA program analyzed changes in use of toxics by a core group of facilities that were in the program from 1990. 2005 Toxics Use Reduction Information Release (April 2008), available at www.mass.gov/dep/toxics/priorities/05relin.doc

What Regulated Ontario Facilities Need To Do

The Act requires the owners and operators of all facilities subject to the Act and Regulation, to take the following steps:

1. track and quantify the toxic substances, prescribed in Regulation, that are used, created, transformed, destroyed, released, disposed of, transferred and contained in product at the facility (Toxic Substance Accounting)
2. prepare plans to reduce the use and creation of the toxic substances prescribed in Regulation (Toxic Substance Reduction Planning) and have the plans certified both by the highest ranking employee at the facility with management responsibilities and by a person with qualifications set out in the regulation (a toxic substance reduction planner)
3. provide summaries of their plans to the public and the Ministry and notify employees the same day those summaries are made public
4. report annually to the Ministry and the public on their progress in reducing the prescribed toxic substances and notify employees the same day those reports are made public
5. review their plans in specific years

Terms You Need To Know

National Pollutant Release Inventory Notice (NPRI Notice): sets out the reporting criteria for Canada's legislated inventory of pollutant releases, disposals and transfers for recycling. The inventory is publicly accessible[4].

Ontario Regulation 127/01 – Airborne Contaminant Discharge Monitoring and Reporting (Reg. 127/01): requires Ontario-based facilities that emit set amounts of acetone to report to the government and to the public[5].

Many of the terms used in the Act and Regulation mirror those set out in the NPRI Notice for that year. This table lists some of the more common terms you need to know. Please refer to the NPRI Notice, for that year and the associated guide for the meaning of the terms.

***Table 1:** Common terms you need to know*

Term	Meaning
Destroyed	When a prescribed toxic substance is changed into one or more other substances that are not prescribed toxic substances, after it enters a process at the facility.
Disposal	Includes: - final disposal or transfer to a location off the facility site prior to final disposal - transfer to an area where tailings or waste rock are either discarded or stored and treated to reduce or prevent releases to air, water or land
Employee	A person employed at the facility. Includes: - the owner of the facility who performs work on site - a person, such as a contractor, who performs work at the facility related to its operations, for a certain period of time
Facility	Includes: - a contiguous or portable facility - a pipeline or offshore installation
Level of Quantification	The lowest concentration of a substance that can be accurately measured using sensitive but routine methods.
NAICS	The North American Industry Classification System, maintained for Canada by Statistics Canada. May be amended or revised from time to time.
Transformed	When a prescribed toxic substance is changed into one or more other prescribed toxic substances, after entering a process at a facility.

[4] www.ec.gc.ca/inrp-npri/

[5] www.e-laws.gov.on.ca/html/regs/english/elaws_regs_010127_e.htm

Do the Act and Regulation Apply to My Facility?

As the owner and/or operator of a facility in Ontario, you need to determine whether your facility needs to fulfill the requirements of the Act and Regulation.

Follow these three steps **each year:**

Step 1. Determine if your facility is engaged in a sector that is subject to the legislation.

1. Does your facility operate in the manufacturing sector? This includes facilities identified by a North American Industry Classification System (NAICS) code that starts with the digits "31", "32", "33".
2. Does your facility operate in the mineral processing sector? This includes facilities identified with a NAICS code that starts 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, concentrate, smelt or refine metallic or non-metallic minerals from an ore. It does not apply to the facilities that extract, crush or grind ore by non-chemical means).

Important:
It is your responsibility to determine the most applicable NAICS code based on the activities your facility is undertaking. The NAICS code applicable to your sector may be obtained from the Statistics Canada website[6].

If you answered 'yes' to questions 1 or 2 under Step 1: your facility may be required to take further steps to comply with the Act and Regulation. Continue with Step 2.

If you answered 'no' to both questions 1 and 2 under Step 1: the Act and Regulation do not apply to your facility for this year.

Step 2. Determine if your facility uses or creates one of the toxic substances prescribed in the Regulation.

1. Does your facility use or create acetone, which is listed in Reg. 127/01?
2. Does your facility use or create one or more of the substances listed in the most current NPRI Notices?

Important:
The prescribed toxic substances were separated into two Phases to focus on priority substances first:

- **Phase I:** 47 priority substances and substance groupings for which the requirements begin first. See **Appendix A** of this guide for a list of the priority substances and substance groups.
- **Phase II:** All remaining substances listed in the current NPRI Notices and acetone.

[6] www.statcan.gc.ca/subjects-sujets/standard-norme/naics-scian/2002/naics-scian02l-eng.htm

If you answered 'yes' to questions 1 or 2 under Step 2: your facility may be required to take further steps to comply with the Act and Regulation. Continue with Step 3.

If you answered 'no' to both questions 1 and 2 for all substances used and created at your facility under Step 2: the Act and Regulation do not apply to your facility this year.

Step 3. Determine if your facility is required to report under related Ontario or Canadian standards and regulations.

1. Are the owner and operator required to report under Reg. 127/01?
2. Are the owner and operator required to provide information under any of the current National Pollutant Release Inventory (NPRI) notices?

To confirm whether your facility is required to report under the current NPRI Notices and/or Reg. 127/01 you must consult the rules contained in each.

Important:

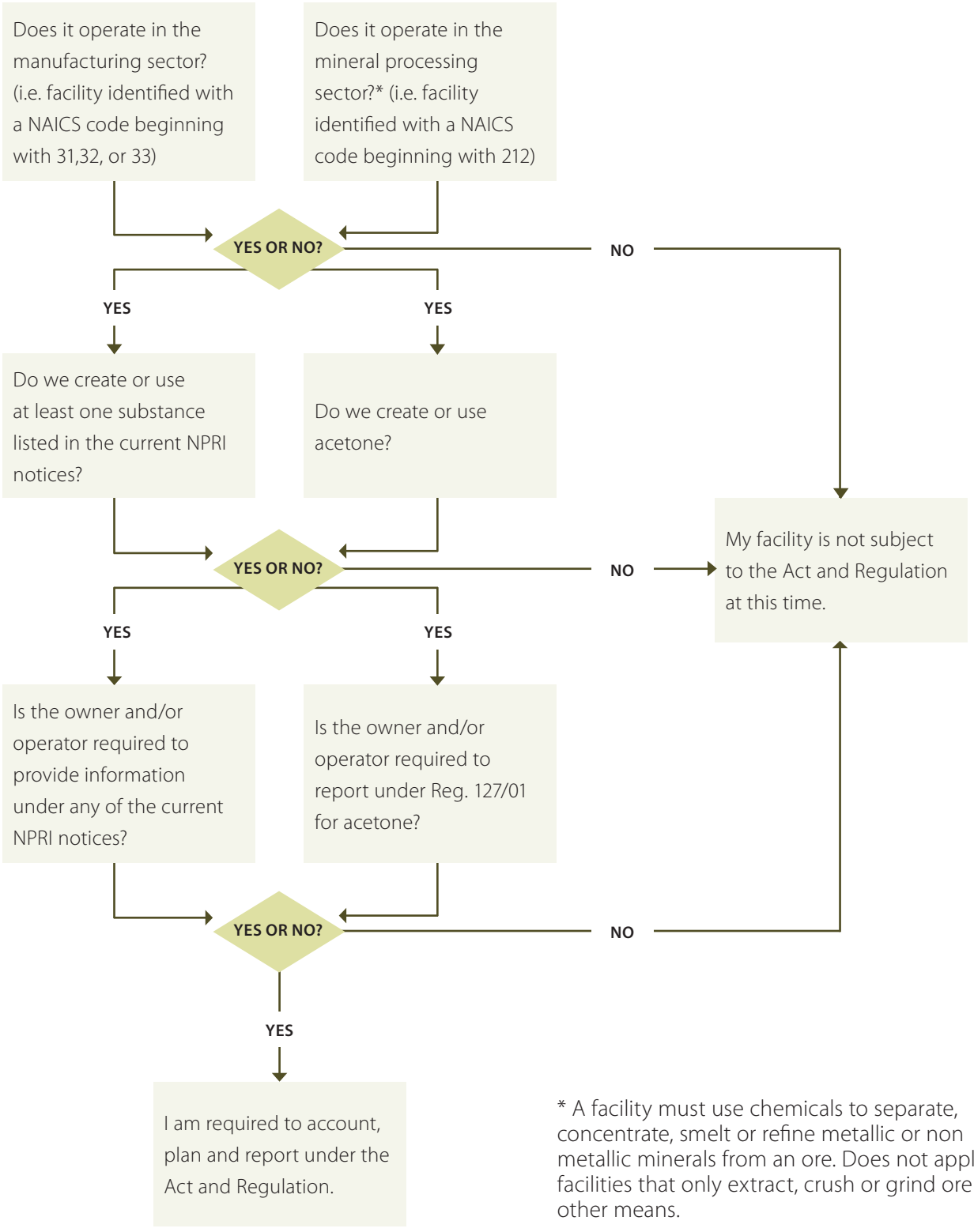
- Is your facility providing information to NPRI on total volatile organic compounds (VOCs)? Total VOCs is listed as Item 291 of Schedule 1 to the NPRI Notice. There is an exemption in the Regulation for *total* VOCs. Your facility is only required to account for, plan for, and report on VOCs individually, if that individual VOC (i.e. speciated VOC), listed in Part 5 of Schedule 1 to the NPRI Notice, meets the applicable NPRI threshold.
- Is your facility required to provide information to NPRI on dioxins, furans or hexachlorobenzene because your facility engaged in one or more activities listed by NPRI (e.g. base metals smelting, production of magnesium, etc)? If yes, that means your facility needs to account for, plan for and report on these substances individually under the Toxics Reduction Act, 2009 even if you reported "no information available" to NPRI.
- Is your facility only providing information to NPRI on total unspeciated polycyclic aromatic hydrocarbons (PAHs) because no individual PAH met the applicable NPRI threshold? If yes, then under the Toxics Reduction Act, 2009, your facility does not have to account, plan or report on the individual polycyclic aromatic hydrocarbons that make up the total unspeciated polycyclic aromatic hydrocarbons.

If you answered 'yes' to either questions 1 or 2 under Step 3: your facility needs to address all the requirements set out in the Act and Regulation to comply.

If you answered 'no' to both questions 1 and 2 under Step 3: the Act and Regulation do not apply to your facility this year.

Use the following flowchart to help you determine whether your facility needs to fulfill all the requirements set out in the Act and Regulation.

Figure 1: *How to determine whether the Act and Regulation apply to my facility*



* A facility must use chemicals to separate, concentrate, smelt or refine metallic or non metallic minerals from an ore. Does not apply to facilities that only extract, crush or grind ore by other means.

Key Dates

The requirements under the legislation will be phased in over four years. Below is a list of key dates.

Phase I

January 1, 2010: the requirements under the Act and Regulation apply to the list of 47 priority substances and substance groupings. Your facility will track and quantify the prescribed toxic substances for each process. See **Appendix A** for the complete list of priority substances and substance groups.

June 17, 2011: based on the information collected for 2010, your facility will have provided its first annual report to the Ministry by this date. Provide some of the information to the public and notify employees when it is available.

December 31, 2012: your facility must complete a plan for each Phase I substance. Keep the plan on-site at your facility. Provide a summary to the public on the Internet and to the Ministry by this date. Notify your employees when the summary is made public.

December 31, 2018: Your facility will conduct its first review during this year and prepare a new version of its plan by this date. Keep the new version of the plan on-site at your facility. Provide an updated plan summary to the public on the Internet and to the Ministry by this date. Notify your employees when the updated plan summary is made public.

Phase II

January 1, 2012: the requirements under the Act and Regulation apply to all of the substances listed in the current NPRI Notices and acetone. Your facility will track and quantify all the prescribed toxic substances used or created for each process.

June 1, 2013: based on the information collected for 2012, your facility will provide its first annual report to the Ministry by this date. Provide some of the information to the public and notify employees when it is available.

December 31, 2013: your facility must complete a plan for each Phase II substance. Keep the plan on-site at your facility. Provide a summary to the public on the Internet and to the Ministry by this date. Notify your employees when the summary is made public.

December 31, 2018: Your facility will conduct its first review during this year and prepare a new version of its plan by this date. All plans that are required to be prepared between 2012 and 2017 must be reviewed by this date. Keep the new version of the plan on-site at your facility. Provide an updated plan summary to the public on the Internet and to the Ministry by this date. Notify your employees when the updated plan summary is made public.

Important:

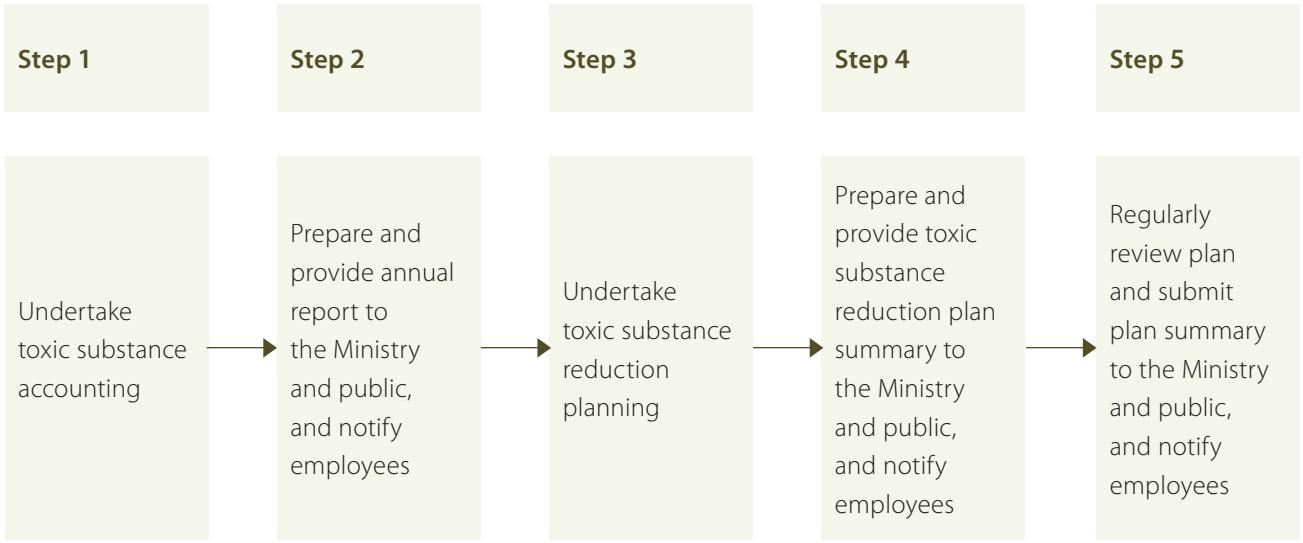
Your facility will annually track and quantify the prescribed toxic substances as well as report to the Ministry and the public on the Internet.

If your facility is subject to the Act and Regulation after the 2010 calendar year, adjust your reporting dates based on the actual start date. For example, if your facility is subject to the Act and Regulation as of the 2013 calendar year; your facility will provide its first annual report to the Ministry by June 1, 2014 and complete the plan and plan summary by December 31, 2014.

Steps To Comply With The Legislation

This section provides more information on the requirements your facility will have to meet if the Act and Regulation applies to it.

Figure 2: *Key steps to fulfilling the requirements under the Act and Regulation*



The five main actions in toxic substance accounting*

1. Identify stages and processes that use or create toxic substances

Describe and document every stage of the facility's operations that use or create a prescribed toxic substance. Identify a sufficient number of processes within each stage that use or create such a substance to show flow and change through each process and to permit quantification.

2. Prepare process flow diagrams

Visually represent the movement of a toxic substance through each process. Show the relationship between processes.

3. Choose a method or combination of methods

Choose the best available method or combination of methods to track and quantify a toxic substance and document the reasons for choosing the method(s).

4. Track and quantify the amounts of the substance

Track and quantify the process level amounts of a toxic substance that are used, created, transformed, transferred, destroyed, released, disposed of, and/or contained in product.

5. Compare input and output and explain "no approximate" balance (if any)

If the sum of inputs does not approximately equal the sum of outputs for a given process, document the reason(s) why in a record.

**Track and quantify each toxic substance at the process level.*

Step 1. Toxic substance accounting

Refer to section 9 of the Act and sections 12 and 13 of the Regulation.

The Act requires owners and operators of a facility to track and quantify prescribed toxic substances and the Regulation sets out the details.

The actions listed below are designed to help your facility:

- develop a comprehensive procedure to track and quantify prescribed toxic substances at the process level
- generate the information needed to understand the use and creation of the prescribed toxic substances
- determine which aspects of your operations are good targets for reducing prescribed toxic substances and to identify ways to reduce them
- establish a baseline from which your facility can track its progress, and measure its success if it decides to implement reduction options

For more information on the accounting requirements listed in the subsequent pages including examples, please refer to the Ministry's Toolkit for Toxic Substance Accounting.

1. Identify stages and processes that use or create the prescribed toxic substance

Refer to paragraph 1 of subsection 12(2) of the Regulation.

As part of this action, the owner and operator of a regulated facility must:

- Identify, describe and document every stage of its operations that uses or creates a prescribed toxic substance
- Identify a sufficient number of processes within each stage that use or create a prescribed toxic substance. The Act and Regulation do not explicitly define what a process is, so that facilities have some flexibility about how best to define processes to enable the tracking and quantification of the substance. It is up to the owner and operator of a regulated facility to determine how many processes is sufficient. Some industries may more commonly understand the term "process" by the terms "unit operation," or "activity," among others.

Important:
The term "use" refers to the amount of a substance that enters a process as either:

- the substance itself, or
- as part of another substance.

This would include substances found within raw materials and substances found in natural feedstocks.

The term "create" refers to any intentional or incidental creation of a substance.

Once created, the substance may be destroyed, transformed, released, disposed of, transferred or leave the process and/or facility contained in product(s).

Action required
Create a record of this data. Include the record in the toxic substance reduction plan and complete the plan by the stated due date. To learn more, see page 26.

Tip: Refer to the location of the record within the plan instead of reproducing it.

2. Prepare process flow diagram(s)

Refer to paragraph 2 of subsection 12(2) as well as subsections 12(3) and 12(4) of the Regulation.

As part of this action, the owner and operator of a regulated facility will develop a process flow diagram that:

- visually represents the movement of a prescribed toxic substance through each process – from the time a substance enters the process, whether it is created, destroyed or transformed during the process, how it leaves the process and what happens to it after it leaves the process
- shows the relationships between the processes
- may include quantifications of amounts used, created, destroyed, transformed, released, disposed of, transferred and contained in product(s)

Tip: Utilize and/or change/supplement existing process flow diagrams to support your facility in meeting this requirement.

Action required

Create a record of the process flow diagram(s). Include the record in the toxic substance reduction plan and complete the plan by the stated due date. To learn more, see page 26.

Tip: Refer to the location of the record within the plan instead of reproducing it.

3. Choose a method or combination of methods

Refer to paragraphs 5 of subsection 12(2) and subsections 12(6), 12(7) and 12(8) of the Regulation.

Your facility will choose the best available method or combination of methods to track and quantify a prescribed toxic substance for each process.

To determine the best available method consider:

- how the substance enters the process, what happens to the substance during the process, how it leaves the process and what happens to it after it leaves the process
- industry standards (i.e. best practices used in similar facilities)
- the economic cost, to your facility, of the method or combination of methods
- established and recognized methods listed in the Regulation
- whether a method is required to comply with a federal, provincial or municipal law.

The methods listed in the Regulation include:

- continuous monitoring
- predictive monitoring
- source testing or sampling
- mass balance
- published emission factors
- site-specific emission factors
- engineering estimates.

Action required

Document the method(s) your facility uses for tracking and quantifying a prescribed toxic substance and explain why it chose the method(s) in a record. Include this record in your facility's toxic substance reduction plan and complete the plan by the stated due date. To learn more, see page 26.

Tip: Refer to the location of the record within the plan instead of reproducing it.

Important:
Using the same method or combination of methods over time, for a prescribed toxic substance, ensures consistency in the approach used by your facility to collect data. This, in turn, makes it easier to track your facility's progress in reducing toxic substances.

Your facility can only change methods in three cases:

- it is required to do so by law
- it decides to change the methods at the time of a plan review
- the planner makes a recommendation for a change in methods and the change is made before the next report is due (i.e. By June 1 in the year immediately following the year in which the recommendation was required to be made).

In any of these cases, if your facility changes its method(s), update the record that documents the method(s) it uses.

A change in method(s) refers to a change from one method category to another method category. For example your facility decides to change its method from mass balance to engineering estimates.

4. Track and quantify the amounts of the prescribed toxic substance

Refer to subsection 12(1) and to paragraph 3 of subsection 12(2) of the Regulation.

As part of this action, the owner and operator of a regulated facility will track and quantify the process-level amounts of a prescribed toxic substance that:

- **enters a process** as the substance itself or as part of another substance (amount used)
- is **created** during each process
- is **transformed or destroyed** during each process
- is **released, disposed of and transferred** from each process
- is **contained in product.** (Note: This applies only to prescribed toxic substances that are not criteria air contaminants or volatile organic compounds listed in Parts 4 and 5 of Schedule 1 of the NPRI Notices or acetone)

Important:
For quantities contained in product: quantify the amount of the prescribed toxic substance that leaves the process in all products. This includes consumer products as well as products that will be used in another process. Your facility does not have to identify the specific consumer product(s) within which the prescribed toxic substance is found.

For quantities released, disposed of and transferred: your facility already tracks and reports these amounts to NPRI. Provide the same information to the Ministry.

Action required
Create a record containing the process-level amounts of a substance. Include the record in your facility's toxic substance reduction plan and complete the plan by the stated due date. To learn more, see page 26.

Tip: Refer to the location of the record within the plan instead of reproducing it.

5. Compare inputs and outputs and explain no "approximate" balance, if any

Refer to paragraph 4 of subsection 12(2) and subsection 12(5) of the Regulation.

As part of this action, the owner and operator of a regulated facility will determine whether the sum of the inputs in a given process approximately equals the sum of the outputs. The inputs may be used or created. The outputs may be destroyed, transformed or leaves the process.

Used + Created = Transformed + Destroyed + Leaves Process

Leaves Process includes amounts released, disposed of, transferred and contained in product(s).

The Ministry also recognizes that in some instances input/output balances will not be equal or approximately equal. If the sum of the inputs does not approximately equal the sum of the outputs for a given process at the facility, document the reason(s) why in a record.

The action listed here is designed to help your facility determine whether the reason the sum of the inputs does not approximately equal the sum of the outputs may be because:

- missing information
- the fate of a substance was overlooked
- the process flow diagram is not complete and therefore needs to be revised (i.e. an input or output was not included)
- the method(s) for tracking and quantifying the substance should be changed to increase data accuracy. Note that the method(s) can be changed as part of the plan review, if required by another law or if the planner makes a recommendation to change it
- of measurement variability
- the process and/or operation conditions were changed
- there may be another reason for the gap

Action required

Create a record containing the explanation of why the sum of the inputs does not approximately equal the sum of the outputs, if applicable. Include the record in your facility's toxic substance reduction plan and complete the plan by the stated due date.

Tip: Refer to the location of the record within the plan instead of reproducing it.

Step 2. Reporting your facility's progress each year

Refer to section 10 of the Act and sections 25, 26 and 27 of the Regulation.

Reports give your facility a way to communicate progress in:

- reducing the use and creation of toxic substances
- implementing your plan(s)

Your facility needs to report to both the Ministry and the public each year. The information that your facility will report to the Ministry is different than the information that your facility will report to the public. The table below provides an overview of the similarities and differences between the report to the Ministry and the report to the public.

Table 2: *Comparison of the annual report to the Ministry and the annual report to the public*

Contents of Report to Ministry	Contents of Report to Public
General information: About your facility About report contacts About the toxic substance(s) for which your facility must prepare a plan	Similar info, except: - no business number and - contact info only for the public contact
Your facility's approach to toxic substance accounting: Facility-wide amounts used, created, contained in product as well as amounts released, disposed of and transferred in the same categories required by NPRI Indication of changes in methods, significant process changes, non-routine events	Similar info, except: - used, created, contained in product (amounts may be expressed in ranges specified by the Ministry) - no information on methods, significant process changes, non-routine events
Your facility's objectives and any targets	Same
Your facility's progress in reducing the substance: Comparison of toxic substance accounting to previous reporting period Reasons for changes from previous reporting period	Similar info, except: - summary of the reasons for changes from previous reporting period
Your facility's progress in implementing its plan (if applicable): Indication of when your facility prepared its plan (i.e. before or during the current reporting period) Estimates of toxics reduction achieved Difference between steps taken and those in the plan Indication of whether timetable of steps will be met Amendments to the plan	Similar info except: - summary only of estimate of toxics reduction achieved, steps taken and the difference between steps taken and those in the plan
Certification by highest-ranking employee	A copy of the certification

1. What information must the report to the Ministry include?

Your facility's first report for a prescribed toxic substance will be different than all of the later reports. This is because your facility will have to prepare and submit this report to the Ministry before it:

- has developed a plan for that substance, and
- has a prior year's worth of data to compare against the data in the report.

What to include in your first report to the Ministry

Refer to subsections 26(1), 26(3) and 26(4) of the Regulation.

1. General information

In many cases the information required under the Act and Regulation is similar to what you are required to submit under NPRI:

About your facility

Provide the:

- NPRI identification number
- if applicable, facility's identification number under Reg. 127/01
- name and contact information for the owner and the operator of the facility
- name and contact information for the highest ranking employee at the facility
- number of full-time employee equivalents
- two, four and six digit NAICS code
- spatial coordinates for the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83)

Important:

If your facility is a subsidiary of a Canadian parent company, also provide:

- legal name of the parent company
- street and mailing address of the company
- what percentage of the facility is owned by the parent company
- the business number assigned by Canada Customs and Revenue Agency.

About report contacts

Provide the name, position, and contact information of:

- the highest ranking employee at the facility
- the person who prepared the report
- any public contact(s)
- any technical contact(s)

About the toxic substance(s) for which your facility must prepare a plan

Provide:

- the name, as listed in the Act or NPRI Notices
- any Chemical Abstract Service Registry number(s)

2. Toxic substance accounting results

- Include the precise facility-wide amounts that are:
  - » used
  - » created
  - » contained in product. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts 4 and 5 of Schedule 1 to the NPRI Notice) or acetone

  - » released, disposed of and transferred in the same categories required by NPRI.
- Indicate whether your facility has experienced any incidents out of the normal course of events during the prior calendar year. If yes, state whether and how this may have affected the tracking and quantification results.

3. Certification

Include a signed statement from the highest ranking employee with responsibilities for managing the facility. This person must sign a statement that he or she:

- has read the report(s)
- is familiar with its contents
- believes the report(s) is factually accurate and that it complies with the Act and Regulation – to the best of his or her knowledge

Tip: Only one certification statement by the highest ranking employee at the facility is needed for all reports.

Required content in the first annual report

1. General Information

Include general information about your facility, report contacts and list of toxic substances used and/or created.

2. Toxic substance accounting results

Include the facility wide amounts that are:

- used
- created
- contained in product
- released (as provided to NPRI)
- disposed of (as provided to NPRI)
- transferred (as provided to NPRI)

Indicate any non-routine event(s) and explain how it affected the tracking and quantification results.

3. Certification

Include a signed statement(s) from the highest ranking employee at the facility.

Additional information to include in all later reports to the Ministry

Refer to section subsection 26(2) of the Regulation.

Your facility's later reports for a prescribed toxic substance will include all of the information required in the first report as well as the additional information listed below.

This is because your facility will have:

- developed a plan for that substance and
- a prior year's worth of data to compare against the data in the report.

4. About plan contacts

Provide the name, position, and contact information of the:

- person who coordinated the preparation of the plan
- person who prepared the plan (if different from the plan coordinator)

5. Your facility's objectives and targets – after a plan has been prepared

- Include a copy of the objectives your facility set out in the current version of the plan.
- Include any targets that your facility may have set out in the current version of the plan.

6. Your facility's progress in reducing the substance

- Compare the latest tracking and quantification results with those of the prior reporting period. Be sure to:
  - » compare the quantities of the substance used, created, contained in product, released, disposed of and transferred
  - » express these compared results in two ways: i) as a percentage, and ii) in the units of measurement required by NPRI for that substance, and in tonnes for acetone
- If there have been changes to the tracking and quantification results, explain the changes.

Example

Year	Substance	Amount	Change
2010	benzene	103 tonnes	↓ 2.9 per cent ↓ 3 tonnes
2011	benzene	103 tonnes	

7. Changes in tracking and quantification methods

- Indicate whether your facility has changed the method or combination of methods it used to track and quantify the substance during the prior calendar year. If yes, include within the report:
  - » a description of the change
  - » the reason for the change
  - » how the change will affect tracking and quantifying the substance

8. Indication of a significant process change – after a plan has been prepared

- Indicate whether your facility has made any significant process changes during the prior calendar year.

9. Your facility's progress in implementing its plan – after a plan has been prepared

- Indicate when your facility prepared its plan, before or during the current reporting period?
- Indicate whether your facility has achieved any of its plan objectives. Has it achieved any targets stated in the plan, if it set out targets?
- For each option your facility plans to implement (if applicable), identify:
  - » what steps your facility took during the prior calendar year to implement the option
  - » how much your facility reduced the amount of the substance used, created and discharged to air, land or water during the prior calendar year
  - » how much has your facility reduced the substance contained in product during the prior calendar year. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts 4 and 5 of Schedule 1 of the NPRI Notice) or acetone
  - » whether your facility will meet the timelines set out in the current version of its plan
  - » how the steps taken by your facility during the prior calendar year compare to those set out in the current plan
- If your facility has taken any extra actions in the prior calendar year to achieve the plan objectives – including any targets, include:
  - » a description of the additional actions taken
  - » the amount, if any, your facility has reduced the substance's:
    - * use
    - * creation
    - * discharges to air, land or water during the prior calendar year

    * contained in product amount during the prior calendar year. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts 4 and 5 of Schedule 1 of the NPRI Notice) or acetone

- If your facility has voluntarily amended its plan in the prior calendar year, describe the changes that were made.

Important:

If your facility provided a report to the Ministry in 2011 (based on the tracking and quantification information for the 2010 calendar year) and is required to provide a report to the Ministry in 2012 (based on the tracking and quantification information for the 2011 calendar year), include the following in the report:

- General information
- Your facility's approach to toxic substance accounting
- Your facility's progress in reducing the substance
- Changes in tracking and quantification methods
- Certification

To learn more about the content required for each of the above, refer to pages 16 to 19.

Note: The content of this report is unique. If your facility's first report is required by June 1, 2012, this does not apply to you.

Required content in subsequent annual reports

** Note: If your facility is submitting its second annual report in 2012, steps 4, 7 and 8 are to be omitted.*

1. General Information

Include general information about your facility, report contacts and list of toxic substances used and/or created.

2. Plan Contacts

Include general information about your plan contacts.

3. Toxic substance accounting results

Include the facility wide amounts that are:

- used
- created
- contained in product
- released (as provided to NPRI)
- disposed (as provided to NPRI)
- transferred (as provided to NPRI)

Indicate any non-routine event(s) and explain how it affected the tracking and quantification results.

4. Facility's objectives and targets

Include a copy of the objectives set out in the current version of the plan and any targets.

5. Your facility's progress in reducing the toxic substance

Compare your toxic substance accounting results to the previous reporting period and provide reasons for any changes.

6. Changes in tracking and quantification methods

Indicate any changes in tracking and quantification methods and explain how it will affect accounting results.

7. Significant process changes

Indicate any significant process changes.

8. Progress your facility has made to implement its plan (if applicable)

Indicate when your facility prepared its plan. Include:

- Estimates of reductions achieved.
- Difference between steps taken and those set out in the plan and whether the timetable for the steps will be met.
- Amendments to the plan.

9. Certification

Include a signed statement(s) from the highest ranking employee at the facility.

2. How will your facility submit its report to the Ministry?

Your facility needs to submit the report electronically to the Ministry. *Refer to section 30 of the Regulation.*

Important:
The Ontario government has partnered with the Federal government to use an existing and familiar on-line tool for reporting, the One Window to National Environmental Reporting System (OWNERS). The system is secure and easy to use.

3. What information will your facility share with the public?

Refer to subsections 27(1), 27(2) and 27(3) of the Regulation.

One of the purposes of the Act and Regulation is to inform Ontarians about toxic substances. As such, your facility must share the following information with the public:

1. General information

About your facility

Include the:

- name and contact information for the owner and the operator of the facility
- name and contact information for the public contact
- NPRI identification number
- if applicable, the facility's identification number under Reg. 127/01
- number of full-time employee equivalents
- two, four and six digit NAICS code
- spatial coordinates for the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83)

Important:
If your facility is a subsidiary of a Canadian parent company, also provide:

- legal name of the parent company
- street and mailing address of the company
- what percentage of the facility is owned by the parent company

About the toxic substance(s) for which your facility must prepare a plan

Include:

- name, as listed under the Act or NPRI Notices
- any Chemical Abstract Service Registry number(s)

2. What your facility aims to achieve – after a plan has been prepared

Include:

- a copy of the objectives your facility set out in the current version of the plan
- a copy of any targets that your facility may have set out in the current version of the plan

3. Your facility's approach to toxic substance accounting

- Include the facility-wide amounts of the toxic substance for which the report has been prepared that are:
  - » used
  - » created

- » contained in product. Note: this applies only to those substances that are not criteria air contaminants, volatile organic compounds (Parts four and five of Schedule one of the NPRI Notice) or acetone
- » released, disposed of and transferred in the same categories required by NPRI

Important:
The owner and the operator of your facility may choose to report facility-wide amounts used, created and contained in product to the public in actual amounts or in ranges specified by the Ministry.

The Ministry has identified the following ranges to express the amount of a substance used, created and contained in product to the public:

Amounts in Grams, Kilograms, Tonnes[7]
> 0 to 1
> 1 to 10
> 10 to 100
> 100 to 1000
> 1000 to 10,000
> 10,000 to 100,000
> 100,000 to 1,000,000
> 1,000,000

If your facility is concerned that ranges may allow the public to misinterpret the amounts reported, because the public may assume that values are closer to the high end of the range than the lower end, your facility may choose to report these amounts in absolute values.

In consideration of the fact that 2011 was the first time actual quantifications for use, creation, and contained in product for prescribed toxic substances were reported in Ontario, the Ministry will use this first set of data reported by regulated facilities under the Act to assess the validity of the ranges and their application to each prescribed substance.

Should revisions to ranges be required, the Ministry will provide information on these changes to both the reporting facilities and the public for further consultation.

4. Your facility's progress in reducing the substance

- Compare the tracking and quantification results of this reporting period (i.e. the results based on the previous calendar year) with those of the prior reporting period. Be sure to:
  - » compare the quantities of the substance used, created, contained in product, released, disposed of and transferred
  - » express these compared results in two ways: i) as a percentage, and ii) in the units of measurement required by NPRI for that substance or in tonnes for acetone

[7] Units (grams, kilograms, tonnes) are the same units as required under the Act and Regulation (and NPRI).

Example

Year	Substance	Amount	Change
2010	benzene	103 tonnes	↓ 2.9 per cent ↓ 3 tonnes
2011	benzene	100 tonnes	

- If there have been changes in the quantities of the substance used, created, contained in product, released, disposed of or transferred, provide a summary of these reasons to the public.

5. Your facility's progress implementing its plan – after a plan has been prepared

- Indicate whether your facility has achieved any of its plan objectives. Has it achieved any targets stated in the plan?
- For each option your facility plans to implement, include a summary of:
  - how much your facility has reduced the amount of the substance it:
    - uses
    - creates and
    - discharges to air, land or water during the prior calendar year
  - how much your facility has reduced the amount in product during the prior calendar year? Note: this applies only to those prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts 4 and 5 of Schedule 1 of the NPRI Notice) or acetone
  - has your facility met the timelines set out in the current version of its plan?
  - how do the steps taken by your facility during the prior calendar year to implement its plan compare to those set out in the current plan?
- If your facility has taken any extra actions in the prior calendar year to achieve the plan objectives – including any targets, include a summary of:
  - the actions taken
  - the amount, if any, your facility has reduced the substance's:
    - use
    - creation and
    - discharges to air, land or water
  - the amount of the substance, if any, your facility has reduced that was contained in product during the prior calendar year. Note: this applies only to those prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
- If your facility has voluntarily amended its plan in the prior calendar year, summarize the changes that were made.

6. Certification

- Include a copy of the signed statement from the highest ranking employee with responsibilities for managing the facility.

Reminders:

The first report your facility shares with the public will be different than all following reports.

This is because you will have to prepare this report before you:

- have developed a plan for that substance, and
- have a prior year's worth of data to compare against the data in the first report

If your facility was required to share a report with the public in 2011 and is required to share a report with the public in 2012 include the following in the 2012 public report:

- General information.
- Your facility's approach to toxic substance accounting.
- Your facility's progress in reducing the substance.
- Certification

To learn more about the content required for each of the above, refer to pages 22 to 24.

The information your facility will provide to the public

1. General Information

Include general information about your facility, contact people and list of toxic substances used and/or created.

2. Facility's approach to toxic substance accouting

*Amounts of the toxic substance used, created and contained in product expressed in specific amounts or in ranges, if the Ministry specifies ranges.

3. Facility's objectives and targets

A copy of the objectives your facility set out in the current version of the plan and any target.

4. Your facility's progress in reducing the toxic substance

Compare your toxic substance accounting results to the previous reporting period and provide a summary of the reasons for any changes.

5. Progress your facility has made to implement its plan (if applicable)

Include a summary of:

- Estimates of reductions achieved.
- Difference between steps taken and those set out in the plan.
- Amendments to the plan.

6. Certification

Include a copy of the signed statement from the highest ranking employee at the facility.

** Amounts released, disposed, transferred are publicly available on the NPRI website. Facilities are required to make all other required information available to the public on the Internet.*

4. How will your facility distribute its report to the public?

Refer to subsections 27(1) and 27(4) of the Regulation.

Your facility must provide copies of the report:

- on the Internet (for example, on the facility's or parent's company website)
- in print form, upon request from a member of the public.

In addition, your facility must notify employees that it has released the report on the day that it makes the report available to the public on the Internet.

Step 3. Developing a plan to reduce a prescribed toxic substance

With this step, your facility will identify and assess options to reduce the use and creation of a toxic substance . The planning process may reveal opportunities for reducing the use and creation of the prescribed toxic substance. As a result of going through this process, your facility may decide to implement a toxic substance reduction program.

Six actions in building a Toxic Substance Reduction Plan

1. Establish a cross functional team (suggested, not required).
2. Identify the costs associated with a toxic substance.
3. Identify ways to reduce toxics in each of the seven categories of toxics reduction.
4. Assess these options, including their technical and economic feasibility.
5. Choose the best option(s) for implementation (if applicable).
6. Map out implementation steps and timelines (if applicable).

Important:
Complete a plan for each prescribed toxic substance and keep the plan at your facility.

1. What information must a plan include?

Refer to section 4 of the Act and sections 15.1, 16, 17, 18, 18.1, 18.2, 19, 19.1 and 19.2 of the Regulation.

When you are preparing your plan, use the information contained in the report due by June 1 of that year (i.e. the plan is based on the previous calendar year's tracking and quantification results).

Tip: Your facility may have already developed documents which meet some plan content requirements or which are useful and or relevant in the preparation of plan content requirements.

The following text describes the content that owners and operators of regulated facilities must include within a plan:

The required content in a plan*

1. General Information

Include general information about your facility, contact people, name and licence number of planner(s) and list of toxic substances used and/or created.

2. Facility's intent, objectives and targets

Include a simple statement of your facility's intent to reduce the use and creation of the prescribed toxic substance or the reasons for not including a statement as well as a list of specific objectives including any targets.

3. Facility's stages and processes

Include records of: your facility's stages, descriptions of processes and process flow diagrams (visual representation of the flow of the substance through the process).

4. Information on toxic substance accounting

Include records of: methods used to track and quantify; quantifications; and reasons why the sum of inputs is not approximately equal to the sum of outputs (if applicable).

5. Cost estimates

Include an estimate of your facility's yearly direct and indirect costs related to the substance.

6. Options to reduce

Document the options considered by your facility to reduce the use and/or creation of the prescribed toxic substance. For each option record the toxic reduction estimates and the technical and economic feasibility analyses.

7. Implementation plan (if applicable)

Include a list of options that your facility plans to implement including the steps, timetable, estimated reductions and dates for achieving reductions in the use and/or creation OR an explanation of why no options will be implemented.

8. Recommendations by the Planner

Include the recommendations made by the planner and the rationale for the recommendations and/or an explanation as to why there are no recommendations.

9. Certifications

Include signed statements from the highest ranking employee at the facility and the toxic substance reduction planner.

** Prepared for each toxic substance at the facility level.*

1. General information

About your facility

Include the:

- NPRI identification number
- if applicable, facility's identification number under Reg. 127/01
- name and contact information for the owner and the operator of the facility
- name and contact information for the highest ranking employee at the facility
- number of full-time employee equivalents
- two, four and six digit NAICS code
- spatial coordinates for the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83)

Important:
If your facility is a subsidiary of a Canadian parent company, also provide:

- legal name of the parent company
- street and mailing address of the company
- what percentage of the facility is owned by the parent company
- the business number assigned by Canada Customs and Revenue Agency

About the toxic substance for which your facility must prepare a plan

Include:

- the name, as listed in the Act or NPRI Notices
- any Chemical Abstract Service Registry number

About plan contacts

Provide the name, position, and contact information of:

- the person coordinating the preparation of the plan
- the person who prepared the plan (if different from the plan coordinator)
- any public contact for the facility
- any technical contact for the facility

About the toxic substance reduction planner

Include the:

- licence number of the planner who made recommendations and provided the corresponding rationale for those recommendations or provided a written explanation of why there are no recommendations
- licence number of the planner who certified the plan
  Tip: The same planner may make recommendations and certify the plan.

2. Your facility's intent, objectives and any targets

Include:

- a statement of your facility's intent to reduce the use and creation of this substance
  Note: *your facility may omit such a statement as long as it provides a statement to say it is not intending to reduce the use and creation of the substance and provides the reasons why. For example, your facility may already have taken steps to reduce the use and creation of the substance. This statement will form part of your facility's plan summary.*
- a list of specific objectives, including any targets your facility may have set for reducing the use or creation of a substance

3. Your facility's stages and processes

Include:

- a record that documents every stage of your facility's operations that uses or creates the substance

Tip: creating this record was one of the actions required as part of toxic substance accounting; refer to the location of the record within the plan instead of reproducing it

- a description of the processes within each stage that use or create the substance. Include how, when, where and why the substance is used or created
- a record of the process flow diagrams for each process that uses or creates the substance

  Tip: creating this record was one of the actions required as part of toxic substance accounting; refer to the location of the record within the plan instead of reproducing it

4. Your facility's toxic substance accounting information

Include:

- a record that identifies the method(s) used to track and quantify the substance and explains why the method or combination of methods was chosen.

  Tip: creating this record was one of the actions required as part of toxic substance accounting; refer to the location of the record within the plan instead of reproducing it
- the quantifications used to prepare the plan.

  Tip: creating this record was one of the actions required as part of toxic substance accounting; refer to the location of the record within the plan instead of reproducing it
- if needed, a record that contains the reasons why the sum of the inputs for a given process is not approximately equal to the sum of the outputs for that process.

  Tip: creating this record was one of the actions required as part of toxic substance accounting; refer to the location of the record within the plan instead of reproducing it.

5. Cost estimates

Include:

- an estimate of your facility's yearly costs related to this prescribed toxic substance. This includes direct and indirect costs related to the substance being:
  - » used or created
  - » released
  - » disposed of
  - » transferred
  - » contained in product that leaves the facility. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts four and five of Schedule one of the NPRI Notice) or acetone

6. Options to reduce

Include:

- a description and analysis of the options that your facility considered to reduce the use or creation of the prescribed toxic substance. Include at least one option for each of the seven categories listed below or an explanation of why an option could not be identified for a particular category.

The seven categories of toxics reduction are:

1. Materials or feedstock substitution
2. Product design or reformulation
3. Equipment or process modifications
4. Spill and leak prevention
5. On-site reuse or recycling
6. Improved inventory management or purchasing techniques
7. Training or improved operating practices

Important:
Your facility cannot identify or select options that would:

- contravene another federal, provincial or municipal law
- have a greater net negative impact on human health and the environment

- an estimate of the amount by which each option would reduce the prescribed toxic substance. This includes identifying the estimated reductions in the amount:
  - » used
  - » created
  - » released to air, land or water, disposed of and transferred
  - » contained in product leaving the facility. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
- a record of the data and methods that were used to prepare the estimates of reduction.

Important:
All estimates stated in your facility's plans must be:

- expressed as a percentage and in the unit of measurement required to be used by NPRI or in tonnes if the substance is acetone
- developed in good faith, using the best available information
- calculated using the same quantifications set out in the current version of the plan

- a list of the options that your facility determines are technically feasible
- a report on the economic feasibility of each option that your facility has determined to be technically feasible. This must include the anticipated savings for each option, if any, and the anticipated payback period
- a list of options that your facility determines to be both technically and economically feasible. These could be the options that a facility chooses to implement

7. Implementation plan (if applicable)

Include:

- a list of the options, if any, that your facility plans to implement
- for each option that your facility plans to implement, include:
  - » a description of the steps your facility will take to implement the option
  - » the timetable for those steps
  - » an estimate of the amount by which each option would reduce the amount of the prescribed toxic substance:
    - * used
    - * created
    - * released, disposed of and transferred to air, land or water
    - * contained in product. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
      Tip: these estimates were prepared previously. See number six, page 29 – options to reduce toxic substances
  - » the anticipated dates for achieving the estimated reductions in use and creation of the substance.

OR

- if your facility does not plan to implement any of the options, state this within the plan and provide an explanation of why no options will be implemented. This statement will also be included in the plan summary.

8. Recommendations by the planner

Include:

- recommendations made by the toxic substance reduction planner and the rationale for the recommendations and/or explain why no recommendations were provided.
    - » when making recommendations, the planner will decide whether improvements can be made:
        - * in the expertise relied on to prepare your facility's plan
        - * to the data and methods used for tracking and quantifying the prescribed toxic substance
        - * to the record that documents every stage of your facility's operations that uses or creates the substance
        - * to the record of process flow diagrams for each process at your facility that uses or creates the substance
        - * to the record that contains the reasons why the sum of the inputs for a given process is not approximately equal to the sum of the outputs for that process, if needed
        - * to the description of why the substance is used or created within the processes
        - * to the list of options that your facility determines to be both technically and economically feasible; specifically the toxic substance reduction planner will determine whether there are additional options that would result in reductions of the prescribed toxic substance that are equal to or greater than those already identified in the plan
        - * to the estimate of the amount by which each option would reduce the prescribed toxic substance. This includes the estimated reductions in the amount:
            - – used
            - – created
            - – released, disposed of and transferred to air, land or water
            - – contained in product leaving the facility. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
        - * to the technical feasibility analysis
        - * to the economic feasibility analysis of technically feasible options
        - * to the estimate of your facility's yearly costs related to this prescribed toxic substance. This includes direct and indirect costs related to the substance being:
            - – used or created
            - – released
            - – disposed of
            - – transferred

- contained in product that leaves the facility. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone

* to the description of the steps your facility will take to implement an option(s) and the timetable for those steps, if your facility has chosen to implement an option(s)

9. Certifications

Include certifications from:

- the highest ranking employee at the facility with management responsibilities related to the facility. This person must sign a statement that he or she has read the plan, is familiar with its contents, and that to his or her knowledge the plan is factually accurate and that it complies with the Act and Regulation
- a person with prescribed qualifications (a toxic substance reduction planner). This person cannot be the same person as the highest ranking employee referred to above. This person must sign a statement that he or she is familiar with the processes at the facility that use or create the toxic substance, that he or she agrees with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4(1) of the Act and that it complies with the Act and Regulation

Tips: Only one certification statement by the highest ranking employee at the facility and/or by the planner is needed for all plans contained in a single document.

A planner may certify before or after the highest ranking employee provided both sign the same version of the plan.

2. What does a toxic substance reduction planner do?

A toxic substance reduction planner:

- makes recommendations to improve the plan and provides the accompanying rationale for this advice
- certifies that the facility's plan(s) meet the requirements set out in the Act and Regulation

A toxic substance reduction planner may also assist your facility in preparing the plan by offering advice.

3. What happens if your facility needs to file a plan for more than one substance?

Subsection 3(2) of the Act allows for more than one plan to be included in a single document.

Your facility may group the prescribed toxic substances into one overarching plan as long as all the requirements of planning for each of the toxic substances are met. The overarching plan should list all of the substances to which it applies. Alternatively, your facility may within a plan, reference another plan so that it does not have to repeat information.

This provision may be especially useful if, for instance, there are substances that flow through your facility in the same stages and processes (e.g. VOCs or PAHs), or if multiple substances are present in one input material.

4. Can your facility use documents prepared for another purpose?

Yes. Your facility may use a document or portions of a document prepared for another purpose or another government to prepare or include in the plan, plan summary and/or report, as long as all the requirements set out in the Act and Regulation are met for each of the required documents. Section 45 of the Act makes this possible.

Possible examples of these types of documents include environmental management systems (EMS), pollution prevention plans, facility business plans and health and safety documents.

The Ministry recognizes information contained in other documents may meet the requirements set out in the Act and Regulation, but in some situations your facility may need to supplement the document prepared for another purpose with additional information in order to ensure that all of the requirements of the Act are met. This may be achieved by modifying an existing document, by creating a new document that references the existing information and also contains supplementary information

What happens if your facility wants to change its plan(s)?

See section 5 of the Act and sections 20 and 23(2) (b) (i) of the Regulation.

Your facility may amend its plan(s) at any time. If your facility decides to amend a plan, it must have the plan recertified by:

- the highest ranking employee, stating that he or she has read the plan, is familiar with its contents and to his or her knowledge the current version of the plan is factually accurate and complies with the Act and Regulation.
- a person with prescribed qualifications (a toxic substance reduction planner). This person cannot be the same person as the highest ranking employee referred to above. This person must sign a statement that he or she is familiar with the processes at the facility that use or create the toxic substance that he or she agrees with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4(1) of the Act and that it complies with the Act and Regulation

Tip: Only one certification statement by the highest ranking employee at the facility and/or by the planner is needed for all plans contained in a single document.

A planner may certify before or after the highest ranking employee provided both sign the same version of the plan

Important:
If your facility amends its plan, it must also amend its summary within 30 days. This ensures that the summary you file electronically with the Ministry and provide to the public on the Internet always reflects the current version of the plan.

What records of its plan(s) does your facility need to keep?

Refer to section to 28 of the Regulation.

Your facility is required to keep the following documents on site for at least seven years:

- Toxic Substance Reduction Plan Report including the tracking and quantification records (This is the annual report submitted by June each year)
- Toxic Substance Reduction Plan
- Toxic Substance Reduction Plan Summary

If the government requests a copy, for example through an inspection, provide the required document(s).

Step 4. Developing and providing summaries of your facility's plans to reduce toxics

A plan summary is a valuable way to communicate with Ontarians. It tells the public:

- why your facility uses or creates a prescribed toxic substance
- whether your facility intends to reduce its use and creation of the substance, and
- how it intends to achieve those reductions

What if your facility does not intend to reduce – or cannot reduce – its use and creation of a prescribed toxic substance? For example, what if there are no options available? Or, the substance has beneficial uses? In these cases, a plan summary lets you communicate clearly to Ontarians the reasons why.

1. What information must a summary include?

Refer to section 8 of the Act and section 24 of the Regulation.

Although briefer, a plan summary reflects the current version of the plan.

The required content within a plan summary

1. General Information

Include general information about your facility, contact people and list of toxic substances used and/or created.

2. Your facility's intent, objectives and targets

Include a copy of your facility's intent to reduce the use and creation of a substance and a list of specific objectives including any targets.

3. How your facility will achieve its goals

Include a list of options, if any, that your facility plans to implement, estimated reductions and anticipated dates for achieving reductions, or explain why your facility does not plan to implement any options.

4. Other information from your facility's plan

Include a statement that the plan summary is accurate, up to date and reflects the current version of the plan.

5. Copy of certifications

Include a copy of the signed statements from the highest ranking employee at the facility and a person with prescribed qualifications.

6. Optional content

Include additional activities to reduce toxics and rationale for implementing options selected.

1. General information

About your facility

Include the:

- name and contact information for the person identified as the public contact
- NPRI identification number
- if applicable, facility's identification number under Reg 127/01
- number of full-time employee equivalents
- two, four and six digit NAICS code
- spatial coordinates for the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83)

Important:
If your facility is a subsidiary of a Canadian parent company, also provide:

- legal name of the parent company
- street and mailing address of the company
- what percentage of the facility is owned by the parent company

About the toxic substance(s) for which your facility must prepare a plan

Include:

- the name, as listed in the Act or NPRI Notices
- any Chemical Abstract Service Registry number(s)
- a list of all the toxic substances at the facility for which a plan is required
- a description of why the substance is used or created at the facility

About the toxic substance reduction planner

Include the:

- licence number of the planner who made recommendations and provided the corresponding rationale for those recommendations or provided a written explanation of why there are no recommendations
- licence number of the planner who certified the plan

2. Your facility's intent, objectives and any targets

Include:

- a copy of your facility's statement of intent to reduce the use and creation of the prescribed toxic substance **OR** your facility's statement to say it is not intending to reduce the use and creation of the substance and provides the reasons why
- a copy of your facility's objectives. This includes any targets your facility may have set for reducing the use or creation of a prescribed toxic substance

3. How your facility will achieve its goals

If your facility plans to implement an option(s), include:

- a description of the option(s)
- an estimate of how each option will reduce the amount:
  - » used
  - » created
  - » released, disposed of and transferred to air, land or water
  - » contained in product(s). Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
- the anticipated dates/timeframes for achieving these estimated reductions in use and creation

If your facility does not plan to implement any options, state this clearly and provide a copy

of the explanation of why no options will be implemented, as contained in the plan.

4. Other information

Include:

- a statement that the plan summary is:
  - » accurate
  - » up to date, and
  - » reflects the current version of the plan

Your facility may also include:

- its rationale for the option(s) it has chosen to implement
- a description of any actions that your facility has taken to reduce the use and creation of the toxic substance(s)

5. Copies of certifications

- include the copies of signed statements from the:
  - » highest ranking employee at the facility with responsibilities to manage the facility
  - » person with prescribed qualifications (a toxics substance reduction planner).

2. How will your facility distribute its plan summary to the public and the Ministry?

Refer to subsection 23(2) of the Regulation.

Your facility must submit its plan summary to the Ministry electronically via OWNERS.

You must make your plan summary available to the public:

- via the Internet (for example, on the facility's or parent company's website)
- in print form, upon request from a member of the public

In addition, your facility must notify its employees when your plan summary is available to the public on the Internet.

Step 5. Reviewing your facility's plan(s) to reduce toxics

Refer to section 7 of the Act.

The Act requires that facilities review their plans regularly. This ensures that your facility:

- updates its plans from time to time
- looks into whether methods for tracking and quantification should be changed
- looks into whether new reduction options are available
- looks into whether previously identified options are now feasible.

1. What are the key dates for reviewing your facility's plans?

Refer to section 21 of the Regulation.

First Review Year: 2018. *By December 31, 2018* your facility will conduct its first review and prepare a new version of its plan by this date. This date applies to all facilities who prepared a plan before 2018, regardless of when they first completed the plan.

Subsequent Reviews: Every 5 Years: Your facility will review and update its plans every five years after 2018. The due date is by December 31 in each of these years (i.e. 2023, 2028 and so on).

Interim reviews: If your facility makes a significant process change in one year, this would trigger a plan review in the next year. In these cases, your facility should review and update its plan by December 31 of the year *after* the year in which your facility made the significant process change.

What is a significant process change?

For the purpose of the Act and Regulation, a significant process change occurs when a facility:

- adds a new, distinct process that uses or creates a prescribed toxic substance and is not already described in the plan, or
- alters an existing process that results in at least a 15 per cent increase in the use or creation of the prescribed toxic substance in that process

This applies when the change does not result from implementing an option set out in the current version of the plan.

Note: An increase in throughput/production of 15 per cent or more within a process, regardless of whether or not there is an alteration to the process, would not constitute a significant process change.

2. What actions are required to review your facility's plan(s)?

Refer to section 22 of the Regulation.

The new version of the plan, created as a result of the review, will reflect any revised business decisions that your facility may have made.

Your facility needs to review and update all of the elements of its plan(s). In addition to updating all the elements of its plan(s), your facility will also include the following in the new version of the plan(s):

1. Where applicable, a statement as to whether the reason(s) for including a statement to say your facility is not intending to reduce the use and creation of the prescribed toxic substance remains valid and, if not, the new reason(s).
2. Where applicable, an explanation of why your facility no longer intends to reduce the use and creation of the prescribed toxic substance including whether it is the result of successfully implementing a toxics reduction option, if your facility previously had a statement to say it is intending to reduce the use and creation of the prescribed toxic substance.
3. An update of the objectives and an explanation for any changes to the objectives including why an objective is no longer valid or requires revision.
4. Any update of the following records that is necessary to ensure the records are accurate and complete :
    - » the record that identifies and describes all the stages and processes at your facility
    - » the record that contains the process flow diagrams that give a visual representation of the movement of the substance through each process
    - » the record that identifies the method(s) that your facility uses for tracking and quantification and explains why your facility chose the method(s)

Reminder:

Your facility may choose to change the method(s) it uses for tracking and quantification at the time of the plan review.

5. Any update to the description of the processes within each stage that use or create the substance to ensure it is accurate and complete. It describes how, when, where and why the substance is used or created.

6. An update of the identification, estimates of reduction for amounts of the substance used, created, released, disposed of and transferred to air, land and water and contained in product, and of the technical and economic feasibility analysis of reduction options.
    - ***Note:*** Your facility may make use of new technologies, green chemistry solutions and other innovations. This is your facility's chance to assess new solutions for toxics reduction
    - Estimates of reduction for amounts contained in product apply only to those prescribed toxic substances that are not criteria air contaminants, volatile organic compounds (Parts 4 and 5 of Schedule 1 of the NPRI Notice) or acetone
7. Where applicable, an update to the estimate of the amount by which each option that is being implemented would reduce the amount of the prescribed toxic substance:
    - used
    - created
    - released, disposed of and transferred to air, land or water
    - contained in product. Note: this applies only to prescribed toxic substances that are not criteria air contaminants, volatile organic compounds or acetone
8. Any update of the timetable for implementing an option.
9. Any update of the indirect and direct annual costs to ensure they are accurate and complete.
10. Correct any errors in the plan.
11. Ensure that:
    - the highest ranking employee at your facility certifies the new version of the plan, specifically that:
        - the review conducted that year was done in accordance with the Act and Regulation
        - he or she has read the current version of the plan
        - is familiar with its contents
        - to the best of his or her knowledge the plan(s) is factually accurate and that it complies with the Act and Regulation
    - the toxic substance reduction planner certifies the new version of the plan.

Tips: Only one certification statement by the highest ranking employee at the facility and/or by the planner is needed for all plans contained in a single document.

A planner may certify before or after the highest ranking employee provided both sign the same version of the plan.

Your facility also needs to include the tracking and quantification records and the records containing the explanation of why the sum of the inputs does not approximately equal the sum of the outputs, if applicable, for each year since the plan was last reviewed and/or prepared.

Actions required as part of the review

As part of the review, your facility will review all elements of the plan and:

1. If needed, modify the statement of intent

Where applicable:
- If your facility still does not intend to reduce the use and creation of the toxic substance determine whether the reason(s) remains valid or include the new reason(s)

- If your facility no longer intends to reduce the use and creation of the toxic substance explain why, including whether it is the result of successfully implementing a toxics reduction option.

2. Update objectives

Update the objectives and explain the reason(s) for any changes.

3. Ensure records are accurate and complete

Records:
1. Identifies and describes all the stages and processes at your facility.
2. Contains the process flow diagrams.
3. Identifies the tracking and quantification method(s) and explains why your facility chose the method(s).

4. Update process descriptions

Update the description of the processes to ensure they are accurate and complete.

5. Include the record of tracking and quantification and the record containing the reasons why the sum of the inputs does not approximately equal the sum of the outputs (if applicable)

Include the tracking and quantification record and the record containing the explanation of why the sum of the inputs does not approximately equal the sum of the outputs (if applicable) for each year since the plan was reviewed and/or prepared.

6. Update cost estimates

Update the indirect and direct annual costs related to the substance to ensure they are accurate and complete.

7. Update identification and analysis of reduction options

Update the options considered by your facility to reduce the use and/or creation of the substance. For each option, update the estimates of reduction and the technical and economic feasibility analysis.

8. Update reduction estimates (if applicable)

Where applicable, update the reduction estimates associated with each option that is being implemented.

9. Update timetable (if applicable)

Where applicable, update the timetable for implementing an option(s).

10. Correct any errors in the plan

11. Certify the new version of the plan

Ensure the highest ranking employee at your facility and the toxic substance reduction planner certify the new version of the plan. Include the signed statements. Also include the planner's recommendation(s) and licence number(s).

3. What If my facility no longer meets all of the criteria?

Refer to section 11.2 of the Regulation.

Your facility may be subject to the Act at this time, but may not meet all of the criteria in the future. To determine this, your facility must be able to answer 'yes' to one of these questions:

- Has it stopped operating in the manufacturing or mineral processing sector?
- Has it permanently reduced the number of employees at the facility to zero?
- Has it stopped using or creating a prescribed toxic substance in all of its processes?
- Is it no longer required to report for acetone, under Reg. 127/01, because it failed to meet the substance or employee thresholds for acetone?
- Is it no longer required to provide information to NPRI because it failed to meet the activity, substance or employee thresholds?

If your facility answered yes to one of these questions, it needs to notify the Ministry and prepare a Exit Record. This Exit Record is due by June 1 in the year after your facility no longer meets one or more of the criteria. To learn more, review the section on How to prepare an Exit Record (at right).

The Exit Record helps the Ministry distinguish between facilities that are no longer subject to the requirements of the Act and Regulation from those that are not in compliance.

Important:

The Regulation offers a special exemption for three toxic substances:

- dioxins
- furans
- hexachlorobenzene

You must follow a special procedure to claim this exemption. To learn more, review Appendix B, Special Exemptions.

4. How to prepare an Exit Record

Refer to section 11.2 of the Regulation.

An Exit Record:

- **Describes why your facility is no longer required to plan under the Act.** For example, your facility:
  - » no longer belongs to the regulated class of facilities (i.e. no longer engages in manufacturing)
  - » has ceased to have any employees on site
  - » has ceased to use and create the toxic substance in all processes
  - » is no longer required to report under Reg. 127/01 for acetone
  - » is no longer required to provide information about the substance under NPRI
- **Shows that your facility has not met all the criteria for being required to account, plan and report under the Act.** For this purpose, it needs to provide the following to the Ministry:

- the information and any quantifications used by the facility to conclude that it did not meet all of the prescribed criteria in the regulation

- **Includes a certification by the highest ranking employee at the facility with management responsibilities relating to the facility.** This must state that this individual:
  - has read the Exit Record and is familiar with its contents
  - confirms the factual accuracy of the account of the circumstances that led to giving the Record – to the best of his or her knowledge

Tips: Only one certification statement by the highest ranking employee at the facility is needed for all exit records in a single document

The Ministry will provide the Exit Record to the public on the Internet or upon written request. Exit Record information made available to the pubic will not include the information and any quantifications used by the facility to make the determination.

5. What if after submitting an exit record my facility meets the prescribed criteria at a later date?

In these cases, one of two different scenarios may apply:

1. Your facility meets all the criteria within two years or less of submitting an exit record:

Refer to section 11.3 of the Regulation.

If your facility:

- was not subject to the requirements of the Act and Regulation for a particular toxic substance in the last year or in the last two consecutive years
- provided an Exit Record to the Ministry
- and now meets all of the criteria

Your facility, in most cases (see note below), may 'revive' its most recent plan. The facility may simply carry on with the most recent plan as if there was no interruption in the planning/review cycle.

Important:
If your facility meets all the criteria in a review year, or the first year after a review year, your facility must prepare a new plan (i.e. pretend it is the first year your facility must comply with the Act and Regulation).

2. Your facility meets all the criteria within three or more years of submitting an exit record:

Refer to section 11.4 of the Regulation.

If your facility:

- was not subject to the requirements of the Act and Regulation for a particular toxic substance in the last three consecutive years
- provided an Exit Record to the Ministry, and
- now meets all of the criteria

Prepare a new plan (i.e. pretend it is the first year your facility must comply with the requirements in the Act and Regulation).

Frequently Asked Questions

In this section, you'll find answers to questions we are often asked about the Act and the Regulation. If you have other questions after reading this guide, please let us know. Contact the Ministry's Public Information Centre at **1-800-565-4923** or in Toronto at 416 325-4000 or email picemail.moe@ontario.ca

The Strategy

1. How is the province working with industry to establish a green economy?

The Government of Ontario invested $13.6 million in GreenCentre Canada, a green technology consortium which connects green chemistry discoveries in Ontario universities to companies in order to develop alternatives to toxic chemicals and get them to the marketplace faster.

Ontario established two Chairs in Green Chemistry and Engineering at Queen's University and Trent University as part of a commitment to financially support Green Chemistry and Engineering research.

In June 2010, the Ministry announced a partnership with the Canadian Manufacturers & Exporters (CME) and the Bloom Centre for Sustainability (formerly the Ontario Centre for Environmental Technology Advancement) to develop and deliver a "Cleaner and Greener Manufacturing" training and assistance program for industries affected by the Toxics Reduction Program.

The Act and Exemptions

2. Our facility does not engage in manufacturing or mineral processing activities. Do requirements set out in the Act and Regulation apply to our facility?

No. Your facility must undertake manufacturing or mineral processing activities as well as be required to provide information to the federal National Pollutant Release Inventory (NPRI) or report under Reg. 127/01 in order to be captured. If your facility reports to NPRI but does not engage in manufacturing or mineral processing activities, it is not captured by the Act and Regulation.

3. Are the content requirements of a toxic substance reduction plan the same as those for an ISO 14001 Environmental Management System (EMS) or a Canadian Environmental Protection Act (CEPA) P2 Plan?

In some cases they may be the same, In other cases, an EMS or CEPA P2 plan will need to be supplemented with additional information before it meets all of the requirements for a toxic substance reduction plan. However, the use of an existing EMS or CEPA P2 plan as a foundational tool will likely reduce the amount of work needed to meet the content requirements of a toxic substance reduction plan.

4. How was the list of priority toxic substances (Phase I) generated?

The Ministry of the Environment sought advice from the Toxics Reduction Scientific Expert Panel, the Ministry of Health and Long-Term Care and Cancer Care Ontario to identify 47 priority toxic substances (Phase I). These include 24 known carcinogens and 19 substances identified under the Canadian Environmental Protection Act as toxic.

Ministry scientific experts carried out four reviews, each of which provided a different perspective to prioritization:

- effects on human health and the environment (high hazard and/or high emission)
- priorities identified by other jurisdictions
- provincial programs (standards/guideline exceedences)
- known or probable carcinogens relevant to Ontario

Toxic Substance Accounting, Planning and Reporting

5. How is our facility supposed to determine the amounts used, created, destroyed, transformed, released, disposed of, transferred and contained in product?

Your facility is required to use the best available method or combination of methods to determine this amount. When choosing method(s), consider:

- what is the best way to quantify the amount?
- what are facilities in similar sectors using?
- what method(s) are economically viable?
- what are some established and recognized methods?
- what method(s) are required by other laws?

Refer to section 5.0 of the Toolkit for Toxic Substance Accounting.

6. Are any specified activities and/or things excluded from the accounting, planning and reporting requirements?

Each year, the related NPRI Notice may list a number of exclusions. Your facility needs to determine whether it meets the criteria for reporting by referring to the current NPRI Notice. These same exclusions apply for the purpose of accounting, planning and reporting on the toxic substances prescribed in the Act and Regulation. Please see the NPRI guidance documents for more information[8].

7. Does my facility need to account, plan and report on feedstocks?

If a facility is subject to the Act and Regulation, all inputs should be considered, including feedstocks.

Ontarians have the right to know which substances originate from naturally occurring feedstocks. Accounting, planning and reporting will enable facilities to better understand the use of toxic substances in their processes and may highlight areas in which less toxic alternatives may be substituted. While some facilities may not be able to change their feedstocks, they may be able to identify and implement processing efficiencies.

In some cases, feedstocks may be considered to be articles. Please refer to NPRI for guidance on what is considered to be an article.

8. My facility's plan contains sensitive information. What provisions are in place to protect its confidentiality?

Plans are to be kept at the facility. Your facility will provide a summary only to the Ministry and the public.

In some cases, the Ministry could request a plan or portion of a plan, as in the case of an inspection by an Environmental Officer. In such cases, your facility would be able to stamp it confidential.

In addition, your facility may choose to report facility-wide amounts used, created and contained in product to the public in ranges specified by the Ministry.

[8] www.ec.gc.ca/inrp-npri/

9. What administrative rules does my facility need to follow under the legislation?

There are several administrative rules that a facility must follow when tracking, quantifying, reporting and planning. These rules are described below.

Unit of Measurement

Please refer to section 31 of the Regulation.

The unit of measurement used for tracking or reporting is the same unit that is required under NPRI for that substance. For acetone the unit is tonnes.

Errors

Please refer to subsections 29(1), 29(2) and 29(3) of the Regulation.

If the owner and the operator of your facility becomes aware of any errors in a summary, report or notice provided to the Ministry, he or she must inform the Ministry and submit the correct information within 30 days.

Should your facility require more time, it may request an extension. The Ministry will then determine whether and how much more time should be given.

Forms

Please refer to section 30 of the Regulation.

The plan summary, report and any records required are to be provided in an electronic form specified or approved by the Ministry.

Records

Please refer to section 28 of the Regulation.

Your facility must keep all records created or acquired to comply with the legislation on site for seven years. This includes records used for toxics accounting or to prepare, review or amend a plan, a plan summary or report.

Change in ownership

Please refer to subsection 29(4) of the Regulation.

The new owner or operator of your facility must inform the Ministry within 30 days of any change in ownership.

Toxic Substance Reduction Planner

10. How can I become a Toxic Substance Reduction Planner?

To become a toxic substance reduction planner you must:

1. Demonstrate you meet one of the following criteria:
   - » hold a Bachelor's degree in a relevant field and have four years of relevant work experience; or
   - » hold a college diploma in a relevant field and have six years of relevant work experience; or,
   - » have eight years work experience with a minimum of two years in environmental management and two years in operational activities in a manufacturing or mineral processing setting;
2. Take a Ministry-approved training course;
3. Pass a Ministry-approved exam; and,
4. Apply for a licence and pay for the licence.

To find out more, refer to the Ministry of the Environment website (www.ene.gov.on.ca/environment/en/subject/toxics/index.htm) for details on licensing qualifications, courses, exams, fees and resources.

Enforcement

11. How will the Ministry ensure compliance with the legislation?

The Ministry of the Environment is responsible for ensuring compliance with the Act and Regulation. It will work closely with the regulated community, taking a fair, familiar and progressive approach. Steps can include:

- education and outreach. This can take the form of pointing facilities to tools to support compliance. Examples: guidance materials, grants, information sessions and technical support
- phone calls and letters
- inspections

12. What enforcement measures are included in the legislation?

Measures to enforce the Act and Regulation follow those similar to other environmental laws. Examples include:

- Environmental Protection Act
- Ontario Water Resources Act
- Safe Drinking Water Act, 2002
- Clean Water Act, 2006

Example: The Act gives the Ministry the authority to inspect regulated facilities, at a reasonable time, to ensure that proper records are

- kept on site
- complete
- accurate

The Ministry will also be able to track some compliance issues among regulated facilities through their submission of plan summaries and reports. This approach will help the Ministry focus on facilities that are more likely to be out of compliance.

13. What happens if the Ministry finds that a facility has failed to comply with the legislation?

By law, the Ministry would be able to take certain steps to ensure that compliance is achieved and/or to deter other instances of non compliance. The Ministry could send the facility a letter, bringing the non-compliance activity to the facility's attention and asking the facility to come into compliance within a set time frame. Alternatively if the facility still did not come into compliance after receiving the letter, the Ministry could issue an order to the facility to comply.

If an individual or a corporation is found guilty of an offence under the Toxics Reduction Act, 2009, the Ministry could assign penalties as follows:

For individuals

- up to $25,000 a day for a first offence
- up to $50,000 a day for a second offence

For corporations

- up to $50,000 a day for a first offence
- up to $100,000 a day for a second offence

The Future

14. How will the Ministry report on Ontario's progress?

The Ontario government plans to establish a website/information system to inform Ontarians about toxic substance reduction in Ontario by:

- providing province-wide reports on the current status of toxics; and
- providing province-wide reports on the progress of facilities in reducing

In addition, the Ministry must prepare an annual report that describes the progress facilities make in implementing the Act and Regulation. This

report will be available to the public via the Ministry's website.

15. Will there be any changes to the list of toxic substances in the future?

As required by the Act, at least once every five years, the Minister of the Environment will consult with experts and the public regarding possible changes to:

- the list of toxic substances – both additions and deletions
- substance thresholds
- employee thresholds

The process for changes will be open and transparent. This process is known as the Living List process. The Ministry will establish a multi-stakeholder expert committee to assess, identify and advise the Ministry on changes to the lists of substances. The Ministry will:

- post details about the process on the Ministry website. This includes the criteria for decisions and opportunities for stakeholder participation
- inform stakeholders and the public of any changes made to the list of substances and or thresholds through the Environmental Registry[9]

16. Does the Ministry plan to introduce new regulations in the future?

At this time, the Ministry has deferred proclamation of the sections of the Act that relate to:

- substances of concern
- administrative penalties
- consumer products

Any actions related to those sections will not apply until a regulation has been put in place. Any new regulation would detail the requirements that facilities must meet.

The Ministry would consult with the public and stakeholders to set these requirements.

17. Will the Ministry introduce any new authorities related to consumer products in the future?

The Ministry will continue to work with the federal government to promote the use of existing federal powers to address toxic substances in consumer products.

The Toxics Reduction Act does provide new authorities related to consumer products which the Ontario government would be able to use to protect Ontarians.

Consultation with stakeholders and the public would take place prior to the development of any regulation under these new authorities.

18. Where can I learn more?

Information on the Ministry of Environment's Toxics Reduction Strategy can be found at www.ene.gov.on.ca/en/toxics/index.php

A copy of the Act can be found at www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_09t19_e.htm

A copy of the Regulation can be found at www.e-laws.gov.on.ca/html/regs/english/elaws_regs_090455_e.htm

[9] The Environmental Registry contains "public notices" about environmental matters being proposed by all government ministries covered by the Environmental Bill of Rights. The public notices may contain information about proposed new laws, regulations, policies and programs or about proposals to change or eliminate existing ones. To access the Environmental Registry, please visit www.ebr.gov.on.ca/ERS-WEB-External/

Appendix A – The toxic substances prescribed under the Toxics Reduction Act and O. Reg. 455/09

The Regulation defines toxic substances as listed in the National Pollutant Release Inventory Notice (the NPRI Notice) given under subsection 46(1) of the Canadian Environmental Protection Act, 1999, in the form specified in Schedule 1 of the NPRI Notice, as well as acetone (adopted from Regulation 127/01 made under the Environmental Protection Act).

The chart below lists the 47 priority substances and substance groups (i.e. Phase I substances) listed in the Regulation as of date of publication of this version of this document for which the regulatory requirements begin first.

Table A

Item	Named Toxic Substance	CAS #	NPRI Part
1.	Acetaldehyde	75-07-0	1
2.	Acrylamide	79-06-1	1
3.	Aluminum[1]	7429-90-5	1
4.	Antimony[2]	**	1
5.	Arsenic[3]	**	1
6.	Asbestos[4]	1332-21-4	1
7.	Benzene	71-43-2	1,5
8.	Biphenyl	92-52-4	1
9.	1,3 –Butadiene	106-99-0	1,5
10.	Cadmium[5]	**	1
11a.	Benzoyl chloride	98-88-4	1
11b.	Benzyl chloride	100-44-7	1
12.	Chlorine	7782-50-5	1
13.	Chromium[6]	**	1

Item	Named Toxic Substance	CAS #	NPRI Part
14.	Cobalt[7]	**	1
15.	Copper[8]	**	1
16.	Creosote	8001-58-9	5
17.	Cyanides[9]	**	1
18.	1,2-Dichloroethane	107-06-2	1,5
19a.	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	3
19b.	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	3
19c.	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	3
19d.	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	3
19e.	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	3
19f.	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	3
19g.	Octachlorodibenzo-p-dioxin	3268-87-9	3
19h.	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	3
19i.	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	3
19j.	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	3
19k.	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	3
19l.	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	3
19m.	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	3
19n.	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	3
19o.	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	3
19p.	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	3
19q.	Octachlorodibenzofuran	39001-02-0	3
20.	Epichlorohydrin	106-89-8	1
21.	Ethylbenzene	100-41-4	1
22	Ethylene Oxide	75-21-8	1
23	Formaldehyde	50-00-0	1,5
24	Hexachlorobenzene	118-74-1	3

Item	Named Toxic Substance	CAS #	NPRI Part
25.	Hexavalent Chromium compounds	**	1
26.	Hydrochloric acid	7647-01-0	1
27.	Lead[10,11]	**	1
28.	Manganese[12]	**	1
29.	Mercury[13]	**	1,2
30.	Methanol	67-56-1	1,5
31.	Nickel[14]	**	1
32.	Phenol[15]	108-95-2	1
33.	p,p'-methylenebis (2-chloroaniline)	101-14-4	1
34.	Selenium[16]	**	1
35.	Silver[17]	**	1
36.	Styrene Oxide	96-09-3	1
37a.	Sulphuric acid	7664-93-9	1
37b.	Dimethyl sulphate	77-78-1	1
37c.	Diethyl sulphate	64-67-5	1
38.	Tetrachloroethylene	127-18-4	1
39.	Thorium Dioxide	1314-20-1	1
40.	Toluene	108-88-3	1,5
41a.	Acenaphthene	83-32-9	2
41b.	Acenaphthylene	208-96-8	2
41c.	Anthracene	120-12-7	1
41d.	Benzo(a)anthracene	56-55-3	2
41e.	Benzo(a)phenanthrene	218-01-9	2
41f.	Benzo(a)pyrene	50-32-8	2
41g.	Benzo(b)fluoranthene	205-99-2	2
41h	Benzo(e)pyrene	192-97-2	2
41i.	Benzo(g,h,i)perylene	191-24-2	2

Item	Named Toxic Substance	CAS #	NPRI Part
41j.	Benzo(j)fluoranthene	205-82-3	2
41k.	Benzo(k)fluoranthene	207-08-9	2
41l.	Dibenzo(a,j)acridine	224-42-0	2
41m.	Dibenzo(a,h)acridine	226-36-8	2
41n.	Dibenzo(a,h)anthracene	53-70-3	2
41o.	Dibenzo(a,e)fluoranthene	5385-75-1	2
41p.	Dibenzo(a,e)pyrene	192-65-4	2
41q.	Dibenzo(a,h)pyrene	189-64-0	2
41r.	Dibenzo(a,i)pyrene	189-55-9	2
41s.	Dibenzo(a,1)pyrene	191-30-0	2
41t.	7H-Dibenzo(c,g)carbazole	194-59-2	2
41u.	7,12-Dimethylbenz(a)anthracene	57-97-6	2
41v.	Fluoranthene	206-44-0	2
41w.	Fluorene	86-73-7	2
41x.	Indeno(1,2,3-c,d)pyrene	193-39-5	2
41y.	3-Methylcholanthrene	56-49-5	2
41z.	5-Methylchrysene	3697-24-3	2
41aa.	Naphthalene	91-20-3	1
41ab.	1-Nitropyrene	5522-43-0	2
41ac.	Perylene	198-55-0	2
41ad.	Phenanthrene	85-01-8	2
41ae.	Pyrene	129-00-0	2
42.	Trichloroethylene	79-01-6	1
43.	Triethylamine	121-44-8	1
44.	Vanadium[18]	7440-62-2	1
45.	Vinyl Chloride	75-01-4	1
46.	Xylene[19]	1330-20-7	1,5
47.	Zinc[20]	**	1

Notes to Table A:

*** no single CAS number applies to this substance*

[1] fume or dust

[2] and its compounds

[3] and its compounds

[4] friable form

[5] and its compounds

[6] and its compounds, except hexavalent chromium compounds

[7] and its compounds

[8] and its compounds

[9] ionic

[10] and its compounds, except tetraethyl lead (CAS No. 78-00-2)

[11] does not include lead (and its compounds) contained in stainless steel, brass or bronze alloys.

[12] and its compounds

[13] and its compounds

[14] and its compounds

[15] and its salts. The CAS Number corresponds to the weak acid or base. However, this substance includes the salts of these weak acids and bases. When calculating the weight of these substances and their salts, use the molecular weight of the acid or base, not the total weight of the salt.

[16] and its compounds

[17] and its compounds

[18] (except when in an alloy) and its compounds

[19] all isomers, including the individual isomers of xylene: m-xylene (CAS No. 108-38-3), o-xylene (CAS No. 95-47-6) and p-xylene (CAS No. 106-42-3)

[20] and its compounds

***Note:** A footnote that qualifies the listing of a toxic substance in this Table is the same footnote that qualifies its listing in Schedule 1 to the NPRI Notice.*

Appendix B – Exemptions for dioxins, furans and hexachlorobenzene

Refer to section 9 of the Regulation.

The Regulation provides for an exemption for the following three groups of substances:

- dioxins
- furans
- hexachlorobenzene

NPRI requires a facility to provide information on dioxins, furans and hexachlorobenzene no matter what amount was released, disposed and transferred off-site for recycling.

In cases where your facility is below the estimated levels of quantification set out in the given NPRI notice for these substances, it is eligible for an exemption.

In order to take advantage of this exemption, your facility must be able to answer 'yes' to these questions:

- Is the concentration of the substance released on-site, disposed of, or transferred off-site for recycling less than the applicable estimated levels of quantification set out in the NPRI Notice?
- Has it determined the quantity of the substance through monitoring or source testing?

If your facility wants to take advantage of the exemption, provide a record to the Ministry by June 1 in the year after your facility falls below the applicable estimated levels of quantification set out in the given NPRI notice for the substance. This record is referred to as a "Record of Exemption". Provide a record for three consecutive years. Once your facility has provided three records in a row, all the obligations related to dioxins, furans and/or hexachlorobenzene under the Act and Regulation cease as long as your facility does not meet or exceed the estimated level of quantification.

To learn more, read the section below on How to prepare a Record of Exemption.

Important: The Record of Exemption helps the Ministry distinguish between facilities that are no longer required to comply with the Act and Regulation from those that are not in compliance. The exemption would last as long as your facility does not meet or exceed the estimated level of quantification.

How to prepare a Record of Exemption for dioxins, furans and hexachlorobenzene

A Record of Exemption:

- Describes why your facility is now exempt under the Act.
- Shows that your facility does not meet the estimated levels of quantification set out in the NPRI Notice for dioxins, furans or hexachlorbenzene.

Your facility needs to provide a record of the information and any quantifications it used to determine its exempt status.

- Includes a certification by the highest ranking employee with management responsibilities relating to the facility. This must state that this person:
  - » has read the record and is familiar with its contents
  - » confirms the factual accuracy of the account of the circumstances that led to giving the record – to the best of his or her knowledge

Tips: Only one certification statement by the highest ranking employee at the facility is needed for all records contained in a single document.

The Ministry will provide the Record of Exemption to the public on the Internet or upon written request. The Ministry will not make the detailed information your facility provides available to the public.

Appendix C – List of Documents Required to be Created for Each Toxic Substance

Document	Due Date	Related Provsisions in the Act and/or Regulation
Record of tracking and quantification	Same as annual report: June 1 in the year following the calendar year for which the data was collected	**O. Reg. 455/09:** para. 3 of s. 12 (2)
Record of no approximate balance	Same as annual report: June 1 in the year following the calendar year for which the data was collected	**O. Reg 455/09:** para. 4 of 12 (2) as well as subsection 18 (3)
Report	Due annually by June 1	**TRA:** s. 10 **O. Reg 455/09:** s. 25, s. 26 and s. 27
Record of stages	Same as plan and plan review: December 31	**O. Reg. 455/09:** 12 (2) 1 i and ii as well as section 16.
Record of process flow diagrams	Same as plan and plan review: December 31	**O. Reg. 455/09:** 12 (2) 2 i and ii as well as section 16.
Record of method or combination of methods	Same as plan and plan review: December 31	**O. Reg. 455/09:** 12 (2) 5 as well as section 16
Record of the data and methods that were used to prepare the estimates of reduction	Same as plan and plan review: December 31	**O. Reg 455/09:** 17 (5) (c)
First Toxic Substance Reduction Plan	Due by December 31 of the year that follows the calendar year in which the facility meets all of the prescribed criteria.	**TRA:** s. 4 **O. Reg. 455/09:** s. 16, s. 17, s. 18, s. 19

Document	Due Date	Related Provsisions in the Act and/or Regulation
First Toxic Substance Reduction Plan Summary	Due at the same time as the plan	**TRA:** s. 8 **O. Reg. 455/09:** s. 23 and s. 24
New Version of Plan (after Plan Review)	Due by December 31 of the year of the review (i.e. 2018 and every five years after or the year after a significant process change)	**TRA:** s. 7 **O. Reg. 455/09:** s. 21 and s. 22
New Version of Plan Summary (after Plan Review)	Due at same time as the plan Due by December 31 of the year of the review (i.e. 2018 and every five years after or the year after a significant process change)	**O. Reg. 455/09:** s. 23 (2) (b) ii
Exit Record	Due by June 1 in the year after your facility no longer meets all of the criteria	**O. Reg. 455/09:** s. 11. 2
Record of Exemption	By June 1 in the year after your facility falls below the applicable estimated levels of quantification set out in the given NPRI notice. Note: Provide this record for three consecutive years.	**O. Reg. 455/09:** s. 9
Notice of errors	Within 30 days of becoming aware of an error in inaccuracy	**O. Reg. 455/09:** s 29 (4)
Notice of change in ownership	Within 30 days of the change	**O. Reg. 455/09:** s 29 (1), (2) and (3)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