



# Canadian Environmental Sustainability Indicators Environmental Emergencies – Regulated Facilities





**Suggested citation for this document:** Environment and Climate Change Canada (2016) Canadian Environmental Sustainability Indicators: Environmental Emergencies – Regulated Facilities. Consulted on *day Month, year*.

Available at: www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=9A81D21D-1.

Cat. No.: En4-144/68-2015E-PDF

ISBN: 978-0-660-02881-1

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## Canadian Environmental Sustainability Indicators Environmental Emergencies – Regulated Facilities

#### February 2016

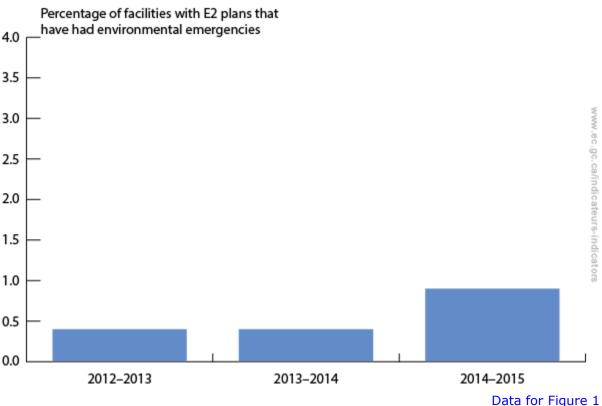
#### **Table of Contents**

Part 1. Environmental Emergencies – Regulated Facilities Indicator4				
Part 2. Data Sources and Methods for the Environmental Emergencies – Regulated Facilities indicator	rces and Methods for the Environmental Emergencies – sies indicator			
Introduction	6			
Description and rationale of the Environmental Emergencies – Regulated Facilities indicator	6			
Data	6			
Methods	7			
Caveats and limitations	7			
Part 3. Annexes	9			
Annex A. Data tables for the figures presented in this document	9			
Annex B. References and additional information	10			
List of Figures				
Figure 1. Percentage of facilities with E2 plans that have reported environmental emergencies, Canada, 2012 to 2015	4			
List of Tables				
Table A.1. Data for Figure 1. Percentage of facilities with E2 plans that have reported environmental emergencies, Canada, 2012 to 2015	9			

### Part 1. Environmental Emergencies – Regulated Facilities Indicator

An environmental emergency is an accidental release of a hazardous substance that can have immediate and long-term impact on environmental and human health, such as an oil or chemical spill. To prevent and mitigate potential spills of regulated substances, facilities that have these substances at or above certain quantities may be required to have environmental emergency plans (E2 plans) under the *Environmental Emergency Regulations* (E2 Regulations). Between April 2012 and March 2015, less than 1.0% of facilities with E2 plans have reported environmental emergencies.

Figure 1. Percentage of facilities with E2 plans that have reported environmental emergencies, Canada, 2012 to 2015



**Source:** Environment and Climate Change Canada's National Emergencies and Enforcement Management Information System and Intelligence System (NEMISIS).

 $<sup>^1</sup>$  As per section 193 of the <u>Canadian Environmental Protection Act, 1999</u> an "environmental emergency means: (a) an uncontrolled, unplanned or accidental release, or release in contravention of regulations or interim orders made under this Part, of a substance into the environment; or (b) the reasonable likelihood of such a release into the environment."

Facilities may be required to develop an E2 plan if they manufacture, store, use, or dispose of regulated substances at or above specified quantities, as described in the <u>List of Substances in Schedule 1</u> of the E2 Regulations. An E2 plan strengthens the capacity of facilities to prevent, prepare for, respond to, and recover from environmental emergencies and incidents. The Environmental Emergencies Program helps facilities comply with the requirements and obligations under the E2 Regulations by providing guidance for the development of an E2 plan.



This indicator is used to measure progress toward <u>Target 4.7: Environmental Disasters</u>, <u>Incidents and Emergencies: Environmental disasters</u>, <u>incidents and emergencies are</u> <u>prevented or their impacts mitigated</u> of the <u>Federal Sustainable Development Strategy 2013–2016</u>.

#### Part 2. Data Sources and Methods for the Environmental Emergencies – Regulated Facilities Indicator

#### Introduction

The <u>Environmental Emergencies – Regulated Facilities</u> indicator is part of the <u>Canadian Environmental Sustainability Indicators</u> (CESI) program, which provides data and information to track Canada's performance on key environmental sustainability issues. This indicator is also used to measure progress towards the goals and targets of the <u>Federal Sustainable Development Strategy</u>.

#### Description and rationale of the Environmental Emergencies – Regulated Facilities indicator

#### **Description**

The <u>Environmental Emergencies – Regulated Facilities</u> indicator reports the number of facilities with environmental emergency plans (E2 plans) under the <u>Environmental Emergency</u> <u>Regulations</u> (E2 Regulations) that have had environmental emergencies.

An environmental emergency, as defined by the *Canadian Environmental Protection Act*, 1999 (CEPA 1999), is an uncontrolled, unplanned or accidental release of a substance (listed in regulations made under Part 8 of the Act) into the environment, or the reasonable likelihood of such a release, that may affect the environment or human health. Facilities may be required to develop an E2 plan if they are manufacturing, storing, using, or disposing of regulated substances listed in Schedule 1 of the E2 Regulations at or above specified quantities. Under Section 9 of the E2 Regulations, any facility in Canada is required to inform Environment and Climate Change Canada of a spill involving a regulated substance.

#### **Rationale**

Some environmental emergencies have the potential to cause an immediate and long-term impact on the environment and human health. As a result, some facilities are required to develop an E2 plan. An E2 plan strengthens the capacity of a facility to prevent, prepare for, respond to and recover from environmental emergencies and incidents. Tracking the number of environmental emergencies at facilities with E2 plans can help evaluate, validate and identify improvements related to Canada's environmental emergency management plans, procedures and protocols.

#### **Data**

#### **Data source**

The Environmental Emergencies Program at Environment and Climate Change Canada compiled the data for this indicator from the National Emergencies and Enforcement Management Information System and Intelligence System (NEMISIS).

<sup>&</sup>lt;sup>2</sup> Environment Canada (2013) A Guide to Understanding the Canadian Environmental Protection Act, 1999.

#### Spatial coverage

The coverage is national.

#### **Temporal coverage**

Data is available for three fiscal years (1 April to 31 March) from 2012–2013 to 2014–2015. The data was collected following the end of each fiscal year. The 2012–2013 fiscal year was chosen as the first period because of the amendments made to the List of Substances in Schedule 1 of the *Environmental Emergency Regulations* (E2 Regulations) in December 2011. The amendments added 41 substances and exempted a few in certain circumstances, affecting the number of facilities requiring an environmental emergency plan (E2 plan).

#### **Data completeness**

The data cover only facilities across Canada that are required to have an E2 plan under the E2 Regulations.

Facilities are required to develop an E2 plan if they manufacture, store, use, or dispose of regulated substances at or above specified threshold quantities, as set out in Schedule 1 of the E2 Regulations. The number of facilities that require an E2 plan may vary from year to year, depending on the facilities' chemicals on site and their quantities.

Facilities that require an E2 plan must inform Environment and Climate Change Canada that they have developed one. Under section 9 of the E2 Regulations, facilities in Canada are required to inform Environment and Climate Change Canada of any spills involving regulated substances. This information is tracked in NEMISIS.

#### **Data timeliness**

The Environmental Enforcement Program at Environment and Climate Change Canada uses NEMISIS to compile reports on environmental emergencies on a continuous basis. Data is available up to 2014–2015.

#### **Methods**

The <u>Environmental Emergencies – Regulated Facilities</u> indicator reports the percentage of facilities with an environmental emergency plan (E2 plan) that have had an environmental emergency during a fiscal year (1 April to 31 March).

Only a subset of facilities requires an E2 plan. Facilities that have a substance listed in column 1 of the <u>List of Substances in Schedule 1</u> of the <u>Environmental Emergency</u> Regulations (E2 Regulations) may be required to develop an E2 plan if the maximum expected quantities on site meets or exceeds the specified threshold and/or if the capacity of the largest container meets or exceeds the specified threshold.

#### Caveats and limitations

The development of environmental emergency plans (E2 plans) and the reporting of environmental emergencies are the responsibility of the respective facilities. The *Environmental Emergency Regulations* (E2 Regulations) require that facilities inform Environment and Climate Change Canada that they have a regulated substance at or above the specified threshold quantities. Facilities are then required to develop an E2 plan and to inform Environment and Climate Change Canada that they have done so within six months of reporting the substances. Although Environment and Climate Change Canada conducts compliance promotion and enforcement activities, the facility is responsible for complying with the E2 Regulations.

The data in the indicator is collected following the end of each fiscal year, providing a snapshot at that time. Depending on when the data is collected, it may change because the E2 Regulations do not prescribe a deadline for reporting environmental emergencies. While facilities are required to develop an E2 plan, they are not required to identify themselves as having one when reporting an environmental emergency. These limitations could lead to issues with timely and comprehensive reporting of environmental emergencies and also with understanding the current state of environmental emergencies at facilities with E2 plans.

#### Part 3. Annexes

## Annex A. Data tables for the figures presented in this document

Table A.1. Data for Figure 1. Percentage of facilities with E2 plans that have reported environmental emergencies, Canada, 2012 to 2015

Fiscal year (1 April to 31 March)	Total number of facilities with E2 plans	Number of facilities with E2 plans that have had environmental emergencies	Percentage of facilities with E2 plans that have had environmental emergencies
2012-2013	2517	10	0.4
2013-2014	2585	11	0.4
2014-2015	2449	21	0.9

**Source:** Environment and Climate Change Canada's National Emergencies and Enforcement Management Information System and Intelligence System (NEMISIS).

#### Annex B. References and additional information

#### References and further reading

Environment Canada (2013) <u>A Guide to Understanding the Canadian Environmental Protection Act, 1999</u>. Retrieved on 3 March, 2015.

Environment Canada (2014) <u>Departmental Performance Report: Departmental Sustainable Development Strategy</u>. Retrieved on 3 March, 2015.

Environment and Climate Change Canada (2014) <u>Environmental Emergencies</u>. Retrieved on 3 March, 2015.

Government of Canada (1999) <u>Canadian Environmental Protection Act, 1999</u>. Retrieved on 14 April, 2015.

Government of Canada (2011) *Environmental Emergency Regulations*. Retrieved on 14 April, 2015.

#### **Related information**

<u>Environment and Climate Change Canada – Environmental Emergency Regulations</u> <u>Implementation Guidelines for the Environmental Emergency Regulations, 2011</u>

#### www.ec.gc.ca

Additional information can be obtained at:

Environment and Climate Change Canada Public Inquiries Centre 7th Floor, Fontaine Building 200 Sacré-Coeur boul. Gatineau, QC K1A 0H3

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