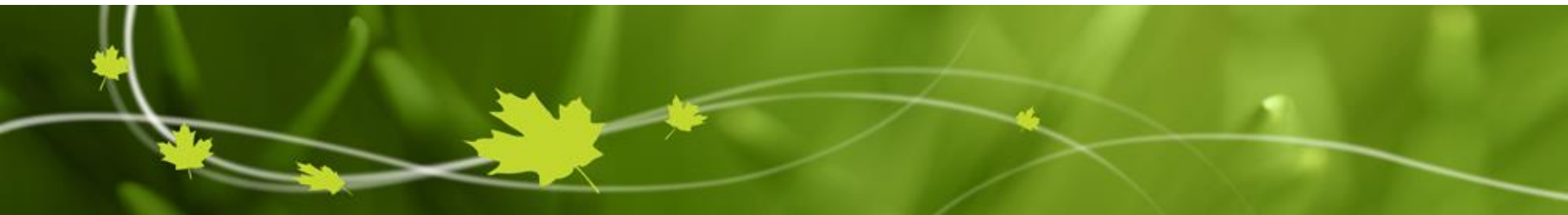




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Overview of the National Pollutant Release Inventory (NPRI)

**Session for
Air & Waste Management Association
Ottawa Valley Chapter**

Presented by:
Jeff Gleeson, P.Eng.
Program Integration Division
Science and Risk Assessment Directorate
Science and Technology Branch

Agenda

- Background
- Highlights from the most recently published data
- How to access NPRI data
- Upcoming changes to reporting requirements for 2018/19
- Look ahead to potential changes for 2020/21
- Upcoming projects and initiatives
- Q & A



What is the NPRI?

- Canada's legislated, publicly-accessible inventory of pollutant releases (to air, water and land), disposals (e.g. underground injection, landfill) and transfers for recycling
- Established in 1993, it includes information collected from approximately 7,500 facilities on over 300 substances, based on mandatory annual reporting under CEPA
- Includes reporting on “CEPA-Toxic” substances, air pollutants contributing to smog and acid rain, and other pollutants of concern



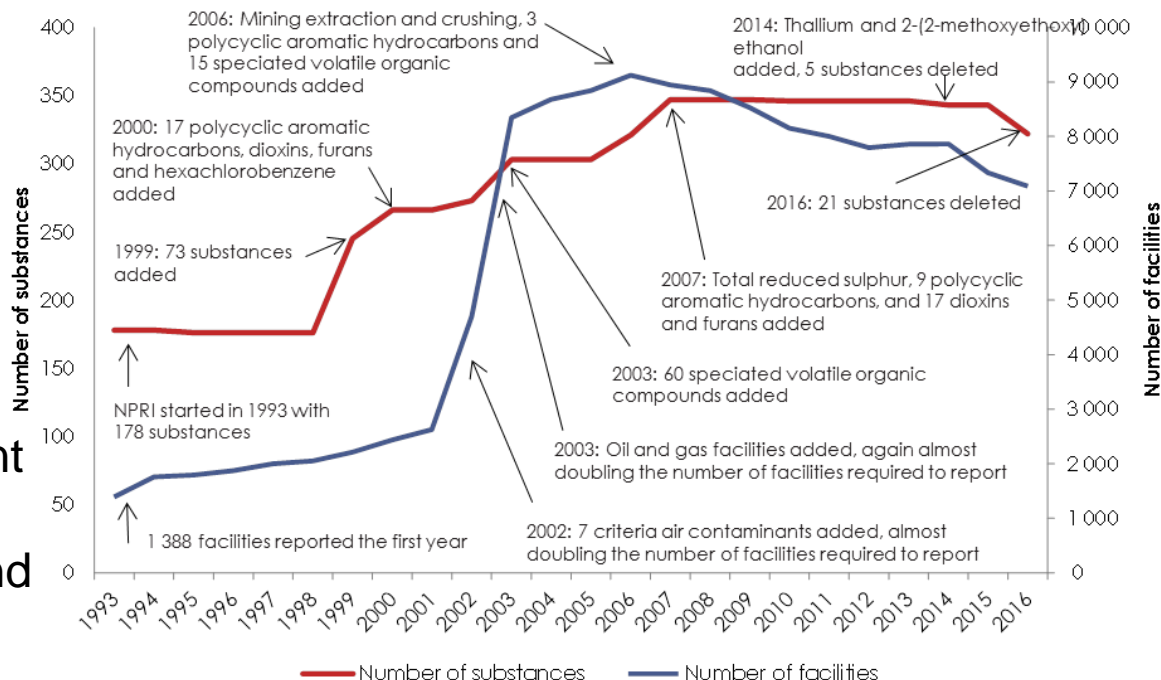
Why the NPRI Exists

- The NPRI is a key resource for identifying and monitoring sources of pollution in Canada. It exists to:
 - Identify pollution prevention priorities;
 - Support the assessment and risk management of chemicals and air quality modelling;
 - Encourage actions to reduce the release of pollutants into the environment;
 - Improve public understanding; and
 - Support annual international reporting (e.g. submission of the Air Pollutant Emissions Inventory to the United Nations Economic Commission for Europe).
- Public “right-to-know” is a fundamental underlying principle of the NPRI.



The NPRI has expanded since its inception...

- Since 1993, the first year of the NPRI, ECCC has:
 - Added over 150 substances, including toxic substances and air pollutants
 - Reduced thresholds or established different reporting criteria for certain substances and activities



- A list of changes to NPRI requirements over time is available at:
<https://www.canada.ca/en/environment-climate-change/services/national-pollutant-release-inventory/substances-list/history-reporting-requirements.html>

Who must report to the NPRI?

- NPRI reporting requirements are published in Part I of the *Canada Gazette*. In summary:
 1. Facilities are subject to the requirements if they:
 - Have a certain number of employees (10 FTEs / 20 000 hours); **or**
 - Carry out certain specified activities :
 - wood preservation, sewage sludge incineration, hazardous waste incineration, hospital waste incineration, operations at pits or quarries where production is $\geq 500,000$ tonnes
 2. Individual substances may be reportable if:
 - Thresholds are exceeded for:
 - Quantity manufactured, processed or otherwise used (MPO); or
 - Quantity released (for air pollutants); or
 - Certain activities occur (e.g. dioxins/furans and hexachlorobenzene)



Who currently reports to the NPRI?

- Industrial sectors:
 - Oil and gas extraction, chemical pulp mills, petroleum refineries, mining, metal manufacturing, chemical manufacturing
- Treatment facilities:
 - Waste treatment and disposal, sewage treatment facilities
- Services facilities:
 - Electric power generation, airports, cargo handling, research and development facilities, hospitals
- Government facilities:
 - National Defence, Correctional Services



What substances are on the NPRI?

- Over 300 substances are listed on the NPRI, including CEPA-toxic substances, air pollutants and other substances of concern.
- They are listed in parts, each with its own reporting criteria:
 - Part 1A – **Core Substances** [10 tonnes manufactured, processed or otherwise used (MPO), at >1% concentration except by-products]
 - E. g. : Copper and its compounds, zinc and its compounds, manganese and its compounds, ethylene glycol, ethylbenzene, methanol, phosphorus, ammonia, nitrate ion, hydrogen sulphide, hydrochloric and sulphuric acids.
 - Part 1B – **Alternate Threshold substances** [MPO, with lower mass and/or concentration thresholds]
 - E.g.: Mercury (5 kg MPO threshold)
 - Arsenic, lead (50 kg MPO threshold)
 - Bisphenol A, selenium and its compounds, thallium and its compounds (100 kg MPO threshold)

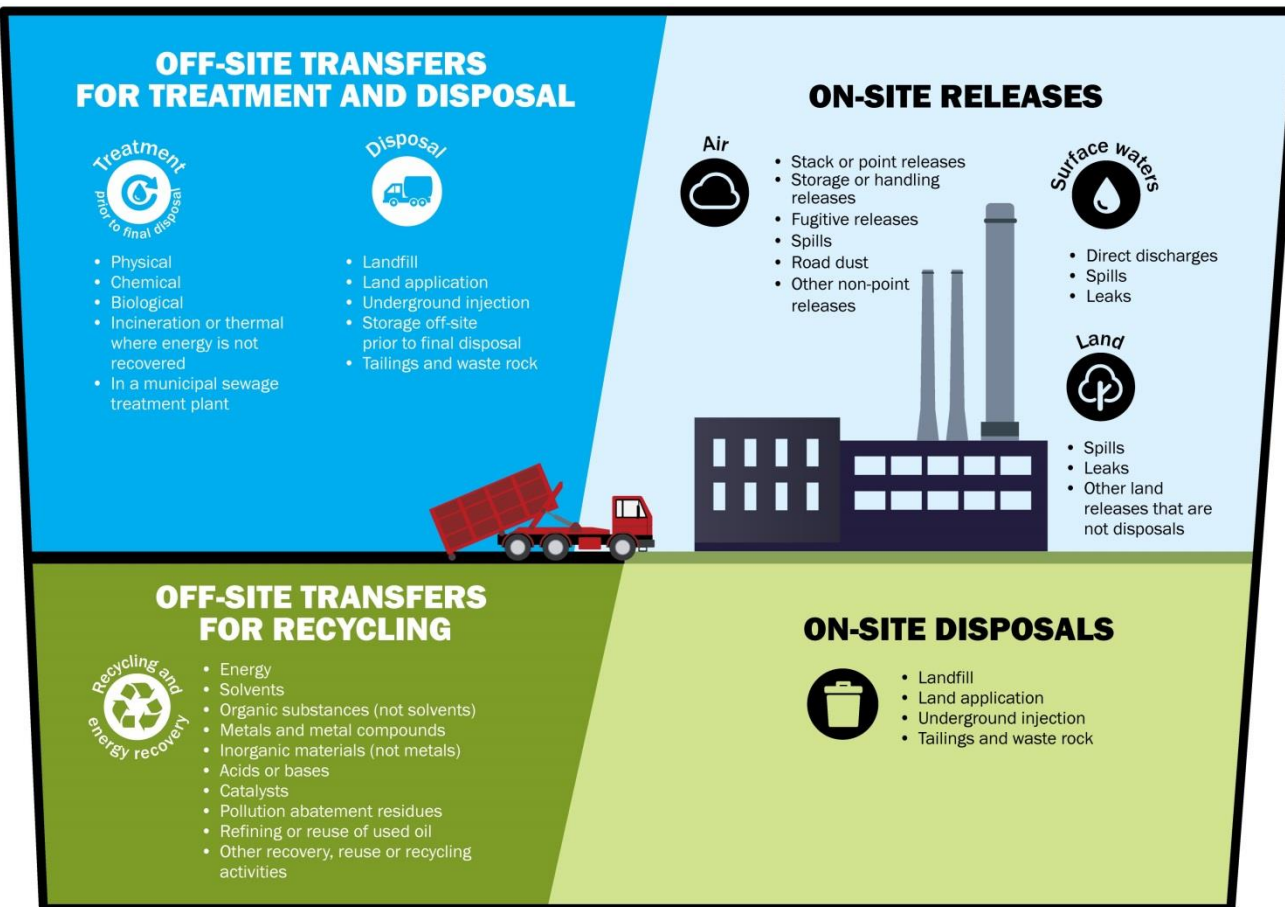


What substances are on the NPRI? (2)

- Parts and reporting criteria (continued):
 - Part 2 – **Polycyclic Aromatic Hydrocarbons (PAHs)** [50 kg released, disposed or recycled for group, 5 kg for individual reporting]
 - Part 3 – **Dioxins, Furans & Hexachlorobenzene** [specified activities]
 - Part 4 – **Criteria Air Contaminants (CACs)** [quantity released to air]
 - Sulphur dioxide, carbon monoxide, nitrogen oxides (NO_x), volatile organic compounds (VOCs), total particulate matter, PM_{2.5} and PM₁₀.
 - Part 5 – **Individual Volatile Organic Compounds (VOCs)** [1 tonne released to air, if Part 4 criteria for Total VOCs is met]
 - E.g.: Benzene, creosote, ethylene, formaldehyde, octane, propane, styrene, xylene.
- NPRI substance list:
www.canada.ca/en/environment-climate-change/services/national-pollutant-release-inventory/substances-list/threshold.html



What information is reported to the NPRI?



• Quantities

Releases: air, surface water, land and less than 1 tonnes in total

Disposals (on- or off-site): landfill, land application, tailings & waste rock, underground injection

Transfers (off-site): treatment, recycling or energy recovery (including the destination of the transfer)

• Other information

Facility information: location, industry type, contacts

Type of use (of substance): for sale, by-product, additive, etc.

Pollution Prevention activities

Reasons for changes compared to quantities reported from previous years

Who uses NPRI data?

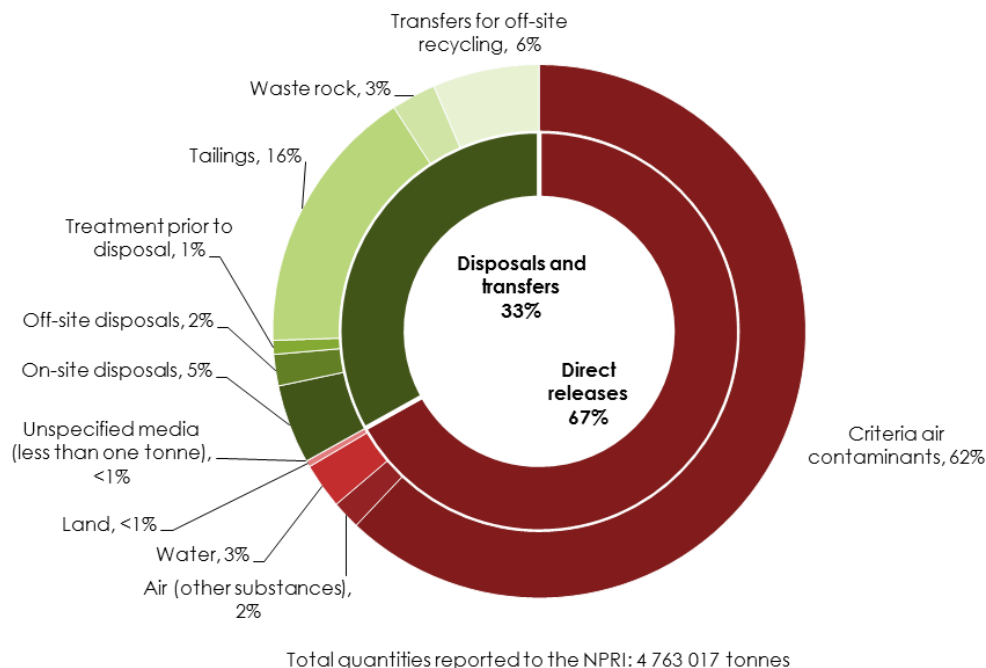
The NPRI data is published on the NPRI webpage as well as on the GoC Open Data Portal and is used by a variety of users:

- Governments and International Organizations:
 - Environment and Climate Change Canada programs e.g. Regulators, Risk Assessors, Indicators Developers, Air Quality Modellers, etc.
 - Other federal departments and other provincial governments
 - International Organizations (e.g. Commission for Environmental Cooperation, OECD), other countries' governments
- Industry Associations and individual companies
- Public:
 - Canadians
 - Non-Government Organizations (environmental, health, etc.)
 - Community Groups
 - Academics
 - Educators & Students
 - Media
- Financial Institutions

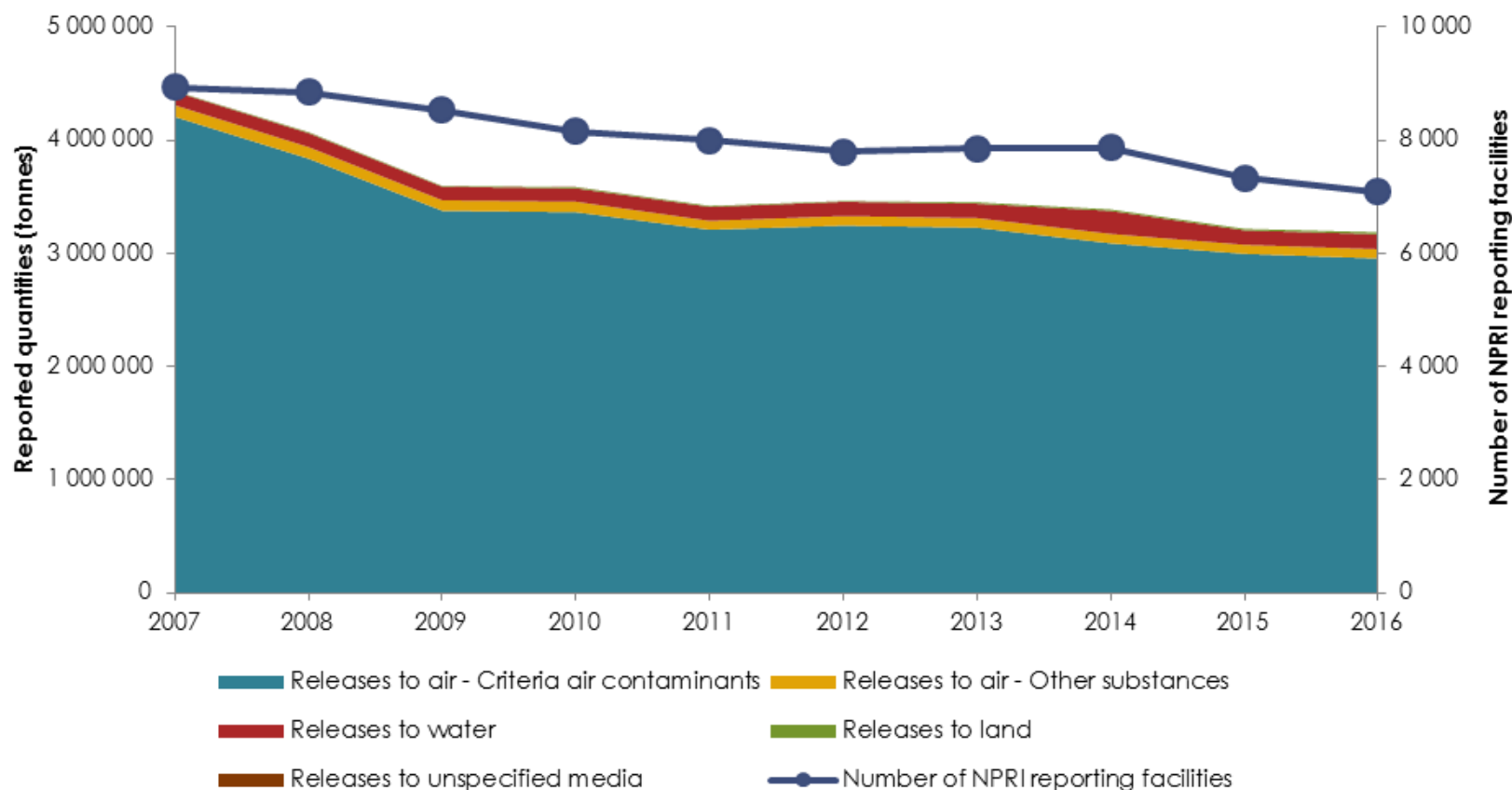


2016 Data Highlights

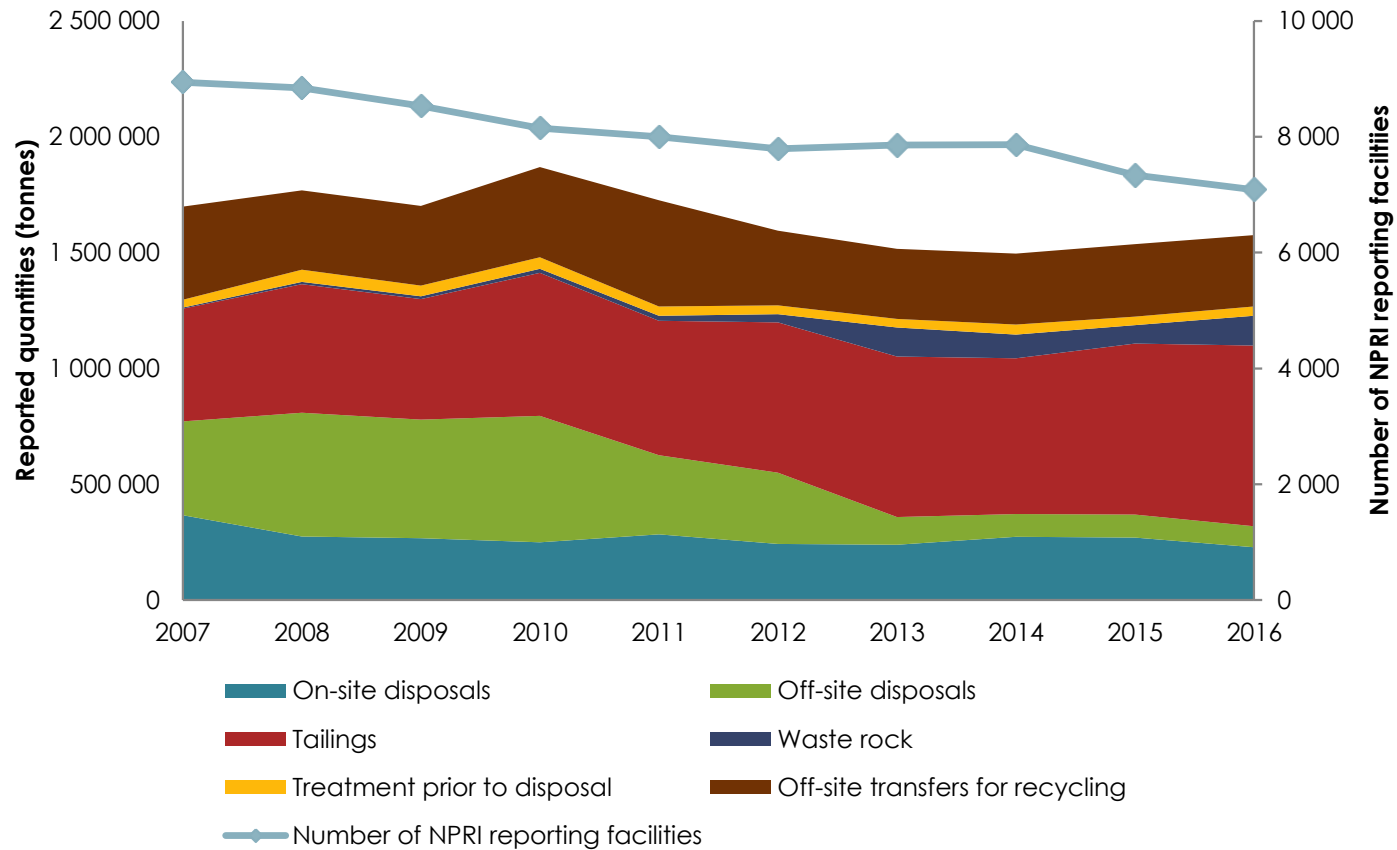
- 7 087 facilities reported to the NPRI in 2016:
 - 197 fewer facilities than in 2015 (↓ 3%)
- Total reported quantity for 2016:
 - 4 763 017 tonnes
- Reduction in releases since 2015:
 - ↓ 29 700 tonnes (↓ 1%)
- Increase in disposals and transfers since 2015:
 - ↑ 39 531 tonnes (↑ 3%)



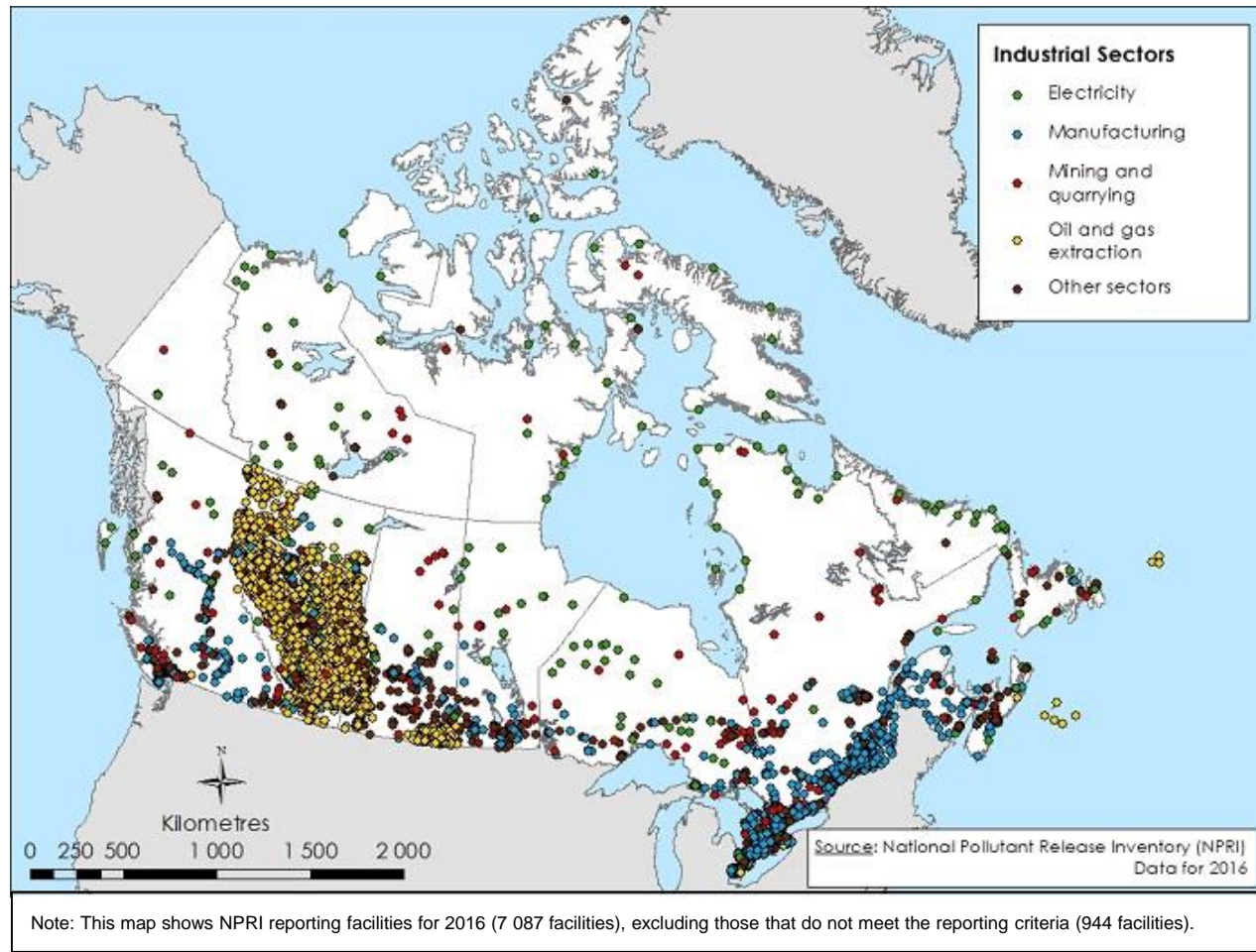
2007 to 2016 Releases and Facility Count



2007 to 2016 Disposals and Facility Count



Location of Facilities in 2016




Accessing NPRI Data

- NPRI data can be accessed through a variety of tools:
 - Online Query Tool for quick, easy search of information on a particular facility;
 - Downloadable data files (i.e., Excel and Comma-Separated-Value (CSV) formats);
 - Map layers to explore NPRI data in a visual way; and
 - NPRI database in Microsoft Access format (i.e., for custom analysis for “technical” users).



Access Data: One Stop Shop



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Access data from the National Pollutant Release Inventory

The following NPRI datasets are available through the Government of Canada Open Data Portal and contain data as of September 29, 2016. There are a number of factors to keep in mind when using and interpreting NPRI data. For more information see [Using and interpreting NPRI data](#).

Note that facility reported data is available in the original language of submission.

Data Set	Data Set Description
Online Query Tool	<p>Use the query tool to search detailed information on pollutant releases (to air, water and land), disposals, and transfers for recycling reported by facilities to the NPRI. You can search a report by filtering by reporting year, company, substance, location, and industry type.</p> <p>Predefined queries are also available for aggregated data by province, industry type, and substance, for the last five reporting years.</p>
Single Year Tabular Data	<p>These files contain the most commonly used NPRI data fields within a simplified tabular format, including all facility-reported pollutant releases, disposals and transfers for recycling for a given year, listed by facility and substance.</p> <p>Available in CSV and XLSX for the three most recent years.</p>
Five Year Release Data Aggregated by Province, Industry Type, and Substance	<p>These files contain NPRI release data for the past five reporting years, aggregated by Province, Industry Type and Substance, and disaggregated by media (air, water and land). The number of reporting facilities represented by each aggregated data point is included*. The results can be further explored using the pre-defined queries available in the online query tool.</p>



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Online Data Search (Query Tool)

Preview – Custom Search Form

- Quick, easy to find information on a particular facility, substance, location, sector.

Pollution and Waste

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- National Pollutant Release Inventory Home
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- Data Quality
- Consultations
- Substance Lists
- Glossary
- Related Links
- FAQ
- Contact the NPRI
- Site Map

NPRI Data Search

Data as of: September 14, 2017

Welcome to the **NPRI** On-line Facility Data Search. Use this query tool to search detailed information on pollutant releases (to air, water and land), disposals and transfers for recycling reported by facilities to the National Pollutant Release Inventory (NPRI) from 1994 to 2016.

Search:

Custom Queries

Select a reporting year: 2016 ?

Facility

Please select no more than **one** of the following facility query options:

Company or Facility Name: ?

NPRI ID: ?

Substance

Please select no more than **one** of the following substance query options:

Substance Name: ?

CAS number: ?

Location

Please select no more than **one** of the following location query options:

Province or Territory: ?

Postal Code (Enter 1 to 3 characters): ?

Major Urban Center (population of at least 10 000): ?

Community

Step 1 (select community province/territory): ?



Online Data Search

Preview: Substance Search

Search Information

Search criteria	
Reporting Year	2016
Substance	Aniline (and its salts)
CAS	62-53-3
Units	tonnes
Location	All of Canada
Facility	All Facilities
Industrial Sectors	All Sectors
Type	All Types
Total Results	3



The number of results returned here may differ from published lists of the number of facilities reporting pollutant releases and transfers to the NPRI due to the inclusion of facilities reporting only under Ontario Regulation 127/01, and/or facilities submitting "did not meet criteria" reports.

Sort by: Releases

Sort order: Descending

Sort

Notes:

1. Click on the NPRI ID or a facility name for the details on that facility.
2. Off-site column under Disposal in this table includes "Off-site Disposal" and "Off-Site Treatment Prior to Final Disposal".
3. Units: tonnes

NPRI ID	GHGRP ID	Facility	City	Prov	On-Site Releases				Disposal *			Off-Site Recycling
					Air	Water	Land	Total	On-Site	Off-Site	Total	
2537	602	Clean Harbors Canada, Inc. - Clean Harbors Canada, Inc - Lambton	Corunna	ON	0	0	0	0.002	3.0	0	3.0	0
2322		Chemtura Canada Co. Cie. - Elmira	Elmira	ON	0	0	0	0.000	0	30	30	0
4948		Clean Harbors Canada, Inc. - CLEAN HARBORS CANADA, INC.	Mississauga	ON	0	0	0	0	0	20	20	0
Total for All Facilities					0	0	0	0.002	3.0	50	53	0



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1 of 4



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New and updated datasets



- [Floods in Canada - Archive](#)
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- [Floods in Canada - Current Year](#)
- [The Fiscal Monitor: 2016-2017](#)
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National Pollutant Release Inventory (NPRI) – Downloadable Databases

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals and transfers for recycling. This database contains the full NPRI dataset from 1993 to the latest reporting year available in Microsoft Access Format (accdb)....

Organization: Environment and Climate Change Canada

Resource Formats: HTML DOCX JPG ZIP

National Pollutant Release Inventory (NPRI) - Bulk Data

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals and transfers for recycling. These files contain data from 1994 to the latest reporting year available. These datasets are in normalized or 'list' format and are...

Organization: Environment and Climate Change Canada

Resource Formats: HTML CSV TXT

Search Filters [Clear All](#)

Portal Type

☐ Open Data (15)

☒ Clear All

Collection Type

☐ Non-Spatial (6)

☐ Open Maps (9)

☒ Clear All

Organization

☐ Environment and Climate Change Canada (15)

☒ Clear All

Keywords



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Open Data Portal

Sample page

National Pollutant Release Inventory (NPRI) - Pollutant Release and Transfer Data Reported by Facilities, Single Year Tabular Format

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals and transfers for recycling.









This file contains the most commonly used NPRI data fields, within a simplified tabular format, including all facility-reported pollutant releases, disposals and transfers for recycling for a given year, listed by facility and substance.

There are important factors that should be considered prior to the use and interpretation of NPRI data. Additional information is available on the NPRI web site.

Publisher - Current Organization Name: Environment and Climate Change Canada

Licence: [Open Government Licence - Canada](#)

Resources

Resource Name  	Resource Type  	Format  	Language  	Links
2013-INRP-NPRI.csv	Dataset	CSV	English French	Access
2013_INRP-NPRI_2016-09-29.xlsx	Dataset	XLS	English French	Access
2014-INRP-NPRI.csv	Dataset	CSV	English French	Access
2014_INRP-NPRI_2016-09-29.xlsx	Dataset	XLS	English French	Access

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Additional Information

Contact Email: open-ouvert@tbs-sct.gc.ca

Keywords:

npri inventory pollutant
pollution emissions
environment recycling
disposal industry
chemical substance
toxic air pollution
water pollution land
chemical spill waste
underground injection landfill
energy recovery ozone
smog particulate matter
emissions
volatile organic compound
nitrogen oxides
sulphur oxide ammonia
facilities



Single Year Tabular Data Preview

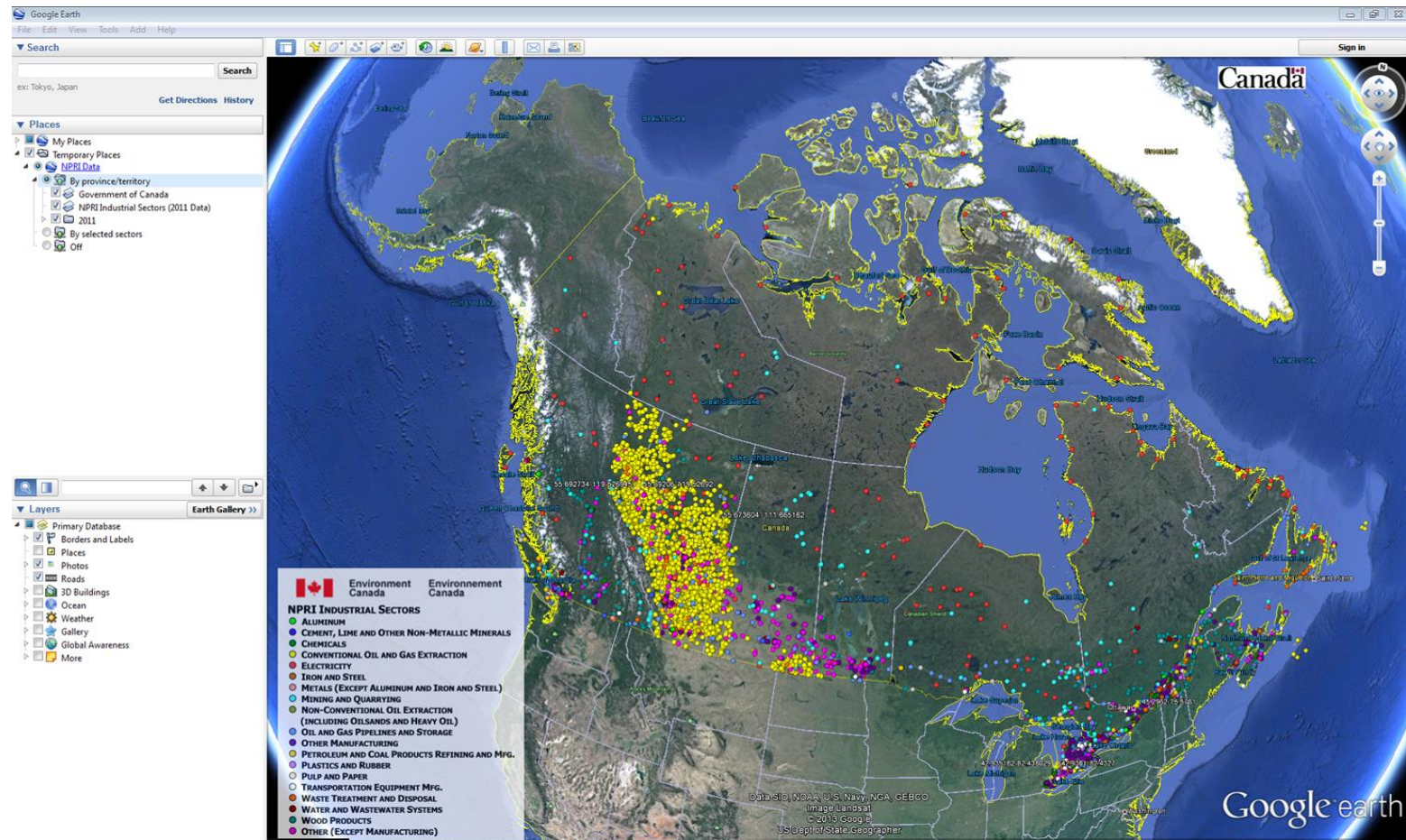
[illegible]

Bulk Data Preview

NPRI-SubsRele-Normalized-Since1993.csv															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Reporting	NPRI_ID /	Facility_Na	Company	NAICS / C	Province /	CAS_Num	Substance	Substance	Group (Eng	Group (Fre	Category (I	Category (I	Quantity / C	Units / U
2	2015	11	Hexion Car	Hexion Car	325210	AB	108-95-2	Phenol (an	Phénol (et	Releases to	Rejets dan	Stack / Poi	Rejets de c	4.002	tonnes
3	2015	11	Hexion Car	Hexion Car	325210	AB	108-95-2	Phenol (an	Phénol (et	Releases to	Rejets dan	Storage / F	Rejets de s	0.241	tonnes
4	2015	11	Hexion Car	Hexion Car	325210	AB	108-95-2	Phenol (an	Phénol (et	Releases to	Rejets dan	Fugitive	Émissions	0.259	tonnes
5	2015	11	Hexion Car	Hexion Car	325210	AB	NA - M16	Volatile Or	Composés	Releases to	Rejets dan	Stack / Poi	Rejets de c	26.4	tonnes
6	2015	11	Hexion Car	Hexion Car	325210	AB	NA - M16	Volatile Or	Composés	Releases to	Rejets dan	Fugitive	Émissions	12.46	tonnes
7	2015	11	Hexion Car	Hexion Car	325210	AB	NA - M16	Volatile Or	Composés	Releases to	Rejets dan	Storage / F	Rejets de s	0.48	tonnes
8	2015	11	Hexion Car	Hexion Car	325210	AB	50-00-0	Formaldehy	Formaldéhy	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.806	tonnes
9	2015	11	Hexion Car	Hexion Car	325210	AB	50-00-0	Formaldehy	Formaldéhy	Releases to	Rejets dan	Fugitive	Émissions	1.475	tonnes
10	2015	11	Hexion Car	Hexion Car	325210	AB	50-00-0	Formaldehy	Formaldéhy	Releases to	Rejets dan	Storage / F	Rejets de s	0.322	tonnes
11	2015	11	Hexion Car	Hexion Car	325210	AB	67-56-1	Methanol	Méthanol	Releases to	Rejets dan	Storage / F	Rejets de s	0.159	tonnes
12	2015	11	Hexion Car	Hexion Car	325210	AB	67-56-1	Methanol	Méthanol	Releases to	Rejets dan	Fugitive	Émissions	6.216	tonnes
13	2015	11	Hexion Car	Hexion Car	325210	AB	67-56-1	Methanol	Méthanol	Releases to	Rejets dan	Stack / Poi	Rejets de c	20.934	tonnes
14	2015	11	Hexion Car	Hexion Car	325210	AB	NA - 16	Ammonia (Ammoniac	Total All M	Rejets à toi	All Media	Rejets à toi	0.056	tonnes
15	2015	11	Hexion Car	Hexion Car	325210	AB	80-05-7	Bisphenol	Bisphénol	Releases to	Rejets dan	Storage / F	Rejets de s	0.01	kg
16	2015	11	Hexion Car	Hexion Car	325210	AB	107-21-1	Ethylene gl	Éthylènegly	Releases to	Rejets dan	Storage / F	Rejets de s	0.0003	tonnes
17	2015	15	BAYCOAT	Baycoat Lt	332810	ON	NA - M16	Volatile Or	Composés	Releases to	Rejets dan	Stack / Poi	Rejets de c	19.173	tonnes
18	2015	15	BAYCOAT	Baycoat Lt	332810	ON	91-20-3	Naphthaler	Naphtalène	Total All M	Rejets à toi	All Media	Rejets à toi	0.289	tonnes
19	2015	15	BAYCOAT	Baycoat Lt	332810	ON	108-88-3	Toluene	Toluène	Total All M	Rejets à toi	All Media	Rejets à toi	0.243	tonnes
20	2015	15	BAYCOAT	Baycoat Lt	332810	ON	78-93-3	Methyl ethy	Méthyléthyl	Releases to	Rejets dan	Stack / Poi	Rejets de c	1.462	tonnes
21	2015	15	BAYCOAT	Baycoat Lt	332810	ON	71-36-3	n-Butyl alcc	Butan-1-ol	Releases to	Rejets dan	Stack / Poi	Rejets de c	1.103	tonnes
22	2015	15	BAYCOAT	Baycoat Lt	332810	ON	95-63-6	1,2,4-Trim	1,2,4-Trimé	Releases to	Rejets dan	Stack / Poi	Rejets de c	2.353	tonnes
23	2015	15	BAYCOAT	Baycoat Lt	332810	ON	1330-20-7	Xylene (all	Xylène (tou	Releases to	Rejets dan	Stack / Poi	Rejets de c	1.513	tonnes
24	2015	15	BAYCOAT	Baycoat Lt	332810	ON	100-41-4	Ethylbenze	Éthylbenzè	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.261	tonnes
25	2015	15	BAYCOAT	Baycoat Lt	332810	ON	111-76-2	2-Butoxyet	2-Butoxyét	Releases to	Rejets dan	Stack / Poi	Rejets de c	2.61	tonnes
26	2015	15	BAYCOAT	Baycoat Lt	332810	ON	11104-93-	Nitrogen ox	Oxydes d'a	Releases to	Rejets dan	Stack / Poi	Rejets de c	20	tonnes
27	2015	15	BAYCOAT	Baycoat Lt	332810	ON	67-64-1	Acetone	Acétone	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.096	tonnes
28	2015	15	BAYCOAT	Baycoat Lt	332810	ON	108-10-1	Methyl isob	Méthylisobi	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.128	tonnes
29	2015	21	Bolton Plar	Bolton Stee	331210	ON	7647-01-0	Hydrochlori	Acide chlor	Releases to	Rejets dan	Fugitive	Émissions	0.3175	tonnes
30	2015	21	Bolton Plar	Bolton Stee	331210	ON	NA - 14	Zinc (and it	Zinc (et ses	Total All M	Rejets à toi	All Media	Rejets à toi	0.0538	tonnes
31	2015	21	Bolton Plar	Bolton Stee	331210	ON	NA - M09	PM10 - Pa	PM10 - Ma	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.1183	tonnes
32	2015	28	CORNWAI	BASF Can	325190	ON	630-08-0	Carbon mc	Monoxyde	Releases to	Rejets dan	Stack / Poi	Rejets de c	1.4	tonnes
33	2015	28	CORNWAI	BASF Can	325190	ON	NA - M08	PM - Total	PM - Partic	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.68	tonnes
34	2015	28	CORNWAI	BASF Can	325190	ON	NA - M16	Volatile Or	Composés	Releases to	Rejets dan	Stack / Poi	Rejets de c	2.26	tonnes
35	2015	28	CORNWAI	BASF Can	325190	ON	NA - M09	PM10 - Pa	PM10 - Ma	Releases to	Rejets dan	Stack / Poi	Rejets de c	0.68	tonnes

Geospatial Data: Virtual Globe

Preview



Geospatial Data: Virtual Globe

Preview

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- My Places
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- NPRI Data
 - By province/territory
 - Government of Canada
 - NPRI Industrial Sectors (2011 Data)
 - 2011
 - By selected sectors
 - Off

Layers

- Primary Database
- Borders and Labels
- Places
- Photos
- Roads
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Earth Gallery >>

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NPRI INDUSTRIAL SECTORS

- ALUMINUM
- CEMENT, LIME AND OTHER NON-METALLIC MINERALS
- CHEMICALS
- CONVENTIONAL OIL AND GAS EXTRACTION
- ELECTRICITY
- IRON AND STEEL
- METALS (EXCEPT ALUMINUM AND IRON AND STEEL)
- MINING AND QUARRYING
- NON-CONVENTIONAL OIL EXTRACTION (INCLUDING OILSANDS AND HEAVY OIL)
- OIL AND GAS PIPELINES AND STORAGE
- OTHER MANUFACTURING
- PETROLEUM AND COAL PRODUCTS REFINING AND MFG.
- PULP AND PAPER
- PLASTICS AND RUBBER
- TRANSPORTATION EQUIPMENT MFG.
- WASTE TREATMENT AND DISPOSAL
- WATER AND WASTEWATER SYSTEMS
- WOOD PRODUCTS
- OTHER (EXCEPT MANUFACTURING)

Environment Canada
www.ec.gc.ca

Hudson Bay Mining and Smelting Co., Limited, HBMS Metallurgical Complex
NPRI ID: 0000003414

Pollutant releases, disposals and transfers for recycling (excluding criteria air contaminants):

Substance	CAS Number	Releases to Air	Releases to Water	Releases to Land	Total Releases*	Total Disposal**	Transfers for Recycling	Units
Ammonia (total)	NA - 16		25.432		25.432			tonnes
Arsenic (and its compounds)	NA - 02		87.2		87.2	1,353,607		kg
Asbestos (friable form)	1332-21-4					0.299		tonnes
Cadmium (and its compounds)	NA - 03		37.1		37.1	16,324		kg
Copper (and its compounds)	NA - 06		0.161		0.161	1,745,679		tonnes
Lead (and its compounds)	NA - 08		59.4		59.4	559,152		kg
Mercury (and its compounds)	NA - 10		0.026		0.026			kg
Nitrate ion in solution at pH >= 6.0	NA - 17		131.109		131.109			tonnes
Sulphuric acid	7664-93-9				0			tonnes
Zinc (and its compounds)	NA - 14		0.878		0.878	4,241,786		tonnes

*There may not be detailed release information for certain substances due to the fact that if the total releases of an [NPRI Part 1A substance](#) were less than one tonne, facilities may choose to report only the total releases of that substance.

**Total Disposal: This column includes 'On-site Disposal', 'Off-site Disposal' and 'Off-site Treatment Prior to Final Disposal'. As of the 2006 reporting year, the 'Total Disposal' column includes information on tailings and waste rock disposals. Negative numbers are possible for on-site disposal of tailings and waste rock, which would reflect a net removal of the substances from the tailings or waste rock management area.

Criteria air contaminant (CAC) releases:

Substance	CAS Number	Releases to Air (Emissions) in tonnes from:			Units
		This Facility	All Facilities Reporting to the NPRI	National CAC Emissions (2011) without open sources and natural sources	
PM - Total Particulate Matter	NA - M08	30.1	241,184	647,492	tonnes
PM10 - Particulate Matter <= 10 Microns	NA - M09	9.966	123,751	337,290	tonnes
PM2.5 - Particulate Matter <= 2.5 Microns	NA - M10	0.989	50,121	245,650	tonnes
Sulphur dioxide	7446-09-5	71.9	1,101,333	1,274,081	tonnes

For more detailed information, see this facility's report on the NPRI website by clicking the link below:
[2011 NPRI Data](#)



Geospatial Data: Facility Locations (Mapping)

Access Point

National Pollutant Release Inventory (NPRI) - Geographic Distribution of NPRI-Reporting Facilities - mapping service









Map of Canada showing location of facilities that reported to the NPRI in the most recent year. The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals and transfers for recycling. Under the authority of the Canadian Environmental Protection Act, 1999 (CEPA 1999), owners or operators of facilities in Canada that meet the published reporting requirements are required to report to the NPRI. Reported pollutants include toxic substances, air pollutants and other substances of concern.

[View on Map](#)

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Resources

Resource Name  	Resource Type  	Format  	Language  	Links
Location of 2015 NPRI facilities	Web Service	WMS	English French	Access
Location of 2015 NPRI facilities	Web Service	WMS	English French	Access
National Pollutant Release Inventory (NPRI) - Geographic Distribution of NPRI-Reporting Facilities	Dataset	CSV	English	Access
National Pollutant Release Inventory (NPRI) - Geographic Distribution of NPRI-Reporting Facilities	Dataset	CSV	English	Access

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Additional Information

Creator: Environment and Climate Change Canada

Contact Email: ec.inrp-npri.ec@canada.ca

Keywords:

[Air](#) [Pollution and Waste](#)
[Water](#) [Facility](#) [Location](#)
[Assess Toxicity; Manage and Monitor for Environmental Presence of Hazardous Substances and Waste](#)
[Plans and Reports for Hazardous Substances](#)
[National \(CA\)](#) [Pollution](#)

Subject:

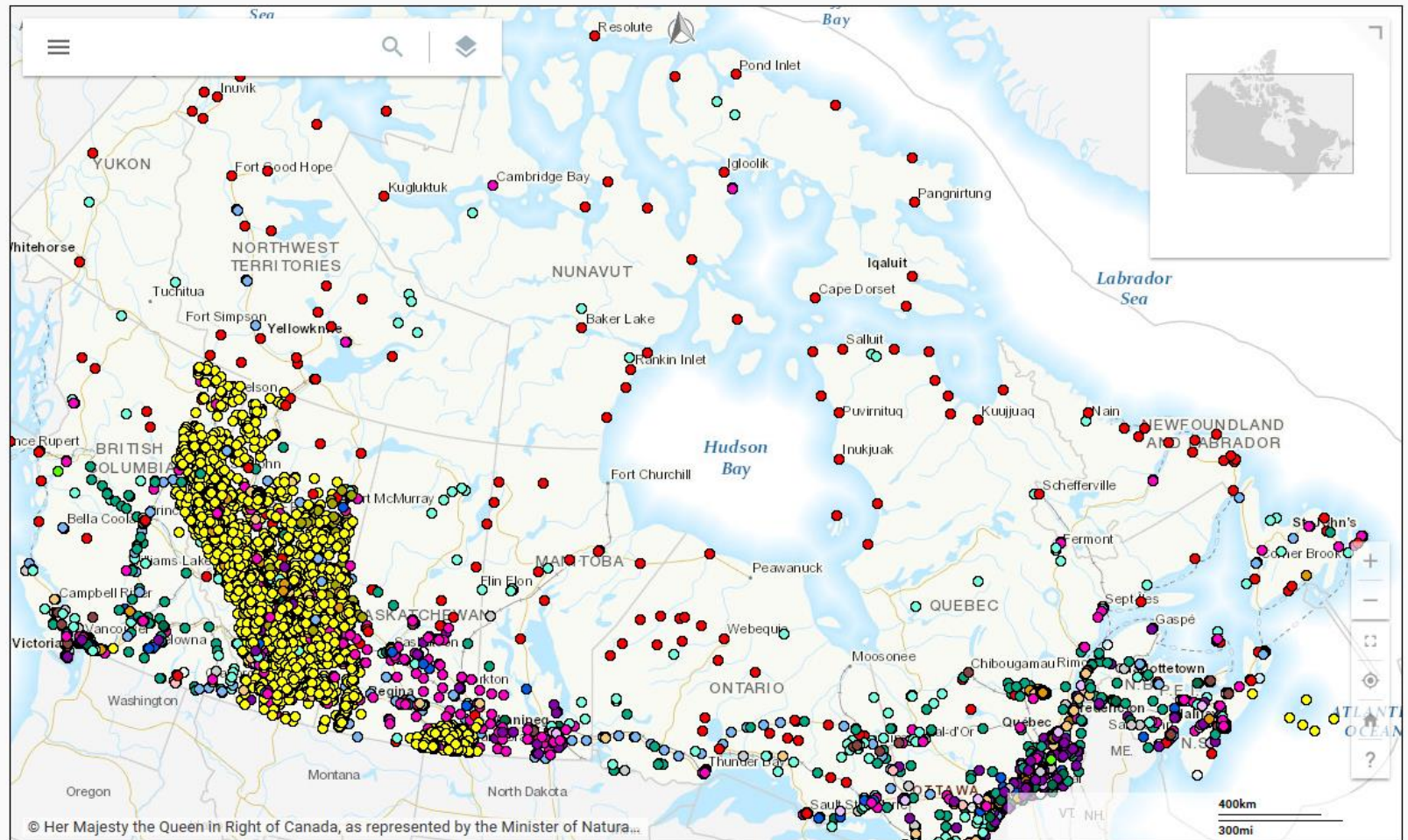
[Nature and Environment](#)

Topic category:

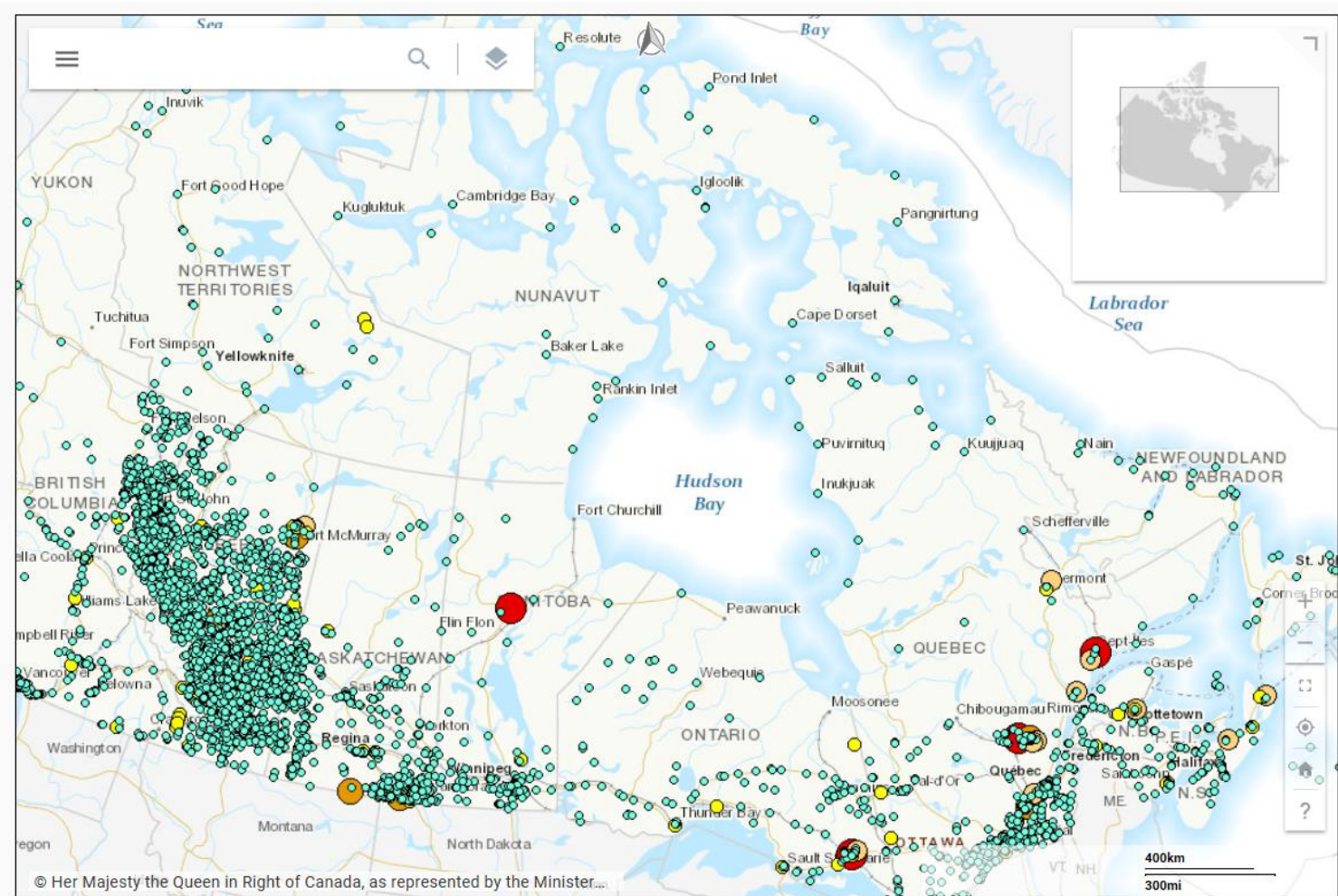
[Environment](#)



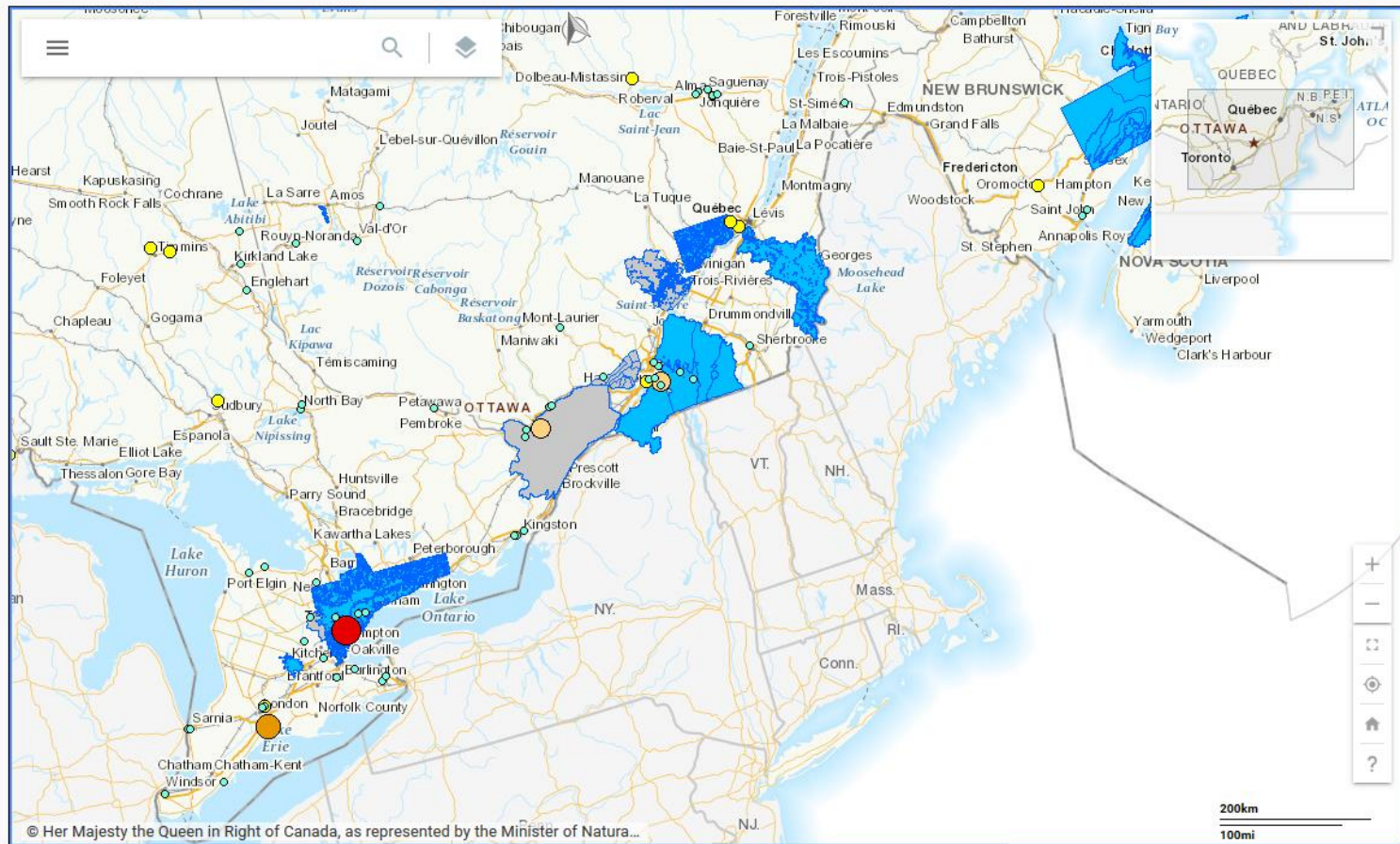
Open Maps: Facility Locations



Open Maps: Releases to Air (CACs)



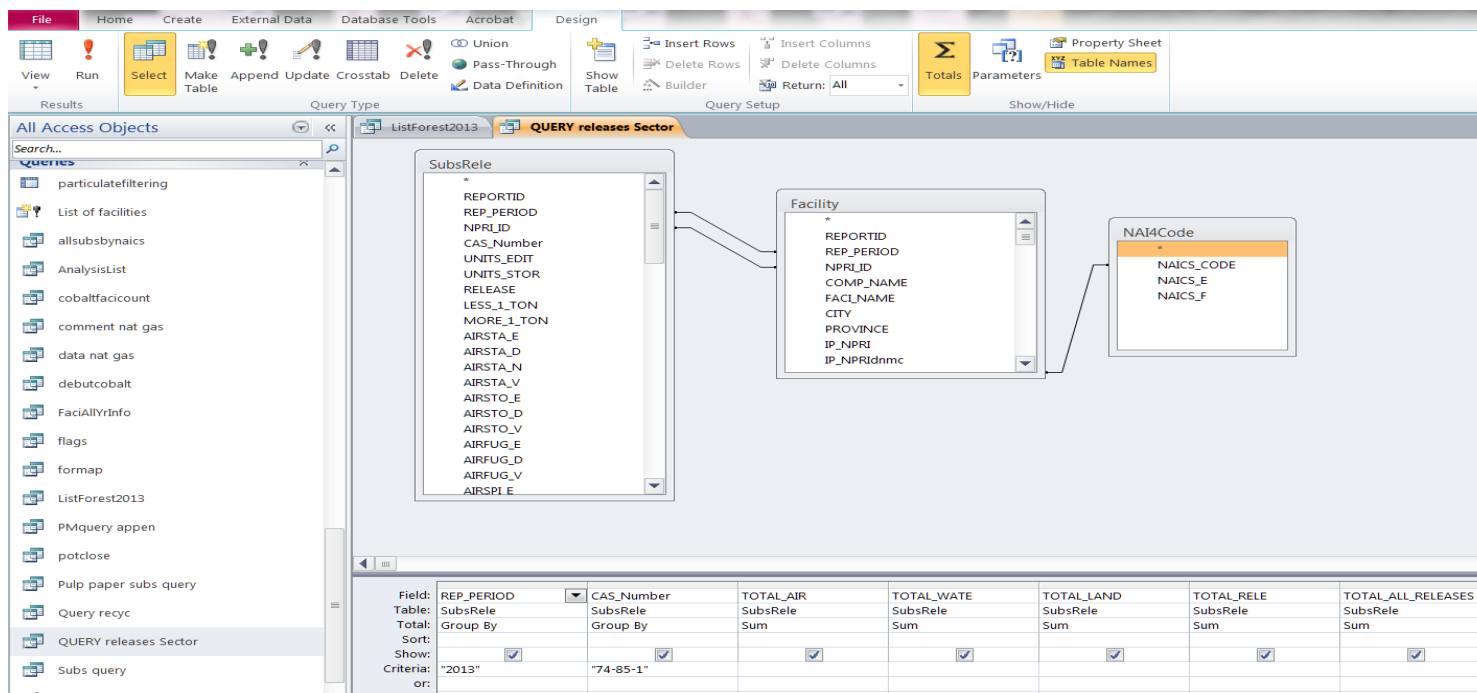
Open Maps: Key Aquifers of Canada (NRC) + Facility Releases to Land (NPRI)



Complete NPRI Database

Microsoft Access Format

- Available upon request; and
- Custom analysis for technical data users (e.g., industry-level analysis, time trends).



Changes for 2018/19 reporting

Canada Gazette Notice published January 20, 2018

<http://www.gazette.gc.ca/rp-pr/p1/2018/2018-01-20/html/notice-avis-eng.html#na1>

Overview of changes:

- Substance list (deletions, additions)
- Chrome Plating
- Stacks & Shut Down Periods
- Reasons for Change
- Pollution Prevention
- Administrative Changes
- New Requirements for Oil and Gas Facilities
- Unit Level Reporting For Electricity Generation

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Changes for 2018/19 reporting

Reporting Requirements for Oil and Gas Facilities

- Summary of Changes:
 - Facilities in the oil and gas extraction (except oil sands) sector with <10 employees will be required to report all CACs and benzene from all sources if they meet the air release threshold for at least one CAC
 - Excludes compressor stations
 - Light and medium crude oil batteries (with an annual oil throughput of $\geq 1900 \text{ m}^3$) must report VOC and benzene emissions from storage tanks
 - This change will result in ~2500 new facilities reporting
- Rationale:
 - Improve the reporting coverage of emissions from the sector
 - Focuses on the key reporting gaps for VOCs and benzene from batteries, gas gathering systems, natural gas processing plants, and wells
 - Proposed changes will provide more information and higher reporting coverage within the existing facility screening criteria, minimizing additional reporting burden faced by industry

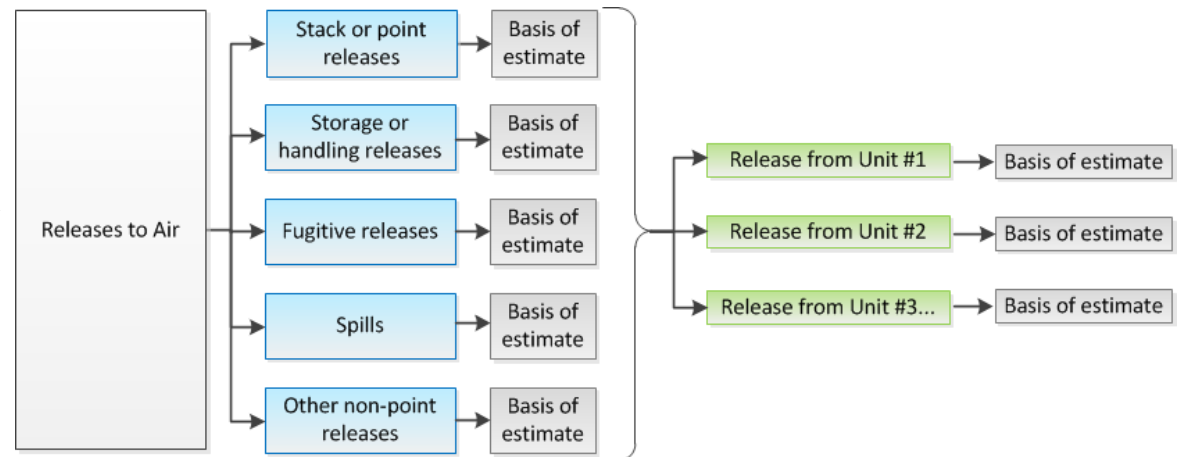


Changes for 2018/19 reporting

Electricity Generation Unit Reporting

- New requirement to report unit-level releases to air of mercury and CACs for individual electricity generating units with capacity of 25 MW or more and that distribute or sell to the grid 33% or more of their potential electrical output

- Process for mercury



- Rationale:
 - requested by Electricity and Combustion Division
 - each unit in a facility can be distinct from others units in terms of age, unique process regime or operation pattern, pollution control equipment, etc. and thus may have different emission characteristics
 - ECCC has historically approached environmental policy for the electricity sector from the unit-level and NPRI information will be useful for cost benefit analysis

Changes for 2020/21 reporting

- Under consideration:
 - Changes to how VOC and PM_{2.5} data are reported from stacks or point sources
 - Separation of combustion and non-combustion sources
 - Basis of estimate reporting on a per-stack basis (for stacks >50 m or with CEMS)
 - Reporting on type of fuel combusted
 - Addition of naphthanic acids* (Consultation period now open)
 - Dioxins, Furans and Hexachlorobenzene
 - Water releases (BOD, TSS, nutrients)
 - Pollution prevention (linkage to substances, activity ratio)
 - Radionuclides



Other Upcoming Projects

- Assessing data products:
 - Addressing data needs;
 - Remodeling the Query Site; and
 - Transition to a new database.
- Pursuing improvement of NPRI data:
 - Integrating data for more complex analysis;
 - Improving data quality, understanding trends and variations; and
 - Implementing changes to requirements to fill data gaps.
- Communicating to Canadians:
 - Developing new information products, including factsheets on industrial sectors and innovative measures;
 - 25th Anniversary outreach events.



Thank you!

Jeff Gleeson

Program Integration Division,
Science and Technology Branch,
Environment and Climate Change Canada

E-mail: ec.inrp-npri.ec@canada.ca

Telephone: 1-877-877-8375

NPRI Website: www.canada.ca/en/services/environment/pollution-waste-management/national-pollutant-release-inventory.html



Releases (not contained)

TOTAL_RELE

Air (TOTAL_AIR)	Water (TOTAL_WATE)	Land (TOTAL_LAND)
Fugitive emissions (AFug_Val, AirFug_Val)	Direct Discharge (WatD_Val, WatDis_Val)	Spill (LanS_Val)
Stack (ASSta_Val, AirSta_Val, AirS_Val)	Spill (WatS_Val, WatSpi_Val)	Leak (LanL_Val)
Storage/handling (ASSto_Val, AirSto_Val)	Leak (WatL_Val, WatLea_Val)	Other (LanO_Val)
Spill (AirSpi_Val)		
Other Non-Point (AirOth_Val)		
Road Dust (AirRoa_Val)		
Other Sources / Stack (VOCg_Val, VOCs_Val, ground<50m, stack>50m)		

Disposals and recycling (contained)

Disposals (TOTAL_DISP)			Recycling (TOTAL_RECY)
On-site (TOTAL_ON_S)	Off-site (TOTAL_OFFS)	Treatment (TOTAL_TREA)	Energy (Ener_Val)
Containment (landfill) (Olan_Val)	Containment (landfill) (Land_Val)	Physical treatment (Phys_Val)	Solvents (Solv_Val)
Land treatment (Farm) (Ofar_Val)	Land treatment (Farm) (Farm_Val)	Chemical treatment (Chem_Val)	Organic substances (not solvents) (Orga_Val)
Tailings (Ota_Val)	Underground injection (Unde_Val)	Biological treatment (Biol_Val)	Metals and metal compounds (Meta_Val)
Waste Rock (Owas_Val)	Containment (storage) (Stor_Val)	Incineration/thermal (Inci_Val)	Inorganic materials (not metals) (Inorg_Val)
Underground injection (Ound_Val)	Tailings (Tali_Val)	Municipal Sewage Treatment Plants (MSTP_Val)	Acids or bases (Acid_Val)
	Waste Rock (Wast_Val)		Catalysts (Cata_Val)
			Pollution abatement residues (Abat_Val)
			Refining or re-use of used oil (Uoil)
			Other (Othe_Val)

Comparison Factors

Time period	Substance	Sources	Receptor
Years (1993-present) (REP_PERIOD, REPORTYEAR)	Releases per quarter Rele_Qx	Reporting Company and Facility (NPRI_ID)	Air Emitting Facility (NPRI_ID, LATI_DEC / LONG_DEC)
Operational Schedule	Releases per month Rele_Month	Substance type (CAC, PAH, ACID, D, F, HCB, HFC, PFC, VOC, VOC_ALL, METAL)	Stack location (LATI_DEC / LONG_DEC, optional)
Shut Down Period (SOPERIOD)	Releases / Disposal / Recycling per year (see Release and Disposal tables)	Substance groups	Major Drainage Area (NPRI_ID, LATI_DEC / LONG_DEC)
P2P Implementation period (up to 2006)	Average total daily hours of operation (Hours_XX)	Special reporting requirement (GHG, PART, TOX, CARC, CEPA_TOX)	Specific water body (NPRI_ID, LATI_DEC / LONG_DEC)
Other time related activities of interest?	Days of Operation (Days_XXX)	Thresholds (EMPLOYEES, R_USED_X, R_ENGA_X, Stack_Th, PART)	Ecozone (NPRI_ID, LATI_DEC / LONG_DEC)
	Number of periods (C_SPERIOD)	EC assessment of qty not declared due to threshold or exemptions	SO _x Management Area (NPRI_ID (LATI_DEC / LONG_DEC)
	Duration of each period (START_DATE, END_DATE)	Mx - Continuous Emission Monitoring, Predictive Emission Monitoring, Source Testing, CMass Balance, Ex - Site Specific or Published Emission Factors, O - Engineering Estimates	Economic Region (NPRI_ID (LATI_DEC / LONG_DEC)
	Prevention Plan activities R_PPA2_x		Land Other
	Measurement method (XXXX_EST, XXXXXX_E)		