

UPDATE ON CANADA'S NATIONAL POLLUTANT RELEASE INVENTORY

Environment and Climate Change Canada

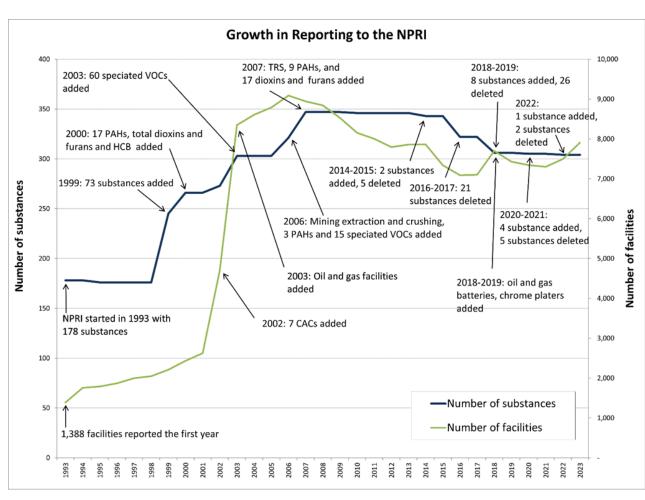


OUTLINE

- Latest NPRI facility-reported data
- Changes to the NPRI reporting requirements
- Pollution prevention plans and activities
- Data publication
- Partnerships

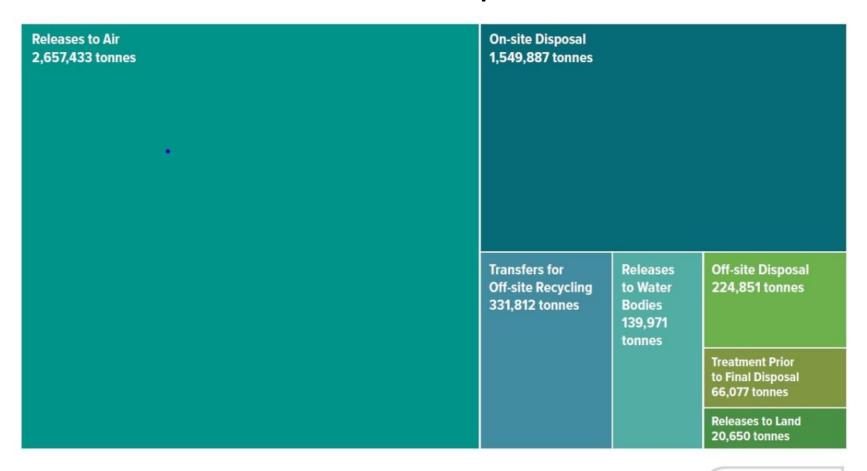
OVERVIEW OF REPORTING FOR 2023 DATA

- Reporting period for 2023 data was open from March 4 – June 3, 2024
 - 7,982 reports submitted (as of Feb 7, 2025)
- Compared with last year:
 - 449 more reports received for 2023 than 2022



LATEST NPRI FACILITY-REPORTED DATA

Breakdown of Total Quantities Reported to NPRI for 2023



Unspecified Media (<1 tonne) 264 tonnes

CHANGES TO REPORTING REQUIREMENTS

- Changes to NPRI reporting requirements are considered on an ongoing basis to improve and expand information available:
 - Subject of multi-stakeholder consultation process
- Changes to reporting requirements for 2022-2024:
 - Deletions from the substance list
 - Two substances have been deleted: Methyl iodide and Hexachlorocyclopentadiene
 - Addition of a substance
 - · Chlorhexidine and its salts
 - Changes that apply to all substances
 - Facilities are now required to indicate the reason a substance is being reported for the first time;
 - Facilities are now required to report any applicable identification number(s) for provincial or territorial operating permit, approval authorization, license or certificate or other applicable provincial or territorial environment program identifier(s);
 - Two new bases of estimate have been added to the list of bases of estimate that facilities are permitted to use to estimate substance quantities: remote quantification and speciation profile.

CHANGES TO REPORTING REQUIREMENTS

- Changes to NPRI reporting requirements for 2022-2024 (continued):
 - Changes applicable to all substances
 - Facilities are strongly encouraged to accurately classify their releases into one of the five
 designated categories: stack or point releases, storage tanks and related or handling
 releases, fugitive releases, spills or other accidental releases, and unpaved road dust. To
 enhance transparency, releases should not be reported under the "other non-point
 releases" category by default. From now on, any facility reporting releases in this category
 must provide a comment specifying their nature.
 - Changes to an exemption for Parts 1-3 substances
 - Changes to the requirements for reporting Part 4 substances
 - Changes to the requirements for reporting Part 5 substances
- The reporting requirements for 2025-27 are currently being developed and include the potential addition of several new substances, including PFAS. These new criteria are expected to be made available to the public in the *Canada Gazette* during March 2025.

WORK GROUP WORK PLAN

- The NPRI Multi-Stakeholder Work Group ("Work Group") is the primary consultative body for the NPRI.
- The mandate of the Work Group is to provide input and recommendations on a variety of issues including modifications to the NPRI substance list and reporting criteria and improving data quality.
- Priorities for the 2025-2027 Work Plan will focus on:
 - Substance list
 - Reporting criteria
 - Reporting system
 - Data accessibility
 - Data quality

POLLUTION PREVENTION PLANS

Pollution prevention involves identifying ways to minimize the causes of waste and pollution. A facility's pollution prevention plan includes an examination of current operations and steps to eliminate or reduce pollution at its source.

1,043* reporting facilities had pollution prevention plans in place in 2023. Of these plans:

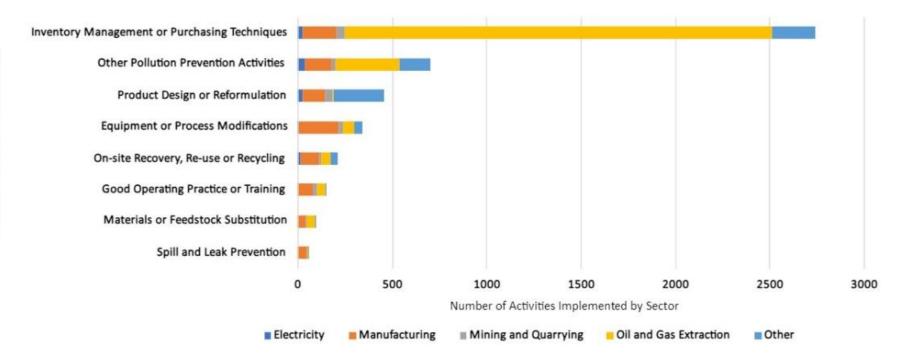
- 616 were prepared voluntarily
- 427 were prepared to meet the requirements of <u>a notice under the Canadian</u>
 <u>Environmental Protection Act, 1999</u> (e.g., the pollution prevention planning notice for toluene)

^{*}Please note that facilities have the option to select more than one reason why they prepared a plan. The sum of the number is therefore higher than 1,043 because it includes facilities that selected more than one reason.

POLLUTION PREVENTION ACTIVITIES

 In 2023, 3,505 facilities (44% of reporting facilities) reported at least one pollution prevention activity. For 2023, the most frequent reported activity was "good operating practice or training", with 2,705 facilities that had this activity. The second most common activity was "Spill and leak prevention", with 671 facilities that had this activity.

Activities reported by sector for 2023



DATA PUBLICATION

- Our online data products are being updated with the latest available data and transitioning towards an interactive text and map format.
- Reviewed 2023 data can be accessed using our NPRI data search tool.



In response to feedback from NPRI data users, several new pre-defined queries have been added to the Facility data search. These queries show on-site release data broken down by media (air, land and water) for the last five years. (Click to run.)



Downloadable datasets

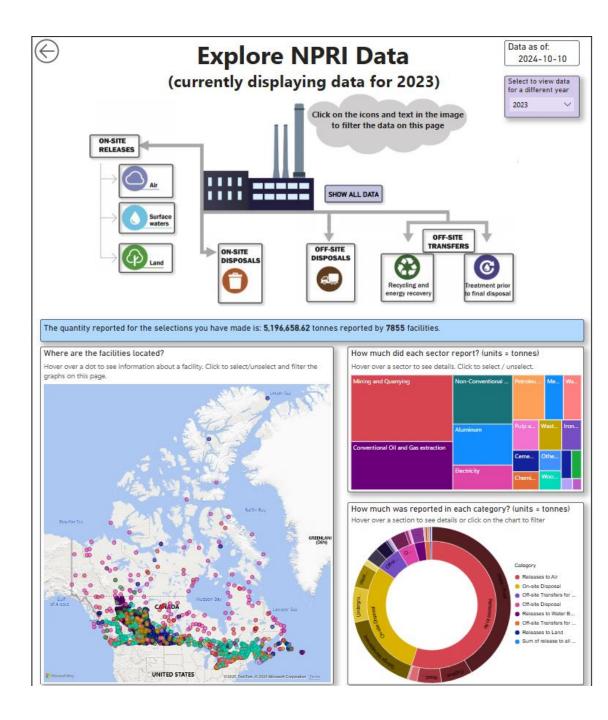
For advanced users visit our Explore NPRI data page.

Additional resources and search tools

For additional resources for accessing, understanding and analyzing NPRI data visit: <u>Pollution data and reports web page</u>.

DATA PUBLICATION

- NPRI Dashboard (right image)
- Spreadsheets
- Database



DATA PUBLICATION

Map of National Pollutant Release Inventory Facilities in 2023 Specific sector name Province/Territory \equiv Reset Filters ΑII Hide Table Substance Air Emissions Water Relea Units Name - Total - Total Q 1,2,4tonnes Trichlorobenzene 1.2.4-601.33 tonnes Trimethylbenzen 1.2-0.06 tonnes Dichloroethane 19.44 1,3-Butadiene tonnes 0.18 Benzenediamine. N.N'-mixed phenyl and tolyl derivatives 1.4-Dioxane 0.40 tonnes 1-Nitropyrene 7.10 kg 2-(2tonnes Methoxyethoxy) ethanol 2,6-Di-t-butyl-4tonnes methylphenol 2-Butoxyethanol 348.26 tonnes 2-Ethoxyethanol tonnes 2-Ethoxyethyl tonnes acetate tonnes Mercaptobenzot

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Information

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DATA OVERVIEWS AND REPORTS

NPRI reports

Substance overviews

- Ammonia
- Arsenic
- Copper
- Cadmium and its
 compounds Updated
- Ethlyene glycol
- Formaldehyde
- Lead
- Mercury Updated
- Nonylphenol and its ethoxylates
- Particulate matter
- Polycyclic aromatic compounds
- Sulphuric acid
- · Total reduced sulphur
- · Volatile organic compounds

Program and annual reviews

- Highlights of 2023 data Updated
- Academic challenge
- International initiatives
- NPRI timeline
- NPRI use in research

Sector overviews

- Aluminium
- Electricity
- Metal ore mining
- Pulp and paper
- Wastewater Updated

Data integration

- Carbon monoxide
- Climate change
- · Federal contaminated sites
- St. Lawrence Estuary beluga
- Sulphur dioxide
- Wetlands Updated
- Water quality Updated

Indigenous series

- Cree
- First Nations of Quebec and Labrador
- Nunavik
- · Reimagining pollution data

NPRI research articles New

- Characterizing and mapping NPRI transfers & disposals data
- <u>Using NPRI transfers & disposals</u>
 data in SDG tracking
- <u>Challenges in interpreting NPRI</u> transfers & disposals data
- Risk modeling with NPRI
- NPRI use in environmental research
- Polycyclic aromatic compounds sources & emissions

OUTREACH AND ACADEMIC PARTNERSHIPS

The NPRI organizes a number of activities in collaboration with museums, government, industry, international organization, academia, non-governmental organizations, and more.

The activities are tailored to each group to promote a broader understanding of the NPRI and pollution tracking in Canada.

NPRI <u>Academic Challenge</u>

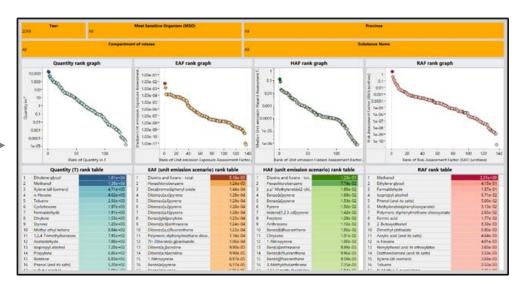
- Engaging the academic community in generating innovative products, activities, recommendations, and research to enhance the understandability, accessibility, awareness and usability of NPRI data;
- In 2023-2024 we supervised 12 projects, including two ongoing for the winter 2025 semester.

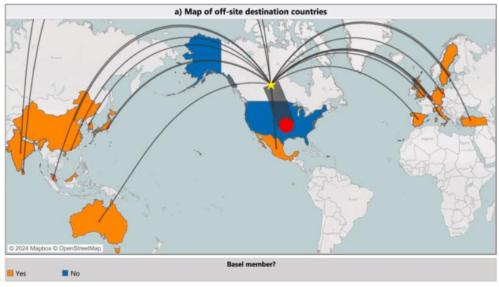
*An <u>interactive overview of select projects</u> is available on the NPRI website



SCIENTIFIC RESEARCH

- Risk-based prioritization of NPRI using an evaluative regional-scale multimedia mass balance model (dynamic dashboard).
- Canada's precedent-setting approach to integrating radionuclide release data.
- Tracking progress toward <u>SDG</u>
 using Canadian industrial pollutants in waste disposals and transfers.





CONTACT THE NATIONAL POLLUTANT RELEASE INVENTORY / CONTACTEZ L'INVENTAIRE NATIONAL DES REJETS DE POLLUANTS

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