I. Description

1. Brief description:

The National Pollutant Release Inventory (NPRI) is Canada’s public inventory of releases, disposals and transfers. It tracks over 320 pollutants from over 7,000 facilities across Canada. Reporting facilities include factories that manufacture a variety of goods, mines, oil and gas operations, power plants and sewage treatment plants.

Information that facility owners and operators must report to the NPRI:
- helps Canadians understand pollutant releases in their communities
- encourages actions to reduce pollution
- assists in tracking progress

NPRI data helps inform decisions on protecting the environment by:
- allowing Canadians to track pollutants in their communities
- identifying and acting on environmental priorities
- aiding facilities reduce and prevent pollution
- monitoring changes to air and water quality
- helping to forecast air quality
- evaluating releases and transfers of substances of concern
- studying impacts of pollution on our ecosystems and human health
- implementing policy initiatives and risk management measures

2. Type: Governmental

3. Scope: National

4. Working languages: French, English

5. Target users: All levels of governments, companies, organizations, researchers and citizens

6. Starting year: 1993

7. Budget and funding source: Environment and Climate Change Canada

8. Contact:

Inventaire national des rejets de polluant | National Pollutant Release Inventory
Environnement et Changement climatique Canada | Environment and Climate Change Canada
Place Vincent-Massey
351, boulevard Saint-Joseph, Gatineau (Québec)
Canada K1A 0H3

1 (877) 877-8375 | ec.inrp-npri.ec@canada.ca
II. Implementation

- 9. Policy, legal and institutional context:

Sections 46-53 of the *Canadian Environmental Protection Act, 1999* (CEPA) contain information gathering provisions that allow the Minister of Environment and Climate Change to require reporting of information on substances. The provisions also require the Minister to establish and publish a national inventory of releases and transfers of pollutants. These provisions under CEPA form the primary legislative basis for the NPRI.

- 10. Partner organizations involved:

The NPRI tracks pollutants from over 7,000 facilities across Canada. It works diligently with these facilities and affiliated industrial associations.

- 11. Stakeholders involved, their expected benefits:

The NPRI Multi-Stakeholder Work Group is the primary consultative body for the NPRI. It has been active in providing input and making recommendations regarding the NPRI since its inception. It operates as a part of the broader NPRI consultation process, which includes all interested Canadian stakeholders and the general public.

The NPRI Multi-Stakeholder Work Group is a venue for information and ideas exchange between the Government of Canada and a number of stakeholders. Its mandate is to provide input and recommendations on issues relevant to the NPRI from a stakeholder perspective. Issues may include modifications to the NPRI’s substance list and reporting criteria, identifying and resolving data gaps, improving public access to and interpretation of pollutant data, and improving data quality. The NPRI Multi-Stakeholder Work Group is also intended to provide stakeholders with information on activities of the NPRI, which may be shared with their constituencies or members.

NPRI Multi-Stakeholder Work Group’s membership is allocated to the following stakeholder categories:
- representatives of the reporting community, such as industry associations (i.e., maximum fifty percent of members)
- environmental or other non-governmental organizations (i.e., maximum forty percent of members)
- Indigenous governments and organizations (i.e., maximum ten percent of members)

While member organizations are generally self-nominated within the stakeholder categories, final selection is subject to approval by Environment and Climate Change Canada. In addition, Environment and Climate Change Canada may review or change membership as needed (e.g., to ensure a balanced representation).

- 12. User needs and methods of their assessment:

NPRI data users require access to pollutant data through online tools. In 2019, an assessment of their needs was completed through a survey, which aimed to solicit quantifiable feedback from Canadians and NPRI data users on their data and information use and needs.

- 13. Technology choice:

NPRI data is accessed online and can be searched using a number of tools, namely:
- **NPRI Data Search**: Query tool for quick, easy search of information on a particular facility
- **Pre-defined queries**
- Excel spreadsheets and comma-separated-value files: single-year tables, five-year summaries, all-years datasets (since 1993)
- **Mapping service**: For use in Google Earth™ and the new Open Maps Data Viewer
- **NPRI database in Microsoft Access format**
Facilities report to the NPRI through the Single Window Information Management System (SWIM). SWIM integrates data collected through federal and provincial programs into one streamlined system.

### III. Evaluation

- **14. Results:**
  
  The NPRI provides high quality information that meets the needs of data users. Its webpage has over 10,000 visits per year and NPRI data files are downloaded 8,000 times per year. Analytics show that users stay long enough to read a portion of the content, which is an indication that it is useful.

- **15. Efficiency gains:**
  
  Online, public, useable, accessible, comprehensive pollutant data sources that helps Canadians understand pollutant releases in their communities and helps inform decisions for protecting the environment.

- **16. Risks:**
  
  Pollutant data is provided in quantities, which is not necessarily reflective of the environmental impact of substance releases. Users may misinterpret this data. The NPRI is working towards providing contextual information to guide users towards a correct interpretation of NPRI data.

- **17. Challenges encountered (please indicate resolved or not):**
  
  - Modernization of information management – ongoing
  - Barriers to the wider public access of NPRI data – ongoing
  - Data quality and validity – ongoing
  - NPRI reporting does not cover all sources of releases (e.g., due to thresholds and exemptions) – ongoing

- **18. Lessons learned:**
  
  - Minimizing duplication and reducing reporting burden for industry lead to an increased collaboration.
  - Constant engagement of stakeholders is required throughout development and implementation.
  - Continuous improvement of NPRI since 1993:
    - Improve use and interpretation for all types of users
    - Build on planned activities to maintain and improve data quality
    - Consider and review changes to list of substances and sectors

- **19. Conditions for successful replication:**
  
  - Establish a solid and flexible legal framework.
  - During initial development, take into account priorities and what is achievable. The program can then expand to meet future needs.
  - During initial development, establish a multi-stakeholder consultation process.
  - Implement a user-friendly reporting system that will streamline the reporting process for facilities.
  - Exchange knowledge with countries that have well established pollutant release and transfer registers (PRTR) and international organizations that support capacity-building opportunities, such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Institute for Training and Research (UNITAR).

- **20. Overall assessment of the tool:**
  
  The NPRI is positively regarded within Canada’s environmental community, and is considered a critical source of information for governments and researchers.