Accessing, Interpreting and Using Canada's National Pollutant Release Inventory Data

Environment
and Climate Change Canada

Outline

- Tools for accessing National Pollutant Release Inventory (NPRI) data;

- Presenting the NPRI's draft Understandability Strategy and project portfolio; and

- Bilateral and international activities.
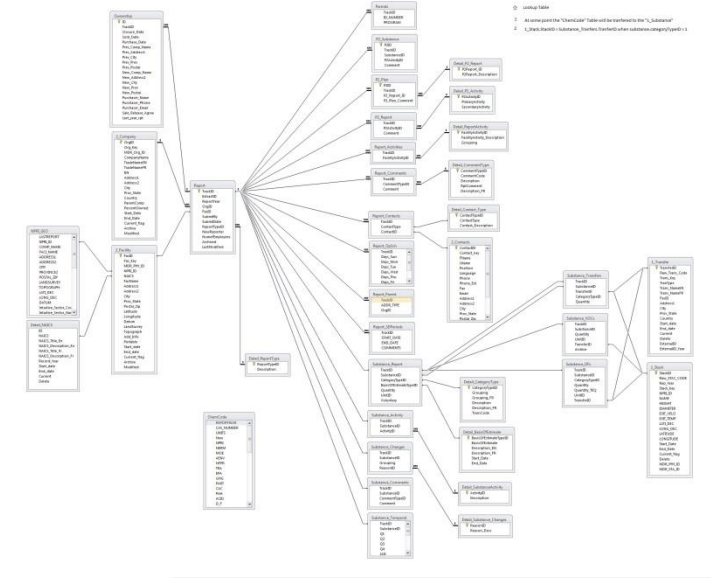
Tools for Accessing NPRI Data

NPRI Online Query Site
Quick, easy to find information on a particular facility.

Predefined Queries
Aggregated data by province, industry type and substance.

NPRI Map Layers for Use in Google Earth™
Explore NPRI data in an intuitive and visual way.

MS Excel or CSV Files – Tabular Data
Most common fields in a simplified spreadsheet format.

Tools for Accessing NPRI Data

MS Excel or CSV files – Bulk Data
Analyze grouped data by sets for releases, disposals and transfers for all reporting years.

NPRI Database (new model)
Useful for custom analysis for "technical" users.

- Tutorials are available for the following tools:

    – Online query tool and pre-defined queries;

    – Map layers with Google Earth; and

    – CSV or MS Excel tabular files.

NPRI's draft Understandability Strategy

- A response to the 2013 National Pollutant Release Inventory (NPRI) Data Users Workshop:
  - More engagement, support and outreach; and
  - Need for more linkages with other datasets.

- Continuous improvement of NPRI:
  - Improve use and interpretation of data for all types of users; and
  - Build on planned activities to maintain and improve data quality.

- Support governmental and departmental initiatives:
  - Departmental efforts to make science more accessible; and
  - Various governmental activities.
    - Open Government
    - Open science and Open data
    - Migration to Canada.ca

Purpose

- Increase awareness of NPRI by Canadians;

- Assessing the needs of data users, including the general public, to better target our audience;

- Knowledge on-demand:
  - Serves stakeholder needs and ability to interpret NPRI data in terms of knowledge on potential environmental and human health impacts
  - Improve use of NPRI data by all types of users

NPRI Users

- NPRI data is published on the NPRI webpage, as well as on the Government of Canada's Open Data Portal and is used by a variety of users:
  - Governments and International Organizations:
    - ECCC's programs;
    - Other federal departments and provincial/territorial governments; and
    - International organizations and other countries' governments.
  - Industry associations and individual companies
  - Public:
    - Canadians;
    - Non-government organizations;
    - Community groups;
    - Educators and students; and
    - Media.
  - Universities
  - Financial Institutions

Project Portfolio: Communication and Outreach

- Advance visibility and awareness of NPRI

- Proposed key activities:
  - NPRI University Challenge;
  - Updated NPRI reporting format and web content with innovative visual products (e.g., annual data highlights, sector factsheets, poster);
  - Partnership with museums;
  - NPRI data users survey; and
  - Booth at the Eureka Festival in Montréal, Québec.

Project Portfolio: Demonstrate Linkages with Other Environmental Datasets

- Provide knowledge-on-demand and a better understanding of NPRI uses

- Encourage data users to conduct their own analyses

- Proposed key activities:
  - NPRI University Challenge;
  - Linking NPRI data to environmental data sets (e.g., air and water quality monitoring, wildlife distribution, agricultural soils);
  - Complete a literature of peer-reviewed and published journal articles containing NPRI information; and
  - Connecting NPRI data to indicators (e.g., regulatory effectiveness, ecosystem health, climate change).

Project Portfolio: Demonstrate Linkages with Non-environmental Datasets

- Determine how NPRI data can be linked with non-environmental datasets (e.g., economic, health and social programs), and what information could be provided to help users interpret and use the data

- Proposed key activities:
  - NPRI University Challenge;
  - Examine linkages between NPRI data and various non-environmental datasets such as the Canadian Health Measure Survey and the Canadian Community Health Survey; and
  - Integrate NPRI release data with chemical properties data.
    - Illustrate relative risk of NPRI substance releases by developing a toxic equivalence tool that will weight NPRI release quantities by human health and environmental information.

Bilateral efforts: PRTR Innovation

- Increased activity with the Organisation for Economic Co-operation and Development's Working Group on Pollutant and Release Transfer Registers (PRTRs)

- Working Group's objectives:
  - Enhance the harmonization of PRTRs;
  - Seek methodologies for comparing and analyzing PRTR data when harmonization is not possible; and
  - Exchange information on ways to use PRTR data (e.g., measuring environmental performance, progress towards targets/goals, evaluating the impact of environmental policies).

International efforts: Transfer of Knowledge

- Initiated and coordinated by the United Nations Institute for Training and Research:
  - Organized workshops, training sessions and other meetings; and
  - Support the PRTR design and implementation.

- Canada's support primarily through attendance and presentation at workshops:
  - NPRI annual cycle;
  - Developing a list of chemicals; and
  - Design and implementation.

Contact the NPRI

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