NATIONAL POLLUTANT RELEASE INVENTORY SURVEY OF DATA USERS 2019

Conducted by EKOS Research Associates for Environment and Climate Change Canada

February 25, 2020
CONTENT

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OBJECTIVES OF THE SURVEY

• Validate or improve the collection of publicly available NPRI data products,
• Evaluate data users’ level of satisfaction with the web content,
• Improve linkages between other datasets, and
• Validate data users’ interest for training opportunities
METHODOLOGY

• 182 responses from
  – List of known data users (67)
  – Open source link used posted on social media and the NPRI website on Canada.ca (pop up box) (115)

• Between mid-July and mid-August, 2019

• 14 follow-up interviews conducted late August
  – $75 incentive was offered
DEMOGRAPHICS

- 1/3 of respondents were not users of the NPRI
NON USERS

- Strong majority believes the NPRI could be of benefit to them
- Interest in guidance/information:
  - Step-by-step guides (62%)
  - Example study cases (52%)
  - Video tutorials (48%)
  - Live webinar training (40%)
- Topic/areas of interest:
  - Background about the NPRI
  - How to use the NPRI
  - Understanding pollutants in areas of interest
  - Visual, interactive maps
PURPOSE OF USING THE DATA

- In the past year, what type of data have you accessed?

- 77% Data for specific facilities
- 76% Data for specific pollutants
- 74% Data for specific years
- 54% Data for specific geographic locations
- 51% Data for specific industry sector
- 50% Realease data to specific medium
- 18% Data for transfers and disposal
PURPOSE OF USING THE DATA

- Only 4% use it exclusively for personal applications

How/where do you obtain NPRI data?

- NPRI Canada.ca: 92%
- Gov of Can Open Data: 20%
- Email from NPRI: 12%
- Gov of Can Open Maps: 7%
- ECCC Data Catalogue: 3%
- Other Websites: 4%
- Other: 8%
PURPOSE OF USING THE DATA

What was your purpose for using the NPRI data?

- Analysis of sectors or trends: 55%
- Environmental / risk assessment: 46%
- Identify pollutant releases in a specific area / community: 40%
- Discussions with a facility: 30%
- Policy Development: 27%
- Fur use in research: 19%
- Quality assurance checks of your NPRI report: 16%
- Benchmarking facility performance: 16%
- Statistical purposes: 12%
- Academic study: 10%
- Media story: 6%
- Benchmarking for competitive purposes: 5%
- Other: 15%
• Users unanimously use a laptop or desktop computer, rather than a mobile device to access the products

• A handful also rely on a mobile device for access or use

<table>
<thead>
<tr>
<th>Have you used any of the following NPRI data products/information products?</th>
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<tbody>
<tr>
<td>NPRI Sector Overview</td>
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<tr>
<td>NPRI Data Highlight</td>
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<tr>
<td>None</td>
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<tr>
<td>Query sire (Online Data Search)</td>
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<tr>
<td>Single Year Flat Files</td>
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<tr>
<td>Raw disaggregated data (MS Access Database)</td>
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<tr>
<td>Aggregated release data, last 5 years</td>
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<tr>
<td>Google Earth</td>
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<tr>
<td>Open Mapping Services</td>
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<tr>
<td>None</td>
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</tbody>
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How would you rate the time it takes to obtain the information that you are looking for?

- Too much time
- Average
- Little time

FOR WHAT PURPOSE DO YOU USE THE ONLINE DATA SEARCH TOOL?

- To find information on substances released (25%)
- To do industrial sector profiling (15%)
- To look at pollution trends (16%)
- To learn about companies (17%)
- To extract data for complex analyses (12%)
- To learn about pollution in my community (12%)
- Other (3%)
SATISFACTION LEVELS

Level of satisfied users of these data products

- Single Year Flat Files: 75%
- Open Maps: 71%
- Query Site: 66%
- Raw, Disaggregated Data: 63%
- Aggregate Release Data: 58%
INTERPRETIVE TOOLS

What tools do you use to help you interpret the data?

- Substance list by threshold category: 51%
- Guide for reporting to the NPRI: 48%
- History of reporting requirements: 45%
- Using and interpreting data from the NPRI: 39%
- Sector overviews: 21%
- Data highlights: 18%
- Other: 9%
- None: 17%
GENERAL SATISFACTION

• Levels of satisfied users with a number of aspects of the NPRI and support services:

- QA/QC: 35%
- History of Reporting Requirements: 36%
- Data Quality Management Framework: 39%
- Ease of Locating Data Files: 42%
- Sector Overviews / Sector Comparisons: 43%
- Ease of Locating Specific Data Fields/Elements: 44%
- Quality of Data: 45%
- Video Tutorials: 45%
- NPRI Website: 46%
- Timeliness of Release of Data: 46%
- Coverage of Sector/Facilities: 48%
- Data Highlights / Data Trends: 53%
- Coverage of Substances: 57%
- Ease of Understanding and Interpreting the Data: 58%
- Telephone Support Provided by Staff: 64%
- Email/Online Support Provided by Staff: 67%
COMBINING DATA

• 62% combine NPRI data with other datasets
• About 60% indicated satisfaction with the ability to
  – compare within a sector, within or between regions, and substances
• About half of those who combine the NPRI with other databases said they use other sources to provide context to NPRI data
  – information about toxicity, fate, and transportation properties of NPRI substances
**FUTURE NEEDS**

**What would you be most likely to use NPRI data for in the future?**

- **56%** Sources of pollutants in my community/neighbourhood
- **53%** Levels of pollutants in my community/neighbourhood
- **37%** Information for academic purposes
- **37%** Impacts of climate change on quality of soil, water and air
- **38%** Other

**If NPRI were to expand to other types of data offerings, what data formats or product types would you be interested in using?**

- **41%** Shape files
- **38%** Online visualization
- **31%** Custom maps
- **18%** Tableau or PowerBI
- **14%** XML
- **10%** Web services
- **8%** API
- **7%** TXT
- **18%** None
FUTURE NEEDS

• Export more data into maps or other visual formats to improve access

• Expansion in the available data on air emissions, or suggested the inclusion of ‘air sheds’ and ‘air zones’ as searchable areas on maps

• Satisfaction levels are 60% and above and interviewers confirmed they are content with the existing formats available to access NPRI data
COMMUNICATING UPDATES ABOUT NPRI

• By far, email is seen as the best way to reach out to the community of NPRI users about updates (84%)
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COMPLETE REPORT:  

SUMMARY  

QUESTIONS?