National Pollutant Release Inventory Survey of Data Users 2024 Final Report



Prepared for Environment and Climate Change Canada

Supplier: Ekos Research Associates Inc. Contract Number: CW2333732 Contract Value (incl. HST): \$45,476.85 Contract Award Date: October 11, 2023 Delivery Date: March 26, 2024 Registration Number: POR 049-23

For more information, please contact Environment and Climate Change Canada at: POR-ROP@ec.gc.ca

Ce rapport est aussi disponible en français.



Environnement et Changement climatique Canada



National Pollutant Release Inventory Survey of Data Users 2024 Final Report

Prepared for Environment and Climate Change Canada

Supplier name: Ekos Research Associates Inc. Registration Number: POR 049-23

Cette publication est aussi disponible en français sous le titre : Sondage auprès des utilisateurs de données de l'Inventaire national des rejets de polluants, 2024 - Rapport final

Cat. No.: En84-152/2024E-PDF ISBN: 978-0-660-70677-1 EC23072

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada Public Information Centre Place Vincent Massey building 351 St-Joseph boulevard Gatineau Quebec K1A 0H3 Toll free: 1-800-668-6767 Email: <u>enviroinfo@ec.gc.ca</u>

 $\ensuremath{\mathbb{C}}$ His Majesty the King in Right of Canada, represented by the Minister of Environment and Climate Change, 2024

TABLE OF CONTENTS

Executiv	e Sumr	nary	4
/	Α.	Background and Objectives	4
E	В.	Methodology	5
(C.	Key Findings	5
[D.	Note to Readers	6
E	E.	Contract Value	7
F	F.	Political Neutrality Certification	7
Detailed	l Findin	gs	8
I	Α.	Sample Profile	8
E	В.	Perception of ECCC Programs and Service Areas	9
(C.	NPRI Usage	11
[D.	NPRI Supports	16
E	E.	NPRI Data Products	21
Appendi	ices		34
I	Α.	Methodological Details	34
ſ	В.	Survey Questionnaire	37
(C.	Follow-Up Interview Guide	70

EXECUTIVE SUMMARY

A. BACKGROUND AND OBJECTIVES

The National Pollutant Release Inventory (NPRI) was established in 1992 to inform Canadians about pollutants in their communities and serves as a public inventory of releases, disposals, and transfers. Organizations in Canada, including manufacturers, mines, oil and gas operations, power plants, and sewage treatment plants are required to report to the NPRI. In all, the inventory tracks over 320 pollutants from over 7,000 facilities throughout Canada. The public inventory is intended to help Canadians understand pollutants released in their communities, encourage action to reduce pollution, and track changes in pollutants over time. Governments, companies, organizations, researchers, and citizens are all potential users of NPRI data. The NPRI website has been designed and updated to help users understand and navigate the data. Users have the ability to search for information in their area, source information for projects and presentations, read data highlights and overviews, or search datasets and the complete inventory database.

A survey of reporters and data users was conducted in 2007 to understand who was using the inventory, their opinions on reporting requirements, and satisfaction with the NPRI. A survey was commissioned in 2019 to focus on the experience of data users only. The 2023 survey of data users was commissioned to understand the needs of users and satisfaction with the inventory, particularly given the additions to the NPRI website that have taken place since the last iteration of the survey, developed to improve the users' ability to use and interpret the data. The primary objectives of the 2023 Survey of Data Users were to:

- To better understand data user needs and preferences in accessing, using, analyzing, and interpreting NPRI data.
- To determine their level of satisfaction with the current collection of data products and identify areas for improvement.
- To better understand how they use NPRI data and determine the level of interest in tools to analyze, sort and visualize the data.
- To determine the level of satisfaction with the supporting documentation provided on the website to help users interpret and use NPRI data.
- To better understand their needs in terms of communicating NPRI information.
- To compare results with previous iterations of the research.

The findings of the survey will be used in the development of policies, programs and initiatives pertaining to NPRI data, ensuring that it is accessible, useful, and intuitive to its users.

B. METHODOLOGY

An online survey was completed by 50 individuals who have used NPRI data and the website to gather information on their data needs and experiences with the inventory and website in order to make both easier to understand and navigate. The survey was conducted between November 2023 and January 2024, using two sources: a client-supplied list of known data users and an open-source link advertised through a general announcement about the survey on social media and the NPRI website on canada.ca. A series of 10 follow-up interviews were also conducted between December 2023 and January 2024 with some survey respondents who agreed to a follow up interview. Interviews ranged from 15 to 35 minutes and gathered more detailed information and context about use of the NPRI as well as sources of satisfaction and areas for improvement.

The online survey results are not comparable with 2019 when the survey was completed by 182 individuals. Further methodological details, along with efforts to increase the response rate of the online survey, can be found in Appendix A: Methodological Details.

C. Key Findings

The online survey results included 39 users of NPRI data out of the 50 respondents, representing a broad range of organizations and individuals.

The vast majority of respondents think of pollution and waste management, along with climate change, when thinking of ECCC. Other than NPRI, the majority of respondents were aware of greenhouse gas emissions, the Air Pollutant Emissions Inventory, and meteorological data in terms of ECCC data. Among those aware of other ECCC data sources, 14 - 43% have used them. Among the 11 respondents who have not used the NPRI, eight indicated that the NPRI data could benefit or be of interest to them. These respondents have not used the NPRI because they were unaware, it is not relevant to them, it is too technical, or they require a better understanding of the Inventory.

Among users of the NPRI, the majority use it for professional use. Very few access the NPRI for personal use, and if they do, they use it for both professional and personal reasons. The majority

of NPRI users used it for analysis of sectors or trends, while fewer used it to identify pollutant releases in a specific area or community, or for an environmental and/or risk assessment.

Almost all NPRI users accessed NPRI data from the NPRI Canada.ca website. Over half of NPRI users who responded to the survey started using NPRI data more than 5 years ago. The majority of NPRI users have used the NPRI Dashboard, Query Site, or Single Year Flat Files. Less than half have used NPRI information products, however, more commonly used products were the Substance Overview, Sector Overview, or Data Highlights.

The most likely types of information to have been accessed in the NPRI are data for specific pollutants or years, according to three in four users. Over half have accessed data for specific facilities, industry sectors, or geographic locations. Over four in ten have accessed release data of specific medium. Fewer have accessed the sector overviews, data for transfers and disposals, or ECCC analysis of the data. Several respondents have accessed NPRI data integration products or Indigenous Series. Six in ten NPRI users have combined NPRI data with other data.

D. NOTE TO READERS

Results are presented in text and charts. Due to the relatively low number of completed responses, results from 2023 are not comparable to previous iterations of the survey. Further, it is not possible to describe findings for specific segments of the sample. Findings in this report should be interpreted with caution. As such, the number of cases responding are presented along with percentage results to illustrate the quantity of individuals responding to an individual question.

Readers should also note that survey findings are presented in the report in terms of valid percentage of responses, excluding those who said "don't know", "not applicable", or otherwise did not provide a response on any given question. Results may also not total to 100% due to rounding.

Results of the interviews are interspersed with the survey findings in relevant thematic areas throughout the report highlighted in grey. In some cases, results described may be based on only two or three interviews, typically noted as "a few" or "several". In some cases, results are described on the basis of input from one participant, also reflected in the use of quotes meant to be illustrative of key points. Therefore, qualitative findings are meant to be illustrative and help to provide added context to the survey findings and should be interpreted with caution.

^{6 •} EKOS RESEARCH ASSOCIATES, 2024

E. CONTRACT VALUE

The total contract value of this research is \$45,476.85 (including HST).

F. POLITICAL NEUTRALITY CERTIFICATION

I hereby certify as Senior Officer of EKOS Research Associates Inc. that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Policy on Communications and Federal Identity and the Directive on the Management of Communications. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

Signed by:

Susan Galley, Vice President, EKOS Research Associates Inc.

DETAILED FINDINGS

A. SAMPLE PROFILE

In the combined sample collected, nearly four in five (78%) have used the NPRI, although 18% have not and 4% were unsure. Among these 11 respondents who have not used the NPRI or are unsure, eight said that they feel that NPRI data could benefit or be of interest to them.

Have you used NPRI data? The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals and transfers of pollution in the environment. It tracks over 320 pollutants from over 7,000 facilities across Canada.	Count	Percent
Yes	39	78%
No	9	18%
Don't know	2	4%

Table 1: Use of NPRI Data

The following table presents the types of organizations respondents responding to the online survey, indicating a wide variety of use and interest. Representatives from ECCC make up the largest proportion of respondents, followed by academic institutions, and industry and associations, provincial governments and NGOs. Other respondents to the survey include individual citizens, commercial or institutional, other federal government departments, students, citizen's group and an Indigenous group. Other mentions include two international organizations, a conservation authority, research organization, and law firm.

What type of organization are you primarily affiliated with?	Count	Percent
Federal government - Environment and Climate Change Canada	11	22%
Academic institution	8	16%
Industrial facility/association	5	10%
Provincial government	4	8%
Environmental Non-governmental organizations (NGOs)	4	8%
Individual citizen	3	6%

^{8 •} EKOS RESEARCH ASSOCIATES, 2024

Commercial/Institutional	3	6%
Federal government – Other	2	4%
Students	2	4%
Citizen's group	1	2%
Indigenous group	1	2%
Other	5	10%

B. PERCEPTION OF ECCC PROGRAMS AND SERVICE AREAS

According to a new question for 2023, respondents primarily think of pollution and waste management, and climate change, when thinking of ECCC. Respondents had the opportunity to select multiple programs and service areas from a list of suggestions. About half or more selected water and the environment, weather, and environmental conservation and protection.

When thinking of Environment and Climate Change Canada (ECCC), what programs and service areas primarily come to mind?	Count	Percent
Pollution and waste management	42	84%
Climate change	40	80%
Water and the environment	33	66%
Weather	29	58%
Environmental conservation and protection	27	54%
Wildlife, plants and species	21	42%
Other	7	14%

Table 3: Top of Mind for ECCC Programs and Service Areas

Awareness of ECCC Data

Also new for 2023, respondents were asked about what ECCC data they were aware of, other than the NPRI. The majority of respondents indicated that they were aware of greenhouse gas emissions data, the Air Pollutant Emissions Inventory (APEI), and meteorological data. Awareness of other ECCC data, identified by about one-third to one half of respondents, include the National Air Pollution Surveillance Program (NAPS), air quality, bio-monitoring, and Black Carbon Emissions Inventory data.

Other than the NPRI, what ECCC data are you aware of?	Count	Percent
Greenhouse gas emissions	34	68%
Air Pollutant Emissions Inventory (APEI)	30	60%
Meteorological	27	54%
National Air Pollution Surveillance Program (NAPS)	24	48%
Water quality	20	40%
Bio-monitoring	17	34%
Black Carbon Emissions Inventory	15	30%
Other	8	16%
Don't know	1	2%

Table 4: Awareness of ECCC Data

Among those indicating awareness of the ECCC data, fewer than have used any of the data. Of these respondents, one-third or more used greenhouse gas emissions data or APEI data. About one in four used meteorological data, NAPS, or air quality data. Fewer used Bio-monitoring data or the Black Carbon Emissions Inventory.

Table 5: Usage of ECCC Data

Have you used any of these ECCC data in the past 5 years?	Count	Percent
Greenhouse gas emissions	21	43%
Air Pollutant Emissions Inventory (APEI)	17	35%
National Air Pollution Surveillance Program (NAPS)	13	27%
Meteorological	12	24%
Water quality	12	24%
Bio-monitoring	9	18%
Black Carbon Emissions Inventory	7	14%

C. NPRI USAGE

Potential Among Non-Users of the NPRI

Among the 11 respondents who have not used the NPRI, eight indicated that the NPRI data could benefit or be of interest to them, the remaining three were not sure. Of the eight respondents who said NPRI data could benefit them, all said they were at least moderately likely to use NPRI data, with three very likely.

Of the eight who might use the NPRI, half said NPRI could provide more information through the NPRI Canada.ca website. Other mentions include social media (Facebook or LinkedIn), the Canada Gazette, or would do a general internet search. One respondent stated in an open comment that information could be provided through an NPRI-specific newsletter. Various supports were identified by those who feel NPRI data could benefit or be of interest to them, which mostly include video tutorials, step-by-step guides, and study cases of how others use the data.

Three of the 11 respondents who have not used the NPRI said that is it because they were unaware of the NPRI data in the past. Others said it was not relevant, too technical, or need a better understanding of what they can find there. Several suggestions were mentioned by nonusers of what they would want to know about NPRI data to better understand it's uses. This includes how to interpret the data, to understand contaminants in Canada and what is allowed, contaminant threshold values, and lists and locations of contaminants.

Purpose of NPRI

Overall, among users of the NPRI, the majority use it for professional use. Very few use it for personal application, and if they do, they use it for both professional and personal reasons. The majority of NPRI users used it for the purpose of analysis of sectors or trends, while close to four in ten either used it to identify pollutant releases in a specific area or community, or for an environmental and/or risk assessment. Nearly three in ten used it for the purpose of policy development, and just over a quarter used it for discussions with a facility or to perform quality assurance checks of their NPRI reports. Just under a quarter used NPRI for benchmarking facility performance, and 21% each used it for research or academic story. One in ten meanwhile used it for preparation of a media story, for statistical purposes, or for another purpose. Very few used it for benchmarking for competitive purposes.

In terms of where NPRI users obtained data, a large majority did so directly from the NPRI Canada.ca website. Seven users obtained NPRI data from Government of Canada Open Data, while one in ten obtained it either from Government of Canada Open Maps or the NPRI by email. Fewer users obtained their data from another source or another website, while only one user did so from the ECC Data Catalogue.

In terms of what NPRI data has or would be used for, most would do so for the purposes of environmental data. Half (49%) indicated they would use NPRI to determine levels of pollutants in their community or neighbourhood, while just over four in ten indicated information for academic purposes, while slightly fewer indicated sources of pollutants in their community or neighbourhood.

Did you use the NPRI for?	Count	Percent
Professional use	26	67%
Both	10	26%
Personal use	3	8%
What was your purpose for using the data?	Count	Percent
For analysis of sectors or trends	24	62%
To identify pollutant releases in a specific area or community	15	38%
For an environmental and/or risk assessment	14	36%
Policy development	11	28%
For discussions with a facility (or facilities)	10	26%
To perform quality assurance checks of your NPRI reports	10	26%
Benchmarking facility performance	9	23%
For use in research (please specify)	8	21%
For academic study (student projects, education)	8	21%
For preparation of a media story	4	10%
For statistical purposes (for example: uncertainty analysis)	4	10%
Other (please specify)	4	10%
Benchmarking for competitive purposes	1	3%
How/where do you obtain NPRI data?	Count	Percent
From NPRI Canada.ca website	36	92%
From Government of Canada Open Data	7	18%
From Government of Canada Open Maps	4	10%

Table 6: Purpose of NPRI

4	10%
3	8%
2	5%
1	3%
Count	Percent
31	66%
23	49%
20	43%
17	36%
5	11%
	3 2 1 <i>Count</i> 31 23 20 17

Interview Findings

Usage of the NPRI

The 10 participants in the follow-up interviews included individuals representing Industry, environmental groups, and the federal government. Among industry representatives, the NPRI is accessed to perform quality control on the information reported to the inventory and to inform on data reporting for a sector. Individuals from environmental groups or consulting primarily access the NPRI to gather data for environmental compliance audits, trends on emissions, and Community Right to Know activities. Federal government users access the data for performance measurement evaluations, reporting and monitoring. These participants use the data in a broad range, including by sector, substance, or individual location.

For most participants, the NPRI provides access to information that is not otherwise available. The data helps to understand release levels of pollutants and trends over time. One commended the NPRI as a consistent and reliable source of information, articulating, "We can base our integrity" on referencing the data. Participants first learned about the NPRI through requirements of their job, academic assignments, or as a reference cited in other reports.

"The NPRI gives us information to understand what needs to be changed."

"NPRI was mentioned a lot in other reports I was reading."

"If I have questions about tracking pollutants, that's where it will go."

Most participants said the NPRI suits their needs for reporting; however, some noted several limitations. These include limited ability to obtain context of the information that was submitted, both in terms of Industry wanting to add qualitative context to the data reported and by users to understand that additional information would be helpful to interpret the data. Some participants cited a limitation of the NPRI in terms of not including all potentially toxic substances, only requiring reporting from companies over a certain size, and not making all fields in reporting mandatory (such as within the pollution prevention section). Two participants indicated that without a scientific or data analysis background, they are limited in what they can infer or use from the data.

"A lot of toxic substances are not on the NPRI. It doesn't mean it's not toxic, but it was never put on the NPRI. That makes people frustrated and you tend not go to back once you've experienced it once or twice."

"There are some data gaps, in terms of what is reported. Small facilities are not required to report if they are under a certain amount of employees."

Sources of Awareness of NPRI

Half of NPRI users heard about NPRI data directly from ECCC, while slightly fewer indicated the NPRI Canada.ca website. Six users heard about NPRI data via the Canada Gazette. Five users found it through a general Internet search, and three through NPRI outreach. Only one user indicated another website. About one in four heard of it through another source.

Where did you hear about NPRI data?	Count	Percent
Directly from Environment and Climate Change Canada (ECCC)	19	49%
NPRI Canada.ca Website	18	46%
Canada Gazette	6	15%
General Internet Search (e.g., Google)	5	13%
NPRI outreach (e.g., Museum presentations, educational info packets, Academic Challenge)	3	8%
Other website	1	3%
Other	9	23%

Table 7: Sources of Awareness of NPRI

History of Use of NPRI

Most NPRI users have been accessing the Inventory data for more than five years. Close to one in five started using it between two and five years ago, and five users began using it within the last six months. Only two users first started using the Inventory data between one and two years ago.

When did you start using NPRI data?	Count	Percent
More than 5 years ago	23	59%
2-5 years ago	7	18%
1-2 years ago	2	5%
Last six months	5	13%

Table 8: History of Use of NPRI

Sources for Accessing NPRI

Almost all of those responding to the survey who use NPRI data access it through the NPRI website on canada.ca (92%). Another 18% indicated they also rely on Government of Canada open data. One in ten responding users access the NPRI through Government of Canada OpenMaps, or from NPRI email. Very few use other methods to access the data.

Table 9: Sources for accessing NPRI

How/where do you obtain NPRI data?	Count	Percent
From NPRI Canada.ca website	36	92%
From Government of Canada Open Data	7	18%
From Government of Canada OpenMaps	4	10%
From the NPRI by email	4	10%
Other website	2	5%
From ECCC Data Catalogue	1	3%
Other source	3	8%

D. NPRI SUPPORTS

Technical Knowledge (Users & Non-Users)

About half of survey respondents rated their knowledge and comfort as high when it comes to using spreadsheets to capture and manipulate data, searching the Internet to find specific information, and using search functions and filters in an online data tool to get the specific information they need. Fewer said that they are knowledgeable and comfortable with using information databases to perform advanced analysis, such as pollution trends, and two individuals said they are not at all knowledgeable and comfortable in this area.

How would you describe your level of knowledge and	Very Comfortable (rating 5 out of 5)	
comfort with:	Count	Percent
Using spreadsheets to capture and manipulate data	26	52%
Searching the Internet to find specific information	25	50%
Using search functions and filters in an online data tool to get the specific information you need	25	50%
Using information databases to perform advanced analysis (e.g. pollution trends)	17	34%

Table 10: Knowledge and Comfort with Data Analysis

Satisfaction with Specific Elements of NPRI

Users of the NPRI in the survey sample were asked about their satisfaction with a number of aspects of the inventory and support services. Following are the proportions of those satisfied, along with an indication of those who have not used the element.

Almost all respondents have used the NPRI website, with over half (56%) indicating they are satisfied with their level of knowledge and comfort. About half (49%) are satisfied with the quality of the NPRI data. About one in three NPRI data users are satisfied with NPRI Substance Overview (39%) and NPRI Data Highlights (34%, with 13 respondents indicating they have not used this). Roughly one in four are satisfied with NPRI Sectoral Overview (28%, with a notable 15 respondents not using), Data Quality Management Framework (28%), or Quality Assurance/Quality Control (26%). Very few have used the NPRI Indigenous Series, with one out of the four users satisfied.

How would you describe your level of knowledge	Satisfied (rating 4 or 5 out of 5)		Not used
and comfort with:	Count	Percent	Count
NPRI Canada.ca website	22	56%	2
Quality of the NPRI data	19	49%	0
NPRI Substance Overview	15	39%	9
NPRI Data Highlight	13	34%	13
NPRI Sectoral Overview	11	28%	15
Data Quality Management Framework	11	28%	11
Quality Assurance/ Quality Control	10	26%	5
NPRI Data Integration	7	18%	10
NPRI Indigenous Series	1	3%	25

Table 11a: Satisfaction with Elements of NPRI

NPRI users responding to the survey had the highest knowledge and comfort with the ease of understanding and interpreting NPRI data (61%) and Ease of locating specific data fields/elements (59%). Over half were satisfied with their level of knowledge with coverage of substances (54%) and coverage of sector/facilities (54%). Roughly one in three were satisfied with the email/online support provided by ECCC staff (39%), the timeliness of release of data (36%), the history of reporting requirements (33%), or ease of locating the data files (26%). Fewer used the video tutorials or telephone support provided by ECCC staff.

How would you describe your level of knowledge and comfort with:	Satisfied (rating 4 or 5 out of 5)		d you describe your level of knowledge (rating 4 or 5 out of 5)	Not used
	Count	Percent	Count	
Ease of understanding and interpreting NPRI data	24	61%	2	
Ease of locating specific data fields/elements	23	59%	2	
Coverage of substances	21	54%	3	
Coverage of sector/facilities	21	54%	4	
Email/online support provided by ECCC staff	15	39%	14	
Timeliness of release of data	14	36%	3	
History of reporting requirements	13	33%	9	
Ease of locating the data files	10	26%	2	
Video tutorials	5	13%	24	
Telephone support provided by ECCC staff	3	8%	25	

Table 11b: Satisfaction with Elements of NPRI (con't)

Interview Findings

Training

Some of the 10 participants in the follow up interviews said that they noticed training available on the NPRI website, with a few using or viewing the material. A few participants, particularly those who are frequent users of the NPRI or with a technical background, said they feel knowledgeable in navigating the NPRI without the need for training resources. One said they may use the tutorials in the future as the potential to learn more efficient or practical ways to use the inventory is "appealing". One participant suggested that implementing "hover" boxes to define some terms or instructions would be beneficial. Another participant said training material should show not only how to use the NPRI, but also how to interpret the data.

"I find the videos useful for now to navigate this tool. There are a lot [of them]."

Questions about the NPRI

Two in three users (62%) have had questions while using the NPRI. Nearly half called or emailed the helpdesk or Enviroinfo. Other methods to answer questions included finding information elsewhere or through the NPRI Canada.ca website. Most of those indicating "other" contacted someone in ECCC or NPRI staff (other than the helpdesk) directly.

Have you ever had questions (e.g., about content, technical issues, or other issues) while using NPRI data?	Count	Percent
Yes	24	62%
No	11	28%
Don't know	4	10%
When you have had questions (e.g., about content technical issues, or other issues), thinking about your most recent experience(s), what have you done about it?	Count	Percent
Called/emailed the NPRI helpdesk or Enviroinfo	11	46%
Found the information elsewhere	9	38%
Found the information on the NPRI Canada.ca website	6	25%
Other	6	25%

Table 12: Questions about NPRI

^{18 •} EKOS RESEARCH ASSOCIATES, 2024

Useful Supports

In terms of possible tools to support their use of the NPRI, about half believe case studies would be helpful. One in three selected step-by-step guides as potential helpful tools, along with live webinar training. Five respondents said in-class training would be the most helpful.

Thinking about your use of NPRI data in the past, which of the following tools would be most helpful to you?	Count	Percent
Study cases	20	51%
Step-by-step guides	15	38%
Live webinar training	13	33%
In class training	5	13%
Other	3	8%
Don't know	9	23%

Table 13: Useful Supports

Interview Findings

NPRI Website

Most participants said they find the NPRI website to be user friendly and that changes have been made over time to improve the functionality of the website. Participants who frequently accessed the NPRI website indicated that the website is well organized and easy to navigate. Among these participants, a few said that they have to click through many layers to get to the intended page; however, noted that this is a flaw of most federal government websites. Participants who use NPRI less frequently mentioned challenges in terms of re-learning how to navigate the website each time they access the site. These participants acknowledge that this is due to updates likely intended to improve the site, but results in a challenge for those less familiar with the website. Some identified the NPRI Dashboard as being a user-friendly approach to accessing the inventory data.

Of note, several participants accessed the NPRI website at the time of the interview in order to have the tool in front of them. Three participants stated difficulties such as the website was not loading at the time of the interview, that there was a new look since the last time they accessed the site, or there was an error loading one of the click-through pages (NPRI Maps, Facility Location).

"The previous version of the website was more technical, now it is [more user friendly]."

"But today, I seem to be having difficulty navigating this. I feel like there's been an update, and there's a relearning curve every time I go onto the site."

Timeliness

Participants from Industry who report to the NPRI felt that the reporting element was timely, with a two month period before the data is available to verify. For those who access the NPRI data, most also feel that the data is timely. However, one participant indicated frustration in understanding current pollutant levels as there is a two year lag in NPRI data being available publicly. For other participants, the delay in publishing data is reasonable given the need to enter and verify data.

"For reporting, I like the opportunity for the Industry to look at the data to make sure it was done correctly and catch any errors before they go

^{20 •} EKOS RESEARCH ASSOCIATES, 2024

broadly public. I don't know how it could go quicker without that needed step."

Areas for improvement

Some participants offered a variety of suggestions to improve the NPRI. Two participants expressed an interest in having the data summarized or displayed in a more visual manner for greater impact for casual users of the NPRI.

One suggested that there should be more outreach to the public to promote the availability and use of the NPRI, similar to activities relating to the Toxic Release Inventory in the United States. This could include creating examples of how communities used the information and how it made a difference, according to the participant.

One participant cautioned that efforts need to be made to ensure that there is not duplication of reporting when a substance moves from one organization to another, in addition to a measured approach to adding any new substances requiring reporting to the NPRI. One said that they have been waiting to substance fact sheets to be published and this activity is taking more time than expected.

E. NPRI DATA PRODUCTS

Use of Specific NPRI Products

In terms of data products, the majority of NPRI users have used the NPRI Dashboard (64%), Query Site (56%) or Single Year Flat Files (51%). Roughly one in four have used Aggregated release data (31%), Google Earth (26%) or Open Mapping Services (23%). Only one of the 39 NPRI users said they have not used any data products.

About one in three NPRI users have not used any information products. Among those who have, nearly half have used an NPRI Substance Overview (46%). Other frequently used information products are NPRI Sector Overview (38%), NPRI Data Highlights (31%) and NPRI Data Integration (21%).

When asked about how they access and work with NPRI data, almost all (97%) use a computer (not shown in chart). Only several users rely on a mobile device for access or use.

Have you used any of the following NPRI data products?	Count	Percent
NPRI Dashboard	25	64%
Query Site	22	56%
Single Year Flat Files	20	51%
Aggregated release data, last 5 years	12	31%
Google Earth	10	26%
Open Mapping Services	9	23%
Other	1	3%
None – have not used any data products	1	3%
Don't know	1	3%
Have you used any of the following NPRI information products?	Count	Percent
NPRI Substance Overview	18	46%
NPRI Sector Overview	15	38%
NPRI Data Highlight	12	31%
NPRI Data Integration	8	21%
NPRI Indigenous Series	1	3%
Other	1	3%
Nona have not used any information products	14	36%
None – have not used any information products		

Table 14: Use of NPRI Specific Data and Information Products

Among the 20 individual users who work with Single Year Flat files, the majority (60%) said having additional years would be helpful; however, 30% said they were unsure. Respondents were split whether or not the Single Year Flat Files have all the information they need. Six said it does, and seven said they need to access and link different files. Another seven said they were unsure.

Would adding additional years be useful?	Count	Percent
Yes	12	60%
No	2	10%
Don't know	6	30%
Does this file contain all of the information you need or do you need to use multiple files to get the information you need?	Count	Percent
Yes, it contains everything needed	6	30%

Table 15: Views about Use of Single Year Flat Files

Would adding additional years be useful?	Count	Percent
No, I need to access and link different files	7	35%
Don't know	7	35%

Among the 12 users who have used the aggregated release data, nine were aware they could use the online data search tool and download the data. Nearly half of these users said they would be more likely to use both open data and online search tool. Four said they would be more likely to use the online data search tool and one said they would use open data.

When asked about the adequacy of five years of aggregated data, seven said five years is enough and five said they would prefer to see data for a longer period, adding either 5 or 10 years. In terms of the time it takes to obtain the data sought, only one in three suggest it takes too much time.

As with Single Year Flat files, about half of users of the aggregated release data report the information is complete and contains everything they need. Similarly, just over half said the file contains all the information they need, although three of the 12 users of aggregate release data said that they need to use multiple files to get the information they need.

Aggregated data is available for download on the newly redesigned online data search tool under the 'pre-defined queries'. Were you aware of this?	Count	Percent
Yes	9	75%
No	3	25%
Would you be more likely to download the aggregate data file on?	Count	Percent
Online data search tool	4	33%
Open Data	1	8%
Both	5	42%
Is 5 years of data enough?	Count	Percent
Yes	7	58%
No	5	42%
How would you rate the time it takes to obtain the information that you are looking for?	Count	Percent
Little time (1-2)	5	41%
Average (3)	3	25%
Too much time (4-5)	4	33%
<i>Is there information that you need that is not contained in the file?</i>	Count	Percent
Yes	3	25%
No	6	50%
Don't know	3	25%
Does this file contain all of the information you need or do you need to use multiple files to get the information you need?	Count	Percent
Yes	7	58%
No	3	25%
Don't know	2	17%

Table 16: Views about Use of Aggregate Release Data

Among the 10 respondents using raw, disaggregated data, only one said it does not contain everything they need and that they use other multiple files to get the information they need. However, half or more were not sure.

<i>Is there information that you need that is not contained in the file?</i>	Count	Percent
Yes	1	10%
No	3	30%
Don't know	6	60%
<i>Do you use other multiple files to get the information you need?</i>	Count	Percent
Yes	1	10%
No	4	40%
Don't know	5	50%

Table 17: Views about Use of Raw, Disaggregated Data

Of the 13 respondents who have used Open Mapping services or Google Earth, only five felt that adding additional years would be useful; six were not sure. Over half of those who use Open Mapping services said that they would like shapefiles to be available. These shapefiles are a geospatial vector data format for geographic information system software. Respondents said they would use shapefiles to visually display results, integrate data with other monitoring data, or reference with other boundary data.

Would adding additional years be useful?	Count	Percent
Yes	5	38%
No	2	15%
Don't know	6	46%
Would you like shapefiles to be available? The shapefile format is a popular geospatial vector data format for geographic information system (GIS) software	Count	Percent
Yes	8	62%
No	1	8%
Don't know	4	31%

Table 18: Views about Use of Open Mapping Services

Among the 22 respondents who used the query site, the online data search tool was predominantly used to find information about substances released (68%) or to do industrial sector profiling (64%). About half used the site to learn about companies, look at pollution trends, or extract data for complex analysis. One in three were searching for information about pollution in their community.

An equal proportion of query site users felt that it took only a little time (46%) or too much time (45%) to obtain the information they were looking for. Overall, 68% said they are satisfied with the Query Site and only one user indicated dissatisfaction.

For what purpose do you use the online data search tool?	Count	Percent
To find information on substances released	15	68%
To do industrial sector profiling	14	64%
To learn about companies	12	55%
To look at pollution trends	12	55%
To extract data for complex analyses	11	50%
To learn about pollution in my community	7	32%
Other	3	14%
How would you rate the time it takes to obtain the information that you are looking for?	Count	Percent
Little time (1-2)	10	46%
Average (3)	2	9%
Too much time (4-5)	10	45%
Satisfaction with Use (4-5)	15	68%

Table 19: Views about Use of the Query Site

Half of the 50 respondents overall said they used the NPRI Dashboard, for a variety of reasons. Some were looking at pollution trends (32%) or to find information on substances released (24%). Fewer were looking to extract data for complex analysis, to learn about companies, do industrial sector profiling, or learn about pollution in their community.

NPRI Dashboard users were also divided on whether it took too much (32%) or very little (44%) time to look through the Dashboard. Overall, 72% said they are satisfied with the Dashboard and only 2 users indicated dissatisfaction.

For what purpose do you use the online data search tool?	Count	Percent
To look at pollution trends	8	32%
To find information on substances released	6	24%
To extract data for complex analyses	3	12%
To learn about companies	2	8%
To do industrial sector profiling	2	8%
To learn about pollution in my community	1	4%
Other	3	12%
How would you rate the time it takes to obtain the information that you are looking for?	Count	Percent
Little time (1-2)	11	44%
Average (3)	6	24%
Too much time (4-5)	8	32%
Satisfaction with Use (4-5)	18	72%

Table 20: Views about Use of the NPRI Dashboard

Recent Types of Information Used

The most likely types of information to have been accessed in the NPRI are data for specific pollutants (79%) or years (74%), according to three in four users. Over half have accessed data for specific facilities (67%), industry sectors (62%), or geographic locations (56%). Over four in ten have accessed release data of specific medium (e.g., land, water, air)(46%). Fewer have accessed the sector overviews (33%), data for transfers and disposals (33%), or ECCC analysis of the data (31%). Several respondents have accessed NPRI data integration products or Indigenous Series.

Over the last year, what types of NPRI information have you accessed?	Count	Percent
Data for specific pollutants	31	79%
Data for specific years	29	74%
Data for specific facilities	26	67%
Data for specific industry sectors	24	62%
Data for specific geographic locations	22	56%
Release data to specific medium	18	46%
Sector overviews	13	33%
Data for transfers and disposals	13	33%
ECCC analysis of the data (data highlights)	12	31%
NPRI data integration products	4	10%
NPRI's Indigenous Series	1	3%

Table 21: Recent Types of Information Used

Interpretive Tools

Acknowledging that substances and data required to be reported to the NPRI have undergone a number of changes over time, which has an impact on trend analysis, the survey asked users which tools they have used to help them interpret the data. Nearly of users have relied on the substance list by threshold category webpage to help them interpret the NPRI data. Slightly fewer have used the history of reporting requirements webpage, guide for reporting to the NPRI, or have been using and interpreting data from the webpage.

Table 22: Interpretive Tools

The substances and data that are required to be reported to the NPRI have undergone many changes over the years. These changes can affect your data analysis. What tools/guidance, if any, have you used to help interpret the NPRI data?	Count	Percent
Substance list by threshold category webpage	19	49%
History of reporting requirements webpage	17	44%
Guide for reporting to the NPRI	16	41%
Using and interpreting data from the NPRI webpage	15	38%
Other	2	5%
None	4	10%
Don't know	4	10%

Combining Data

More advanced users of the Inventory were asked about combining the data with other information sources, with six in 10 indicating they do this. Other datasets used include other environment data and substance information, followed by international substance release and transfer datasets, economic data population trend data and health-related data. The majority were satisfied with the ability to compare within a sector, and perform regional/provincial comparisons. Satisfaction is marginally lower in terms of ability to link with other data. Fewer respondents were familiar with the ability to perform substance to substance comparisons, or compare relative risk, resulting in lower satisfaction ratings.

About one in four currently use other sources of information to provide context to NPRI data, including risk scoring system by Scorecard, and US EPA's Risk Screening Environmental Indicators model. Two in three said that if NPRI offered a tool to incorporate more context to NPRI data, they would use it.

Have you ever combined NPRI data with other data?	Count	Percent
Yes	18	60%
No	8	27%
What other datasets have you used NPRI data with?	Count	Percent
Other environmental data	9	45%
Substance Information	6	30%
International substance release and transfer datasets	5	25%
Economic data	3	15%
Population trend data	3	15%
Health related data	2	10%
Satisfaction levels	Count Satisfied (4-5)	Percent Satisfied (4-5)
Perform comparisons within a sector	12	67%
Perform regional/provincial comparisons	10	55%
Link to other data	8	44%
Perform substance to substance comparison	6	34%
Compare relative risk	2	11%
Do you currently use other sources of information to provide context to NPRI data?	Count	Percent

Table 23: Combining NPRI with Other Data

Risk Scoring system by Scorecard	8	27%
US EPA's RSEI (Risk Screening Environment Indicators) model	7	23%
Other	3	10%
No	12	40%
If NPRI offered a tool to incorporate more context to NPRI data, would you use it?	Count	Percent
Yes	7	64%

Desired NPRI Formats

Among the other types of data offerings NPRI users would like to see, shapefiles (36%) and Tableau or PowerBI (31%) are more commonly mentioned, along with online visualization (26%) and custom maps (26%). Over one in four are not interested in other formats or are not sure.

If NPRI were to expand to other types of data offerings, what data formats or product types would you be interested in using?	Count	Percent
Shape files	14	36%
Tableau or PowerBl	12	31%
Online visualization	10	26%
Custom maps	10	26%
Web services	6	15%
Xml	5	13%
API	4	10%
Txt	4	10%
None, not interested in other formats	2	5%
Don't know	11	28%

Table 24: Desired NPRI Formats

Interview Findings

File Formats, Data Fields

Several participants said they export data from the NPRI using Excel (including a .csv file), and that this is their preferred approach. These participants tend to be those in a position that

requires them to use the data to review trends, conduct data modeling, or report on performance metrics.

A few participants indicated they would like to have additional data fields available. These include more fields available that may have been captured in reporting, including NAICS data, location data, or enabling multi-year data to be extracted as one file.

A few participants use the data products available through the NPRI.

NPRI Updates

Two in three NPRI users indicated an interest in having updates about the program, particularly where it relates to publication of data (93% of those interested). Seven in ten would be interested in consultations on changes made to the substances and reporting requirements (78%), upcoming workshops and training (74%), or publication of information overviews (70%). There is also strong interest in receiving information on consultation periods (63%). About one in three are interested in information regarding community outreach (37%) or the launch of reporting period (33%). All respondents prefer email as the best way for the NPRI program to communicate about updates.

Would you be interested in receiving updates regarding the NPRI Program?	Count	Percent
Yes	26	67%
No	10	26%
What updates would you be interested in receiving?	Count	Percent
Data publication	25	93%
Consultations on changes made to the substances and other reporting requirements	21	78%
Upcoming workshops and training	20	74%
Publication of information overviews	19	70%
Consultation periods	17	63%
Community outreach	10	37%
Launch of reporting period	9	33%
What would be the best way for the NPRI program to communicate with you about updates?	Count	Percent
By email	26	100%

Table 25: Updates about NPRI

APPENDICES

A. METHODOLOGICAL DETAILS

An online survey was completed by 50 individuals who have used NPRI data and the website to gather information on their data needs and experiences with the inventory and website in order to make both easier to understand and navigate. The survey was conducted between November 2023 and January 2024, using two sources: a client-supplied list of known data users and an open-source link advertised through a general announcement about the survey on social media and the NPRI website on canada.ca. A series of 10 follow-up interviews were also conducted between December 2023 and January 2024 with some survey respondents who agreed to a follow up interview to obtain more detailed information and context about use of the NPRI as well as sources of satisfaction and areas for improvement.

Online Survey

The online survey was conducted with 50 individuals who have used NPRI data and the website to gather information on their data needs and experiences with the inventory and website in order to make both easier to understand and navigate.

The survey questionnaire was created from the 2019 iteration, which was reviewed by Environment and Climate Change Canada (ECCC) and modified in several areas to reflect new priorities and changes to the NPRI. EKOS Research further reviewed the questionnaire for clarity, comprehensiveness, skip logic, and flow. The questionnaire was subsequently programmed and translated by EKOS Research, each of which was reviewed by ECCC.

A sample of 183 records including name, organization type, and email address was provided to EKOS Research by ECCC. Sample members received an electronic invitation to participate, containing a unique Personal Identification Number ("pinned") link. In addition, 22 generic email addresses (admin@, info@, etc.) were provided by ECCC identifying only the organization type. An invitation email was sent to these 22 records, providing them with the "open" link, allowing multiple users from the organization to participate. The open link to the survey was also distributed by ECCC to 48 academics or students who have recently used NPRI data for academic challenges. Finally, the open link was further promoted by ECCC through web popups as well as social media messaging.

The questionnaire was pre-tested with an invitation to a sample of 20 users with no resulting changes to the wording and skip logic. The survey required an average of 15 minutes to complete and was conducted between November 9, 2023, and January 31, 2024. A total of five email reminders were sent to those in the sample who did not complete the survey, with the last one extending the date to augment response. The online survey was available in both official languages; 44 completed the survey in English, 6 in French.

Of the 50 individuals who completed the online survey, 21 completed it through the pinned link and 29 through the open link. Response to the 2023 survey was substantially lower than the 182 completes obtained in 2019, which may be attributed to two primary reasons. First, the sample of 183 users for the current iteration was smaller than in 2019 sample of users which included 279 records (of which 67 completed the survey). Second, a ECCC social media blackout due to COP28 UAE, the United Nations Climate Change Conference, occurred during the early portion of the survey in field. This reduced the ability to reach potential NPRI users through social media that was experienced in 2019, as the majority of completed surveys were obtained through the open link.

In an effort to garner more completes, the survey remained in field an additional six weeks. In addition, the 2019 sample of NPRI users was mined for those who were not on the current list of direct or generic email addresses, resulting in 33 additional pinned email invitations, collecting only two more completed surveys.

The overall response rate based on the 21 who completed the survey among the 183 receiving the invitation from the list of current users, and the 33 records invited from the 2019 list, is 10%. It is impossible to tell what the response rate is in the open link since the survey was generally advertised on the ECCC website and through social media networks.

As in 2019, survey data gathered from the list-based sample and open link were combined and are reported without the application of any weight, as characteristics of the population of users of the NPRI is not known.

Similarly, a margin of error is not applicable since a census of all members of the population was attempted in the list-based, PIN-controlled sample, and there was no random selection process used in the open link survey. Overall, since the degree of representativeness of the population of NPRI users cannot be assessed, either from the list-based sample or the open link, and results are combined from the two sources in treatment of the data, the findings should be generally considered qualitative in nature.

Interviews

In addition to the survey, a small series of 10 in-depth interviews were conducted by telephone with users of the NPRI who had completed the survey and indicated a willingness to be interviewed by telephone. All 10 respondents requested that interviews be conducted in English. Participants in the follow-up interview were offered \$95 for their participation. The interviews addressed more detailed context of how they have used the inventory, as well as issues, limitations, or shortcomings they have experienced with it, along with the value of the NPRI for their particular applications. Lastly, suggestions for improvements and other changes were also explored. The length of the interview ranged from 15 to 35 minutes depending on the participant's use of the NPRI.

B. SURVEY QUESTIONNAIRE

WINTRO

Web Intro

Since 1992, the National Pollutant Release Inventory (NPRI) has been collecting data about pollutant releases, disposals and transfers in Canada. 7000 facilities, including manufacturers, mines, oil and gas operations, power plants, and sewage treatment plants, are required to report to the NPRI. This public inventory helps Canadians learn about pollutants released in their communities, encourages action to reduce pollution and lets users track changes over time. The NPRI website helps users find and understand the data. They can search datasets or the complete database, view the data on virtual globe maps, on the Power BI dashboard, or read data highlights and sector/substance overviews. A survey of NPRI data and website users is being conducted to gather information on their data needs and experiences with the inventory and website. The results will be used to make both the data and the website easier to understand and navigate. The survey will take approximately 15 minutes to complete. Please be assured that the information you provide will be administered in accordance with the Privacy Act of Canada regarding the protection of personal information. Your answers are completely confidential (this means that no individual will be associated with the survey's results - rather, they will be rolled up into large categories to protect the confidentiality of each respondent) and that survey is voluntary. INSTRUCTIONS Please consider the questions and your answers carefully. On each screen, after selecting your answer, click on the "Continue" button at the bottom of the screen to move forward in the questionnaire. If you leave the survey before completing it, you can return to the survey URL later, and you will be returned to the page where you left off. Your answers up to that point in the survey will be saved. If you have any questions about how to complete the survey, please call EKOS at 1-866-211-8881 or email us at online@ekos.com. Thank you in advance for your participation.

PREQ1

What type of organization are you primarily affiliated with?

Academic institution	1
Students	2
Media	3
Environmental Nongovernment organizations (NGO)	4
Federal government Environment and Climate Change Canada	5
Federal government Health Canada	6
Federal government Other (please specify)	7
Provincial government	8
Municipal government	9
Indigenous group	10
Industrial facility/association	11
Citizen's group	12
Individual citizen	13
Commercial/Institutional	14

Financial/Insurance/Real Estate	15
Other (please specify)	77
Don't know / Not applicable	99

PREQ2 [1,8]

When thinking of Environment and Climate Change Canada (ECCC), what programs and service areas primarily come to mind?

Select all that apply.	
Weather	1
Climate change	2
Wildlife, plants and species	3
Water and the environment	4
Pollution and waste management	5
Environmental conservation and protection	6
Other (please specify)	77
Don't know / Not applicable	99

Q1

Have you used NPRI data? The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals and transfers of pollution in the environment. It tracks over 320 pollutants from over 7,000 facilities across Canada.

Yes	1
No	2
Don't know / No response	99

Q1B

Haven't used NPRI or DK in Q1

Do you think that NPRI data could benefit or be of interest to you?

Yes	1
No	2
Don't know / No response	99

Q1ECCC1 [1,8]

Other than the NPRI, what ECCC data are you aware of?

Select all that apply.	
Greenhouse gas emissions	1
Meteorological	2
Air Pollutant Emissions Inventory (APEI)	3
Black Carbon Emissions Inventory	4
National Air Pollution Surveillance Program (NAPS)	5
Bio-monitoring	6

Water quality	7
Other (please specify)	77
Don't know / Not applicable	99

Q1ECCC2 [1,8]

Have you used any of these ECCC data in the past 5 years?

Select all that apply.	
Q1ECCC1 = 1	
Greenhouse gas emissions	1
Q1ECCC1 = 2	
Meteorological	2
Q1ECCC1 = 3	
Air Pollutant Emissions Inventory (APEI)	3
Q1ECCC1 = 4	
Black Carbon Emissions Inventory	4
Q1ECCC1 = 5	
National Air Pollution Surveillance Program (NAPS)	5
Q1ECCC1 = 6	
Bio-monitoring	6
Q1ECCC1 = 7	
Water quality	7
Q1ECCC1 = 77	
Other (please specify)	77
None of the above	98
Don't know / Not applicable	99

Q1C

Haven't used NPRI or DK in Q1, might use/could benefit in Q1B

In what capacity would NPRI data be most useful to you?

Personally	1
Professionally	2
Both	3
Don't know / No response	99

Q1D

Haven't used NPRI or DK in Q1, might use/could benefit in Q1B

How likely are you to use NPRI data?

Not at all likely 1	1
2	2
Moderately likely 3	3
4	4
Very likely 5	5

Q1E [1,6]

Haven't used NPRI or DK in Q1, might use/could benefit in Q1B

How could NPRI best reach out to you to provide more information)?

Select all that apply	
NPRI Canada.ca website	1
Other website (which?)	78
Social Media (which?)	2
Canada Gazette	3
General Internet Search (e.g., Google)	4
Other (please specify)	77
Don't know / No response	99

Q1F

Haven't used NPRI or DK in Q1

Why haven't you used NPRI data in the past?

Unaware	1
Not relevant	2
Too technical	3
Did not realize could access for personal use	4
Need better understanding of what I can find there	5
No ability to access on mobile device	6
Other (please specify)	77
Don't know / No response	99

Q1G

Haven't used NPRI or DK in Q1, might use/could benefit in Q1B

What would you most want to know about NPRI data to better understand its uses?

Please specify	77
Don't know / No response	99

Q1H [1,6]

Haven't used NPRI or DK in Q1, might use/could benefit in Q1B

What would you need in order to get started using NPRI data?

Select all that apply	
Live webinar training	1
Video tutorials	2
In class training	3
Step-by-step guides	4
Study cases (examples of how others use the data)	5

Other (please specify)	77
Don't know / No response	99

Q2

Used NPRI data

Did you use the NPRI for:	
Personal use	

Personal use	1
Professional use	2
Both	3
Don't know / No response	99

Q3 [1,13]

Used NPRI data

What was your purpose for using the data?

Select all that apply	
For discussions with a facility (or facilities)	1
For use in research (please specify)	2
For academic study (student projects, education)	3
For preparation of a media story	4
For analysis of sectors or trends	5
For an environmental and/or risk assessment	6
For statistical purposes (for example: uncertainty analysis)	7
Policy development	8
Benchmarking facility performance	9
Benchmarking for competitive purposes	10
To identify pollutant releases in a specific area or community	11
To perform quality assurance checks of your NPRI reports	12
Other (please specify)	77
Don't know / No response	99

Q4 [1,7]

Used NPRI data

How/where do you obtain NPRI data?

Select all that apply	
From NPRI Canada.ca website	1
From Government of Canada Open Data	2
From Government of Canada Open Maps	3
Other website (which?)	78
PREQ1 = 5,6,7	
From ECCC Data Catalogue	4
PREQ1 = 5,6,7	
Federal Geospatial Portal	5

From the NPRI by email	6
Other (please specify)	77
Don't know / Not applicable	99

Q5

Used NPRI data

When did you start using NPRI data?

Last six months	1
6 months to 1 year ago	2
1-2 years ago	3
2-5 years ago	4
More than 5 years ago	5
Don't know / No response	99

Q5B

Used NPRI data

When is the last time you used NPRI data?

Last six months	1
6 months to 1 year ago	2
1-2 years ago	3
2-5 years ago	4
More than 5 years ago	5
Don't know / No response	99

Q6 [1,8]

Used NPRI data

Where did you hear about NPRI data?

Select all that apply	
NPRI Canada.ca Website	1
Other website (which?) 78	3
Social Media (which?)	2
Canada Gazette 3	3
General Internet Search (e.g., Google)	1
Directly from Environment and Climate Change Canada (ECCC)	5
NPRI outreach (e.g., Museum presentations, educational info packets,	
Academic Challenge) 6	5
Other (please specify) 77	7
Don't know / No response 99	Э

Q7 [1,5]

Used NPRI data or the NPRI data could benefit/interest me

<RQ7: [Q1B = 1]What would you be most likely to use NPRI data for in the future?[ELSE]Have you used NPRI data for any of the following purposes?>

Select all that apply	
Levels of pollutants in my community/neighbourhood	1
Sources of pollutants in my community/neighbourhood	2
Information for academic purposes (e.g., research, school project)	3
Integrating with other environmental / data	4
Other (please specify)	77
Don't know / No response	99

Q8 [1,8]

Used NPRI data

Have you used any of the following NPRI data products?

Select all that apply	
Single Year Flat Files (link to website)	1
Aggregated release data, last 5 years (link to website)	2
Raw disaggregated data (MS Access database from 1994 to curren	t) (link
to website)	3
Open Mapping Services (link to website)	4
Google Earth (link to website)	5
Query Site (Online Data Search) (link to website)	6
NPRI Dashboard (link to website)	7
Other (please specify)	77
None – have not used any data products	98
Don't know / Not applicable	99

Q8B [1,5]

Used NPRI data

Have you used any of the following NPRI information products? Products can be found on (link to website)

Select all that apply	
NPRI Sector Overview	1
NPRI Data Highlight	2
NPRI Substance Overview	3
NPRI Data Integration	4
NPRI Indigenous Series	5
Other (please specify)	77
None – have not used any information products	98
Don't know / Not applicable	99

Q9 [1,4]

Used NPRI data/information product from either Q8 or Q8B

What do you use to access and view these data and information products?

Select all that apply	
Cell phone	1
Tablet	2
Computer	3
Other (please specify)	77
Don't know / No response	99

Q10A

Use Single Year Flat Files

Single Year Flat Files Currently, the most recent three data years are available. Would adding additional years be useful?

Yes (please enter the range of years)	1
No	2
Don't know / No response	99

Q10B

Use Single Year Flat Files

What are the most useful fields in the file?

Please specify	77
Don't know / No response	99

Q10C

Use Single Year Flat Files

Does this file contain all of the information you need or do you need to use multiple files to get the information you need?

Yes, it contains everything needed	1
No, I need to access and link different files (which ones?)	77
Don't know / No response	99

Q11A

Use Aggregate Release data, last 5 years

Aggregate Release data, last 5 years Aggregated data is available for download on the newly redesigned online data search tool under the "pre-defined queries". Were you aware of this?

Yes	1
No	2
Don't know / No response	99

Q11B

Use Aggregate Release data, last 5 years

Would you be more likely to download the aggregate data file on:

Open Data	1
Online data search tool	2
Both	3
Don't know / No response	99

Q11C

Use Aggregate Release data, last 5 years

Yes	1
No (How many more years would you want added?)	77
Don't know / No response	99

Q11D

Use Aggregate Release data, last 5 years What fields are the most useful?

Please specify	77
Don't know / No response	99

Q11E

Use Aggregate Release data, last 5 years

How would you rate the time it takes to obtain the information that you are looking for?

Very little time 1	1
2	2
3	3
4	4
Far too much time 5	5
Don't know / No response	99

Q11F

Use Aggregate Release data, last 5 years

Is there anything that would make this process easier for you?

Please specify	77
Don't know / No response	99

Q11G

Use Aggregate Release data, last 5 years

Is there information that you need that is not contained in the file?

Yes (what information is missing?)	77
No	2
Don't know / No response	99

Q11H

Use Aggregate Release data, last 5 years

Does this file contain all of the information you need or do you need to use multiple files to get the information you need?

Yes	1
No (what other files do you use?)	77
Don't know / No response	99

Q12A

Use Raw disaggregated data

Raw disaggregated data (MS Access database from 1994 to current) What fields are the most useful?

Please specify	77
Don't know / No response	99

Q12B

Use Raw disaggregated data

What field do you need to format or change before you are able to use the file?

Please specify	77
None	98
Don't know / No response	99

Q12C

Use Raw disaggregated data

Is there anything that would make this process easier for you?

Please specify	77
Don't know / No response	99

Q12D

Use Raw disaggregated data

Is there information that you need that is not contained in the file?

Yes (what information is missing?)	77
No	2

Don't know / No response

Q12E

Use Raw disaggregated data

Do you use other multiple files to get the information you need?

Yes (what other files do you use?)	77
No	2
Don't know / No response	99

Q14A

Use Open Mapping Services/Google Earth

Open Mapping Services/Google Earth Would adding additional years be useful?

Yes (how many years?)	77
No	2
Don't know / No response	99

Q14B

Use Open Mapping Services/Google Earth

Would you like shapefiles to be available? The *shapefile* format is a popular geospatial vector data format for geographic information system (GIS) software.

Yes	1
No	2
Don't know / No response	99

Q14D

Use Open Mapping Services/Google Earth

What would you use these for?

Please specify	77
Don't know / No response	99

Q15A [1,7]

Use Query Site

Query Site For what purpose do you use the online data search tool?

Select all that apply	
To learn about pollution in my community	1
To find information on substances released	2
To learn about companies	3
To look at pollution trends	4

To do industrial sector profiling	5
To extract data for complex analyses	6
Other (please specify)	77
Don't know / No response	99

Q15B

Use Query Site

How would you rate the time it takes to obtain the information that you are looking for?

Very little time 1	1
2	2
3	3
4	4
Far too much time 5	5
Don't know / No response	99

Q15C

Use NPRI Dashboard

For what purpose do you use the NPRI Dashbord?

Select all that apply	
To learn about pollution in my community	1
To find information on substances released	2
To learn about companies	3
To look at pollution trends	4
To do industrial sector profiling	5
To extract data for complex analyses	6
Other (please specify)	77
Don't know / No response	99

Q15D

UUse NPRI Dashboard

How would you rate the time it takes to obtain the information that you are looking for through the NPRI Dashboard?

Very little time 1	1
2	2
3	3
4	4
Far too much time 5	5
Don't know / No response	99

Q16PROD

No products used from Q8

What is the reason you do not use any of the NPRI data products?

It doesn't fulfill my needs	1
I didn't know it existed	2
It's too complicated to use	3
The file is too big	4
Other (please specify)	77
Don't know / No response	99

PREQ16

Used NPRI data

General NPRI Program How satisfied are you with the following aspects of the NPRI?

Q16A

Used NPRI data

Quality of the NPRI data	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16B

Used NPRI data

Coverage of substances	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16C

Used NPRI data	
Coverage of sector/facilities	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4

Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16D

Used NPRI data

Ease of locating the data files	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16E

Used NPRI data

Ease of locating specific data fields/elements	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16F

Used NPRI data	
Timeliness of release of data	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16G

Used NPRI data

Ease of understanding and interpreting NPRI data	
Extremely dissatisfied 1	1
2	2
Neutral 3	3

4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16H

Used NPRI data

Video tutorials	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16I

Used NPRI data

Telephone support provided by ECCC staff	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16J

Used NPRI data	
Email/online support provided by ECCC staff	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16K

Used NPRI data	
NPRI Sectoral Overview	
Extremely dissatisfied 1	1
2	2

Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16L

Used NPRI data

NPRI Data Highlight	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16M

Used NPRI data History of reporting requirements Extremely dissatisfied 1 1 2 2 Neutral 3 3 4 4 Extremely satisfied 5 5 Have not used this 98 Don't know/ No response 99

Q16N

Used NPRI data	
Data Quality Management Framework	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q160

Used NPRI data	
Quality Assurance/Quality Control	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16P

Used NPRI data	
NPRI Canada.ca Website	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16Q

Used NPRI data **NPRI Substance Overview** Extremely dissatisfied 1 1 2 2 3 Neutral 3 4 4 Extremely satisfied 5 5 Have not used this 98 Don't know/ No response 99

Q16R

Used NPRI data	
NPRI Data Integration	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q16S

Used NPRI data	
NPRI Indigenous Series	
Extremely dissatisfied 1	1
2	2
Neutral 3	3
4	4
Extremely satisfied 5	5
Have not used this	98
Don't know/ No response	99

Q17A

Some dissatisfaction in the quality of the NPRI data

You indicated some dissatisfaction with the **quality of the NPRI data**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17B

Some dissatisfaction in the coverage of substances

You indicated some dissatisfaction with the **coverage of substances**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17C

Some dissatisfaction in the coverage of sector/facilities

You indicated some dissatisfaction with the **coverage of sector/facilities**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17D

Some dissatisfaction in the ease of locating the data files

You indicated some dissatisfaction with the **ease of locating the data files**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17E

Some dissatisfaction in the ease of locating specific data fields/elements

You indicated some dissatisfaction with the **ease of locating specific data fields/elements**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17F

Some dissatisfaction in the timeliness of release of data

You indicated some dissatisfaction with the **timeliness of release of data**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17FB

Some dissatisfaction in timeliness of release of data

How frequently would you like to see data updates in NPRI Dashboard and the online data search tool?

Quarterly	1
Semi annually	2
Annually	3
More often (please specify)	77
Don't know / No response	99

Q17FC

Some dissatisfaction in timeliness of release of data

Would you also expect the previous versions to be available for download (e.g., on the GC Open Data Portal)?

Yes	1
No	2
Don't know / No response	99

Q17K

Some dissatisfaction in the NPRI Sectoral Overview

You indicated some dissatisfaction with the **NPRI Sectoral Overview**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17L

Some dissatisfaction in the NPRI Data Highlight

You indicated some dissatisfaction with the **NPRI Data Highlight**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17P

Some dissatisfaction in the NPRI Website

You indicated some dissatisfaction with the **NPRI Canada.ca Website**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17Q

Some dissatisfaction in the NPRI Substance Overviews

You indicated some dissatisfaction with the **NPRI Substance Overviews**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17R

Some dissatisfaction in the NPRI Data Integration

You indicated some dissatisfaction with the **NPRI Data Integration**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q17S

Some dissatisfaction in the NPRI Indigenous Series

You indicated some dissatisfaction with the **NPRI Indigenous Series**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q18

Used NPRI data

Have you ever had questions (e.g., about content, technical issues, or other issues) while using NPRI data?

Yes	1
No	2
Don't know / No response	99

Q18B [1,4]

Used NPRI data, Had a question/issue/problem while using NPRI data

When you have had questions (e.g., about content, technical issues, or other issues), thinking about your most recent experience(s), what have you done about it?

Select all that apply

Called/emailed the NPRI helpdesk or Enviroinfo	1
Found the information on the NPRI Canada.ca website	2
Found the information elsewhere	3
Other (please specify)	77
Gave up/Did nothing	98
Don't know / Not applicable	99

Q19 [1,5]

Used NPRI data

Thinking about your use of NPRI data in the past, which of the following tools would be most helpful to you?

Select all that apply	
Live webinar training	1
In class training	2
Step-by-step guides	3
Study cases (examples of how others use the data)	4
Other (please specify)	77
Don't know / No response	99

Q20

Used NPRI data

Would you be interested in receiving updates regarding the NPRI Program?

Yes	1
No	2
Don't know / No response	99

Q20B [1,8]

Used NPRI data, Interested in receiving updates regarding the NPRI What updates would you be interested in receiving?

What updates would you be interested in receiving?

Select all that apply	
Data publication	1
Publication of information overviews	2
Consultations on changes made to the substances and other rep	orting
requirements	3
Upcoming workshops and training	4
Launch of reporting period	5
Consultation periods	6
Community outreach (ex.: online educational kits for teachers, f	estivals
we're attending, new info product available, etc.)	7
Other (please specify)	77
Don't know / No response	99

Q20C

Used NPRI data, Interested in receiving updates regarding the NPRI

What would be the best way for the NPRI program to communicate with you about updates?

By email	1
Through the NPRI Canada.ca website	2
Through social media – ECCC channels (LinkedIn; X, formally know	wn as
Twitter; and Facebook)	3
Other (please specify)	77
None	98
Don't know / No response	99

PREQ21

Used NPRI data product listed from Q8

How satisfied are you with the NPRI data products you have used?

Q21A

Single Year Flat Files	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know/ No response	99

Q21B

Aggregated release data, last 5 years	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know/ No response	99

Q21C

Raw disaggregated data (MS Access database from 1994 to current)	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know/ No response	99

Q21D

Open Mapping Services	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know/ No response	99

Q21E

Google Earth	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know/ No response	99

Q21F

Query Site (Online Data Search)	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4

Extremely satisfied 5	5
Don't know/ No response	99

Q21G

1
2
3
4
5
99

Q22A

Some dissatisfaction with Single Year Flat Files

You indicated some dissatisfaction with **Single Year Flat Files**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22B

Some dissatisfaction with Aggregated release data, last 5 years

You indicated some dissatisfaction with **aggregated release data (last 5 years)**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22C

Some dissatisfaction with Raw disaggregated data

You indicated some dissatisfaction with **raw disaggregated data**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22D

Some dissatisfaction with Open Mapping Services

You indicated some dissatisfaction with **Open Mapping Services**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22E

Some dissatisfaction with Google Earth

You indicated some dissatisfaction with **Google Earth**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22F

Some dissatisfaction with Query Site (Online Data Search)

You indicated some dissatisfaction with **Query Site (Online Data Search)**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q22G

Some dissatisfaction with NPRI Dashboard

You indicated some dissatisfaction with **NPRI Dashboard**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q23

Advanced user only

Considering the type of content found within the files, how representative do you feel the file names are of their content?

Not at all representative 1	1
2	2
3	3
4	4
Completely representative 5	5
Don't know / No response	99

Q24 [1,13]

Used NPRI data

Over the last year, what types of NPRI information have you accessed?

Select all that apply	
Data for specific geographic locations (community, postal code,	
municipality, city, province)	1
Data for specific facilities	2
Data for specific years	3
ECCC analysis of the data (data highlights)	4

Data for specific Industry sectors	5
Data for specific pollutants	6
Release data to specific medium (air, water and/or soil)	7
Data for transfers and disposals	8
Sector overviews	9
Substance overviews	10
NPRI's Indigenous series	11
NPRI data integration products	12
Other (please specify)	77
Don't know / Not applicable	99

Q25 [1,5]

Used NPRI data

The substances and data that are required to be reported to the NPRI have undergone many changes over the years. These changes can affect your data analysis. What tools/guidance, if any, have you used to help interpret the NPRI data?

Substance list by threshold category webpage	1
History of reporting requirements webpage	2
Using and interpreting data from the NPRI webpage	3
Guide for reporting to the NPRI (link to webpage)	4
Other (please specify)	77
None	98
Don't know / No response	99

Q26

Used NPRI data

Are you able, with the current data products, to perform all your analyses or are there gaps?

Yes, I can perform all analyses	1
No, there are gaps	2
Don't know / No response	99

Q27

Used NPRI data

How can we improve our data products to meet your needs?

Please specify	77
Don't know / No response	99

Q28 [1,9]

Used NPRI data

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

Select all that apply	
API	1
XML	2
Tableau or additional Power BI products	3
Txt	4
Web services	5
Shape files	6
Online visualization	7
Custom maps	8
Other (please specify)	77
None, not interested in other formats/product types	98
Don't know / Not applicable	99

Q29

Advanced user

Have you ever combined NPRI data with other data?

Yes	1
No	2
Don't know / No response	99

Q29BBOX1 [0,1]

Other environmental	data	(please specify)	
	aata	(picuse speeny)	

Q29B [1,6]

Advanced user, combined NPRI data with other data

What other datasets have you used NPRI data with?

Select all that apply	
Other environmental data (please specify) Q29BBOX1	78
Population trend data	1
Economic data	2
Substance Information (toxicity, fate and transport properties)	3
Health related data	4
International Substance release and transfer datasets	5
Other (please specify)	77
None required	98
Don't know / Not applicable	99

1

Q29C

Advanced user, combined NPRI data with other data

For what purpose?

Please specify	77
Don't know / No response	99

Q29D

Advanced user, combined NPRI data with other data

What challenges did you have when you combined NPRI data with other datasets and what would have made it easier for you?

Please specify	77
Don't know / No response	99

PREQ29E

Advanced user, combined NPRI data with other data

How satisfied are you with the following aspects of the NPRI?

Q29E1

Advanced user, combined NPRI data with other data

Ability to link to other data	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know / No response	99

Q29E2

Advanced user, combined NPRI data with other data

Ability to perform comparisons within a sector	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know / No response	99

Q29E3

Advanced user, combined NPRI data with other data	
Ability to perform regional/provincial comparisons	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know / No response	99

Q29E4

Advanced user, combined NPRI data with other data

Ability to perform substance to substance comparison	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know / No response	99

Q29E5

Advanced user, combined NPRI data with other data

Ability to compare relative risk	
Extremely dissatisfied 1	1
2	2
Neither 3	3
4	4
Extremely satisfied 5	5
Don't know / No response	99

Q29F

Advanced user, combined NPRI data with other data, Some dissatisfaction with ability to link to other data of interest

You indicated some dissatisfaction with the **ability to link to other data of interest**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q29G

Advanced user, combined NPRI data with other data, Some dissatisfaction with ability to perform comparisons within a sector

You indicated some dissatisfaction with the **ability to perform comparisons within a sector**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q29H

Advanced user, combined NPRI data with other data, Some dissatisfaction with ability to perform regional/provincial comparisons

You indicated some dissatisfaction with the **ability to perform regional/provincial comparisons**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q29H2

Advanced user, combined NPRI data with other data, Some dissatisfaction with ability to perform substance to substance comparison

You indicated some dissatisfaction with the **ability to perform substance to substance comparison**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q29H3

Advanced user, combined NPRI data with other data, Some dissatisfaction with ability to compare relative risk

You indicated some dissatisfaction with the **ability to compare relative risk**. Can you provide some detail about why or what you were dissatisfied with?

Please specify	77
Don't know / No response	99

Q291

Advanced user, have not combined NPRI data with other data

Would you like to be able to link NPRI data to other data?

Yes (which ones?)	77
No	2
Don't know / No response	99

Q29J

Advanced user, have not combined NPRI data with other data, would like to be able to link NPRI data to other data

What benefits would this provide to you?

Please specify	77
Don't know / No response	99

Q30 [1,3]

Advanced user

Do you currently use other sources of information to provide context to NPRI data? Context could refer to information about the toxicity, fate and transport properties of NPRI substances.

Select all that apply	
US EPA's RSEI (Risk Screening Environment Indicators) model	1
Risk Scoring system by Scorecard	2
Other (please specify)	77
No	98
Don't know / Not applicable	99

Q30B

Advanced user, currently use other sources of information to provide context to NPRI data

Are there any pros/cons of these tools that gives more context to the data you want NPRI be aware of?

Please specify	77
Don't know / No response	99

Q30C

Advanced user, currently use other sources of information to provide context to NPRI data

If NPRI offered a tool to incorporate more context to NPRI data, would you use it?

Yes	1
No	2
Don't know / No response	99

Q30D

Advanced user, currently use other sources of information to provide context to NPRI data

Please explain how you would use the tool to incorporate more context to NPRI data.

Please specify	77
Don't know / No response	99

PREQ31

How would you describe your level of knowledge and comfort with:

Q31A

Searching the Internet to find specific information	
Not at all knowledgeable/ comfortable 1	1
2	2
3	3
4	4
Very comfortable/ knowledgeable 5	5
Don't know / No response	99

Q31B

Using search functions and filters in an online data tool to get the specific information you need

Not at all knowledgeable/ comfortable 1	1
2	2
3	3
4	4
Very comfortable/ knowledgeable 5	5
Don't know / No response	99

Q31C

Using spreadsheets to capture and manipulate data	
Not at all knowledgeable/ comfortable 1	1
2	2
3	3
4	4
Very comfortable/ knowledgeable 5	5
Don't know / No response	99

Q31D

Using information data bases to perform advanced analysis (e.g., pollution trends) Not at all knowledgeable/ comfortable 1 1

2	2
3	3
4	4
Very comfortable/ knowledgeable 5	5
Don't know / No response	99

QREC

We are conducting a series of 20 to 30 minute telephone interviews to discuss how people are using the National Pollutants Release Inventory (NPRI), and what changes or improvements could be beneficial for them. It's just a friendly conversation, and does not require any specific knowledge! We are offering a \$75 incentive for participation in this added component. Would you be interested in participating in this follow-up interview?

Yes (please provide your name, email address and phone number below
so we can contact you. We will NOT use this contact information for any
other purpose or release it to anyone, for any reason)1No2

QRECNAME [0,1] Name:	1
QRECEMAIL [0,1] Email:	1
QRECTEL [0,1] Telephone:	1
QRECEXT [0,1] Ext.	1

тник

Those are all the questions we have for you. Thank you very much for taking the time to complete this survey, it is greatly appreciated. <center><button type="button" class="BUTTON" onClick="window.open('https://surveys.ekos.com/cwx.cgi?EN:06623:{\$_telkey}:REVISEOE','_sel f','','false')">Visit ekos.com</button></center>

THNK2

Screened-out

We regret but your responses have shown that you are ineligible to participate in this survey. Thank you for your time! <center><button type="button" class="BUTTON" onClick="window.open('https://surveys.ekos.com/cwx.cgi?EN:06623:{\$_telkey}:REVISEOE',_sel f','','false')">Visit ekos.com</button></center>

C. FOLLOW-UP INTERVIEW GUIDE

You recently completed a survey on your use of the National Pollutant Release Inventory (NPRI) system which collects data about pollutant releases, disposals and transfers in Canada. This follow up interview intends to provide more detail and context around your experience using the system. We will get into how and why you use the system and what, if any, changes or improvements could be beneficial. The interview will take approximately 20 minutes to complete and you will receive \$95 for your participation.

We will be recording our conversation today for the purposes of note taking and report writing only. Please be assured that the information you provide will be administered in accordance with the *Privacy Act* of Canada regarding the protection of personal information. Your answers are completely confidential and the interview is voluntary.

- 1. Could you tell me a bit more about how you have been using the NPRI?
 - a. If in a professional capacity, in what role do you use it?
 - b. How has it been useful to you?
 - c. What is the benefit of having access to the information the NPRI provides?
- 2. Is there something that you would like to use it for that it is currently not suited for?
 - a. What is that and what would you need to have changed/added in order for that to happen?
- 3. Do you find NPRI Website to be well organized and easy to navigate? If no what improvements do you think are needed?¹
- 4. Are there file formats or fields that you wish were available?
 - a. How about supports to use the information/products? Do you feel there is anything missing that would be helpful to you?
- Do you find the information/products to be well organized and easy to use and understand?
 a. If not, in what way? What would improve this?

¹ New question for 2023

^{70 •} EKOS RESEARCH ASSOCIATES, 2024

- 6. Are there other aspects you are particularly satisfied or dissatisfied with (timing, supports/training, timeliness)?
 - a. What and what makes it work/not work for you?
 - b. What would improve things?
- 7. What extra supports/training would you like to help you use the NPRI more effectively?
- 8. Are there any other gaps or areas for improvements that you would like to discuss or make suggestions about?