



# CANADIAN INSTITUTE FOR ENVIRONMENTAL LAW AND POLICY

L'INSTITUT CANADIEN DU DROIT ET DE LA POLITIQUE DE L'ENVIRONNEMENT

Est. 1970

CIELAP Shelf:  
Mitchell, Anne; Canadian Institute for Environmental  
Law and Policy  
Public Education and Outreach Activities Using The  
NPRI : A Perspective From The Canadian Institute  
RN 27179

## PUBLIC EDUCATION AND OUTREACH ACTIVITIES USING THE NPRI

### A PERSPECTIVE FROM THE CANADIAN INSTITUTE FOR ENVIRONMENTAL LAW AND POLICY (CIELAP)

Prepared by Anne Mitchell, Executive Director  
for the  
National Emissions Inventory and Projections Task Group (NEIPTG)  
Vancouver  
May 1999

#### 1 Introduction

The Canadian Institute for Environmental Law and Policy was established in 1970 in response to the continuing need for objective analysis of environmental law and policy issues. CIELAP is a national, charitable, not for profit research and education institute committed to reforming environmental law and public policy in Canada and the world.

The Institute's mission is to provide leadership in the research and development of environmental law and policy that promotes the public interest and the principles of sustainability.

Pollutant Release and Transfer Registries such as the NPRI are emerging as one of the most important environmental policy innovations of the past thirty years. Such registries have the potential to strengthen public understanding and knowledge of pollution problems, enhance the accountability of governments and industry to the public for their actions, and promote reductions in the generation and release of hazardous and toxic substances into the environment.

#### 2 Background on NPRI

Environment Canada in 1992 established the NPRI to give Canadians information, through a publicly accessible database, on pollutants released into their environment.

Under the NPRI program, facilities that have ten or more full-time employees and manufacture, process or otherwise use 10 tonnes or more of one of 176 designated substances are required to

report the identity and quantities of those pollutants released on-site to the air, water, land or transferred off-site in waste.

For the purposes of the NPRI, a pollutant is considered to have been 'released' if it is discharged to the air or water, disposed of on the surface of the land, in a landfill, or into an underground injection well, on the site of the facility where it is generated.

'Transfers' of pollutants are substances which are moved from the facilities where they are generated to another location for chemical, physical or biological treatment prior to disposal, disposal through incineration, land filling, application to the surface of the land, underground injection, or in a municipal sewage treatment plant. 'Transfers' to municipal sewage treatment plants include pollutants disposed of by facilities through discharges into municipal sewer systems.

Educational and research facilities, facilities engaged in vehicle repair, the distribution, storage or sale of fuels, the retail sale of listed substances or products containing listed substances, the growing, harvesting or management of renewable resources (forestry, fisheries and agriculture), mining, and the drilling and operating of oil and gas wells, are exempt from the reporting requirements.

The potential for harm to human health or the environment from releases or transfers of NPRI pollutants from reporting facilities cannot be determined from the NPRI data alone. The data provides a useful starting point; other information, such as the toxicity of individual pollutants, the type of release or transfer, and the environmental medium receiving the pollutant is necessary before such assessments can be made.

Smaller releases or transfers of specific pollutants, such as those which have been identified as "toxic" or carcinogenic, may have larger impacts on human health and the environment, than larger quantity releases or transfers of other substances.

The NPRI currently collects pollutant release and transfer information from a range of larger industrial and nonindustrial facilities. However, there are many other sources of pollutants that are not currently captured under the NPRI. These include such things as the release of volatile organic compounds (VOCs) from paint and other coatings on buildings, commercial and consumer uses of solvents, such as paint thinner, dry cleaning, and fuel distribution and vehicle exhaust. Some information on these sources is included in the NPRI summary reports, as they can be, cumulatively, significant sources of pollutants.

### ***Toxic and Carcinogenic Substances***

Some substances on the NPRI list may be of particular interest because they have been determined to be 'CEPA Toxic', 'carcinogenic' or 'probably carcinogenic'. Approximately 25 of the 176 substances whose releases and transfers are reported under the NPRI are classified as being 'toxic' or 'carcinogenic'. 'Toxic' substances are those classified by the federal government under section 11 of the Canadian Environmental Protection Act, as having, or having the potential to have, immediate or long-term harmful effects on the environment or human life or health.

Carcinogenic substances are those identified by the International Agency for Research on Cancer as being known to cause cancer in humans, or as being probably carcinogenic to humans.

### ***Transfers***

It is not possible to identify the facilities receiving transfers of waste for treatment or disposal under the existing NPRI reporting structures.

The NPRI data can be accessed through Environment Canada's web site at:  
<http://www.ec.gc.ca/pdb/npri/>

### **3 Potential Uses of NPRI Data**

Users can put data generated through the NPRI to many uses ranging from Environment Canada to individual citizens dealing with a local pollution problem. Some of these uses include:

- ensuring the right of local communities and the public at large to know about releases and transfers of pollutants
- strengthening the ability of the public to hold governments to account for the consequences of their environmental policy decisions
- strengthening the ability of the public to hold industry to account for the environmental and health impacts of its activities, and the validity of its claims regarding voluntary reductions in the generation of wastes and release or transfer of pollutants
- providing a more sound basis for public policy decisions regarding environmental protection
- improving environmental management and promoting and facilitating pollution prevention activities within firms and institutions which generate, transfer or release pollutants
- improving investment and insurance decision-making by financial institutions regarding activities which involve the potential to cause harm to the environment or human health

### **4 Need for Outreach and Education Activities to Accompany the NPRI**

The public needs to be aware of the NPRI data and needs to know how to access the data. Therefore, we need to develop public awareness programs around the NPRI and how to use it. This is important to ensure the continued support for the NPRI. Encouraging individual and community responsibility to help clean up their local areas is also important. In the end, increased public awareness and the resultant actions will lead to better environmental policy development. To date, in Canada, despite efforts to make the NPRI data more widely known, community, environmental and citizens' groups have made limited use of the data. The most significant user group has not been members of the public, or community, environmental and citizens groups, but financial institutions. If the NPRI program is to be a success and the expected results of a more engaged and aware public achieved, then several steps must be taken

to ensure that the public is informed of the existence of the NPRI and can use it.

## **5 Ensuring Public Knowledge and Accessibility of the NPRI data**

Public Access to the Data:

Posting the NPRI data on Environment Canada's home page. This is already done.

Making the data available to the public in a CD-ROM or floppy disc format

Providing annual hard copy summary reports on the NPRI to the public. This too, is already done.

The public needs to have access to the most up to date data as soon as possible. This is an important issue for facilities that report under the NPRI. Should a facility have undertaken a major pollution control or prevention initiative, this may not be reflected in the data and the reports in the media on the data.

To achieve the widest possible distribution, the NPRI data has to be provided at no, or least cost.

Informing the Public about the Existence of the Data:

Steps need to be taken to inform the public about the existence of the data and the fact that the public has a right to access it. A communications and marketing campaign should be developed to include the following:

- i print and audio visual media - articles, announcements, public service announcements including community newspapers and local radio and television
- ii outreach and education programs targeting potential users - eg community groups; environmental organizations; rate payers' associations; local businesses and associations; health groups; etc
- iii inclusion in curricula in high schools
- iv use in college and university courses
- v Internet Access
- vi production of hard copy summary reports

## **6 Some of CIELAP's Projects Using NPRI data:**

## **i Map of Canada**

This is CIELAP's first NPRI project. With the cooperation of Environment Canada, the EJLB Foundation and the Cartography Department at the University of Toronto, we have developed a map of Canada with the major pollutants, as identified by the NPRI data, plotted on it. The map will be available in English and in French and we plan to distribute it across Canada to schools, universities and community groups. The map will provide a visual picture to Canadians about where the major sources of pollutants are across the country. We hope this will stimulate debate at all levels of society about the long-term health and environmental implications.

This map does not include data on transfers of NPRI substances for the purposes of recovery, recycling or re-use (the 3Rs). Reporting of transfers for these purposes was voluntary in the 1996 reporting year, and therefore, the data is incomplete and unreliable. However, as Table XX and the Provincial and Territorial Summary Map shows, the 3Rs may be the most significant single fate of NPRI reported substances generated by reporting facilities. The mandatory reporting of the 3Rs to the NPRI will begin with the 1998 reporting year.

## **ii Citizen's Guide to NPRI**

The Citizen's Guide is the second of the components of the two-year program that is being developed by CIELAP in cooperation with Environment Canada, Mountain Equipment Coop and the Laidlaw Foundation. The program will include a series of workshops, training sessions, presentations and other forms of outreach and distribution. The intent behind this program is to show the importance of the NPRI to the public and its relevance to the protection of public health and safety. The program will provide instruction on how to use the NPRI.

The Citizen's Guide would accompany the map of major sources of NPRI pollutants in Canada. The Guide will be similar to the two previously published *Citizen's Guide to Biotechnology* and *Citizen's Guide to Pollution Prevention*. The Guide will inform the public of the existence of the NPRI, why it was established and how to access and use the information available in the inventory.

The Guide will also provide ideas for action and practical examples of how concerned individuals and community groups can use the information provided by the NPRI to protect Canada's air, land and water from pollution.

The Guide can also be used as a stand alone educational publication in senior high schools and undergraduate courses.

CIELAP is seeking sponsors to cover the costs of distributing the Guide so that individuals and community groups can obtain it at no or nominal cost.

## **iii Three City Map**

The Commission for Environmental Cooperation (CEC) is facilitating trilateral activities to

support the development of, and improve the comparability of, North American pollutant release and transfer registers to enhance the quality of the environment.

In the US, the Toxic Release Inventory has collected this type of data since 1987. In Canada, the NPRI has collected similar data since 1993. In Mexico, pollutant release and transfer register information (Registro de Emisiones y Transferencia de Contaminantes RETC) has been collected for 1997.

During the fourth Annual Regular Session of the CEC in Pittsburgh, Pennsylvania in June 1997 the representatives of the Environmental Ministers signed a resolution entitled "promoting Comparability of Pollutant Release and Transfer Registers (PRTR)" and agreed to further cooperate to adopt more comparable PRTR.

To accomplish the goals of the Environment Ministers, the CEC Secretariat initiated a multi-activity project related to North American PRTR including the development of an annual report on North American PRTR based upon existing public inventory information.

In December 1988 the CEC held a workshop for community groups involved in PRTR issues to demonstrate tools for accessing and utilizing PRTR information and discuss potential specific projects in which North American community groups could collaborate in 1999 and beyond. The participants at the workshop defined a project that included the development of pollutant emissions maps for Mexican, US and Canadian cities, followed by a series of workshops to present the data.

The specific objective of this project is to help citizens in integrating and understanding the implications of North American PRTR data. The project would work with NGOs in Canada, US and Mexico, conceptualize and develop the maps. The CEC contracted CIELAP to do this work along with the Cartography Department at the University of Toronto. The map is nearly in the final stages and three workshops have been held in Mexico.

#### **iv Canadian Scorecard Web Site**

A fourth project using NPRI is a collaborative one with other Canadian NGOs, to establish the Chemical Scorecard in Canada to increase citizen awareness, empowerment and action to reduce chemical loadings, particularly to the Great Lakes Basin.

We plan a three-year program of work consisting of two major components:

- 1 The Development and Operation of a Canadian 'Chemical Scorecard' Website. We will construct the site with the support of the Environmental Defense Fund using the Canadian NPRI data and providing Canadian regulatory and other information.

- 2 A Program of Public Outreach and Support Activities. These activities will support the use of the information presented in the Canadian 'scorecard' web site at the community level to promote pollution prevention. This will include both active

outreach efforts in selected communities, and a capacity to respond to requests for assistance on demand.

We will develop partnerships with local environmental organizations in the communities targeted for active support. Educational materials and advisory services will be provided in these locations. Public workshops will also be conducted, including speakers from the US with experience in the community level use of TRI data.

The program will also create the support mechanisms necessary for citizens wanting to become engaged to reduce toxic chemical pollution in their community.

## **7 Conclusions:**

PRTR programs such as the NPRI represent one of the most important environmental policy innovations of the past thirty years. However, to achieve their full potential, PRTR, and specifically NPRI, data collection activities need to be accompanied by a communications and marketing campaign, including significant programs of public outreach and education activities.