

# **Sharing Perspectives on Industrial Pollutant Data: The North American PRTR Initiative**

**Public Engagement Event, 24 August 2023, 13:00 - 15:00 EDT**

## **Background Document**

### **Pollutant Release and Transfer Registers (PRTRs)**

PRTRs contain data collected annually, at a national scale, on the volumes of pollutants released on-site to air or water, injected into underground wells, or disposed of in or on land; and transferred off-site for disposal, recycling, treatment, or other form of waste management. PRTRs are innovative tools that serve several purposes. By enabling the tracking of specific chemicals, they help industry, governments, and citizens determine the best way to reduce releases and transfers of these chemicals, thus contributing to a more responsible use of them while preventing pollution and reducing the generation of waste. Companies use the data to publicize their environmental performance and identify opportunities to reduce and prevent pollution; governments generally use the data to guide their priorities and national plans and to evaluate the management of industrial chemicals; while communities, non-governmental organizations and citizens can consult the data to improve their understanding of emission sources and the management of pollutant wastes and to support the establishment of a dialogue with industrial facilities and public authorities.

PRTRs collect data on individual substances and/or pollutant groups, and not on the global volume of waste made up of mixtures of substances, which enables releases and transfers of individual pollutants to be tracked. Reports by facility are essential to locate the source of the emissions and who or what generates them. Much of the strength of PRTRs lies in the public disclosure or dissemination of the data—whether disaggregated or in aggregated form—among a wide range of users. The public availability of data organized specifically by pollutant and facility allows interested individuals and groups to identify the sources of industrial emissions in their locality, in addition to facilitating regional and other analyzes based on geographic criteria.

### **The North American PRTR Initiative**

Since 1995, the CEC's North American PRTR Initiative has compiled, harmonized, and provided access to publicly available data on releases and transfers reported by industrial facilities across the region. Currently, data for the 2006-2020 period are available for more than 40,000 facilities reporting to their respective PRTRs, namely:

- Canada's National Pollutant Release Inventory (NPRI)
- The United States' Toxics Release Inventory (TRI)
- Mexico's Pollutant Release and Transfer Register (*Registro de Emisiones y Transferencias de Contaminantes*—RETC)

The main objectives of this initiative are to raise awareness of, and promote access to, data and information on releases and transfers of industrial pollutants in North America; and to improve the understanding of the sources and management of pollutants of common concern in the region and support decisions relating to pollution prevention and sustainability.

Following a validated harmonization process, the CEC publishes the data in *Taking Stock Online*, which features a searchable database and enhanced access to a comparable, multi-year North American dataset going back to 2006 (the first year of data available for all three countries). The site also provides contextual information (e.g., the unique features of each of the three PRTR programs, factors to consider when assessing the risk of pollutants), as well as data overviews and graphics, including for pollutant transfers across national borders. This information, along with additional thematic analyses, is also presented via the *Taking Stock* report series. Through these products, the CEC provides enhanced access to comparable Canadian, Mexican and US PRTR data and information to support decisions at all levels.

### **North American PRTR Data**

*Taking Stock* is based on public data provided by North America's three national PRTR programs. Each country's PRTR has evolved with its own list of pollutants, sector coverage, and reporting requirements, which can change to reflect new information about chemicals and their use by industrial facilities, and so on. The national datasets therefore undergo a harmonization process before being integrated into the *Taking Stock* North American PRTR dataset. More information about the Taking Stock scope and methodology is available at [Understanding Taking Stock](#).

The main features of the three North American PRTR programs are presented in the table below. In addition to these core elements, the PRTRs also collect and publish data and information on facilities' management of chemical wastes, pollution prevention practices, and other related information. Readers should visit the national PRTR websites for specific details.

Feature	Canada's National Pollutant Release Inventory (NPRI)	Mexico's Registro de Emisiones y Transferencia de Contaminantes (RETC)	US Toxics Release Inventory (TRI)
First mandatory reporting year	1993	2004	1987
<b>Industrial sectors and activities covered</b>	Any facility manufacturing or using a listed chemical, except for exempted activities (e.g., research, repair, retail sale, agriculture, and forestry). Any facility releasing criteria air contaminants (CACs) to air in specified quantities.	Point sources in eleven sectors under federal jurisdiction, in terms of atmospheric emissions: petroleum, chemical and petrochemical industries; paints and inks; metallurgy (iron and steel); automobile manufacturing; pulp and paper; cement and lime; asbestos; glass; power plants; and hazardous waste management facilities. Also, facilities engaged in the following activities subject to reporting under federal jurisdiction: <ul style="list-style-type: none"> <li>· Large generators (10 tons or more) of hazardous waste (if the transferred wastes contain PRTR substances in amounts equal to or greater than the reporting threshold)</li> <li>· Facilities that discharge wastewater into national water bodies (if the wastewater contains PRTR substances in amounts equal to or greater than the reporting threshold).</li> </ul>	Manufacturing and federal facilities, electric utilities (oil- and coal-fired), coal and metal mines, hazardous waste management and solvent recovery facilities, chemical wholesalers, and petroleum bulk terminals.
<b># pollutants subject to reporting</b>	More than 320 pollutants/pollutant groups.	200 pollutants/groups (as of 2014).	More than 700 individual pollutants and 33 chemical categories.
<b>Employee threshold</b>	Generally, 10 employees or more. For some activities (e.g., waste incineration, wastewater treatment) the 10-employee threshold does not apply.	No employee threshold.	Ten or more full-time employees, or the equivalent in hours worked.
<b>Pollutant "activity" (manufacture, process, or other use), or release thresholds</b>	"Activity" thresholds of 10,000 kg for most chemicals. Lower thresholds for certain pollutants such as PBTs, polycyclic aromatic hydrocarbons, dioxins and furans, and criteria air contaminants.	"Release" and "Activity" thresholds for each pollutant (facilities must report if they meet or exceed either threshold). Except for GHG, release thresholds range from 1 to 1,000 kg and activity thresholds range from 5 to 5,000 kg. Any release of polychlorinated biphenyls or sulfur hexafluoride, and any release or other activity involving dioxins and furans, must be reported.	"Activity" thresholds of 25,000 lbs (11,340 kg), with an "other use" threshold of 10,000 lbs (about 5,000 kg). Lower thresholds for certain substances, such as PBTs and dioxins and furans.
<b>Types of releases and transfers covered</b>	On-site releases to air, water, land; disposal (including underground injection). Off-site transfers to disposal, treatment prior to disposal (including sewage), recycling, and energy recovery.	On-site releases to air, water, and land. Off-site transfers to disposal, recycling, reuse, energy recovery, treatment, co-processing, and discharges to sewer/sewage treatment.	On-site releases to air, water, land, and underground injection. Off-site transfers to disposal, recycling, energy recovery, treatment, and wastewater treatment.