



Tracking industrial pollution

The CEC's Pollutant Release and Transfer Register project tracks and compares releases of toxic chemicals from facilities throughout North America

Manufacturing industries, power plants, hazardous waste facilities and other industrial activities emit millions of tonnes of chemical pollutants into the environment each year in North America. These industrial wastes and byproducts pose threats to our health and ecosystems.



Some contaminants are persistent, accumulating in the environment and traveling thousands of kilometers. Some are known or suspected carcinogens. Others are developmental toxins, which can harm a developing fetus, infant or child. And some react in the atmosphere to produce smog and acid rain. Through the **North American Pollutant Release and Transfer Register** project, the CEC is working with Canada, Mexico and the United States to track these pollutants and to provide community, industry and other stakeholders with an informed basis for promoting reductions.

Prior to the development of pollutant release and transfer registers (PRTRs), citizens had little way of knowing what pollutants were entering the environment from industrial facilities, nor in what amounts. Moreover, industrial plants themselves typically did not track these emissions.

A continental view

In North America, PRTR programs are administered by the governments of Canada, the United States and, most recently, Mexico. These national programs, on their own, cannot fully address environmental problems associated with cross-border transport of atmospheric and water pollutants—or cross-border transfers of wastes. Through the North American PRTR project, the CEC compares and combines data sets from Canada and the United States on more than 200 matched substances—substances reported in both Canadian and the US inventories (Mexican data is being incorporated as it becomes available).

The CEC's annual publication *Taking Stock* summarizes the compiled data set and analyzes trends from year to year and across North America. Since 2001, the public has been able to access and search the matched data sets at www.cec.org/takingstock using a query builder to pin-point their search criteria. The *Taking Stock* query builder is the only public source for current, consolidated and searchable North American data on industrial chemical releases and transfers.

Mexico's RETC moves forward

The CEC has worked for several years to support the full participation of Mexico in the North American PRTR system.

In 2005, the Mexican **Registro de Emisiones y Transferencia de Contaminantes** (RETC) made important advances toward becoming a mandatory reporting program, including the establishment of a legal framework and the collaboration with state authorities.

Mandatory PRTR reporting in Mexico began with amendments to Article 109 bis of the General Law of Ecological Balance and Environmental Protection, which provides that the different levels of government, within their respective jurisdictions, are to create a register of pollutant releases and transfers based on information compiled from permits, authorizations, licenses and certificates. Persons responsible for pollution sources also must provide information on the quantities released and transferred, and that information will be made public.

In March 2005, Mexico's Secretariat of the Environment and Natural Resources (Semarnat) determined the first list of reportable substances—104 chemicals with two reporting thresholds, one for manufacturing, production and other uses, and another based upon each facility's emissions. This initial list includes chemicals that are potentially harmful to human health and the environment, such as mercury, DDT, asbestos, lindane, polychlorinated biphenyls (PCBs), dioxins and furans.

For more information on Mexico's RETC go to: <http://www.semarnat.gob.mx/dgca/retc/index.htm>.

A vital tool

Measuring emissions of toxic chemicals is the first step in reducing them. PRTR databases, at both the national and North American levels, allow citizens, industry and government to answer questions critical to reducing toxic releases and transfers. Citizens, for example, can compare the environmental performance of a chemical plant in their community with similar facilities elsewhere. While, plant managers could use PRTR data to demonstrate to nearby residents year-to-year progress in reducing emissions of toxic contaminants. Government agencies, environmental groups and academic researchers can use PRTR data to assess the effects of industry on the air, water and soil of a region, evaluate the impact of government policies, and set priorities for action.

When used with other health or ecological data, the PRTR offers a starting point for evaluating potential public health impacts and ecological effects of the pollutants.

Cooperation and comparability

Through the CEC's PRTR project, Canada, Mexico and the United States are working together to improve the comparability among their national reporting systems and to sharpen the picture of pollutant releases and transfers across the continent. A 2002 action plan specifies improvements to be taken by the national programs to bridge comparability gaps.

The CEC Council has defined effective pollution reporting as: facility and chemical-specific, multi-media (i.e., covering releases to air, water, land and underground injection; and transfers off-site for further management); mandatory; and periodic (e.g., annual). Public disclosure of reported data on a chemical and facility specific basis, limits on what information can be claimed as confidential, and a public feedback system to ensure continual improvement are also key to PRTR effectiveness. These elements continue to guide the CEC's ongoing work to improve comparability among North American PRTRs.



PRTRs around the world

Recognizing the importance of PRTRs to the public's right to information and to effective environmental management, international organizations, including the United Nations and the Organization for Economic Cooperation and Development (OECD), as well as the Intergovernmental Forum on Chemical Safety, have all called for the development of national PRTR programs. Worldwide, an increasing number of countries are developing them. The North American PRTR project represents the world's first effort at a continental database on pollutant releases and transfers.

National inventories

The United States became the first country to establish a PRTR, in 1986. The **Toxics Release Inventory (TRI)** collects information on over 600 chemicals from industrial plants, metal and

coal mines, electricity generating facilities, hazardous waste facilities, chemical wholesalers, and petroleum bulk terminals.

The public can access the inventory online at <<http://www.epa.gov/tri>>.

Canada's National Pollutant Release Inventory (NPRI) has been in operation since 1993. The program covers more than 250 chemical substances and facilities in nearly all industrial sectors <<http://www.ec.gc.ca/pdb/npri>>.

Mexico's RETC, now collects information concerning 104 chemical substances. Mandatory reporting is expected to begin with the 2004 reporting year, and as data become available they will be incorporated in the CEC's *Taking Stock* reports <<http://www.semarnat.gob.mx/dgca/retc/general/gral.shtml>>.

Public input

The Consultative Group for the North American Pollutant Release and Transfer Register, a multi-stakeholder group composed of a broad range of interested groups individuals from the three countries, helps guide the development of CEC's annual *Taking Stock* report and other aspects of the PRTR project. It meets annually to provide ideas and input on the development of the *Taking Stock* reports, as well as ways of strengthening linkages between PRTRs and other CEC programs, such as SMOC, children's environmental health and the air quality program.

To find out more

To find out more about the North American Pollutant Release and Transfer Register Project, look under "Our Programs" on the CEC web site <www.cec.org> and click on "Pollutants and Health."



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