Pollutant Release and Transfer Register (PRTR) Preparation in LAC

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Background

A key component of the sound management of chemicals, and one required in many international agreements, is the capacity to gather information. This has also been mentioned as a priority by several countries in the LAC region[1]. Information gathering and systematization may take the form of chemical inventories or lists, supplemented by a means for disseminating the gathered information (information exchange). In this context countries may want to consider if they develop separate inventories of chemicals or emissions, or consolidate their efforts within more integrated approaches such as the development of **Pollutant Release and Transfer Registers** (PRTR).

The United States initiated PRTR activities in the Americas, with its Toxics Release Inventory (TRI), in 1987. Canada followed in 1993, with its National Pollutant Release Inventory (NPRI).

The Toxics Release Inventory (TRI) of the U.S. is a publicly available database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

EPA compiles the TRI data each year and makes it available through several data access tools, including the TRI Explorer and Envirofacts. There are other organizations which also make the data available to the public through their own data access tools, including Unison Institute which puts out a tool called "RTKNet" and Environmental Defense which has developed a tool called "Scorecard."

The TRI program has expanded significantly since its inception in 1987. The Agency has issued rules to roughly double the number of chemicals included in the TRI to approximately 650. Seven new industry sectors have been added to expand coverage significantly beyond the original covered industries, i.e. manufacturing industries. Most recently, the Agency has reduced the reporting thresholds for certain persistent, bioaccumulative, and toxic (PBT) chemicals in order to be able to provide additional information to the public on these chemicals.

Canada's NPRI is a federal, comprehensive inventory that includes industries, residential heating, transportation, incineration, roads, forest fires and more. Pollutants from mobile sources such as trucks and cars, households, facilities that release pollutants on a smaller scale and certain sector activities, such as agriculture and education and some mining activities, are not included in the NPRI. Other jurisdictions, such as provinces, also

[1] Priorities on chemical management are stated in the National Implementation Plans for the Stockholm Convention and in National Profiles of the Infrastructure for Chemicals Management

collect pollutant release information. For example, the Ontario Ministry of the Environment (MOE) requires Ontario-based facilities that emit certain quantities of substances to the air to report annually to the Ontario government by the deadline date and then makes this information available to the public.

In North America, the governments of the U.S., Canada and Mexico are working together to improve the ability to compare data from their three PRTR systems. This work is coordinated by the North American Commission for Environmental Cooperation (CEC), an organization created with the North American Free Trade Association (NAFTA). The NACEC's work includes helping Mexico establish a PRTR comparable to the U.S. and Canadian PRTRs, publishing an annual report titled "Taking Stock" that compiles and compares the PRTR data, and operating a searchable website of comparable North American PRTR data.

Several national and regional organizations have developed systems to collect and disseminate data on environmental releases and transfers of toxic chemicals from industrial facilities. More are underway, stimulated by the recommendations of the 1992 United Nations Conference on Environment and Development in Rio de Janeiro. Nevertheless, most of the countries of Latin America and all countries in the Caribbean still lack such systems or any information exchange platform for chemicals.

Mexico and Chile Initiatives

Mexico is the only LAC country that established a voluntary PRTR in 2002, as part of the collaboration with the U.S. in the context of their Free Trade Agreement. In 2004, it became mandatory. Mexico's registry, which has been included in the National System of Environmental Information, includes releases and transfers of all federally regulated industrial plants in the country, including the automotive, cement, chemical, electricity, petroleum, iron and steel, and paper sectors. Other sectors, including electronics and factories in the *maquiladora* (manufacturers operating on the U.S.-Mexican border), fall under the jurisdiction of states or municipalities, which are developing their own reporting requirements. The Mexican RETC initially is tracking the releases and transfers to air, land and water for 104 chemicals (versus 268 in Canada and 650 in the U.S.). It brings together information from polluting sources under the jurisdiction of the three levels of government. The information in the RETC is updated annually and is available to the public, beginning in the second half of 2006. The instrument for collecting information from the federally-regulated industrial sector is the Annual Certificate of Operation (*Cédula de Operación Anual*—COA).

Chile's National Environment Commission (CONAMA) recently begun the design of its PRTR (a pilot trial is on-going) in the context of a free trade agreement with Canada. The register should also be part of the National System of Environmental Information.

The OAS has started an initiative to promote the sound management of chemicals in the Western Hemisphere. This integral approach aims, among others, to develop capacity in governmental and non-governmental organizations for the compliance of the legal framework on chemicals, and the management of information.
For this purpose, a Database of Persistent Toxic Substances and Heavy Metals was created. The database contains mainly the information published by the countries in their National Implementation Plans or National Profiles. It is a systematic inventory of sources of pollutant emission, from conventional activities such as agricultural use of pesticides, to less often activities such as fireworks display, which allows the user to generate new information[2] through database queries. This tool was designed to assist decision making by providing region-wide **comparable data on pollution sources** as a basis upon which countries can start the design of a national PRTR. The Database includes priority toxic substances for the LAC countries, as not all industrial plants existing in the country are considered for PRTR reporting. It contains also referential values of ecotoxicity that can guide in the definition of national threshold values and the structure of the PRTR.

A series of legal instruments and institutional arrangements support the creation and work of a PRTR. The Database of Persistent Toxic Substances and Heavy Metals gives a quick screening of the gaps in the legal and institutional framework of the countries, as well as a view or the different approaches taken by LAC countries to address chemicals management.
The legal status for the different Persistent Toxic Substances (PTS) varies greatly from country to country. Although internationally banned substances (e.g. POPs) are prohibited in all LAC countries, regulation for other PTS is weak, unclear or missing. Legal reforms are necessary to define reporting requirements to PRTR, especially the definition and widening of environmental reglaments.

From this first analysis, it's clear that not all countries of the region are ready to host a PRTR, because mainly of lack of infrastructure, trained personnel and communication. Some of the countries of LAC that could support PRTR with minor institutional inputs are Brazil, Costa Rica and Trinidad and Tobago.
The Brazilian President adopted a decree in 2004 that led to the creation of the National Plan for the Prevention of, Preparation for and Response to Environmental Emergencies Involving Hazardous Chemicals Products ("P2R2"). Companies, as part of their submissions for environmental licenses, must present for approval an emergency prevention and preparedness plan.
Costa Rica is the country that has the strongest institutional framework for environmental management in Central America.[3] The government has special interest in taking the regional lead in environmental protection. The Ministry of Environment and Energy plays an important role in the overall country planification.

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[2] For example, emission estimations
[3] Personal communication with OAS' legal advisor

Finally, Trinidad and Tobago is the Caribbean country that has gone further in chemicals management, in terms of information gathering and international agreements compliance.[4] It published Inventories of obsolete pesticides and hazardous waste.

Other countries can nevertheless start PRTR design by strengthening their capacity for Environmental Impact Assessment and merging (preliminarily) PRTR data into their National Environmental Information Systems.

[4] Internal report "Obsolete Pesticides in the Caribbean", M. Williams, June 2007