

**Commission for Environmental Cooperation of North America**



***Annual Meeting of the Consultative Group for the  
North American Pollutant Release and Transfer  
Register (PRTR) Project***

***20–21 October 2004, Montreal, Quebec, Canada***

**Meeting Summary, Response to Comments  
and Proposed Directions for  
*Taking Stock 2003***

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# **SUMMARY OF CONSULTATIVE MEETING, RESPONSE TO COMMENTS AND PROPOSED DIRECTIONS FOR THE *TAKING STOCK 2003* REPORT ON NORTH AMERICAN POLLUTANT RELEASES AND TRANSFERS**

**Montreal, Quebec, Canada, 20–21 October 2004**

## **Introduction**

The Commission for Environmental Cooperation (CEC) of North America organized a public meeting in Montreal, Quebec, Canada as a forum for exchanging ideas and obtaining stakeholder input in the development of the *Taking Stock 2003* report. *Taking Stock* is an annual report which analyzes publicly available data from the Canadian National Pollutant Release Inventory (NPRI), the US Toxics Release Inventory (TRI) and, wherever possible, from the Mexican *Registro de Emisiones y Transferencia de Contaminants* (RETC).

About thirty-five people from academia, nongovernmental groups, industrial associations and government, from Canada, Mexico and the United States, attended the Consultative Group meeting to discuss the development of the *Taking Stock* report. The list of participants is attached as [Annex A](#). A discussion paper entitled "Consultations for the *Taking Stock 2003* report on North American Pollutant Releases and Transfers," was circulated in advance to provide background for the meeting (available from the CEC web site at <[www.cec.org](http://www.cec.org)> or by request).

This document summarizes the discussions from the public meeting of: progress in PRTRs in each country, industrial PRTR activities and opportunities for *Taking Stock 2003*. This document also outlines the directions for the *Taking Stock 2003* report.

The CEC received one written comment from Raul Pacheco-Vega. This comment reflected on the need to more widely communicate the findings of the *Taking Stock* report and the development of the RETC in Mexico, the need for industry and NGOs to work collaboratively in Mexico, the need to integrate PRTR with other CEC programs and the possibility of improving meeting participation, potentially through a symposium.

The CEC wishes to thank all of the members of the Consultative Group for their comments and suggestions, and for their continued involvement in the *Taking Stock* report and the CEC's PRTR project. Comments on the *Taking Stock* report are welcome at any time.

## **Meeting Summary**

Douglas Wright, director of programs for the CEC, welcomed participants to the meeting. Victor Shantora, head of the CEC's Pollutants and Health program area, outlined the main objectives for the meeting: to increase our understanding of PRTR in North America, to provide an opportunity to review progress in Canada, Mexico and the United States on PRTRs, to discuss ideas for increased sharing of expertise across borders and to obtain feedback on and ideas for the *Taking Stock* report. Victor Shantora and Talli Nauman also led the group in a tribute to Gildardo Agosta, an early supporter of RETC, who passed away in September 2004.

## 1. Country Updates

### 1.1 Update on the National Pollutant Release Inventory (NPRI) in Canada

Arun Chatterjee of the NPRI program at Environment Canada provided an update on recent developments:

- ◆ Data on criteria air contaminants are available for the first time, for the 2002 reporting year.
- ◆ For the 2003 reporting year, NPRI added the requirement to break out volatile organic compounds into individual chemicals, added phosphorus and carbonyl sulfide, aggregated individual nonylphenoethoxylates into a group, and changed the exemption for upstream oil and gas.
- ◆ Greenhouse gas emission data will be collected by Statistics Canada.
- ◆ Few changes are proposed for the 2004 and 2005 reporting years.
- ◆ For 2003, approximately 7,800 facilities submitted 15,413 chemical reports.
- ◆ NPRI has changed the classification method to three categories: releases, disposal, and recycling/energy recovery. Releases include air and water releases and spills, leaks and other to land. Final disposal is divided into on-site disposal, including landfill, land treatment and underground injection, and off-site disposal, which includes landfill, land treatment, underground injection and storage. Off-site transfers include physical treatment, chemical treatment, biological incineration and sewage. Recycling includes energy recovery and recycling.
- ◆ Future discussions may be held on the reporting burden.

Arun was asked about the quality of the data, especially the criteria air contaminants (CAC) data. He noted that Environment Canada is looking at ways to improve data quality. He reported that NPRI data are used by the assessment section of Environment Canada, for the categorization of chemical processes, and for the development of Canada-wide Standards.

For more information, see the NPRI web site at <[www.ec.gc.ca/pdb/npri](http://www.ec.gc.ca/pdb/npri)> or contact the NPRI office at Environment Canada at Tel: +1 (819) 953-1656, or by e-mail at <[NPRI@ec.gc.ca](mailto:NPRI@ec.gc.ca)>.

### 1.2 Update on the *Registro de Emisiones y Transferencia de Contaminantes (RETC)* in Mexico

Maricruz Rodriguez Gallegos, of the office of air quality management and RETC, *Directora de Registros y Licencias*, within the Mexican Secretariat of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat), described the current activities in Mexico related to the RETC.

In December 2001, Mexico revised the *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (General Law of Ecological Equilibrium and Environmental Protection) to establish the basis for compulsory reporting on the entire Annual Certificate of Operations, the *Cedula de Operación Anual* (COA), including section V, which contains the reporting on specific chemical substances and is similar to NPRI and TRI. COA is an integrated system requiring facilities to report on water and energy use, hazardous waste management, emissions of criteria air contaminants, greenhouse gases and some toxics. Federally regulated industries will report to the federal government, while state and municipally regulated industries will report to their respective governments. Reporting will, therefore, involve three levels of administration.

Previously, federally regulated industries had been reporting voluntarily using the NMX-118 SCFI-2001 standard, which has a list of 104 chemicals and has no reporting thresholds. The data collected under the NMX will be used to revise the chemical list and set reporting thresholds for an official Mexican standard (NOM). Reporting software is also under development.

In June 2004, a regulation implementing mandatory reporting was published. Maricruz reviewed the clauses of the regulation, describing which industries need to report and how the information has to be presented and processed. Preliminary estimates are that about 2,500 to 3,000 facilities from the 11 federally regulated sectors will be required to report to the federal government. By the reporting requirement of hazardous waste generation through the COA, an additional 15,000 to 20,000 reporting industries are expected. Approximately 20,000 additional facilities from the state-regulated industrial sectors, such as food and services, will be required to report to state governments. With regard to employee size, it is expected that 17 percent of the total reporting industries to RETC will be micro, 35 percent small, 27 percent medium and 26 percent large industry.

The RETC office is collaborating with the states on the development of national and state reporting. Fifteen coordination agreements have been developed among the states and the federal government to define roles, specify common information and communication mechanisms. The state authorities will define the industrial sectors under state and municipal jurisdiction that will be required to report. At this moment 13 municipalities, which have the largest concentrations of industry, are already participating in this process (Mexico consists of 32 states and approximately 2,500 municipalities). The states will collect the information and then transmit the data to the federal government, which will integrate it into a national report. The State of Aguascalientes has already collected data in electronic form for the 2001, 2002 and 2003 reporting years. The regulations and new format are being developed and are expected to be published this winter. This would mean the first year of mandatory reporting under RETC would be 2005.

Maricruz Gallegos responded to a number of questions following her presentation. Some concerns were raised about the type of industrial classification system used, how thresholds would be established and the development of a list of chemicals.

The goal was to start with a useful and comparable system. On questions about public access to data, she noted that any data collected after December 2001 is considered public. All information received in 2002 will be publicly available, plant by plant, substance by substance, and for each medium (air, water, land) for the list of 104 chemicals. The name of the facility, its location, releases and transfers will be made public. Information on processes and inputs will not be made public. Some felt that Article 27, which describes how the information can be used and penalties for misuse, created unnecessary confusion. Some expressed the desire for closer participation in the development process, and the need for more dissemination of proposals to industry. On the question of whether federal, state and municipalities would be reporting using one form, Maricruz replied that they were working on a common format, but that some states may specify their own information in an annex.

For more information about the RETC see <[www.semarnat.gob.mx](http://www.semarnat.gob.mx)> or contact Ing. Sergio Sánchez Martínez at e-mail: <[sergio.sanchez@semarnat.gob.mx](mailto:sergio.sanchez@semarnat.gob.mx)> or Tel: + (55 5) 624 3404 or 3624, or M en C. Maricruz Rodríguez Gallegos at e-mail: <[mr gallegos@semarnat.gob.mx](mailto:mr gallegos@semarnat.gob.mx)> or Tel: +(55 5) 624 3389.

### 1.3 Update on the Toxics Release Inventory (TRI) in the United States

Michelle Price, environmental protection specialist of the US Environmental Protection Agency (EPA), discussed the TRI program:

- TRI requires reporting on approximately 650 chemicals from 24,000 facilities, which typically generates almost 100,000 chemical reports. TRI started in 1998 and has evolved over the years, adding chemicals and sectors.
- TRI has also changed the way it presents the numbers, with underground injection and landfills separate from air and water for both on-site and off-site categories.
- For 2002, there was a 15 percent decrease due to reporting reductions in the metal mining sector. Under a court decision, quantities in waste rock no longer have to be reported. Without the reporting by the metal mining sector, there was an increase. However, one copper smelter reported a large one-time increase and without this one facility, the overall numbers decreased.
- Electric utilities are a bigger piece of the pie (23 percent) now that metal mining has decreased.
- TRI is working to move data quality upstream to facilities. To this end, EPA is working on electronic software and establishing reporting software on the web, incorporating web-based data quality.
- A rule to broaden the information collected on dioxins and furans, including data expressed as toxicity equivalents (TEQ), is being developed and is expected to be proposed this year.
- TRI will be releasing its data to the public in two phases: the first phase will release just the 2003 facility-reported data through Envirofacts (released in November 2004). The second phase will release the analyzed data (currently planned for March 2005) and focus on more Internet-based products such as TRI Explorer.
- EPA is also looking at burden reduction. This could include changes to the TRI Form R to allow for some data to be pulled from other data systems (such as latitude/longitude and permit numbers). It could also mean programmatic changes, as described in their options paper.
- In March 2003, EPA proposed replacing US standard industrial classification codes with North American codes (NAISC) without producing any changes in the universe of facilities now subject to TRI reporting. EPA expects to finalize the rule in 2005, with implementation in reporting year 2006.
- TRI is working on a rulemaking with regard to the mining sector in light of several court decisions. This rule will clarify how the activities of extraction and beneficiation should be characterized for the purposes of the TRI threshold determination. EPA is planning to propose this rule in 2005.

Michelle Price responded to a series of questions following her presentation. Several participants were interested in how to express emissions in terms of production. Michelle noted that TRI is analyzing data on a sectoral basis and may be looking at intensity (emissions per production). Katherine Harrison noted that she and her colleagues are working on emission/job comparison between TRI and NPRI. Others suggested that intensity figures can be useful but should be presented as an addition to and not as a replacement for total emissions figures. Others noted their difficulty in using the TRI production index as it varies within a facility and among sectors and lacks the consistency and quality necessary for comparability.

Some suggested that TRI could analyze the impact of recent court decisions regarding mining. Others suggested that as the requirements change, it makes it more difficult to analyze time trends, and suggested adding a box for facilities to check off if they would have reported this number without the reporting change. Others expressed concern regarding the burden reduction options and the difficulty in triggering some of the changes based on recycling amounts as recycling is not defined in TRI.

For more information, see the TRI web site at <[www.epa.gov/tri](http://www.epa.gov/tri)> or TRI Explorer at <[www.epa.gov/triexplorer](http://www.epa.gov/triexplorer)> or call TRI Users Support Tel: 1 (800) 424-9346 within the US or +1 (202) 260-1531 from elsewhere.

## **2. CEC Update on PRTR Program Activities**

Doug Wright, director of programs for the CEC, provided a brief overview of recent CEC developments. He discussed the 10-year review of the CEC and the resulting Puebla Declaration signed by the Council (the environment ministers) in 2004 (available at [www.cec.org](http://www.cec.org) ). This declaration identified three pillars to guide the future work of the CEC: 1) capacity building 2) environment and trade and 3) information for decision-making. The current work of the CEC, including the PRTR program, is being assessed against these three pillars to streamline future work.

Vic Shantora, head of Pollutants and Health, then presented an update of CEC's PRTR activities, summarized below. In his introductory remarks, he noted that he is interested in ideas for meeting formats or topics for next year's meeting. He also noted that CEC had made a particular effort to engage industry for this meeting, through having industry presentations and additional invitations. He welcomed suggestions on how to further increase the level of industry interest in the meetings.

### **2.1 Taking Stock Report**

The annual *Taking Stock* report provides a North American picture of chemical releases and transfers. It uses a matched database of the common chemicals and sectors reported to TRI and NPRI. *Taking Stock* will include data from Mexico's RETC program in the future. *Taking Stock 2002* analyzes over 200 chemicals, presents an eight-year trend and contains data on persistent, bioaccumulative toxics and criteria air contaminants. Users can also generate their own searches of the matched database by using *Taking Stock Online* at <[www.cec.org/takingstock/](http://www.cec.org/takingstock/)>.

A draft report focusing on PRTR data and children's health was released for comment in spring 2004. Over 25 comments were received, and a scientific expert panel reviewed the report in fall 2004. A revised report, presenting data for 2002, is anticipated to be released in fall 2005.

The *Taking Stock 2002* report is in preparation and will present an analysis of lead at lowered thresholds, progress in Mexico, trend analyses and criteria air contaminants. *Taking Stock 2002* is expected to be released in spring 2005.

### **2.2 Action Plan on PRTRs**

In June 2002, Council adopted the "Action Plan to Enhance the Comparability of PRTRs in North America" (Resolution 02-05) (available from the CEC web site at <[www.cec.org/files/pdf/POLLUTANTS/PRTR\\_action\\_plan\\_June02-e.pdf](http://www.cec.org/files/pdf/POLLUTANTS/PRTR_action_plan_June02-e.pdf)>). The Action Plan was

developed through collaboration among the three national PRTR programs. The Action Plan identifies areas where progress has been made, where progress is still required and describes specific actions to be taken by the national PRTR programs. Some of the current issues of comparability, such as reporting thresholds, industry classification codes, coverage of industry sectors, chemical lists, public access and data confidentiality, are addressed. An updated version is in development.

Participants noted that government actions geared towards reducing burden also have an impact on comparability. They requested a more formalized approach to assessing the impact of proposed changes on the comparability of North American PRTRs. It was suggested that the CEC could provide input on proposed burden reduction methods and their effect on comparability.

Future activities of the PRTR program include the development of the *Taking Stock 2002 and 2003* reports, updating of the Action Plan, support for Mexico and international activities.

One participant questioned why Mexico had stepped down from the CEC's trilateral children's health and environment (CHE) team. It was noted that while Mexico is not participating on the CHE team, Mexico remains engaged, through the Ministry of Health, in the CEC's work to develop indicators for children's health and the environment. Another participant noted that they had requested seed money from the CEC for a proposal to foster collaboration among industry, NGOs and government on PRTRs.

### **2.3 Update on the CEC Air Quality Project on North American Power Plant Emissions**

Paul Miller, the CEC's Air Quality program manager, presented an overview of an upcoming report on emissions from power plants in Canada, Mexico and the United States. The study documents the energy situation in each country, the current mix of fuel, the emissions of sulfur dioxide, nitrogen oxides, mercury and carbon dioxide from power plants in each country. Emissions and emission rates are presented by country and by facility. The report was been released in January 2005 (available at <[www.cec.org](http://www.cec.org)>).

## **3. Case Examples of Industry Action**

Industry has a key role to play in tracking PRTR data and acting upon opportunities for improvement. Three speakers discussed their activities to improve PRTR reporting and environmental performance.

### **3.1 Industry Action in Canada**

Catherine Cobden, vice president for environment, Forest Products Association of Canada, presented an overview of the forest products industry in Canada, trends in environmental releases and the association's work in improving NPRI reporting. The forest products industry employs over 1 million Canadians in 150 pulp and paper mills and 1000 sawmills. The sector has invested C\$8 billion in environmental improvements since 1990 and is a leader in forest certification.

There are several challenges with NPRI reporting including sector diversity, data accuracy, increasing complexity of the NPRI program, potential for poor government decision making and relevancy to communities. The association has addressed these challenges through active stakeholder involvement and aggressive action on data quality, consistency and filling data gaps. She also noted that the species of trees used can differ between Canada and the United States, accounting for some of the differences in TRI and NPRI reporting for this sector.



The association has invested C\$1.5 million on developing reporting tools for NPRI for the sector. It has also spent C\$2.5 million for field measurements designed to address data gaps, verify emission factors and quality procedures, with the knowledge gained being used to revise the reporting handbook. A reporting tool for the lumber subsection also has been developed. The association has developed a technical agreement with NPRI to foster cooperation.

During a discussion of the presentation, participants supported industry efforts to increase the quality of data. One participant noted that the community panel had not been so successful in her community.

### **3.2 Industry Action in Mexico**

María de Lourdes Ugarte Bazan, manager for environmental control planning, Volkswagen de México in Puebla, described the Volkswagen (VW) manufacturing operations in Mexico, which produces 16,000 cars per day and exports about 90 percent of these. VW has been involved in sustainable development and “Triple Bottom Line” and has a signed publicly available company environmental policy. In the absence of Mexican regulation, VW follows German regulations, which are environmentally very strict. VW sees the advantages of RETC as increased transparency, credibility and potential for global investment. The possible concerns over RETC are potential for attacks from NGOs and media, effect on company image and market.

The main environmental concern at the VW plant is the management of water, and they have installed several new technologies to reduce water use from seven cubic meters per car to four. VW has had an environmental management system since 2000, is certified by ISO 14001 and practices pollution prevention, switching from solvent- to water-based paint. This has reduced volatile organic carbon emissions from 91 grams per cubic meter in 1998 to 44 in 2003. They manage to be revenue neutral, supporting the US\$7 million cost of disposal of hazardous waste with a US\$7 million payment from the sale of recyclables.

VW works on the basis of 20 environmental indicators, and has the information that may be required for RETC. They are interested in learning more about RETC requirements, reporting formats, public reaction to the data and about reporting in Canada and the United States.

### **3.3 Industry Action in the United States**

Randy Armstrong, manager of compliance and consulting for Shell, presented his experiences with community participation in environmental monitoring at the Norco plant near New Orleans, Louisiana. Randy stated his belief that TRI was the most effective program in the US in driving reductions in air releases. Five different chemical companies operate in the town of 4,000 people. The Norco plant has significant TRI emissions, and reported 1.6 million pounds in 2002 from producing benzene, butadiene and methyl ethyl ketone.

Because of community concerns, Shell and others involved the community in trying to answer a series of questions, including “What is in the air? How is my neighborhood different than others? Are these levels safe? Are there chemicals in the air that are hurting me or my family?” With the help of the community and TRI data, Shell designed an air sampling network for 148 chemicals. The companies formed a SWAT team to respond quickly to community questions and provide information through presentations, speakers, newsletters, videos and web site reporting of data. Leaks were fixed quickly.

Employee health data are being used in a health study. Over time, some members of the community had become more comfortable with the air data and asked for the air monitors to be removed. In response to questions about the PBS video "Fence Lines," which documented the Norco situation, Randy noted that the video had increased concerns in the community, fostered the need for air quality monitoring and the relocation of some residents.

#### **4. Discussion of Key Trends in *Taking Stock***

Catherine Miller of Hampshire Research Associates presented a summary of *Taking Stock* based on over 200 commonly reported chemicals and industrial sectors. In 2001, 2.95 million tonnes of chemicals were released and transferred in North America. From 1995–2001 there was a 14 percent reduction in total releases and transfers of air releases on-site. From 1998–2001 there was an 18 percent decrease in air releases, a 26 percent decrease in land releases and a 26 percent increase in off site land releases.

Transfers across the borders have changed over this time period, with the United States decreasing the amount of substances sent to Canada and increasing the amount sent to Mexico, and Canada increasing the amounts of substances sent to the United States. No data are yet available on transfers from Mexico to the United States or Canada.

Most of the reductions in NPRI and TRI have come from a group of facilities reporting larger releases and transfers (more than 100 tonnes). Another group of facilities reporting smaller amounts of chemicals released and transferred (less than 100 tonnes) is generally increasing their releases and transfers over time.

The *Taking Stock 2001* report and database is available at <[www.cec.org/takingstock](http://www.cec.org/takingstock)>.

#### **5. Opportunities for *Taking Stock 2003***

Participants discussed seven possible opportunities for *Taking Stock 2003*, based on the discussion document that was distributed in advance of the meeting.

The opportunities were:

1. Focus on the "Back Door"
2. Pollution prevention reporting
3. Sector analysis
4. New chemical- and health-based lists
5. Link to DUNS data
6. Increased geographical presentation
7. Participants' ideas

##### **5.1 Opportunity One: Focus on the "Back Door"**

*Taking Stock 2001* identified a 19 percent decrease in on-site releases from 1998 to 2001 (driven mainly by large reductions in air releases from larger reporters). At the same time, many facilities are increasing the amount of chemicals sent out the "back door" to landfill off-site (a three percent increase from 1998 to 2001), to sewage (a seven percent increase from 1998 to 2001), and metals sent for disposal off-site and to sewage (a two percent increase). In general, there is a shift in how facilities are

managing chemicals, from releasing them to the air and water on site to transferring them off site to landfill, treatment and sewage. *Taking Stock 2001* focused on air releases and looked in detail at the sectors, chemicals and facilities showing large air releases. In 2003, it may be time to focus on the “back door” and analyze the chemicals, sectors, facilities and states/provinces transferring chemicals to landfill, treatment and sewage.

Participants were interested in a focus of emissions from sewage treatment plants, but noted that this was a Canadian focus as these plants do not report to TRI. Some participants felt that this topic was too complicated and time consuming to explore further. One participant noted that there was an assumption that the same chemicals being reduced in the air were being increasingly sent to landfill, when in fact it may be different chemicals. It was clarified that recycling was not proposed to be part of this analysis. Some participants expressed concerns over the emissions from maquilladoras, and whether these would be captured by RETC. One participant noted that the term “back door” should be replaced as it may suggest illegal transfers.

## **5.2 Opportunity Two: Pollution Prevention Reporting**

Pollution prevention is a government priority in all three countries. For the first time, in 2002 both TRI and NPRI had similar categories of pollution prevention activity reporting. This will allow pollution prevention reporting to be matched between the two countries. Mexico's RETC also has somewhat similar pollution prevention reporting. The special feature could present the 2002 and 2003 data on pollution prevention activities, analyzing which are the most commonly reported, and which sectors, facilities, and locations report pollution prevention activities.

The feature also could explore if pollution prevention was effective in lowering releases and transfers by examining if facilities that reported pollution prevention activity also reported lower releases and transfers over time. The feature could compare pollution prevention reporting by facilities reporting smaller releases and transfers to facilities reporting larger releases and transfers. The *Taking Stock 1997* report had a special feature on pollution prevention, and the 2003 report provides an ideal opportunity to see how things have changed since that time.

Participants noted difficulties in the pollution prevention data, including: the data are qualitative, not quantitative; they vary in quality; they are often not consistent among facilities or sectors; facilities often misunderstood the definition of pollution prevention and thus do not report accurately; some pollution prevention measures yield long-term reductions that are not captured after the first year of reporting; there is not always a relationship between pollution prevention activities and reduction in releases; the focus should be on source reduction methods, not maintenance and good operating practices; and more anecdotal descriptions of how companies have reduced pollution through pollution prevention efforts are not needed.

Participants also noted that a pollution prevention focus could be a positive story and could involve data from all three countries. TRI has a written attachment on pollution prevention that could be useful for this analysis. The chapter could: promote the idea of pollution prevention as effective in saving money and reducing releases, acknowledge company efforts, encourage the use of PRTR data in filing financial performance information, examine the links between pollution prevention and innovation, and be linked to other similar activities such as green chemistry and clean production. One participant's research found that companies that engage in pollution prevention were rewarded in the stock market over the long term. Another noted that the supplier chain could be more effectively used to increase pollution prevention methods.

In general, participants were supportive of any efforts that would encourage pollution prevention, but were skeptical that the quality of the pollution prevention data is sufficient for detailed analysis.

### **5.3 Opportunity Three: Sector Analysis**

Previous *Taking Stock* reports have focused on two sectors: primary metals and pulp and paper. It may be time to focus a special feature chapter on another sector. One could be selected on the basis of:

- large releases and transfers of carcinogens or California Proposition 65 chemicals or persistent bioaccumulative toxics (PBT) chemicals,
- increases (or decreases) in releases and transfers over time,
- large difference in average releases and transfers between NPRI and TRI,
- large transfers to sewage, treatment or underground injection, or
- differences in reporting on pollution prevention activity.

Such an analysis could describe the sector, the chemicals released and transferred, and time trends. It could also discuss programs and regulations to reduce releases and transfers. Differences between TRI and NPRI releases in this sector could be compared. This sector analysis could potentially include Mexican data. Some sectors that may be of interest include the cement manufacturing sector, with large releases of many PBTs; the rubber and plastics sector, with large releases of many carcinogens; or the electronics industry, with greater-than-average decreases in total releases (32 percent compared to 16 percent for all industries). This analysis could be done cooperatively with an industrial sector, academic researcher and/or NGO.

Many participants expressed an interest in focusing on a sector. Participants were interested in the cement manufacturing sector as it is a source of PBTs, has large releases of toxic chemicals reported to NPRI and TRI, has significant greenhouse gas and CAC emissions, and the sector is integrated across North America. Participants noted that previously, Mexican cement plants that had up-to-date technology were certified as a Clean Industry. Now fuel switching in Mexico (away from natural gas and towards coal, oil, tires and hazardous wastes) has increased concerns over emissions from these plants. Others cautioned that cement kilns were an important and balanced way of managing wastes, that often stockpiling wastes such as tires can result in more problems, and that a negative story may hamper greater industrial participation in Consultative Group meetings.

Other sectors of interest to fewer participants were the electronic sector and petroleum refineries.

### **5.4 Opportunity Four: New Chemical- and Health-based Lists**

A variety of new chemical- and health-based lists could be considered in *Taking Stock 2003*. Currently, *Taking Stock* analyzes PRTR data based on: 1) known or suspected carcinogens, and 2) California Proposition 65 chemicals (those known to the State of California to cause cancer, birth defects or other reproductive harm). We could consider new lists of chemicals based either on the characteristics of the chemical, such as toxicity, bioaccumulation or persistence, chemicals associated with programs, or chemicals drawn from different regulatory lists. An analysis of the sectors, facilities and jurisdictions based on these new chemical and health lists could be considered.

Participants suggested additional lists including the US Centers for Disease Control and Prevention (CDC) body burden list, comparing the North American with the European lists, and chemicals that hinder early development of children. A cross section of lists was felt to be useful as each gave a different perspective on the data. A variety of different lists could be added to the web site. Participants were interested in adding pesticides to the TRI and NPRI reporting lists.

### **5.5 Opportunity Five: Link to DUNS Data**

Canada, Mexico and the United States ask facilities to report their Dunn and Bradstreet business number (DUNS number). This number provides links to a wealth of financial data about the facility. The type of financial data available includes credit ratings, employee data, business ratios, ownership, payment histories, etc. DUNS data are also available by sector using Standard Industrial Classification codes, making sector analysis possible.

This special feature could explore some of the links between environmental and economic performance. This could be a bold new direction for *Taking Stock*, by starting to examine some of the pressing issues related to environment and economy. This feature could be done cooperatively with an industrial sector, academic researcher and/or NGO. Access to portions of the DUNS database would be needed (either purchased, negotiated or as a contribution from an existing user).

The DUNS data also could be used to calculate the number of facilities below the ten-employee threshold in each sector. This would give an idea of the proportion of facilities not captured by NPRI or TRI.

Participants were interested in using PRTR data to link with economic data. They felt that it would demonstrate a positive relationship between environment and economy, and incorporate some of the concepts of the "Triple Bottom Line." A potential temporal problem was noted as DUNS data tend to be recent, and the analysis would need to use archived DUNS data to match with PRTR data for 2003. It was suggested that a few sectors could be selected for this analysis and also that facilities could be analyzed based on small, medium or large releases. One participant noted that she uses a free database on economic performance instead of DUNS. Issues to be decided included: whether to use the parent or facility level data and how to link with CEC's Environment and Trade work.

### **5.6 Opportunity Six: Increased Geographical Presentation**

*Taking Stock 2003* could devote time and resources to increasing the geographic presentation of the data. Maps and regional analyses can stimulate readers' interest. Types of ideas that could be considered are: watershed- and air shed-based mapping, water bodies and river basins, and mapping facilities with increases/decrease or large releases of carcinogens.

There was support for increasing the geographical presentations within *Taking Stock*, potentially using GIS mapping of air sheds, watersheds and border areas. Participants noted the difficulty in determining air sheds, which can vary by chemical and season, and that emissions into one media can end up in another. One participant noted the possibility of using open mapping tools, which would allow other users to import PRTR data into their mapping work.

### **5.7 Opportunity Seven: Your ideas**

Participants were encouraged to come to the meeting with other ideas for special analyses or areas of interest that could be considered for the *Taking Stock* report. One participant felt that the topic for the 2003 report should reflect the ten years of experience with PRTRs in North America, perhaps through a retrospective look at changes in PRTRs. A participant suggested that the agriculture industry be analyzed, as it was a significant source of water releases. Another participant suggested a focus on the role of PRTR data in the total pollution picture. A participant suggested linking pollutant reporting with health care costs.

Participants were asked to choose one idea from those discussed. Most participants were interested in Opportunity Three: Sector Analysis, and Opportunity Four: List Development. Only a few participants placed highest priority on Opportunity Five: Economic Analysis, Opportunity Two: Pollution Prevention, and Opportunity One: "Back Door" Analysis. Many suggested that Opportunity Six: Geographic Presentation was more of an approach to data presentation than a special feature in itself.

## **6. Proposed Directions for *Taking Stock 2003***

The annual consultative meetings provide an important opportunity for stakeholders to help guide the development of the *Taking Stock* report. Taking into account comments heard at the meeting and availability of resources, the following is an overview of the proposed directions to be taken for *Taking Stock 2003*.

Opportunity Three: Sector Analysis and Opportunity Four: List Development were the areas that received greatest support from participants in the Consultative Group meeting. Therefore, the CEC will focus on these two areas in preparing the *Taking Stock 2003* report and web site.

For Opportunity Three: Sector Analysis, the report will include an analysis based on a detailed review of PRTR data for a particular sector, combined with other environmental, regulatory and economic information on the sector. The sector of interest to most participants was the cement manufacturing industry. The chapter will present the releases and transfers from this sector and trends over time, and potentially link to work from the CEC's Environment, Economy and Trade program that is looking at integration and ownership of cement plants across North America. The CEC also will explore the feasibility of addressing efforts in this sector on pollution prevention, links with DUNS data and some geographic presentation of the data.

For Opportunity Four: List Development, the CEC will explore the possibility of increasing the number of lists of chemicals that are available for analysis on the CEC *Taking Stock Online* web site. This would allow users to analyze the matched data based on a list of interest to them. Some of the approaches using different lists of chemicals that may be adopted in the revised Toxic Chemicals and Children's Health report could also be considered for *Taking Stock 2003*.

### **6.2 Discussion on Meeting Format and Content**

Participants had the following suggestions for a meeting format for the next Consultative Group meeting:

- Hold a workshop focused on one topic, in advance or following the annual one-day discussion on options for *Taking Stock*
- Hold a symposium with a call for papers

Topics that were suggested for workshops include: exploring the matched data in depth, increasing training and awareness, promoting capacity building and training in Mexico, support implementation of Mexico's RETC program, training in reporting releases, estimation methodologies, response to media inquiries, inviting European counterparts to describe progress in Europe on emission registers and inventories, and methods to understand impacts on local ecology.

It was noted that the next Consultative Group meeting would be held in Mexico, and that this may present special opportunities for a new meeting format and content.

Participants noted the possibility of joining the PRTR meeting with other meetings. EPA noted that they are hosting a TRI meeting in February 2005, in Washington, DC. The CEC will consider possible linkages between this meeting and the symposium organized by the Environment, Economy and Trade program. One participant noted that the meeting objectives should be clearly defined, and then the format will follow.

For the Consultative Group meeting in fall 2005 in Mexico, the CEC will explore creating a workshop to complement the regular consultations on the *Taking Stock* report. This one-day workshop will be held either in advance or following the regular consultations. The workshop will be designed to support the implementation of the RETC program in Mexico, and to foster further sharing of PRTR expertise across countries. A symposium on PRTRs may be considered for future years, or the idea of sponsoring a joint meeting with another CEC program, or other activity.

Comments on the *Taking Stock* reports are welcome at any time. Please direct comments to the CEC at the address shown inside the front cover.



## **Annex A: List of Participants**

**Annual Meeting of the Consultative Group for the North American Pollutant Release  
and Transfer Register (PRTR) Project**

**Grupo Consultivo del proyecto Registro de Emisiones y Transferencias  
de Contaminantes (RETC)**

**Réunion du Groupe consultatif sur le projet de registre  
nord-américain des rejets et des transferts de polluants (RRTP)**

Montreal, Quebec Canada  
22–21 October 2004

**Liste finale des participants / Final List of Participants / Lista final de participantes**

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