

Via E-mail
Original by Mail

May 20, 2004

Mr. William Kennedy
Executive Director
North American Commission for Environmental Cooperation
393, rue St-Jacques West
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Montréal, Québec
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Dear Mr. Kennedy:

We are writing in response to your invitation to comment on the NACEC draft report Taking Stock: A Special Report on Toxic Chemicals and Children's Health in North America. As spelled out in this letter, CCPA supports PRTRs and is a leader in this area. Also, through Responsible Care® we support dialogue with the public and stakeholders on issues of concern—such as children's health. As discussed below, we are very disappointed that there are fundamental flaws in the Special Report such that it does not make the type of useful, balanced and science-based contribution that we understand you expected from the NACEC under your leadership. We make a number of suggestions on how the Report needs to be improved, and we anticipate that a full scientific peer review (which we fully support as essential) by qualified experts will resolve many of the detailed technical/scientific issues that we raise.

The Canadian Chemical Producers' Association (CCPA) represents over 70 chemical manufacturing companies with over 200 plants across Canada -- which collectively produce more than 90 per cent of all chemicals in Canada. CCPA is also the driving force behind Responsible Care, a global initiative to continually improve environmental performance and to address public concerns about the manufacture, distribution, use and disposal of chemicals.

Before going into details on the report and CCPA's concerns, however, I would also like to suggest several alternative approaches that the NACEC should consider as a better way to address children's health issues and possible connections to chemicals:

- First, we understand that the United States is doing a comprehensive "National Children's Study" to take place over a 30-year timeframe. NACEC should encourage Mexico and Canada to also undertake related and linked studies and the NACEC should monitor progress and results.
- NACEC needs to look at children's health issues in the context of focusing on what are the greatest problems and issues. We believe that this will show that the chemical aspects of those issues (that the NACEC is currently focusing on) is at the margins. We all need to spend our scarce resources on where there is value added.

The CCPA is committed to the complementary goals of a healthy environment and a healthy economy. Improving children's health is a serious concern, and it warrants being addressed seriously. We therefore welcome science-based studies that contribute to our understanding of the risks posed by chemicals on the health of children, or any other population.

CCPA has a long history of supporting PRTRs. Under Responsible Care, in 1992 CCPA initiated public reporting of releases to the environment from members' chemical facilities and has published the results annually in Reducing Emissions. In 2002, total emissions of the 600+ substances on the CCPA list declined by 7 per cent over 2001, for a total reduction of 72 per cent or 188,000 tonnes since 1992. Our latest report is available on our web site at www.ccpa.ca

We have also been an active supporter of Environment Canada's NPRI, and a long-time member of the multi-stakeholder consultations aimed at building consensus on the design of the NPRI. In fact, CCPA's annual survey of members' emissions is fully integrated with the NPRI.

Public dialogue aimed at identifying and responding to questions and concerns is an integral part of Responsible Care. We are committed to open, transparent communication of our PRTR data and responding to all stakeholder concerns. We also believe that it is important to report our information in terms that respond to public concerns – thus we group substances according to environmental or health issues such as toxic substances, carcinogens, smog, climate change, ozone depletion, water quality.

We believe that PRTRs provide valuable information that can help document and stimulate reductions in emissions and communicate information to key audiences. They provide information on the sources and quantities of releases of listed substances from industrial facilities to air, land, and water and transfers to recovery, treatment or disposal. Over time they provide information on trends. PRTR data provides a factual basis for identifying areas of concern, establishing priorities and implementing actions to resolve concerns.

However, PRTRs also have very significant limitations. They **DO NOT PROVIDE**:

- A complete picture of releases to the environment from all sources, anthropogenic or natural – in fact in many cases industrial releases account for only a small portion of total releases
- Any information on the environmental fate of the releases – some substances remain in the environment longer than others and are transported differently in air, water and in the soil. Some substances may break down into simpler, less toxic forms; others may accumulate in the environment, becoming a potential source of long-term exposure.
- Any information on exposure or risk to human health or wildlife – the likelihood that an environmental receptor (fish, wildlife, plant, human) will come into contact with a substance that is emitted depends on where the source is located, how the substance is transported and its environmental fate, which affects the method and likelihood of uptake. Exposure potential is also affected by the receptor's activities, location, and diet. Emissions data provide only one of the factors that need to be taken into account in assessing the risk to humans or wildlife: the amount of a substance that is put into the environment from a particular source in a given time period. In most cases, even that information is incomplete because major sources of the same substance are not included in the PRTR.

With the above in mind, we offer the following comments on the Taking Stock report:

1. Ownership of the Report

We note the disclaimer that the views contained in the report do not necessarily reflect the views of the NACEC or the governments of Canada, Mexico or the United States of America. In addition, the identity of the authors or any of the advisors that have been involved in its development are not indicated. So whose views does the report reflect? Is it merely an advocacy document prepared by “unknown” authors, or is it intended to provide a scientifically sound analysis of the role of releases and transfers from industrial facilities on the health of children in North America? If it is the former, we submit that is an inappropriate role for NACEC to play. Support for advocacy groups should be identified as such, and should not be published as a NACEC report. **On the other hand, if it is intended to be a scientifically credible study (which we believe it should be) then the study should follow recognized scientific procedures and the report should be subjected to a scientific peer review, the authors should be identified, and NACEC and the sponsoring governments should take ownership of the document. Without ownership there is no accountability.**

2. The need for scientific peer review

We are pleased that you note in your cover letter that you intend to subject the report to a scientific peer review. But you don't state when this will occur or what will happen to this report, which has already been widely circulated, when a scientific peer review requires significant change. **We believe that independent, qualified experts should subject the report to a full scientific peer review.** The Revised Information Bulletin for Peer Review issued by the US Office of Management and Budget on April 15, 2004 provides useful guidance on the underlying principles and process for a credible scientific peer review. As noted by the OMB, the assessment must ensure that the peer review process is transparent, and that reviewers possess the necessary expertise, are objective and independent from the organization that produced the report. Importantly, OMB notes that peer review should not be confused with public comment and other stakeholder processes.

3. Placing children's environmental health in context

In Chapter 2 the report notes a wide range of factors that affect children's health, including unintentional injuries, respiratory infections, poor nutrition, lack of medical care, smoking, infectious disease, and environmental and occupational exposures. However, the discussion of this range of factors is very general, and fails to put illness due to environmental exposures to toxic substances in context with other causes of illness in children. **At the top of page 10 the report states, “whether there are exposures to toxic substances in the environment that would cause further negative impacts is speculative”. Yet the whole analysis of PRTR data is built on the premise that there is a scientifically supportable link between industrial releases, environmental exposures and impacts on children's health.** We believe that the report should clearly articulate the state of knowledge of the context of environmental contaminants in the range of factors that impact children's health. It should also present a clear picture of the long-term trends in children's health and in related indicators of environmental quality. The Environmental Indicators – 2004 Report recently published by the Fraser Institute provides a wide range of useful indicators of environmental trends in North America.

4. Use of PRTR data

The report makes many generalizations regarding the trends in children's illnesses and injuries, the causes of children's injuries and illnesses and the role of environmental contaminants, and the linkages between environmental exposures and releases and transfers from industrial facilities. As noted earlier, PRTR data does not provide any information on exposure or the risk to human health. **Yet the underlying premise of the report is that there is a relationship (which we do not believe the Report substantiates) between industrial releases and transfers as reported in PRTRs and children's health outcomes.** In this regard, the report goes well beyond appropriate use of PRTR data in assessing risk. While there is passing comment on the limitations of PRTR data, (including notes under some of the tables in extremely small font) the report does a totally inadequate job of explaining the limitations of PRTR data in any kind of risk assessment, and is misleading.

The report also does not distinguish between the pathways of exposure of children to releases to air, water or land, or to transfers to recycling, treatment or disposal. It takes the scientifically indefensible approach of assuming that any of these dispositions of substances are cumulative and proceeds to add them all together. This fails to recognize that substances that are released to the environment have a totally different pathway and potential for exposure than do substances that are recycled for further use, or that are transformed or destroyed in a treatment process, disposed in a deep well, or contained in a landfill or storage area. Aggregating these totally different dispositions in the context of impacts on children's health is grossly misinforming the reader. Any methodology that adds these together in the context of impacts on children's health should be fully explained and justified.

5. Definitions of release, transfer, recovery, treatment, disposal

The report uses the term "release" interchangeably to mean "release to air, land, water" in some cases, and "releases and transfers" in others. **We suggest that the definitions for release, transfer, treatment, recycling, and disposal and the sub-groupings for each should be consistent with the national PRTRs.** Where there are differences between the national systems these should be explained and the data reported accordingly.

In Canada transfers to underground injection (UI), landfarm and land treatment were redefined as disposal in 2002. Although the data being analyzed for this report is for the year 2000, before the definitions were changed, we believe that the report should reflect the new definitions.

6. Identification of chemicals as carcinogens, neurotoxicants, developmental toxicants

The report analyses PRTR data in three broad groupings – carcinogens, developmental toxicants and neurotoxicants. We agree that it is useful to present information in groupings that the public can identify with and are concerned about. **However, we think that it is very important that the list of substances that is used for each grouping be supported by a recognized scientific authority—which the Report does not do in any credible way.** The IARC classification of carcinogens is well recognized as an authoritative science-based system. However, there is no authoritative list of developmental toxicants or neurotoxicants, and it is not appropriate to use a listing that has been developed by an advocacy group and that has not been subjected to the scientific discipline and rigour of a scientific authority. In the absence of an authoritative list, the

report should be restricted to a discussion of specific substances that have been shown through scientific studies to present a risk to children through environmental exposures.

In any grouping that is used it is important to clearly communicate the level of evidence that a substance fits the classification under discussion. For example, IARC classifies substances as known, probable, and possible carcinogens, or not carcinogenic. Similar weight of evidence classifications would apply to other groupings. We suggest that the presentation of the PRTR data should distinguish between these classifications.

Further, if the purpose is to link the grouping to children's health then the substance's toxicity should be relevant to the health outcome. For example, asbestos is a known carcinogen but it does not cause leukemia. If the health indicator is the incidence of leukemia then substances such as benzene would be included but asbestos would not. We recognize the difficulty of making these distinctions, but if the report is to be scientifically credible it is critical that these distinctions be made.

It is also important to identify the chemical species that causes the health effect, and only that species should be included in the relevant grouping. For example, Cr+6 is a known carcinogen but other forms of chromium are not. Only Cr+6 should be included in the grouping of known carcinogens.

7. NAICS classification of facilities

The report shows the Safety-Kleen facility in Corunna as being in the chemical industry. This is incorrect and has been rectified by Environment Canada. We request that you ensure that this facility is correctly classified.

This report in its current form with its numerous errors and unsubstantiated allegations does not reflect well on the NACEC. We anticipate that a full scientific peer review by qualified experts (which we fully support as essential) will resolve many of these detailed technical/scientific issues.

Yours sincerely,



Richard Paton,
President and CEO

cc: Mr. David Anderson, Minister of Environment
Mr. Pierre Pettigrew, Minister of Health
Mr. Lucienne Robillard, Minister of Industry
Mr. John Efford, Minister of Natural Resources