

**Future Directions under the Commission for Environmental Cooperation
Sound Management of Chemicals Initiative**

Draft

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**Prepared by the North American Working Group on the
Sound Management of Chemicals**

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Executive Summary

Section 1.0 addresses the mandate for the SMOC future directions exercise

In response to a request by Council, and consistent with Resolution 95-05, the SMOC Working Group recommends future directions to “reduce and eliminate, wherever possible, the threats to our environment and health from the most toxic and persistent chemicals.” As the basis for its renewal, the SMOC Working Group has adopted the goal of the World Summit on Sustainable Development (WSSD) as set forth in its Vision 2020.

Section 2.0 addresses risk reduction activities for persistent and toxic substances

The SMOC Working Group proposes to:

- Enhance implementation of existing action plans to bring them to conclusion and free up resources for other activities.
- Report on emerging chemical contaminant issues of potential mutual concern to anticipate the possible need for action on toxic chemicals on a trilateral basis.
- Examine various mechanisms to enhance flexibility for addressing risk reduction activities as part of its review by 2005 of its *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative*.
- Enhance its capacities to investigate and recommend opportunities for pathway intervention, starting with priority substances addressed by current action plans.

Section 3.0 addresses building partnerships that can assist in North American efforts to prevent the risks posed by toxic chemicals to health and the environment

The SMOC Working Group proposes to:

- Examine opportunities to build stronger partnerships for sharing information, knowledge and experience.
- Identify barriers to and opportunities for sharing chemicals assessment information and methodologies and recommend actions.
- Work with the CEC Pollution Prevention initiative to identify chemical-intensive industrial sectors or companies operating in the three countries, and to identify and implement mechanisms to engage industry in pollution prevention practices. Emphasis will be placed on sectors that are sources of multi-pollutants that pose significant risks.
- Share information and experience within the three countries and build governmental capacity to foster green procurement by the public sector.
- Work with the CEC hazardous waste management initiative to share pertinent information.

Section 4.0 addresses improved use of environmental and health information for decision making

The SMOC Working Group proposes to:

- Work with its Environmental Monitoring and Assessment Task Force to identify opportunities for North American biomonitoring and environmental monitoring of toxic substances, focusing initially NARAP substances, with the ultimate objective of establishing a North American database that can be used to establish baselines and determine trends.
- Seek opportunities to use available environmental and biomonitoring data and information as an early warning system to identify potential chemical management issues mutual concern.
- Report on its monitoring efforts to government and the public.

Section 5.0 addresses capacity building to manage chemicals throughout their life cycle, and funding for the sustainability of the SMOC initiative

The SMOC Working group proposes to:

- Work with the CEC to identify capacity building needs, those responsible for implementing them, and to recommend capacity-building priorities and funding options
- Identify leveraging opportunities to enhance funding for capacity building
- Promote discussion of CEC SMOC initiatives in key international initiatives
- In coordination with the CEC Secretariat and Mexico, identify and implement opportunities for enhancing and formalizing on a North American basis information exchanges and access to training on the sound management of chemicals. Subsequent to such implementation, determine the feasibility of establishing a *Training Institute for Capacity Building on the Sound Management of Chemicals* that would be located in Mexico.

Section 6.0 addresses public involvement, communications and outreach

To meet its commitment to transparency and multi-stakeholder engagement, the SMOC Working Group proposes to:

- Develop a Communications Strategy for the SMOC initiative to ensure consistency in its message and as a tool for raising awareness about SMOC efforts.
- Explore mechanisms for enhanced public participation, including with respect to awareness raising and training.

1.0 Introduction

1.1 Issue

In its 2003 Regular Meeting, the Council of the Commission for Environmental Cooperation (CEC) instructed the North American Working Group on the Sound Management of Chemicals (SMOC Working Group), “to consider the path forward and to report at our next session on how the SMOC program should evolve in future years in order to reduce and eliminate, wherever possible, the threats to our environment and health from the most toxic and persistent chemicals.”

This document provides the SMOC Working Group’s recommendations to Council on future directions under the CEC SMOC Initiative. At the outset of developing its recommendations on future directions, the SMOC Working Group took particular note of the following:

- That the Council envisaged in Resolution 95-05, Sound Management of Chemicals “*regional cooperation for the sound management, throughout their life cycles, of the full range of chemical substances of mutual concern including by pollution prevention, source reduction and pollution control, with priority to be placed upon the management and control of substances of mutual concern that are persistent and toxic*” (see Appendix 1 for full text of the Resolution). Policy work on the initial priority of the Resolution emphasizing work on a short-list of persistent organic pollutants (POPs) and certain heavy metals is a mature agenda, and implementation work pertaining to this initial emphasis is progressing. A question is therefore raised as to what should be the priorities to be addressed as matters of mutual concern regarding the full range of chemical substances, in addition to continued implementation activities to address the initial priorities;
- That Resolution 95-5 was originally developed in 1995 in the context of facilitating regional implementation of Agenda 21, Chapter 19 on the Sound Management of Chemicals, and UNEP GC Decision 18/32, which identified 12 Persistent Organic Pollutants for international action and lead to the negotiation of the Stockholm Convention on Persistent Organic Pollutants (which lists the same 12 substances that are referenced in Resolution 95-5 for consideration as initial priorities). Six of the substances targeted for action under the CEC SMOC initiative to-date are drawn from UNEP GC Decision 18/32. Most of the substances from that list that were not chosen for action (aldrin, dieldrin, endrin, heptachlor, mirex and toxaphene) are no longer manufactured or registered for use in Canada, Mexico and the United States. As such, the SMOC Working Group determined that there would not be sufficient value to addressing these substances on a trilateral basis; and
- That the World Summit on Sustainable Development (WSSD), specifically paragraph 23 of the WSSD Plan of Implementation, asks countries to: *Renew the commitment, as advanced in Agenda 21, to sound management of chemicals throughout their life cycle and of hazardous wastes for sustainable development as well as for the protection of human health and the environment, inter alia, aiming to achieve, by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures, taking into account the precautionary approach, as set out in principle 15 of the Rio Declaration on Environment and Development, and support developing countries in strengthening their capacity for the sound management of chemicals and hazardous wastes by providing technical and financial assistance.*

In this context, the SMOC Working Group views the Council’s instruction to develop recommendations on future directions under the CEC SMOC Initiative as entirely consistent with a) the current, relatively mature state of policy initiatives regarding the initial list of 12 priority toxic and persistent substances; b) implementation work on priority toxic and persistent substances that must continue consistent with the initial priority of Resolution 95-5 and the coming into force in 2004 of the Stockholm Convention; and, c) global discussions and efforts to renew the commitment to the sound management of chemicals originally

set out in Chapter 19 of Agenda 21 and called for at the World Summit on Sustainable Development held in Johannesburg in 2002.

The SMOC Working Group also notes the Strategic Approach to International Chemicals Management (SAICM) process that commenced in November 2003 as called for by the UNEP Governing Council in its decision SS.VII/3. There was agreement at the first preparatory meeting for SAICM that the WSSD goal as expressed in paragraph 23, should be considered as the overarching goal of SAICM. We also note that the results of the first preparatory meeting for SAICM calls for the *enhancement of the capacity of developing countries*, which is consistent with one key emphasis of the CEC SMOC initiative, i.e., to improve capacities for the sound management of chemicals in Mexico.

The SMOC Working Group has also adopted the WSSD goal as expressed in paragraph 23 as the basis for renewal of the SMOC Initiative, seen in context of the mandate provided by Council in Resolution 95-5.

1.2 CEC SMOC Initiative Achievements on Initial Priorities

The SMOC Working Group, working since 1995 in open and transparent engagement with North American stakeholders and experts:

- Has developed a *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative* in accordance with Resolution 95-05;
- Has developed and implemented NARAPs on PCBs, chlordane and DDT. The Task Forces assigned to oversee implementation of these NARAPs, having completed their work are in the process of being disbanded by the SMOC Working Group. The Parties will continue work on these substances as required at the national level with periodic reviews by the SMOC Working Group to determine whether the environmental benefits of NARAP implementation are being sustained over time;
- Has developed a NARAP on mercury that is currently being implemented, while a Phase 1 NARAP that sets out capacity building and near-term actions for dioxins, furans, hexachlorobenzene is being finalized, even as some capacity-building actions its advocates are being implemented. The Task Forces assigned to oversee implementation of these NARAPs are continuing with their work;
- Has developed a cross-cutting NARAP on environmental monitoring and assessment that is now being implemented, and which will provide comparable North American data that can be used to assess progress under the substance-specific NARAPs. This effort utilizes and builds on information available through existing North American monitoring networks for the environment (water, atmosphere, etc.). Additionally, implementation activities include a health biomonitoring component through which North American health experts are advising and helping to guide CEC work aimed at developing a North American baseline on exposure to NARAP substances. The World Bank is supporting analysis of persistent organic pollutants as part of this work, and the CEC is funding biomonitoring activities involving heavy metals;
- Is developing a NARAP on Lindane and a Phase 2 NARAP of dioxins and furans, and hexachlorobenzene (emphasizing risk reduction activities); and
- Has provided a recommendation to Council that there be trinational cooperation on lead.

Details on the SMOC initiative to-date are provided in Appendices 2 and 3.

1.3 Structure of this Document

The SMOC Working Group's recommendations for future directions are organized under the following headings:

- Building on Past Successes to Reduce Risks Associated with Toxic and Persistent Substances;
- Building Partnerships and Sharing our Experiences, Practices and Techniques to Better Prevent Risks to Human Health and the Environment;
- Improving Environmental and Health Information for Decision Making;
- Capacity Building and Sustainability of the Initiative; and
- Public Involvement, Communications and Outreach.

2.0 Building on Past Successes to Reduce Risks Associated with Toxic and Persistent Substances

2.1 Implementation of Current NARAPs

The SMOC Working Group recognizes that implementation of existing NARAPs for substances or classes of substances (including those NARAPs under development) and other actions to reduce releases to the environment of specific priority toxic and persistent substances constitutes a vital part of its risk reduction work, consistent with Resolution 95-5 and the coming into force of the Stockholm Convention.

The CEC SMOC Working Group further recognizes the importance of bringing this work to conclusion, as it constitutes a major demand on available resources severely limiting resources available for new initiatives.

2.2 Improving Efficiencies in Our Risk Reduction Activities

The SMOC Working Group recognizes that broad-based approaches, which go beyond a substance-by-substance management approach, can accelerate attainment of objectives for reducing risks associated with toxic and persistent substances, while they also lend themselves to maximizing efficiencies, including with respect to financial and human resources, for those tasked with managing chemicals.

In the next phase of its work, the SMOC Working Group proposes to investigate and adopt, as feasible, approaches that go beyond a substance-by-substance approach to reducing risks to human health and the environment, including by investigating the potential to advance initiatives to address classes of toxic substances, or clusters of toxic substances with a common source when there is mutual concern by the three countries. (These approaches will not preclude the potential for working on a particular substance should mutual concern exist; however, the emphasis of future risk reduction activities will be on approaches that can achieve the most value in terms of risk reduction for effort applied, including with respect to reducing risks from multiple toxic and persistent pollutants, and products and articles containing these compounds, e.g., with respect to promoting products that do not pose end-of-life recycling or disposal concerns).

2.3 Improving Ability to Anticipate Emerging Contaminant Issues

The SMOC Working Group will routinely examine emerging chemical contaminant issues (e.g., tracking chemicals and their compounds proposed for international action via various fora and monitoring information within North America) to improve anticipation of issues that might be of mutual concern in North America, consistent with Resolution 95-05 objectives for risk reduction. As per past practice under the CEC SMOC Initiative, in cases where mutual concern is determined, the SMOC Working Group will

identify and recommend to Council North American stewardship opportunities.

2.4 Enhancing Our Understanding of Pathway Intervention

Once contamination in the environment from a toxic and persistent substance is known to have occurred at concentrations that approach or can cause adverse health effects within a population or vulnerable sub-population (e.g., based on tissue, blood, breast milk sampling), management of health effects should, where warranted and as practicable, include pathway intervention (i.e., reducing the path of the toxic to the human through management strategies such as alternative food production practices). The SMOC Working Group will investigate pathway intervention opportunities, and, when there is mutual concern, recommend to Council possible actions to enhance capacities in North America for pathway intervention.

The SMOC Working Group recognizes that pathway intervention strategies constitute an interim management tool that is utilized when source reduction strategies (i.e., eliminating or reducing releases to the environment in the first place) are or have in the past (i.e., contaminants are already resident in the environment) been insufficient to prevent continued exposure of a population. Pathway intervention strategies need to be closely coupled with bio- and environmental monitoring efforts. As an important corollary to pathway intervention, strategies may be required with respect to sectors (for example, the food industry) so as to inform these industries of the nature of the problem and assist them to avoid or minimize negative human health and related economic consequences (e.g., trade restriction that could possibly be introduced by countries based on health concerns).

The SMOC Working Group observes that pathway intervention strategies, while an interim measure, may be required in some instances for, years or decades, until such time as environmental contamination resulting from historical industrial practices declines to levels below which exposure will no longer result in the risk of adverse health effects to a population.

2.5 Proposed Activities

The SMOC Working Group recommends that future work to reduce risks associated with targeted toxic and persistent substances include the following:

1. Enhancement of work to implement existing North American Regional Action Plans (NARAPs), acknowledging that these efforts constitute by far the largest commitment of current resources available to the CEC SMOC Initiative, and therefore this work needs to be advanced and concluded as efficiently as possible to enable reasoned increases in actions on other priorities of mutual concern;
2. That the SMOC Working Group periodically reports to Council on emerging chemical contaminant issues of potential mutual concern (e.g., chemicals which have been banned or are slated to be banned within a North American jurisdiction or internationally and for which health effects are a particular concern to North American populations). The SMOC Working Group will utilize this information to anticipate the possible need for action on toxic chemicals on a trilateral basis (including to build on actions that might be taken by individual countries), thereby improving the strategic planning, as opposed to reactive, elements of the CEC SMOC Initiative;
3. That the SMOC Working Group complete in 2005 its review of the *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative*, including, at a minimum, enhancing flexibility regarding mechanisms that can be utilized to address a broader range of substances for which collective action is recommended; and
4. The SMOC Working Group begin enhancing its capacities to investigate pathway intervention opportunities, and, when there is mutual concern, recommend to Council possible actions to enhance capacities in North America for strategic targeted actions, starting with consideration of priority toxic and persistent substances addressed by current NARAPs. The SMOC Working Group recognizes that strategies and actions proposed could be geared toward trinational implementation, implementation at

the national level or a combination of the two as deemed most effective and cost efficient. This work will also involve coordination with the CEC's Children's Environmental Health initiative at the trinational level.

3.0 Building Partnerships to Share Experiences, Practices and Techniques to Better Prevent Risks to Human Health and the Environment

3.1 Improving Capabilities for Pollution Prevention

The SMOC Working Group will seek new opportunities to facilitate pollution prevention in the three countries by building stronger partnerships for sharing information, knowledge and experience among the three countries about policies, institutions, tools and processes that can be adopted to better prevent risks to human health and the environment arising from toxic chemicals. This work will be done in close coordination with current CEC pollution prevention initiatives.

For instance, actions that span chemical intensive corporations or industries operating in the three countries will promote multi-pollutant reduction benefits, pollution prevention planning and cleaner production, so as to achieve health and environmental gains in a relatively efficient manner (i.e., as compared to a substance-by-substance approach), while making a contribution to a level playing field for trade between the three countries. These strategies can also bring to bear a wider range of public policy instruments, including fostering voluntary approaches by industry.

3.2 Improving Efficiency and Effectiveness of Chemicals Assessments

There are serious shortages of reliable data on chemicals within or newly entering the North American market. The SMOC Working Group will identify potential cooperative action in this area that can make a significant contribution to sustaining the progress needed to "catch-up" regarding this data gap to safeguard the environment and human health in North America.

The SMOC Working Group will seek opportunities to improve the efficiency and effectiveness of assessments of existing and new chemicals within the three countries through sharing data on chemical characteristics (i.e., environmental and health risks) and screening assessment methodologies. Cooperation by the three countries will assist Mexico to also enhance its chemicals management framework in this critical area, including developing or refining laws and regulations that permit the three countries to share compatible assessment methodologies and data, and streamline the generation of assessment data such that data collected in one country can be used by the other North American countries (i.e., sharing the burden of chemical assessments).

3.3 Environmentally Sound Disposal of Chemical Wastes

The SMOC Working Group recognizes that there is a need to increase public confidence that the disposal of chemical wastes is being done in the three countries to standards consistent with environmentally sound management (ESM) practices. Given the increasing emphasis within international and national policies and laws on retirement of toxic substances (e.g., Stockholm Convention on Persistent Organic Pollutants) and taking into consideration the quantities of toxic substances in products nearing the end of their life-cycle (e.g., in North America, some 1 billion computers containing toxic compounds such as lead, mercury and cadmium will reach the end of their life cycle in coming years), a renewed emphasis on waste disposal and destruction processes and facilities will be needed to ensure that chemical compounds and waste products and articles containing these compounds do not present an additional threat to the environment and human health when they are being recycled, disposed of, or destroyed. The SMOC Working Group will work with the current CEC hazardous waste management initiative to ensure that leading practices and techniques regarding disposal of toxic and persistent substances are taken fully into

account.

3.4 Proposed Activities

The SMOC Working Group proposes to:

1. Complete an analysis of specific opportunities to build stronger partnerships for sharing information, knowledge and experience among the three countries about policies, institutions, tools and processes that can be adopted to better prevent risks to human health and the environment arising from toxic chemicals, and propose potential actions to Council;
2. Identify barriers to and opportunities for sharing chemicals assessment information and methodologies between the three countries and recommend potential actions to Council (e.g., development of institutionalized processes and identification of contact points for information sharing on a sustained basis).
3. Work with the CEC Pollution Prevention initiative to identify chemical intensive industrial sectors or companies operating in the three countries, and to identify and implement mechanisms to engage industry in improved pollution prevention practices for the sound management of chemicals applicable to the priorities held in the three countries. This work will build upon existing national programs (i.e., additive and coordinated rather than duplicative) towards the goal of preventing and reducing releases to the environment of toxic chemicals. Through this mechanism the SMOC Working Group will also seek to address sectors common to the three countries that are sources of multi-pollutants that pose significant risks to the environment and human health. Activities with industry will, as appropriate to the circumstances, focus on:
 - greening the supply chain by improving the knowledge of purchasers regarding toxic and hazardous chemicals in products and processes through activities such as development of and improved access to the most recent information on hazards associated with chemical compounds;
 - sustainable chemistry design and engineering processes (e.g., with respect to chemical screening and assessment methodologies, and technological processes, such as oxidation processes), together with identification of opportunities for improved information sharing on successful approaches and of data arising from these efforts;
 - life-cycle management policies and practices¹; extended producer responsibility) for the sound management of chemicals, including the highest standards in environmentally sound management (ESM) of chemicals as wastes. In this area, the SMOC Working Group will coordinate with the CEC Hazardous Waste Task Force; and
 - encourage corporations to adopt their highest environmental standards of operation (i.e., processes, procedures and technologies applicable to toxic and hazardous chemicals) in all jurisdictions within which they operate;
5. Share information and experience within the three countries and build capacities within governments

¹ Life-cycle is a term that applies to management of substances from their design stages (e.g., aimed at bringing a product to market) through to their end-of-life, hence is inclusive of their generation, subsequent use, including incorporation into products and articles, downstream industry use, consumer use, recycling, and ultimate disposition, such as long-term storage and/or destruction. Often referred to as “cradle-to-grave” a recent expansion of the life-cycle concept includes “cradle-to-cradle, whereby end-products are either fully degradable and will be returned to nature after use or, at end use, will be recycled back in their entirety as an industrial feedstock to produce new products of the same or a similar type (as presented by William A. McDonough and Michael Braungart in their book *Cradle to Cradle*).

to foster green procurement by the public sector, specifically regarding treatment of toxic and hazardous chemicals in procured products and processes; and

6. Work with the hazardous waste management initiative of the CEC to share information on leading practices and techniques regarding the toxic and persistent substances of concern to the CEC SMOC Initiative.

4.0 Improving Environmental and Health Information for Decision Making

The SMOC Working Group recognizes the key role of environmental information in informed decision making, including with respect to adjusting existing NARAP activities, setting priorities for risk reduction strategies and activities, and anticipating and preventing risks to human health and the environment. The SMOC Working Group, in addition to continued implementation of the current Environment Monitoring and Assessment NARAP, will seek increased opportunities to improve information on toxic chemicals in areas of mutual concern to the three countries.

While our society benefits greatly from the use of synthetic chemicals, we know that the unintended consequences of some uses of chemicals have been contamination of our bodies, including through exposure to chemical residues in products (e.g., during manufacture or subsequent handling of products containing toxic chemicals) and through exposure to contaminants introduced to the environment or made bioavailable as a result of human activities.

Some chemicals are introduced to our bodies even as we are formed, through the placenta of mothers who pass on a portion of this unwanted chemical contamination. Therefore, when we reduce human exposure to toxic chemicals, we are not only working to improve the health of one individual, but in many instances, of future generations.

Upon entering the world, humans continue to be at risk of exposure to the adverse effects of toxic chemicals throughout their lives from avenues both direct and indirect. Exposure can be the result of long-term or chronic contact (for example, by factory workers, or where a food or drinking water source is contaminated²) or can result from a single incident involving an acutely toxic substance.

Biomonitoring provides a tool for better understanding the occurrence and extent of exposure to substances to which we are exposed through a variety of pathways (inhalation, skin contact, via food and water ingestion, etc.). The resulting data can also be used to determine whether exposure of general and vulnerable populations to toxic and hazardous chemicals is declining in response to sound management of chemical actions aimed at reducing chemical exposure. As well, biomonitoring can indicate exposure to chemicals for which effects are unknown, but which, by their presence may warrant closer examination to determine whether effects are occurring. Complementary monitoring can also be required, for example, where contaminated foods constitute a pathway. Food basket surveys, and other measures can help to determine exposure levels through foods.

Biomonitoring of organisms that are contaminated, including fish and wildlife (including “indicator species”) can also be indicative of environmental contamination.

Environmental monitoring can inform our knowledge of fate and transport of chemicals, and the extent of localized contamination, as well as how chemicals within the environment are made available to organisms, including humans.

² The word contaminated used in this context means, “contaminated by toxic chemical(s) known to be harmful to human health and the environment.”

4.1 Proposed Activities

The SMOC Working Group proposes to:

1. Continue working via the Environmental Monitoring and Assessment Task Force to identify cost-effective opportunities for North American biomonitoring and environmental monitoring of toxic substances, focusing initially on toxic and persistent substances that are the subject of NARAPs, and with the ultimate objective of establishing a reliable North American database that can be used to establish baselines and determine trends. This effort will include identification of opportunities for sharing and building upon existing data (e.g., NHANES) where practicable, both to take advantage of existing expertise and in the interest of cost efficiencies.
2. Seek opportunities to use available environmental and biomonitoring data and information as an early warning system to identify potential chemical management issues of mutual concern, including identification of populations at increased risk of exposure, such as workers, women of child-bearing age, children, indigenous peoples, and the elderly; and
3. Report on the results of its monitoring efforts to the governments and the public.

5.0 Capacity Building and Sustainability of the Initiative

The SMOC Working Group reaffirms its commitment to capacity building as a core component of its work.

Capacity building under the SMOC initiative as set forth in its 2001 *Strategic Framework for Capacity Building*, refers to “the investment of time, effort and resources in people, institutions, and improved practices that will, together, enhance and sustain the capacity of the governments of Canada, Mexico and the U.S., and the other stakeholders in these countries, to promote the sound management of chemicals in the North American region.”

The SMOC has more recently recognized that outreach to other nations as regards sharing North American experiences has helped to build capacity of other nations with respect to the sound management of chemicals, which, ultimately, can result in additional benefits to North America (e.g., via reduced emissions of pollutants susceptible to long-range atmospheric transport). For instance, the World Bank has invited the CEC to share North American experiences in various workshops on persistent organic pollutants held in developing countries.

The SMOC Working Group recognizes that resources currently available to the CEC SMOC Initiative are inadequate to facilitate implementation of current NARAPs while also meeting broader demands for capacity building. Therefore, at the direction of the CEC Council, in 2002, the SMOC Working Group developed a leveraging strategy to attract additional resources to support implementation activities under the SMOC initiative. Despite some early leveraging successes³ (see Appendix 4 for more details on SMOC capacity building achievements), the need for the SMOC leveraging strategy has become more acute, taking into account the range of activities underway and, most recently, the shrinking program budget as affected by the stronger Canadian dollar (the operative currency of the Secretariat into which US currency donations of the three countries are converted), such that the initiative, initially funded in 1995 at about CN\$900,000, is currently budgeted at CN\$545,000.

³ Funds leveraged for this initiative include US \$7.5 million in Global Environment Facility or GEF funds (with CEC seed money of US \$126,000) to enable North America to maintain and expand upon its DDT NARAP successes via collaborative activities with central America; World Bank funds of US \$500,000 to assist Mexico with development of its National Implementation Plan on POPs under the Stockholm Convention (which will further advance implementation efforts within Mexico for POPs NARAPs); and World Bank funds of US\$100,000 for the Mexican component of a biomonitoring project aimed at development of a North American baseline of exposure to POPs addressed in NARAPs, which are also the Stockholm Convention listed POPs.

The SMOC Working Group further recognizes that for North America to continue to play a leading stewardship role for the sound management of chemicals, it will be important to enhance its own capacity to anticipate the implications of and to contribute to the formulation of global trends toward greater integration of the sound management of chemicals, such as those initiatives occurring under UNEP Council direction and the Intergovernmental Forum on Chemical Safety (IFCS).

Finally, the SMOC Working Group notes that Mexico's role with respect to capacity building, in addition to strengthening its own capabilities, includes serving as a focal point for sharing North American information and expertise with other nations in the Americas whose actions can negatively effect the North American environment. A current example is the aforementioned DDT initiative, which seeks to build capacity of Central American countries to develop and implement strategies that, in the long run, will help prevent re-introduction of vector-borne diseases into North America and reduce dependency on chemical intervention with its attendant dimension of potential environmental releases (e.g., via atmospheric transport and, as wastes, via releases that can occur during transport, treatment and/or destruction).⁴

5.1 Proposed Activities

The SMOC Working Group proposes to:

1. Work diligently with its Task Forces and the CEC Secretariat to:
 - Identify priority capacity building needs and those responsible for implementing actions that address these needs, and with regard to recommending implementation priorities and potential funding options for these activities (e.g., within existing government programs, CEC budget, etc.); and
 - Identify opportunities for taking further advantage of the Leveraging Strategy to address resource limitations with respect to realizing the SMOC's capacity-building mission, acknowledging that resources garnered under the Leveraging Strategy are project specific under contractual agreement with funding agencies, and cannot be used for general ongoing implementation of Resolution 95-5 and its NARAPs, where resources have been rapidly reducing.
2. Promote discussion of SMOC initiatives in key selected international initiatives pertaining to the sound management of chemicals, for example the Strategic Approaches to International Chemicals Management (SAICM) process, IFCS, UNEP initiatives, etc., so as to keep abreast of developments that may inform North American efforts and ensure that North American transboundary and regional interests are properly represented⁵; and
3. In coordination with the CEC Secretariat and Mexico, identify and implement opportunities for

⁴ The CEC, via seed money from its capacity-building fund, helped to secure Global Environment Facility funds to support a joint project with the Global Environment Facility for a Regional *Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America*. The principle objectives of the program, for which the Pan American Health Organization (PAHO) is the Executing Agency, are to test and develop sustainable alternatives to DDT for use in malaria control; assess human and environmental exposure to DDT; build analytical capacities of the countries and develop a comprehensive information system. As part of the pre-proposal to this project, the International Development Research Center (IDRC) collaborated with the CEC and Mexico in testing and monitoring alternatives to DDT, and using an ecosystem health approach to aimed at finding ways of better managing the local environment to reduce the incidence and spread of malaria.

⁵ This could include SAICM intercessional work being included on SMOC Working Group meeting agendas and holding meetings of the three parties at the SAICM Preparatory Committee (PrepCom) meetings to assess prospects for coordinated positions on certain issues as appropriate to advancing national objectives held in common; and attendance by a senior representative of CEC at the SAICM meetings.

enhancing and formalizing on a North American basis information exchanges and access to training on the sound management of chemicals, and, subsequent to such implementation, determine the feasibility of establishing a *Training Institute for Capacity Building on the Sound Management of Chemicals* that would be located in Mexico, for example, at the National Research and Training Center (*Centro Nacional de Investigación y Capacitación —CENICA*) or other facility as determined by Mexico, and available to receive candidates for training from within Mexico, and from Central and South America.⁶

6.0 Public Involvement, Communications and Outreach

The SMOC Working Group believes that a North American SMOC Communications Strategy is required to provide guidance on information exchanges and public outreach so as to ensure that it is systematically meeting its commitment to transparency and multi-stakeholder engagement.

Public outreach and multistakeholder engagement is vital to achieving “buy-in” for proposals and plans that arise from the SMOC initiative and help ensure the success of SMOC efforts. To this end, the SMOC Working Group has developed formal policies on stakeholder inclusion on its task forces, worked to make such inclusion as broad as is feasible within existing budget constraints, and developed and implemented policies to undertake its deliberations and develop and implement its products in a manner this is readily accessible and accountable to the public. We believe the contribution of stakeholders has been a key factor in the initiative’s reputation as the “flagship” initiative of the CEC.

The SMOC Working Group observes, however, that meaningful public awareness of and participation in its initiative comes with significant transactional costs that must be funded out of CEC Secretariat resources (e.g., funding observer members to sit on task forces; funding provided for meaningful consultation with stakeholders and experts in workshops and symposiums both to raise awareness of issues and to solicit advice on proposed activities at both developmental stages and as implementation moves forward on a particular effort). The SMOC Working Group will continue to work with the CEC Secretariat to determine where there are synergies with other CEC programs and external groups that can be tapped both with respect to inclusion of a broader range of stakeholders and regarding sharing of costs to advance common objectives.

6.1 Proposed Activities

The SMOC Working Group proposes to:

1. Develop a draft Communications Strategy for the SMOC initiative that is designed to ensure consistency in its message as disseminated by the CEC Secretariat so as to highlight its achievements and as a tool for raising awareness regarding the work of the SMOC. The Strategy should consider options and identify mechanisms for enhanced access and dissemination of information (e.g., to government jurisdictions, institutions and entities that manage chemicals, and to the general public and to communities of interest).
2. Explore mechanisms for enhanced public participation, including with respect to awareness raising and training.

⁶ In determining the feasibility of establishing such a training center, the SMOC Working Group and Mexico would seek to coordinate its work and seek synergies with existing international organizations such as UNIDO and UNITAR, as well as regional facilities such as Basel Regional Training and Technology Centres to ensure the efficient use of resources, as well as placing emphasis on sustainability mechanisms for the financial support of the Centre.

APPENDICES

Appendix 1: CEC Council Resolution 95-05

COUNCIL RESOLUTION # 95-5

Sound Management of Chemicals

THE COUNCIL:

RECOGNIZING that the territories of the Parties comprise shared regional ecosystems in which the land, air, water, flora and fauna are linked and interdependent;

RECOGNIZING that transport of toxic substances across national boundaries is a major and shared concern;

NOTING WITH CONCERN that certain persistent toxic substances bioaccumulate in living organisms and have been associated with immune system dysfunction, reproductive deficits, developmental abnormalities, neurobehavioral impairment and cancer, as well as acutely toxic and other harmful effects on human, plant, and animal health and the environment;

NOTING FURTHER that some of these harmful effects are irreversible and that remedial measures to improve degraded environments and treat pollution-associated diseases even when feasible can often place considerable strain on local, regional and national economies;

RECOGNIZING the need to assess and develop strategies for addressing new and existing chemicals in North America, throughout their life cycles, to reduce and prevent adverse effects to human health and the environment;

RECOGNIZING the important contributions that producers and/or users can make to the sound management of chemicals;

REAFFIRMING the Parties' commitment to the sound management of chemicals, as stated in *Agenda 21* and adopted at the *1992 United Nations Conference on Environment and Development*;

REAFFIRMING the Principles of the *1992 Rio Declaration*, noting in particular those Principles that have special importance for the promotion of chemical safety, including:

Principle 14, *States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe degradation or are found to be harmful to human health*; and

Principle 15, *In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific evidence shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation*;

RECOGNIZING that the Intergovernmental Forum on Chemical Safety has recommended that regional cooperation and information exchange networks should be established in all regions as soon as possible;

FURTHER RECOGNIZING that this resolution should build upon existing bilateral and multilateral commitments related to the sound management of chemicals, to which at least two of the *North American Agreement on Environmental Cooperation* (NAAEC) countries are Party, including, for example, the commitments made in Article II (a) of the *Great Lakes Water Quality Agreement of 1978* (Canada-United States of America) that, “*The discharge of toxic substances in toxic amounts be prohibited and the discharge of any or all persistent toxic substances be virtually eliminated*”;

ACKNOWLEDGING the responsibility of the Council, under Article 10(5)(b) of the NAAEC to promote and, as appropriate, develop recommendations regarding appropriate limits for specific pollutants, taking into account differences in ecosystems and other responsibilities for the sound management of chemicals included under other relevant provisions of the NAAEC;

FURTHER ACKNOWLEDGING Article 10(3) of the NAAEC, which calls upon the Council to strengthen cooperation on the development and continuing improvement of environmental laws and regulations, including by: “(a) *promoting the exchange of information on criteria and methodologies used in establishing domestic environmental standards; and (b) without reducing levels of environmental protection, establishing a process for developing recommendations on greater compatibility of environmental technical regulations, standards and conformity assessment procedures in a manner consistent with the NAFTA*”;

COGNIZANT of the need to consider the unique circumstances of NAFTA Partner economies and ecosystems and to develop regional approaches for the sound management of chemicals, particularly to reduce the risks posed by persistent, toxic substances of mutual concern;

CONCLUDING that prevention of pollution and reduction of risk through cooperative actions for the sound management of chemicals, particularly of persistent, toxic substances, is both desirable and imperative in order to protect and improve the environment of North America;

COMMITTS to regional cooperation for the sound management, throughout their life cycles, of the full range of chemical substances of mutual concern including by pollution prevention, source reduction and pollution control;

DECIDES to give priority to the management and control of substances of mutual concern that are persistent and toxic beginning with the development of a regional action plan for the management and control of polychlorinated biphenyls (PCBs). Regional action plans will also be developed for a short list of three additional substances selected from among a group of substances, including the 12 persistent bioaccumulative organic chemicals identified in the recent United Nations Environment Programme Governing Council Decision 18/32 of May 1995 (see Annex I to this resolution) and certain heavy metals;

FURTHER DECIDES that regional action plans for such substances of mutual concern be developed as specified below, taking into consideration different national approaches and timetables for the sound management of chemicals in a manner that respects the different economic, political and regulatory circumstances of the Parties.

HEREBY ESTABLISHES a Working Group comprised of two senior officials selected by each Party whose duties pertain to the regulation or management of toxic substances, and who shall work with the Commission for Environmental Cooperation (CEC) to implement the decisions and commitments set out in this Resolution, including development of:

1. a regional action plan for the management and control of PCBs;
2. criteria for identifying additional persistent and toxic substances for regional action by 15 November 1995;
3. a regional seminar to be held in December 1995 in Mexico for discussion of ongoing actions and experiences on the matter;
4. a short list of three priority persistent and toxic substances in addition to PCBs to be developed by 15 January 1996 for which regional action plans will be prepared;

5. regional action plans covering each of the persistent and toxic substances on this short list to be submitted to the Council for approval by 15 December 1996; and
6. refined criteria for identifying persistent and toxic substances for regional action, an updated short list, and recommendations on other persistent and toxic substances to be the subject of action plans on an annual basis, beginning in 1996.

DIRECTS the Working Group, in addressing the above-mentioned decisions and commitments, to:

- a) develop recommendations for improving the capacity for monitoring, research and information sharing with respect to the sound management of chemicals;
- b) identify and recommend measures for improving capacity and capabilities for the sound management of chemicals, including measures relating to technical cooperation, information sharing and joint approaches;
- c) consider ways and, if practicable, develop recommendations for promoting the exchange of information on criteria and methodologies used in establishing domestic standards for the sound management of chemicals;
- d) incorporate, as appropriate, pollution prevention principles and precautionary approaches in making recommendations to reduce risk associated with toxic substances;
- e) recommend, as set out in Chapter 19 of *Agenda 21*:
 - 1) concerted activities to reduce risks presented by toxic chemicals, taking into account the entire life cycle of the chemicals. These activities could encompass both regulatory and non-regulatory measures, such as promotion of the use of cleaner products and technologies; emission inventories; product labeling; use limitations; economic incentives; and phasing out or banning of toxic chemicals that pose an unreasonable and otherwise unmanageable risk to the environment or human health and those that are toxic, persistent and bio-accumulative and whose use cannot be adequately controlled; and
 - 2) policies and regulatory and non-regulatory measures to identify, and minimize exposure to, toxic chemicals by replacing them with less toxic substitutes and ultimately phasing out the chemicals that pose unreasonable and otherwise unmanageable risks to human health and the environment and those that are toxic, persistent and bio-accumulative and whose use cannot be adequately controlled;
- f) coordinate activities with, avoid duplicating the efforts of, and where possible utilize the expertise of existing workgroups and other organizations whose efforts are pertinent, e. g., the *Technical Working Group on Pesticides* established under the *U.S.-Canada Free Trade Agreement*, the *Ad Hoc Working Group on Persistent Organic Pollutants (POPs)* of the *Inter Organizational Program for the Sound Management of Chemicals (IOMC)*, the *Intergovernmental Forum on Chemical Safety*, the *United Nations Economic Commission for Europe/Long Range Transport of Air Pollutants (UNECE/LRTAP) Ad Hoc Workgroups on POPs and Heavy Metals* and the *Organization for Economic Cooperation and Development (OECD) Chemicals Programme*;
- g) build upon existing bilateral and multilateral commitments related to the sound management of chemicals;
- h) encourage and provide for meaningful participation of the public, including non-governmental organizations; business and industry; provincial, state, and municipal governments; academia; and technical and policy experts in developing its recommendations;
- i) recommend measures for assessing progress with respect to action programs undertaken through this resolution;
- j) encourage complementary national approaches and timetables for the sound management of chemicals in a manner that respects the different economic, political and regulatory circumstances of the Parties.

APPROVED BY THE COUNCIL:

Carol M. Browner

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Appendix 2: SMOC Overview and Update

**The Sound Management of Chemicals (SMOC) Initiative
of the
Commission for Environmental Cooperation
of North America**

Overview and Update

October 2003

**Commission for Environmental Cooperation
393 St. Jacques St. West, Suite 200. Montreal (Quebec) Canada, H2Y 1N9**

Introduction

The North American Agreement on Environmental Cooperation (NAAEC), signed on the first of January 1994, has provided the overall framework for Canada, Mexico and the United States to cooperate on a wide range of environmental issues in the North American Region. The Agreement was negotiated as a parallel side agreement to the North American Agreement on Free Trade (NAFTA) (Figure 1). The Agreement has ten objectives, the first three being to:

- (a) foster the protection and improvement of the environment in the territories of the Parties for the well-being of present and future generations;
- (b) promote sustainable development based on cooperation and mutually supportive environmental and economic policies; and
- (c) increase cooperation between the Parties to better conserve, protect and enhance the environment, including wild flora and fauna.”

In negotiating the Agreement, the governments of the three countries, “convinced of the benefits to be derived from a framework, including a Commission, to facilitate effective cooperation in the conservation, protection and enhancement of the environment in their territories” established the North American Commission for Environmental Cooperation (CEC).

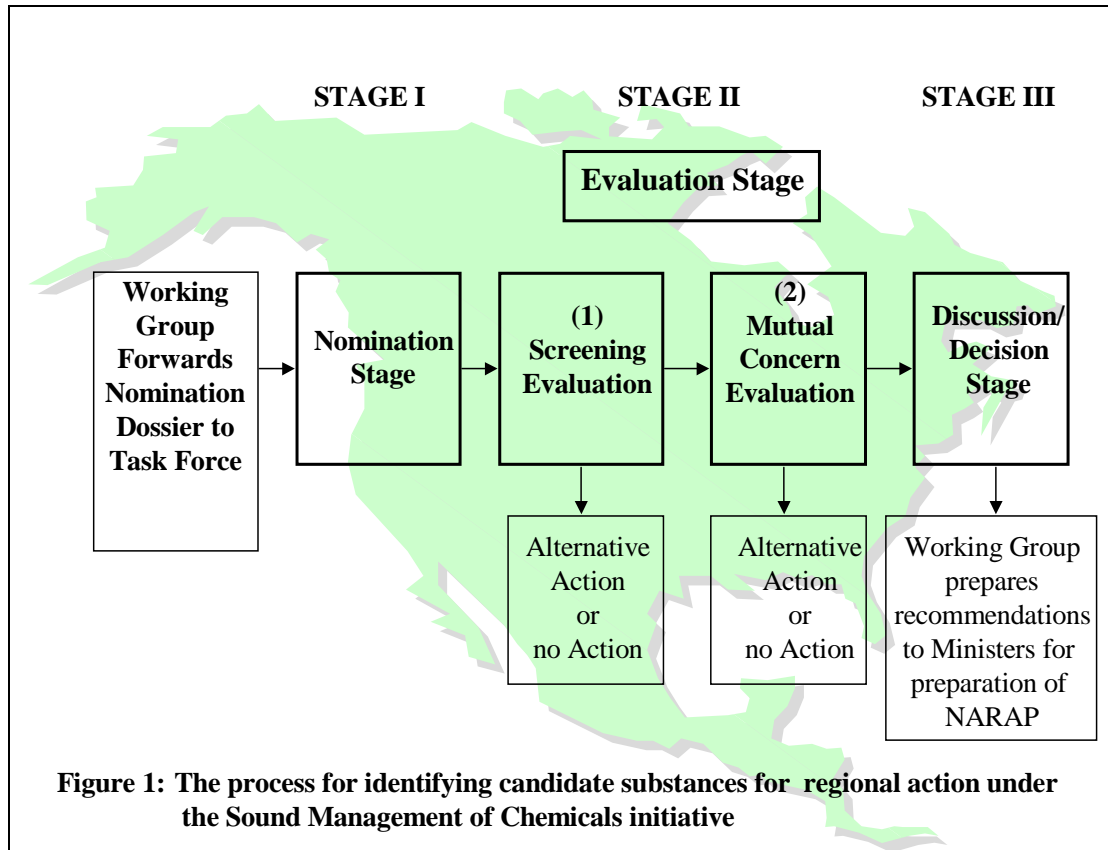
The CEC is composed of a Council (the CEC’s governing body, which is made up of *cabinet-level or equivalent representatives of the Parties, or their designees*), a Joint Public Advisory Committee, which “*may provide advice to the Council on any matter within the scope of this Agreement*” and a Secretariat, which “*shall provide technical, administrative and operational support to the Council and to committees and groups established by the Council and such support as the Council may direct.*”

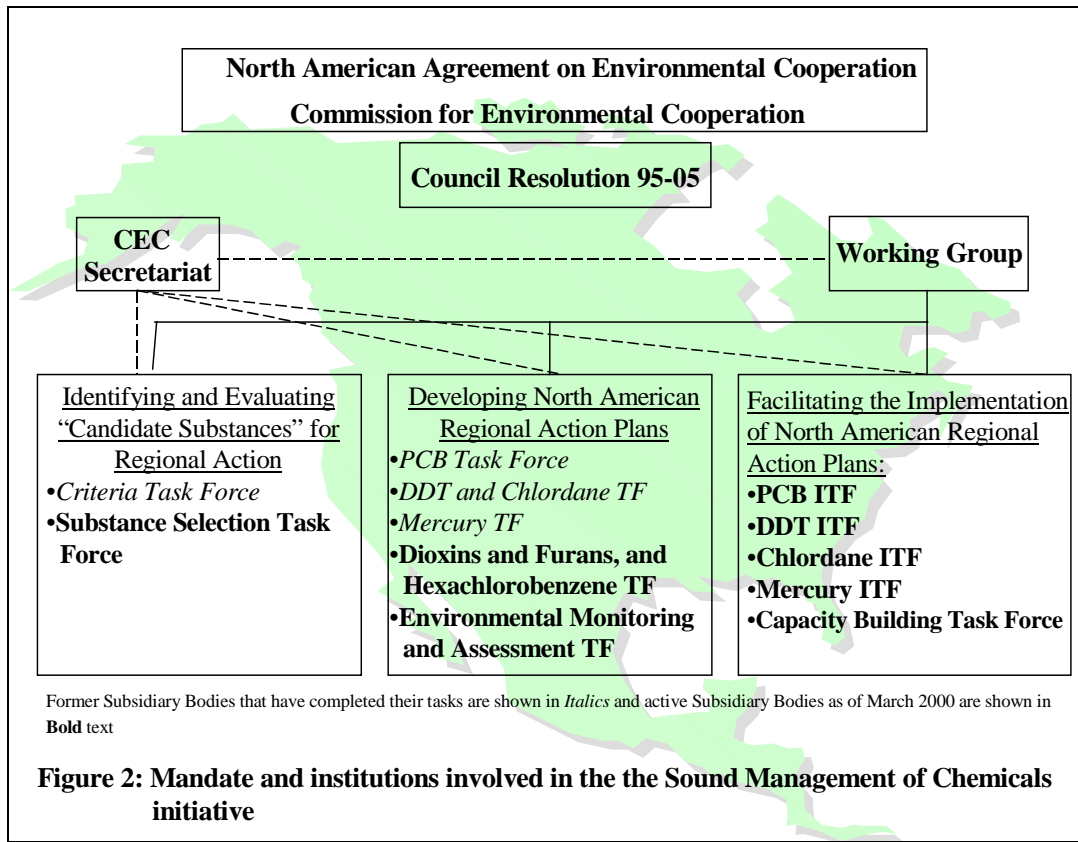
The Commission provided the mechanism for the three countries to negotiate an agreement (Council Resolution 95-05) on the Sound Management of Chemicals, which was agreed to on 13 October 1995, in Oaxaca, Mexico. Council Resolution 95-05 is attached as Annex A. The Resolution sets out a framework, together with specific commitments, for working collaboratively in addressing the sound management of chemicals in the region (i.e., North America). The Council, through the Resolution, established “*a North American Working Group comprised of two senior officials selected by each Party whose duties pertain to the regulation or management of toxic substances, and who shall work with the Commission for Environmental Cooperation (CEC) to implement the decisions and commitments set out in this Resolution.*” The relationships among the Working Group and the subsidiary bodies that it has established to implement the Resolution are summarized in Figure 1.

The initial focus of work under the Resolution has been on chemicals that are persistent and toxic. The Working Group that was established to work with the CEC to implement the decisions and commitments made in the Resolution was instructed to first address the list of persistent organic pollutants (POPs) included in United Nations Environment Programme (UNEP) Governing Council decision 18/32 of May 1995, together with “*certain heavy metals*”.

Five North American Regional Action Plans (DDT, chlordane, PCBs; mercury; and environmental monitoring and assessment) have been developed and are now at various stages of implementation. Two more regional or North American action plans are now under development, one for a cluster of substances—dioxins and furans, and hexachlorobenzene— and a second for lindane. A draft Decision

Document on Lead developed under the Council-approved *Process for identifying candidate substance for regional action under the Sound Management of Chemicals initiative* was circulated for public consultation 19 August–3 October 2003. Once the SMOC Working Group has received the final Decision Document on Lead from its Substance Selection Task force, it will formulate its recommendations to the CEC Council regarding the nature of potential trinational action on lead. The processes used to put substances forward for nomination of substances by governments and for development and implementation of action plans is illustrated in Figures 1 and 2. These processes include opportunities for public input at several junctures.





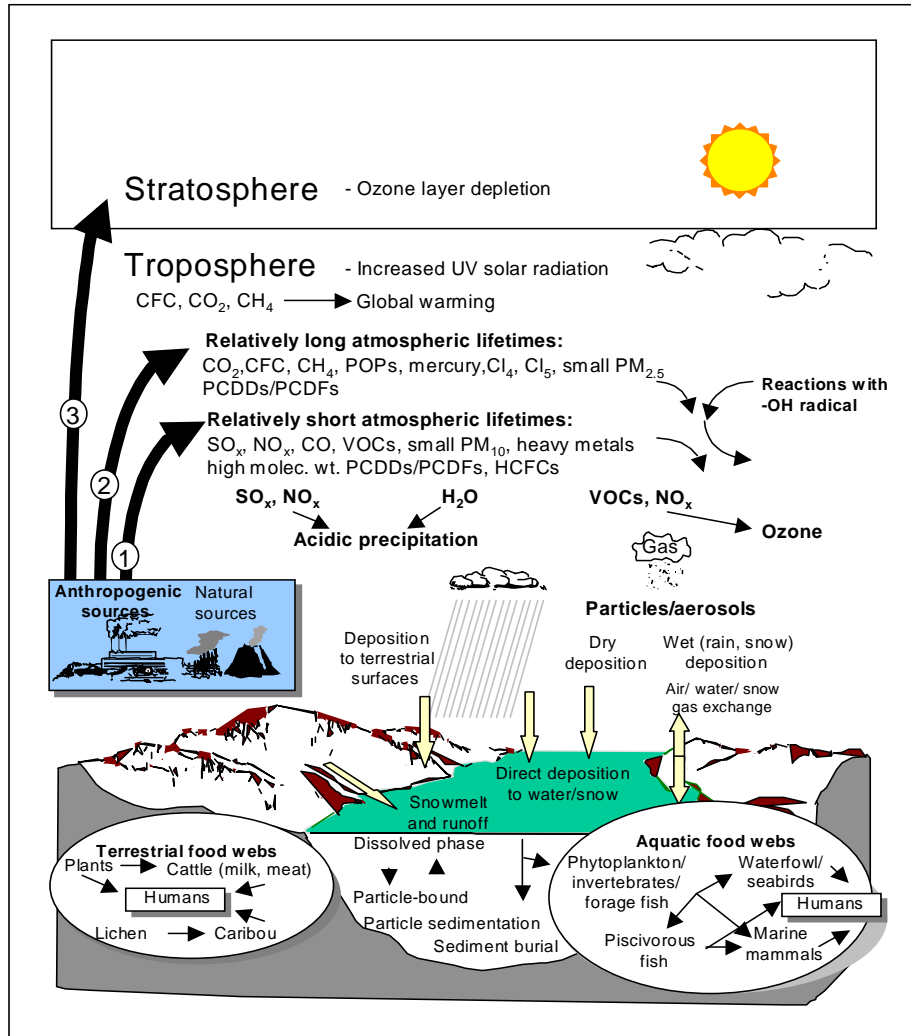


Figure 3: Pathways of transport and accumulation of continental pollutants

Questions and Answers

What is Council Resolution 95-05?

Council Resolution 95-05, Sound Management of Chemicals (see Annex A), states how the Governments of Canada, Mexico and the United States will cooperate to improve the sound management of chemicals in North America. The Resolution gives priority to the management and control of substances of mutual concern that are persistent and toxic, but also allows for cooperation on a broader scale for the sound management of chemicals in the three countries.

Council Resolution 95-05 was developed under the authority of the North American Agreement on Environmental Cooperation (NAAEC) and advances many of the commitments and obligations set out in the NAAEC. The Council (comprised of cabinet-level or equivalent representatives of the Parties, or their designees) is the governing body of the Commission for Environmental Cooperation (CEC), which was established as part of the North American Agreement on Environmental Cooperation. The Council of the CEC approved Council Resolution 95-05 on 13 October 1995, at its second regular meeting, held in Oaxaca, Mexico.

Why was the Resolution Developed?

Council Resolution 95-05 was developed because the three countries recognize that cooperative actions for the sound management of chemicals are needed to protect and improve the environment and to achieve sustainable development. In particular, chemical pollutants transported across national boundaries through air and watersheds and traded products are widely recognized to be a major and shared concern. Persistent, bioaccumulative and toxic chemicals merit special attention under Council Resolution 95-05 because of the threat they pose to human health and ecosystem integrity. Many of these substances bioaccumulate to unacceptable levels in living organisms and certain of these substances have been associated with immune system dysfunction, reproductive deficits, developmental abnormalities, neurobehavioural impairment, and cancerous tumors. In addition, other short-lived, non-persistent chemicals, such as some pesticides, can be acutely toxic and cause extensive damage to human health and ecosystem integrity when used in inappropriate ways.

Pollution of the North American environment resulting from the unsound management of chemicals use debilitates not only the physical and ecological, but also the social and financial fabric of communities. The costs of undertaking remedial measures to improve degraded environments can place considerable strain on local, regional and national economies. The environment, once degraded, can rarely, if ever, be entirely rehabilitated within a time frame that meets human needs. Further, countries failing to lead the way in the sound management of chemicals miss out on the economic and foreign policy opportunities that arise from being a front-runner, including through export of leading technologies and services.

Given the problems and lost opportunities that can arise from the unsound use of chemicals, the three countries agreed that an effective means for advancing the sound management of chemicals was through a Council Resolution indicating the desire of the governments to work cooperatively for improving the sound management of chemicals while building upon their respective national, bilateral and international commitments.

What is the North American Working Group on the Sound Management of Chemicals?

Council Resolution 95-05 established “a Working Group comprised of two senior officials selected by each Party, whose duties involve the regulation and management of toxic substances, and who shall work with the Commission for Environmental Cooperation (CEC) to implement the decisions and commitments set out in the Resolution.” At the first regular meeting of the Working Group held in Mexico City on 6–7 December 1995, it was agreed that the full title of the group would be the North American Working Group on the Sound Management of Chemicals (see Annex B).

What are the Working Group’s Responsibilities and How is it Completing its Tasks?

The Working Group’s overall responsibility is to work with the Commission for Environmental Cooperation to implement the decisions and commitments contained in Resolution 95-05 on the Sound Management of Chemicals. In practice this means overseeing and guiding the work carried out under this initiative including work conducted by any subgroups that it establishes to complete specific tasks. Council Resolution 95-05 requires that the Working Group give priority to the management and control of substances of mutual concern that are persistent and toxic.

The Resolution allows the Working Group to advance other initiatives for the sound management of chemicals that go beyond a substance-by-substance approach. In particular, the Parties committed in Resolution 95-05 to: “*regional cooperation for the sound management, throughout their life cycles, of the full range of chemical substances of mutual concern including by pollution prevention, source reduction and pollution control.*” The Resolution assigned the Working Group with a number of specific tasks including to develop a regional action plan for the management and control of polychlorinated biphenyls (PCBs) and to develop regional action plans for three other priority persistent and toxic substances. It also tasked the Working Group with developing refined criteria for identifying persistent and toxic substances for regional action.

Decisions of the six members of the Working Group are taken by consensus in the spirit of cooperation that is reflected in Council Resolution 95-05.

What are North American Regional Action Plans and How are they Developed?

Resolution 95-05 specifically calls for the development of North American Regional Action Plans for selected persistent and toxic substance as a first priority in the Parties’ common desire to address national and regional concerns associated with the sound management of chemicals. The Action Plans reflect a long-term, shared commitment to regional action in this regard. Furthermore, the Parties work cooperatively by building upon international environmental agreements and existing policies and laws by bringing a regional perspective to international initiatives. At the same time, each Action Plan is unique and reflects the differentiated responsibilities of each of the countries, consistent with their respective production, use, and disposal practices for the particular substance.

The Working Group typically delegates a temporary task force that it establishes with development of a North American Regional Action Plan. The governments delegate experts from their respective agencies to the Task Force. In addition to the government members, the Task Forces will include multi-stakeholder observer members who contribute expertise and represent in a general way the interests of their constituencies. Typically, observer members represent industry, environment, and academia (with an emphasis on science-based knowledge). As the SMOC process has evolved, the Working Group has decided to broaden observer representation on task forces to include representatives from the healthcare sector and indigenous groups. The Secretariat provides a facilitation role by assisting with and

coordinating conference calls, meetings and workshops, translation of products, etc.).

During the NARAP development process, observer members on the Task Force are invited to be fully engaged in conversation. However, decisions are made by government delegates only on a consensus basis. Observer members are at liberty and encouraged to consult with their constituencies generally so as to convey advice to the Task Force regarding NARAP principles, goals, objectives, and desired actions, etc. that these constituencies would like to see reflected in the document. Consultation on NARAPs during the development stage also includes broad consultation at multi-stakeholder workshops hosted by the Task Force in conjunction with the Secretariat. Summaries of stakeholder presentations and comments are posted on the CEC web site.

Once the NARAP is approved by the Task Force, it is forwarded to the SMOC Working Group for its approval. Upon approval by the SMOC Working Group of the TF draft, this draft is then forwarded to government federal agencies that will have a role in administering the NARAP actions. The Task Force takes the intra-agency comments it receives into account in preparing the formal Public Consultation draft that is released with SMOC Working Group approval for broad North American public consultation (a six-week process). Once the draft is submitted for public consultation, all comments, directed to a focal point within the CEC Secretariat, are public comments and will be posted on the CEC web site. At the conclusion of the public consultation process, the Task Force determines whether changes to the draft are warranted in light of comments received. Its response at this juncture is as a trilateral body, as distinguished from individual governments offering proposals based on their domestic agendas. The Task Force forwards the post-consultation draft to the SMOC Working Group. This draft, once approved by the SMOC Working Group, may then undergo a final legal review by the respective ministries of State of the three countries, and those federal agencies that will be administering actions with the NARAP to ensure that the draft is legally in accordance with the respective federal laws of the three countries. The SMOC Working Group then forwards the Final Draft to the CEC Council for approval.

How are NARAP's Implemented?

Once a NARAP is adopted by the CEC Council, the SMOC Working Group typically forms an Implementation Task Force. This Task Force will likely include some members of the previous Task Force (based on their expertise and to ensure institutional follow-through), and potentially other nominees of the Parties who have expertise pertinent to the NARAP. The governments appoint their respective delegates to the ITF. The ITF may decide to consult on an *ad hoc* basis with experts from the private sector and civil society, and jurisdictions within their respective governments, on various aspects of implementation, at its discretion.

Once the ITF is formed, as a first step, it will develop an Implementation Work Plan, in which it will set priorities for implementation of actions, estimate costs of implementing the actions, develop a schedule for implementation and determine roles and responsibilities. Delegates of the Parties to the TF are responsible for conveying the Implementation Plan and tracking implementation of actions domestically.

The CEC supports implementation activities through provision of direct support for those actions involving SMOC Working Group oversight, and by seeking to leverage additional funding for specific trinational activities that have a capacity building dimension.

What Substances are the North American Regional Action Plans (NARAPs) Addressing?

Council Resolution 95-05 required that three substances, in addition to PCBs, be selected from among 12 persistent organic pollutants identified in the United Nations Environment Programme (UNEP) Governing Council Decision 18/32 of May 1995, and certain heavy metals, such as cadmium, mercury

and lead.

At its second meeting held in Washington on 25–26 January 1996, the Working Group decided that mercury, DDT and chlordane would be the subjects of North American Regional Action Plans (NARAPs), in addition to PCBs. These selections were made following consultation with colleagues, officials and interests from each of the respective countries. The selected substances are also the subject of other international forums, primarily because they are persistent, bioaccumulative and toxic and are transported across national boundaries through air and watersheds and traded products.

Subsequent to these decisions, substances have been nominated by a Party for trinational action via the *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative*. (The process is described on page 13.) As a result of recommendations resulting from this process, the CEC Council instructed the SMOC Working Group on 28 June 1999, to develop a NARAP for dioxins and furans, and hexachlorobenzene and a NARAP for environmental monitoring and assessment (Resolutions 99-01 and 99-02, respectively). On 19 June 2002, the CEC Council approved Resolution 02-07 instructing the SMOC Working Group to develop a NARAP on lindane.

Resolution 95-05 also applies to “*certain heavy metals*” which is the provision that enabled the development of the Action Plan on mercury and the consideration of lead as a candidate substance for regional action. The task force of the SMOC Working Group that implements the review process for candidate substances has determined that mutual concern exists among the three countries to act cooperatively on lead and are now in the final stage of that process, which involves preparation of decision document, inclusive of recommendations for actions. Subsequent to public consultation, a final draft decision document will be prepared and forwarded to the SMOC Working Group.

The CEC Council Communiqué issued in June 2000 also suggests that child health is an important component for consideration in all SMOC initiatives. While this aspect of health effects have always been taken into account in the process, the SMOC Working Group is careful to ensure that child health issues are fully considered within each Action Plan and in its deliberations on substances for trinational action.

What are the Objectives of the North American Regional Action Plan on PCBs?

The main objectives of the PCBs NARAP are to: a) work toward the virtual elimination of PCBs in the environment, which the task force is interpreting as no measurable release to the environment, and the phase-out of uses for which release cannot be contained; and b) propose environmentally sound management and control of existing PCBs, throughout their life cycles, with special emphasis given to transboundary shipment of PCBs for disposal/destruction purposes. As noted above a recent judicial decision in the United States prohibiting the import of PCBs for disposal/destruction will influence the implementation of some aspects of this NARAP, but other actions are continuing.

What is the Objective of the NARAP on DDT?

The main objective of the DDT NARAP is to reduce the exposure of humans and the environment to DDT and its metabolites through the phased reduction, and eventual elimination of DDT use for malaria control and the elimination of illegal uses of DDT.

The DDT NARAP promotes an integrated pest-management approach to malaria control to achieve plan objectives and actions. The plan includes objectives and actions for (a) elimination of illegal uses of DDT; (b) gradual reduction of DDT use for malaria control with a target of 80% (by volume) reduction in five years; (c) additional reductions based on cooperative action and experience; and (d) community involvement.

Mexico reduced its use of DDT by 90 percent (from 650 tons in 1996 to just 15 tons in 1999), and stopped the use of DDT entirely by 2000, exceeding by two years the North American Regional Action Plan's interim goal of an 80 percent reduction target for DDT use in Mexico by 2002 and continues to bring about reductions in the use of DDT.

While the objectives of the DDT NARAP have now been achieved, work related to capacity building, outreach and monitoring will continue. For example, recently, a Global Environment Facility (GEF) project has been approved for US\$7.5 million to extend the work completed in Mexico to countries in Central America. In addition, the Environmental Monitoring and Assessment Task Force (EM&A TF) will develop an air monitoring program for DDT and other substances to track trends over time. The Human Health sub-group of the EM&A TF is developing a human blood monitoring program in the three countries that will determine levels of DDT and other contaminants in selected human populations.

What is the Objective of the NARAP on Chlordane?

The objective of the Chlordane NARAP is to reduce the exposure of humans and the environment to chlordane through the phase-out of existing registered uses of chlordane.

Chlordane had limited use in the control of termites. The NARAP reflects an integrated pest management approach and called for the management of existing stocks and the phase-out of chlordane use in North America. This NARAP is essentially implemented. Chlordane is no longer made in North America, existing stocks have been depleted and the sale of the active ingredient is no longer authorized.

What are the Objectives of the NARAP on Mercury?

The Mercury NARAP, developed in two phases, has three main objectives:

Phase I

1. General Ambient Mercury Objective – Reduce mercury levels in, and fluxes among, selected indicative environmental media in order to approach natural levels and fluxes, thereby preventing or minimizing exposure of North American ecosystems, fish and wildlife, and humans to levels in excess of those that can be attributed to naturally occurring levels and fluxes of mercury in environmental media.
2. General Mercury Release Objective - Recognizing that mercury is a naturally occurring element that can never be eliminated from the environment, reduce the sources of anthropogenic mercury pollution that, when warranted, will be targeted for reduction through a life-cycle management approach so as to achieve naturally-occurring levels.

Phase II

3. Phasing out or banning specific mercury uses where there is an unreasonable or otherwise unmanageable risk of release to the environment of risk to human health

Major strategies for meeting these objectives are to:

- a) reduce mercury releases from specific human activities. This includes, but is not limited to, reductions of mercury releases from combustion sources, commercial processes, operations, products and waste streams;
- b) develop an enhanced capacity to measure and manage mercury, assess its impacts and communicate concerns and successes;

- c) establish an equitable implementation and compliance protocol; and
- d) promote continued appropriate and responsible mercury management initiatives on behalf of the governments, the industries and the citizens of North America.

The CEC, through the SMOC initiative, is advancing knowledge of mercury emissions via an inventory in Mexico and through support of a collaborative North American project that identifies areas within North America where concentrations are significantly higher than background levels. The project utilizes a compatible database that can be used to map and track such sites within North America.

How is the Work on NARAPs Progressing?

Task Force members have committed significant time and effort to their work. The Action Plans on PCBs, DDT, chlordane, Phase 1 of the Action Plan on mercury, and the substance selection process were all approved in 1997.

The second phase of the mercury Action Plan was approved by Council in June 2000 and implementation activities are underway with some priority actions, such as identification of mercury “hot spots” in North America, completed in 2001 and 2002. The implementation task force in 2003 completed an assessment of mechanisms for tracking mercury imports and exports throughout North America. Mexico has established two operational wet deposition sites that extend mercury deposition monitoring via the Mercury Deposition Network (NDM) to a continental basis. Capacity building work continues with the exchange of scientific expertise between the three countries. The mercury task force maintains a liaison with the UNEP Global Mercury Assessment and has demonstrated continental cooperation to other countries.

The implementation of the Action Plan for chlordane is complete. Chlordane is now no longer registered for use in Canada, the United States and Mexico and is no longer manufactured in North America.

The implementation of the DDT NARAP has involved several capacity building initiatives including proposals involving co-sponsors. The first such initiative, a joint Mexico/CEC/International Development Research Centre (Canada) project, focused on regions in the state of Oaxaca where malaria is particularly prevalent, and is providing information that is leading to a better understand the environmental and societal factors that lead to malaria outbreaks in incidence in hyper-endemic in these locations. This initiative is also aimed at developing environmentally safe, targeted malaria control measures and promoting the development of a community-based network for the diagnosis, treatment, surveillance and prevention of malaria. A second larger initiative involving the Global Environment Facility, the Pan American Health Organization, and the CEC was approved for funding in 2002 and is now being implemented. This initiative promotes collaboration between Mexico and its Central American neighbors (each of which is conducting a pilot project tailored to its specific geographic, climatic and social considerations). The project is aimed at development of effective means of malaria control (taking into account that both mosquito vectors and infected persons can migrate across borders within the region) without reliance on DDT.

Implementation of the Action Plan for PCBs has been influenced by a USA judicial decision to close the border to the import of PCBs for destruction in the United States although other aspects of the PCB Action Plan have continued. A March 2001 CEC experts workshop in Mexico examined destruction and disposal alternatives for PCBs in light of the border closure. The Task Force in June 2003 proposed goals for the environmentally sound management of PCBs as a substitute for the development of a code of practice on treatment/disposal of PCB wastes that is now moot given the US judicial decision. The final evaluation report on PCB NARAP implementation activities will be presented to the SMOC Working Group at its 16th Regular Meeting, at which the SMOC WG will determine whether additional actions are

required in light of these developments. The Task Force has also prepared a phase-out notification letter for consideration of the SMOC Working Group.

A North American Task Force on Dioxins and Furans, and Hexachlorobenzene is developing a North American Regional Action Plan on dioxins and furans, and hexachlorobenzene. The NARAP is being developed in two phases. Phase one emphasizes capacity building activities. The phase 2 NARAP will include both actions that are long-term in nature and actions that emphasize risk reduction. An initial stakeholder consultation meeting on potential substance of the Phase 1 NARAP was held October 23 and 24, 2001, in Mexico City. A draft of the Phase 1 NARAP developed was subsequently circulated for public comment by the CEC Secretariat during a 60-day consultation period (17 July–16 September 2003). The SMOC Working Group anticipates that it will have a final draft ready to forward to the CEC Council for its approval by June 2004. Task Force development of the Phase 2 NARAP is expected to commence in spring 2004, with completion in fall 2005.

The CEC Council in 1999 approved Resolution 92-02 for development of a North American Regional Action Plan on Environmental Monitoring and Assessment. The NARAP subsequently developed was approved on June 19, 2002. The NARAP is a cross-cutting plan that addresses all of the substance-specific plans, as well as health concerns. In 2002, a North American Steering Committee was appointed (one of the plan's actions) to oversee plan implementation and the work of six task groups. These groups will develop strategies for implementation of actions related to atmospheric deposition; terrestrial and aquatic ecosystems; human health; laboratory and sampling practices; data management and information sharing; and planning, synthesis and assessment. The work of these task groups will occur in some cases concurrently, and in others, incrementally, based on identified priorities in the Steering Committee's work plan and budgetary considerations. The membership of the Steering Committee includes the chairs of the NARAP task forces to ensure close coordination of effort.

Three of the environmental and monitoring task groups have developed work plans that they are now involved in implementing. These include the human health, atmospheric deposition and terrestrial and aquatic ecosystems groups. The work of the human health task group is the most advanced. Its members, which include senior level health officials from the three countries, is primarily focused in its first year on providing input and oversight for a CEC biomonitoring project that will provide a baseline of exposure for NARAP substances in North America and (based on 750 samples to be collected), while also building capacity for biomonitoring. The sites selected for sampling will include, in addition to those representative of the general population, some "hot spots" where exposure is suspected to be elevated. The project is funded by the CEC (for capacity-building work in Mexico related to mercury, lead and other metals), the World Bank (capacity building work in Mexico pertaining to persistent organic pollutants) and in-kind support from the three countries.

The North American Task Force on Lindane held its first meeting in July 2003 and its first public consultation with stakeholders 29 September 2003 in Guadalajara, Mexico. The task force plans to hold a stakeholder consultation on a subsequent draft of the NARAP in February 2004 in Alaska in conjunction with Alaskan Tribal Council. As with all NARAPs, the final task force draft will also be broadly circulated for North American consultation during a 60-day review period (summer 2004). The task force NARAP is expected to be ready for CEC Council approval by May 2005.

The status of substances being addressed under the Sound Management of Chemical initiative is listed in Table 1.

Table 1: Summary of the status of the chemical substances being addressed under the Sound Management of Chemicals initiative

SUBSTANCE	NOMINATION	EVALUATION	DECISION	DEVELOP ACTION PLAN	IMPLEMENTATION OF ACTION PLANS
DDT	*	*	✓	✓	✓
Chlordane	*	*	✓	✓	✓
PCB	*	*	✓	✓	✓
Mercury (Phase I and II)	*	*	✓	✓	Under way
Lead	✓	✓	Under way		
Lindane	✓	✓	✓	Under way	
Dioxins, Furans, and hexachloro-benzene	✓	✓	✓	Under way (two phases)	
Environmental Monitoring and Assessment	✓		✓	✓	Under way

✓ Indicates that this part of the process has been completed

* These substances were chosen directly as instructed in Resolution 95-05

How are Additional Candidates for North American Regional Action Plans Selected?

Once the Parties submit a nomination dossier to the Sound Management of Chemicals Working Group, it is then referred to the Substance Selection Task Force where it passes through the Council-approved evaluation process known as the *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative*. The Task Force is responsible for administering this process and once completed its recommendations are then forwarded to the Working Group. The nomination dossiers are working documents and are not official governmental or CEC documents. The process provides a number of opportunities for public review and comment. Following all public review stages, the decision document is submitted to the SMOC Working Group for its approval and decision as to whether to recommend trilateral action on the substance via a mechanism, such as development of a North American Regional Action Plan. As noted previously, the process for identifying candidate substances is itself currently being reviewed by the SMOC Working Group to determine how well it has worked thus far, and its adequacy as regards future direction under the SMOC initiative.

What is the Objective of the Report on Selection Criteria?

The main objective of the report on a *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative* is to provide refined criteria and a process for identifying persistent and toxic substances as potential candidates for future regional action, including the development and implementation of North American Regional Action Plans.

How is the Process on Selection Criteria Applied?

The Working Group has established a Substance Selection Task Force (SSTF) to guide nominated substances through the *Process for Identifying Candidate Substances for Regional Action under the*

Sound Management of Chemicals Initiative. The Task Force is composed of six governmental experts, two each for Canada, Mexico and the United States and typically includes three non-governmental experts (one from each country) from academia, industry and an environmental group.

Substances Under Evaluation

The Substance Selection Task Force will be recommending regional action on lead to the SMOC Working Group as part of the Decision Document it is finalizing subsequent to public comment. The document comprises the third and final stage of the process as applied to lead.

What other activities are being carried out by the Sound Management of Chemicals Program?

At the sixth regular meeting in Montreal on 21–22 May 1998, the Working Group agreed that there was a need for a capacity building framework that would serve as the context for guidance and regularized incorporation of capacity building measures within NARAPs and as regards support for their implementation. Subsequently, at its October 14–15 meeting in the same year, the Working Group established a Capacity Building Task Force to develop an overall framework to provide a context for the activities of the Implementation Task Forces. The *Strategic Framework for Capacity Building* developed by the Task Force was approved by the SMOC in fall 2000. The SMOC Working Group uses this framework as the basis for its application of capacity building both horizontally across its programs and as regards specific actions.

What is the Focus of Future SMOC Work?

The SMOC Working Group in the fall of 2003 began developing a public consultation document on its renewal and future directions. The document will take into consideration comments the SMOC Working Group has received during past meetings on activities that the SMOC Working Group might undertake as part of its mandate under Resolution 95-05. The SMOC Working Group will circulate a draft Future Directions document for public comment prior to finalizing its recommendations to the CEC Council. The SMOC Working Group will report on progress with regard to its Future Directions assessment to the CEC Council in June 2004.

How is the Public Involved?

The Working Group encourages active stakeholder participation at Working Group meetings. Meetings of the Working Group are generally held over three days. Stakeholders are asked to participate actively in the second day of the meeting. Working Group members brief stakeholders on the progress of their work and invite stakeholders to share their views on the meeting agenda and documents produced by the Working Group. Official representatives of the Working Group meet in private on the third day to conduct their business, taking into account the views of stakeholders.

Working Group task forces also include observer members who bring environmental non-profit, industry, academic and indigenous perspectives to development of Action Plans.

As well, when Action Plans are developed, they are distributed broadly by the CEC to stakeholders within North American and through domestic consultation mechanisms within each country. In addition, task forces may hold consultation meetings on draft Action Plans. For example, the Mercury Task Force held consultation meetings with industry, environmental and academic groups and the North American science communities as well as North American managers of mercury.

Drafts of CEC Sounds Management of Chemical Action Plans are also placed on the CEC's web site.

The Process for Identifying Candidate Substances for Regional Action under the Sound Management of

Chemicals Initiative provides for considerable public involvement. Forwarded nomination dossiers, as well as draft evaluation and decision documents developed under the process, are available for public review and comment and will be posted on the CEC home page: <http://www.cec.org>

How is the CEC Secretariat Involved?

Council Resolution 95-05 states that the CEC shall work with the Working Group to implement the decisions and commitments set out in the Resolution. The CEC is comprised of the Council (of cabinet-level or equivalent representatives), the Joint Public Advisory Committee (JPAC), and the Secretariat, which is located in Montreal. The CEC Secretariat is providing support for the Working Group and its Task Forces within the limits of its resources, including administrative, coordination, technical and translation services.

How does this Initiative Relate to Other Initiatives Involving the CEC?

This initiative is part of the CEC's program on "Protecting Human Health and the Environment" and is aimed at reducing risk. As such, it is closely related and interacts with the CEC's North American Pollutant Release and Transfer Register Project) the CEC's initiative on Children's Health and the Environment in North America, the CEC's program on Cooperation on North American Air Quality Issues, and the Capacity Building for Pollution Prevention initiative. The SMOC initiative is also linked to the CEC's Enforcement Cooperation Program. The North American Working Group on Environmental Enforcement and Compliance Cooperation, constituted by Council in August 1996, will be an ongoing point of contact.

In addition, the Secretariat of the CEC report under Article 13 of the North American Agreement on Environmental Cooperation entitled "Continental Pollutant Pathways" addresses many aspects of the Sound Management of Chemicals.

How does this Initiative Relate to Other International Initiatives?

Throughout its work, the SMOC Working Group considers this North American initiative to be a means of contributing to the development of the global environmental agenda, in addition to providing a vehicle for implementing other international commitments related to the Sound Management of Chemicals.

Decision 18/32 of the Governing Council of the United Nations Environment Program, which was taken in May of 1995, produced the list of 12 persistent organic pollutants that have subsequently been listed within the annexes to the Stockholm Convention on Persistent Organic Pollutants.

All of the "Dirty Dozen" substances listed in the UNEP Governing Council Decision and subsequently, in the Stockholm Convention that was signed 23 May 2001, were considered by the Working Group when developing the initial list of substances to be addressed by North American Regional Action Plans. Most of the substances that were not chosen are no longer used or manufactured in Canada, Mexico and the United States. The Parties agreed, however, to work together to promote action on these substances in other international forums.

The North American Regional Action Plans on DDT, chlordane and PCBs can be viewed as specific regional responses to the UNEP Decision. Similarly, the Action Plan on dioxins and furans, and hexachlorobenzene now under development will address three other substances that are on the UNEP list. The CEC POPs substances chlordane, DDT, dioxins, furans, hexachlorobenzene, and PCBs are also listed substances in the Stockholm Convention on Persistent Organic Pollutants. The CEC work on mercury has also helped to inform the UNEP Global Mercury Assessment.

All the Action Plans and the process for evaluation of nominated candidate substances are also relevant to

the United Nations Economic Commission for Europe (UN ECE) protocols on persistent organic pollutants and metals negotiated under the Convention on Long Range Transboundary Air Pollution.

Another likely example of how this initiative could have considerable relevance to other international work is the Action Plan for DDT, which has been expanded to include Central America under the GEF proposal. The transboundary nature of malaria makes it particularly important that these countries be kept informed of activities under this Action Plan and that they be approached to work cooperatively to reduce the incidence of the disease. This Plan developed through the efforts of the three NAFTA countries, could serve as a model for other nations, not only for collaborative work on DDT, but also on other POPs.

The experience gained in negotiating the Action Plans on PCBs, mercury, DDT and chlordane, and with the evaluation of nominated persistent organic substances (POPs) and certain heavy metals will, it is anticipated, also be relevant to other regions.

What are the linkages between the SMOC initiative and the Stockholm Convention on Persistent Organic Pollutants?

While each Party to the Stockholm Convention is obligated to prepare its own National Implementation Plan, the CEC NARAPs can be considered as a framework for action by the CEC member states, all of whom are signatories to the Stockholm Convention.

The SMOC Working Group is currently reviewing the NARAPs to determine where they address provisions of the Stockholm Convention and whether opportunities exist for additional trilateral collaboration via the NARAPs or additional efforts is warranted in light of obligations under the convention. The Sound Management of Chemicals initiative is directly relevant to the Stockholm Convention that was signed in May 2001. It is anticipated that actions taken under the Sound Management of Chemicals initiative will enable Canada, Mexico and the United States to be among the first countries to ratify this new international convention. All three countries have already signed the convention.

Through discussions with the World Bank, a US\$750,000 project has been identified to support the development of Mexico's National Implementation Plan. The CEC has been identified as the executing agency for this project. The details of this project are currently being developed.

Appendix 3: NARAP achievements under the SMOC initiative

Substance-specific NARAPs

The SMOC initiative initially focused on development of North American Regional Action Plans (NARAPs) for substances selected by the CEC Council. The Council's instruction relative to development of a NARAP on PCBs is provided in Resolution 95-05. The CEC Council subsequently informed the SMOC Working Group in 1996 that NARAPs should be developed on chlordane and DDT (both substances on the UNEP GC Council Decision 18/32) and mercury. The CEC Council subsequently approved the NARAPs developed by the SMOC Working Group for these substances, i.e., PCBs (1996); DDT (1997); Chlordane (1997); and Mercury (Phase 1 NARAP 1997; Phase 2 NARAP 2000). Two of three NARAPs on persistent organic pollutants have been profiled as leading examples in the International Forum on Chemical Safety (IFCS) and Intergovernmental Negotiating Sessions (INCs) leading to the Stockholm Agreement (1996-2002). The mercury NARAP has also helped to inform the work of UNEP relative to its global assessment on mercury.

The SMOC Working Group, working in close coordination with the CEC Secretariat, also developed a *Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative* as called for in Resolution 95-05 and approved by the CEC Council in 1997 (full text of the process can be downloaded from the CEC web site). Mercury was submitted to the process to test its utility to metals after its selection by Council. Other substances submitted to the process following their nomination by one or more of the Parties include dioxins, furans, hexachlorobenzene; lindane; and lead. As an outgrowth of application of the process to the latter five substances, the following activities are in progress:

- The CEC Council instructed the SMOC Working Group on June 28, 1999, to develop a NARAP that would address dioxins and furans, and hexachlorobenzene as a cluster of substances. The task force appointed by the SMOC Working Group to develop the NARAP subsequently determined with SMOC approval to address co-planar PCBs in this cluster, given that they are also produced as by-products of combustion and have “dioxin-like” toxicity. The task force is developing the NARAP in two phases. Phase 1, which emphasizes science-based capacity building activities, is being refined based on public consultation and is expected to be forwarded by the SMOC Working Group to the Council for its approval in June 2004. Work on Phase 2, which will emphasize risk reduction activities and actions that are long-term in nature, will commence in June 2004.
- In July 2002, the CEC Council approved Resolution 02-07 instructing the SMOC Working Group to develop a NARAP on lindane. A task force of the SMOC Working Group is currently engaged in development of this NARAP. The task force held stakeholder consultations in September 2003 and February 2004 to solicit input regarding elements that should appear in the NARAP. The Task Force anticipates that it will have a draft NARAP ready to distribute for public comment in the winter of 2005, and a final plan ready for Council approval by May 2005.
- The public has been consulted on a draft decision document on lead developed by the Substance Selection Task Force in response to the United States nomination of this substance for potential trilateral action. The task force is currently reviewing the comments and will send the final document to the SMOC Working Group, which will then determine whether to recommend a NARAP on lead to the SMOC Council. This recommendation is expected to be forwarded prior to June 2004.

The North American Regional Action Plans on chlordane, DDT, and PCBs can be viewed as specific regional responses to the UNEP Governing Council Decision. Similarly the action plan on dioxins and furans, and hexachlorobenzene will address three other substances that are on the UNEP “dirty dozen” list

(the same 12 persistent organic pollutants that are listed in the Stockholm Convention on Persistent Organic Pollutants). Most of the substances that were not chosen (aldrin, dieldrin, endrin, heptachlor, mirex and toxaphene) are no longer manufactured or registered for use in Canada, Mexico and the United States. The SMOC Working Group determined that there would not be sufficient value to addressing these substances on a trilateral basis.

The NARAPs and fact sheets describing progress in implementing them may be downloaded from the CEC website at www.CEC.org.

Horizontal NARAPs

The CEC Council, in addition to calling for substance specific NARAPs, in 19 June 2002 approved a North American Environmental Monitoring and Assessment NARAP that it requested via Resolution 99-02. This NARAP is a cross-cutting plan that addresses pathways of exposure and which will establish North American baselines from which to assess progress for all of the substance that are the subject of CEC NARAPs.

In 2002, a North American Steering Committee was appointed to oversee plan implementation and the work of six task groups (atmospheric deposition; terrestrial and aquatic ecosystems; human health; laboratory and sampling practices; data management and information sharing; and planning, synthesis and assessment). The work of these task groups will occur in some cases concurrently, and in others, incrementally, based on identified priorities in the Steering Committee's work plan and budgetary considerations. The membership of the Steering Committee includes the chairs of the NARAP task forces to ensure close coordination of effort.

Three of the environmental and monitoring task groups have developed work plans that they are now involved in implementing. These include the human health, atmospheric deposition and terrestrial and aquatic ecosystems groups. The work of the human health task group is the most advanced. Its members, which include senior level health officials from the three countries, is primarily focused in its first year on providing input and oversight for a CEC biomonitoring project that will build North American capacity regarding exposure to NARAP substances.

SMOC Working Group policies

In addition to development of NARAPs, the SMOC Working Group has developed and approved policies that are designed to ensure continuity with respect to NARAP oversight activities. Once NARAPs are approved, an implementation task force is established in place of the initial task force that developed the plan. The implementation task forces report on implementation progress to the Working Group during scheduled teleconferences and at the regular meetings of the Working Group.

Where NARAPs are deemed to have been implemented, save for activities that ongoing in nature and have therefore been institutionalized within each nation's domestic programs and policies, the SMOC requires the NARAP task force to develop a final evaluation report. Once the SMOC Working Group has approved the evaluation report, the task force submits a closeout notification to the SMOC WG. This notification includes designation of "focal points" by the respective countries and identification of agencies that will have a role at the national level in ongoing implementation activities that have been institutionalized within national programs. The close-out notifications includes a reporting schedule for periodically informing the SMOC Working Group and head of the Secretariat's Pollutants and Health program of ongoing implementation activities and any issues that may arise pertaining to implementation. The Secretariat may post these reports on its website. These reports will also be provided for informational purposes to the CEC's pollutant release and transfer register program manager to support internal linkages among programs that pertain to chemicals.

Appendix 4: Capacity-building achievements under the SMOC Initiative

At the sixth regular meeting in Montreal on 21-22 May 1998, the Working Group agreed to develop a capacity building framework for guidance and systematic incorporation of capacity building measures within NARAPs. In October 14-15 1998, the Working Group established a Capacity Building Task Force to develop *Strategic Framework for Capacity Building*. The framework developed by the Task Force was endorsed by the SMOC Working Group in 2001.

In 2002, the CEC Council directed the SMOC Working Group to take additional steps to strengthen capacity building activities. The SMOC Working Group, working with the CEC Secretariat, developed a *Leveraging Strategy* intended to attract additional resources to work under the SMOC initiative.

In its development of this strategy the SMOC Working Group recognized that while the CEC Secretariat budget for the SMOC initiative has remained relatively stable at about C\$900,000 per year, the number of activities and implementation commitments have grown. Some implementation commitments, such as monitoring, require substantial resources, not all of which can be covered through national program budgets and in-kind contributions that the three countries have used to supplement the CEC SMOC budget or which can be addressed through incremental implementation strategies for actions.

The objectives of the SMOC Leveraging Strategy for capacity building are to expand the financial and human resources available for NARAP implementation by promoting SMOC project ideas as opportunities for other delivery agents (e.g., international financial institutions; IFIs, non-government organizations, universities, non-profit institutes and private sector organizations); and to identify and undertake project/partnership opportunities with international financial institutions, regional and multilateral organizations and other appropriate groups.

The plan of action for the leveraging strategy requires that:

- a. SMOC Implementation Task Forces and the CEC Secretariat review NARAPs and related CEC Initiatives such as the Children's Health Initiative (see JPAC Advice to Council No. 02-01) for important work items that could comprise fundable projects;
- b. SMOC NARAP Development Task Forces and the CEC Secretariat take this strategy into consideration in the development of new NARAPs;
- c. Implementation Task Forces determine in consultation with the CEC Secretariat which projects will be taken on internal to the SMOC Program and which will be advanced in cooperation with other delivery agents;
- d. Potential delivery agents be made aware of project ideas that present opportunities for them to become involved;
- e. Task Forces, supported by the CEC Secretariat, preparing to work with delivery agents at the proposal stage (i.e., to provide guidance, intellectual value added and comments);
- f. The SMOC Working Group and/or Task Forces provide letters of support (and other supportive actions as needed and appropriate) for a proposal produced by a third party delivery agent; and
- g. If successful, one or more Task Force members will sit on the project advisory committee as a quid pro quo for proposal support and to ensure consistent and timely reporting against NARAP work items or other related CEC programming as appropriate (e.g., children's health).

While the leveraging strategy is still "young" some early successes have been achieved. The SMOC Working Group, in conjunction with the Secretariat, has leveraged funds for capacity building assistance to Mexico in preparations relative to its development of a National Implementation Plan (NIP) under the Stockholm Convention. This work resulted in the CEC being designated as an Executing Agency for GEF

funds to Mexico for development of its NIP and accords well with the integrated chemicals management emphasis being taken by the Working Group.

The SMOC Working Group, working with the Secretariat, developed a proposal for a North American biomonitoring project that is funded by the CEC (for capacity-building work in Mexico related to mercury, lead and other metals), the World Bank (capacity building work in Mexico pertaining to persistent organic pollutants) and in-kind support from the three countries. The project will provide a baseline of exposure for NARAP substances in North America and (based on 750 samples to be collected), while also building capacity for biomonitoring. The sites selected for sampling will include, in addition to those representative of the general population, some “hot spots” where exposure is suspected to be elevated. Oversight for the project is provided by the Health Group of the Environmental and Monitoring Task Force.

Appendix 5: SMOC Pollution Prevention Achievements and International P2 Initiatives

SMOC Pollution Prevention in NARAP

Pollution Prevention is a component of North American Regional Action Plans. For example, the North American Regional Action Plan on Mercury includes several actions that call upon specific industrial, and health care sectors to utilize substitution and product stewardship to reduce or eliminate mercury in products and waste streams. Similarly, the North American Regional Action Plan on PCBs, in addition to listing virtual elimination of PCBs in the environment as an over-arching objectives, calls for phase-out of PCB uses for which release cannot be contained and includes a pollution prevention principle, which states that the countries, through implementation of the NARAP, “will promote pollution prevention as an effective strategy for managing PCBs and protecting human health and the environment.” The DDT plan includes measures that are intended to result in pollution prevention (research on less toxic and persistent alternatives; more targeted application of pesticides, etc.). The major thrust of the draft Phase 1 NARAP on dioxins and furans, and hexachlorobenzene is capacity building so as to provide a common basis of understanding and baseline information from which the Parties can proceed to consider risk reduction and pathway intervention options. NARAPs also include actions for applying best practices and environmentally sound management, including at the facility level.

Pollution prevention and cleaner production networks

Pollution prevention initiatives that operate internationally and on a continental level are relatively recent. For example, the first International Pollution Prevention Summit was held in October 2000, hosted by Canada.

The Pollution Prevention World Information Network (P2WIN) is a global, internet-based network that brings pollution prevention roundtables and cleaner production networks together on a “virtual” basis and via occasional roundtables to strengthen partnerships, encourage innovation and take collective action.

P2WIN notes that, at present, its practitioners and decision makers do not have a formalized means of exchanging information or acting collectively at the global level to advance cleaner production. It does provide progress reports on pollution prevention efforts globally and provides links to regional organizations, journals, newsletters, etc.

On a North American basis, the CEC established a capacity building program for pollution prevention in 1995. The program has as its overall objective fostering introduction of pollution prevention initiatives in economic activities in North America and development of the necessary capacities in Mexico to spread the concept of pollution prevention, taking advantage of pollution prevention capacity that already exists in Canada and the United States. Activities undertaken in 2003 have included development of the North American component of the Pollution Prevention World Information Network; training sessions on use of the network during annual round table meetings; identification of organizations that can facilitate information exchange, and cooperation on pollution prevention within electronics scrap industries in the region. Mexico, as part of this effort is also working to create regional centers and implement environmental management systems in small- and medium-sized enterprises. Also as an outgrowth of this program, a pilot fund for fostering pollution prevention efforts in Mexico was created under CEC Council Resolution 96-12. As of November 2002, US \$1.5 million in loans had been granted for 48 projects of which 25 were in the tanning industry sector.

In April 2002, the chairs of the Canadian, Mexican and US P2 roundtables signed a North American Pollution Prevention Declaration (NAP3), which has as its mission advancement of environmental protection through pollution prevention. The goals of the declaration are to advance pollution prevention policy within each country and continentally, to share information and to enhance financial and technical resources for implementation of P2 programs in North America.

Cleaner production efforts also fall under the rubric of pollution prevention.

Internationally, cleaner production efforts have operated for the past decade. The UNIDO/UNEP Programme for National Cleaner Production Centres (NCPs) was developed to further development of the Cleaner Production concept at the national level. It is administered by the United Nations Industrial Development Organisation (UNIDO), which works in close association with the United Nations Environment Programme (UNEP). UNIDO is responsible for overall administration, local liaison (through UNIDO Country Offices), and provision of industrial expertise, especially for sectoral industrial demonstrations. UNEP provides strategic environmental expertise in training, information and policy analysis.

The European Roundtable on Cleaner Production (ERCP) is a non-profit organization that seeks to stimulate, develop and disseminate new initiatives that foster cleaner production concepts.

In August 1998, delegates from Latin American, Canada and the U.S. launch the Roundtable of the Americas for Cleaner Production.

North American stewardship activities

The best known chemical industry stewardship initiative is Responsible Care®, first conceived in Canada in 1985. Responsible Care has evolved into a global chemical industry initiative that is implemented at the national level by companies working through their national associations. It is operative in 47 countries. The initiative promotes cooperation with governments and organizations in development of regulations and standards, and helps countries to meet or exceed these requirements. It includes a verification component and emphasizes reporting out of its successes.

There are also numerous government programs, or elements of programs that promote industry stewardship with respect to pollution prevention as it applies to chemicals management. These include challenge programs, such as the US EPA's former 33/50 program aimed at reduction of reduced releases of toxics (concluded in 1996) and the current Common Sense Initiative, Green Lights, Design for the Environment, and Energy Star program. Similarly, Canada's highly successful Accelerated Reduction/Elimination of Toxics (ARET), program, which ran from 1994 to 2000, has been replaced by a focused Environmental Performance Agreements program, implementation of Extended Producer Responsibility initiatives, and the building of capacity within small and medium-size enterprises. Such programs are helping to reduce use and releases of a range of potentially harmful chemicals based on facility process changes and a variety of other P2 measures.

Integrated chemical risk and hazards assessments

Internationally (European Union, OECD, etc.) and in North American, within Canada (as mandated under its Canadian Environmental Protection Act, 1999), and the United States (as called for in Toxic Substances Control Act (TSCA), a variety of programs and policies, as well as specific methodologies and tools, have been developed that seek to accelerate screening of the many thousands of existing chemicals (including reviews of previously registered chemicals) with initial priority on high-production volume chemicals. There are also a number of assessment efforts underway that promote and require use of pollution prevention screening tools which are intended to promote sustainable or "green" chemicals, while discouraging development of or screening out harmful chemicals, such as persistent and toxic chemicals at the early developmental or research stage. Methodologies for screening chemicals for which little analytical effects data is available have been developed that enable industry to identify risks based on chemical categories for substances. At the same time, there is increased emphasis on public accessibility to data that results from assessments. These efforts all have in common their intent of improved chemicals management achieved through greater integration of pollution prevention into the fabric of assessment efforts so as to achieve improved protection of human health and the environment.

Appendix 6: SMOC pollution prevention methodology for identifying and engaging high-priority industrial sectors in P2 and ESM

A potential approach for implementing activities proposed in Chapter 2.0 of this document as they relate to corporate stewardship includes the following:

- establish an *Ad Hoc Task Force on North American Sectoral Approaches to Pollution Prevention and ESM for the Sound Management of Chemicals*. The task force would be charged with identifying high-priority sectors for possible outreach to improve ESM and P2. The Task Force would develop criteria to assist it in its selection of sectors, for example:
 - the sector has production and sales in all three national markets;
 - the sector is a source of significant environmental stressors;
 - the sector generates substances that are on short-lists of each country;
 - pollution prevention activities will have significant multi-pollutant benefits;
 - a trilateral pollution prevention effort will build on (rather than duplicate) commitments and work on pollution prevention already underway by the sector through other venues, as well as “tap” expertise developed as a result of past successes by the sector relative to its operations in one or more of the three countries; and
 - transaction costs will be appropriate to the outcome anticipated;

Upon completion of its assessment, the Task Force will provide a status report to the CEC Council on actions it has identified to engage high-priority industrial sectors in P2 and ESM activities, such as industry challenges aimed at widespread trilateral implementation of ESM and development of P2 plans at the facility level.