SOUND MANAGEMENT OF CHEMICALS THROUGH NORTH AMERICAN REGIONAL ACTION PLANS

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Introduction

As a parallel side agreement to the North American Free Trade Agreement (NAFTA), on January 1, 1994 representatives from Canada, Mexico, and the United States signed the North American Agreement on Environmental Cooperation (NAAEC). A Commission for Environmental Cooperation (CEC) was formed, governed by a Council consisting of cabinet-level or equivalent representatives from the three Parties, along with a Joint Public Advisory Committee to provide technical, administrative, and operational support to the CEC and CEC established groups.

Council Resolution #95-5 on the Sound Management of Chemicals (SMOC)

Council Resolution #95-5 on the Sound Management of Chemicals (SMOC) (October 13, 1995 in Oaxaca, Mexico) provided a framework for the three North American countries to work on joint environmental projects related to interdependent ecosystems resources (land, air, water, flora, and fauna) and transboundary transport of toxic substances. The agreement identified in particular certain persistent toxic substances that bioaccumulate in living organisms and are associated with a range of specific adverse effects to humans and the environment. There was also a special provision for addressing "certain heavy metals." SMOC builds upon existing multilateral and bilateral agreements such as the 1978 Canada-US Great Lakes Water Quality Agreement, and reaffirms Agenda 21, adopted at the 1992 United Nations Conference on Environment and Development on sound management of chemicals¹.

Initial SMOC Activities for Persistent Toxic Substances

Under Council Resolution #95-5, an agreement was made for the development of a North American Regional Action Plan (NARAP) for polychlorinated biphenyls (PCBs)². In addition, the Council agreed to develop criteria for the selection of additional persistent toxic substances for action by November 15, 1995, and for the identification of three priority persistent toxic substances by June 15, 1996 for NARAP development. These three additional substances were to be selected from the UNEP (United Nations Environment Programme) 12 POPs (Persistent Organic Pollutants) agreed to by Governing Council Decision 18/32 of May 1995, as well as certain heavy metals such as cadmium, mercury, and lead. SMOC also identified goals for improving capacity for monitoring, research, and information sharing, as well as technical cooperation and joint approaches. Moreover, the agreement encouraged the development of meaningful participation by the public, including NGOs, business, industry, provincial, state, municipal governments, academia, and policy experts.

Criteria for Identification of Candidate Substances

A Substance Selection Task Force (SSTF) composed of two governmental and one nongovernmental expert from each of the three countries serves to assess nominated substances according to principles agreed to by the Parties in the "Process for Identifying Candidate

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Substances for Regional Action under the Sound Management of Chemicals Initiative." The SSTF process consists of three stages: Stage I or Nomination Stage, Stage II or Evaluation Stage, and Stage III or Decision Stage. In the Nomination Stage, a Nomination Package containing standard types of information is prepared by one or more of the Parties that permits SSTF to assess if adequate justification exists to proceed to the next Stage. The second, or Evaluation Stage, consists of two parts (A and B). Part A, a Screening Evaluation, assesses whether further consideration is warranted based upon scientific evidence with respect to environmental releases, transboundary transport, persistence, and bioaccumulation. In Part B, a Mutual Concern Evaluation determines the degree to which trilateral concern exists, and concludes whether or not the Parties would gain mutual benefits. In Stage III, the Decision Stage, recommendations are made in the form of a Draft Decision Document for (1) development of a NARAP, (2) alternative action, or (3) no action. This stage also provides an opportunity to identify potential implementation issues³.

Three Additional Priority Substances

At the 2nd SMOC meeting held January 25-26, 1996, in Washington, DC, the Working Group selected mercury⁴, DDT⁵, and chlordane⁶ as the next three chemicals for development of NARAPs, and established four Task Forces for this purpose, including one for PCBs. At the 5th SMOC Meeting in Chicago, December 9-10, 1997, stakeholders were provided an opportunity to comment on draft NARAPs for the four substances, as well as on the process for identifying additional candidate chemicals ("Process for Identifying Candidate Substances for Regional Action under the Sound Management of Chemicals Initiative"). Although the Working Group initially reviewed the 12 substances of the UNEP POPs list, a number were not considered further since they were pesticides no longer in use in Canada, Mexico, or the United States.

PCBs

Three goals for PCBs were identified in the December, 1996 Regional Action $Plan^2$, which addresses in detail the implementation of each. These consist of (1) virtual elimination from the environment (no measurable releases and phase out of uses for which releases cannot be controlled), (2) environmentally sound management for existing PCB stocks (use, storage, transport, and disposal), and (3) management as part of a comprehensive regional program. Although the Plan envisioned the possibility of destruction in the United States of PCB wastes from Mexico, this cannot be accomplished due to a recent US court decision that prohibited imports of PCBs into the United States.

Mercury

Phase 1 of the Action Plan for mercury was approved in 1997, and Phase 2 will be available in 2000 for Council approval. Phase 1 has two objectives: (1) reduce mercury levels in selected environmental media to prevent or minimize exposure above naturally occurring levels, and (2) reduce sources of anthropogenic mercury through life-cycle management. Phase 2 will address specific mercury uses posing an unreasonable or unmanageable risk⁴. Reductions from combustion sources, commercial processes, operations, products and waste streams represent goals within both phases; an additional goal is to increase capacity to measure and monitor mercury, assess its impacts, and communicate concerns and successes. Finally, the Action Plan seeks to establish an equitable implementation and compliance protocol.

DDT

The 1996 DDT NARAP seeks to work towards elimination of DDT for malaria control, as well as illegal uses⁵. Limited government use of DDT for malaria control is allowed in Mexico, and the government is ahead of schedule in meeting its goal of an 80% reduction within five years. The initial DDT initiative consists of a joint Mexico/CEC/International Research Centre (Canada) project to understand environmental and societal factors related to endemic malaria in the state of Oaxaca. The goal is to develop environmentally safe malaria control measures as well as a community-based network for malaria diagnosis, treatment, surveillance, and prevention. A second initiative with the Pan American Health Organization will be directed towards collaboration of Mexico with Latin American neighbors to develop malaria control strategies not dependent upon DDT.

Chlordane

At the time of the June 1997 NARAP for chlordane, this substance was no longer registered for use in Canada and the United States, and use in Mexico was limited to termite control in urban areas⁶. Chlordane for this use was imported from the United States, but the sole US manufacturer voluntarily ceased production in May 1997 in the US and around the world. The Plan under the NARAP was to identify alternate control strategies to permit Mexico to phase out registered uses by 1998. This NARAP is essentially implemented as chlordane stocks are exhausted and sale is no longer permitted.

Additional Substances for NARAP Consideration

Nomination dossiers were prepared by the Substance Selection Task Force (SSTF) for hexachlorobenzene⁷, dioxins and furans⁸, lindane⁹, and lead for consideration by the Working Group at its 6th meeting in Montreal, Quebec, May 21-22, 1998. Subsequently, Council Resolution 99-1 directed that a combined Action Plan be developed for dioxins and furans, and for hexachlorobenzene. Evaluations for lindane and lead are in progress¹.

Other Related CEC Initiatives

Other CEC initiatives that, like SMOC, are part of the program on "Protecting Human Health and the Environment," include NAPRI (North American Pollutant Release Inventory), North American Air Monitoring and Modeling, and Transboundary Environmental Impact Assessment. Under Article 13 of NAAEC, the CEC prepared a recent report entitled "Continental Pollutant Pathways." SMOC is also linked to the CEC's August 1996 North American Working Group on Environmental Enforcement and Compliance Cooperation.

Relationship of SMOC to Other International Activities

As indicated above, under CEC Council Resolution #95-5 initial substances for NARAP development were selected from the list of 12 UNEP POPs chemicals. These include PCBs, DDT, chlordane, dioxins, furans, and hexachlorobenzene. Carrying out these NARAPs will better position Canada, Mexico, and the US to provide a leadership role in the implementation of the UNEP POPs protocol for these chemicals. In addition, these SMOC initiatives are also relevant to evaluation of protocols on persistent organic pollutants and metals for the UN ECE (United Nations Economic Commission for Europe) under LRTAP (Convention on Long-Range Transboundary Air Pollution). Future collaboration between Mexico and its Latin American neighbors for phasing out DDT for malaria control was mentioned above.

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