International Environmental Law

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The body of international environmental law continued to expand in 1996. Important new agreements were concluded concerning liability for environmental damage arising from the release of hazardous and noxious substances transported at sea and on protecting the world's migratory fish stocks. The year was also marked by important developments regarding the expansion of international commitments to address climate change, chemicals management, transboundary shipments of hazardous wastes and recyclables, the environmental impact of long-range transboundary air pollution, and the environmental and social challenges posed by human settlements.

Trade and environment issues also figured prominently in 1996 with the Appellate Body of the World Trade Organization (WTO) finding that United States reformulated gasoline regulations promulgated under the Clean Air Act Amendments of 1990 were discriminatory and inconsistent with international trade rules. Cooperation on a broad range of environmental issues also continued among the Parties to the North American Free Trade Agreement (NAFTA) under NAFTA's environmental side agreement. Negotiators from member countries to the Organization for Economic Cooperation and Development (OECD) responsible for drafting a future Multilateral Agreement on Investment (MAI) also began discussions on whether the MAI should include environmental provisions.

The U.S. General Accounting Office reported in 1996 that since the 1972 United Nations Conference on the Human Environment, the number of environmental agreements in which the United States participates or has a significant interest has grown from fewer than 50 to more than 170. Looking ahead to 1997, it is likely that the events of the coming year may match the achievements of 1972 and even 1992, the year of the U.N. Conference on Environment and Development (UNCED) in Rio de Janeiro, in terms of the number of multilateral environmental agreements that are likely to be concluded or expanded.

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The year will be marked by the Fifth Session of the Commission on Sustainable Development (CSD), which since 1992 has met annually to review national and international progress toward the implementation of the commitments made at UNCED, particularly those contained in Agenda 21 concerning sustainable development. More importantly, the U.N. General Assembly is scheduled to hold a Special Session from June 23-27, 1997, to reconfirm the commitments made at UNCED, review international progress in implementing Agenda 21, and consider further actions necessary to pursue the goal of sustainable development. This 1997 Special Session of the U.N. (termed the "Earth Summit + 5" meeting) will address a range of issues related to environmental protection, sustainable development, trade, technology transfer, and poverty. The meeting is expected to energize ongoing negotiations on multilateral environmental agreements and other international environmental initiatives within regional and global environment, trade, and economic fora. Some of the more significant international environmental developments of 1996 (many of which will carry into 1997) are highlighted below.

I. Multilateral Environmental Agreements

A. HNS Convention

In May 1996, a diplomatic conference convened under the auspices of the International Maritime Organization (IMO) adopted the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention).[1] The HNS Convention is a freestanding convention that, when in force, will provide a uniform international legal regime intended to ensure prompt and adequate compensation to an individual or State that has suffered damages in connection with the carriage of hazardous and noxious substances by sea.

The Convention imposes strict liability on the owners of vessels carrying hazardous and noxious substances at sea or any damage arising from such carriage. The Convention defines "damage" broadly to include: (1) loss of life and personal injury; (2) property damage outside the ship; (3) damage to the environment; and (4) costs of preventive measures.[2] Shipowners can avoid liability by proving one of four defenses relating to: (1) acts of war; (2) acts or omissions by third parties done with the intent to cause harm; (3) harm arising from the negligence of governments; and (4) damage caused by the failure of a shipper to provide information on the hazardous and noxious nature of the shipped substances.

The term "hazardous and noxious substances" is defined broadly to include more than 6,000 bulk and packaged substances. Certain materials, such as radioactive materials and materials that are hazardous when in bulk (*e.g.*, coal, wood chips) are excluded from the Convention. The provisions of the Convention apply generally from the time when hazardous and noxious substances are loaded onto a ship to the point in time when the materials are off-loaded. The Convention covers environmental damage caused in the territory, including territorial sea of a Party and in a state's exclusive economic zone (EEZ).

The Convention also places limits on shipowner liability based on ship tonnage. Shipowners must maintain insurance or other financial guarantee sufficient to cover potential liabilities established under the Convention. Compensation for damages above the limits on shipowner

1. The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, *opened for signature* October 1, 1996, 35 I.L.M. 1406 (not yet in force).

2. *Id.* art. 1, para. 6.

liability set forth in the Convention can be obtained from an "HNS Fund" established under the agreement and funded by receivers or importers of hazardous and noxious substances in contracting states. The HNS Convention, adopted by acclamation by more than seventy countries, is open for signature from October 1, 1996, to September 30, 1997, at IMO Headquarters in London, but has not yet entered into force. Although active in the negotiation of the Convention, the United States has not yet signed the agreement.

B. Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (FCCC or Framework Convention) was opened for signature in June of 1992 at the U.N. Conference in Rio de Janeiro and entered into force on March 21, 1994.[3] The FCCC was the response of the international community to growing concerns regarding the impact of human activity on the global climate. Those concerns are comprehensively addressed in the associated work of the Intergovernmental Panel on Climate Change (IPCC), which was established by the United Nations in 1988 to develop scientific assessments of the scope, timing, and potential impacts of climate change.[4]

The Framework Convention obligates its Parties to work toward a broad goal of stabilizing greenhouse gas concentrations at levels which will prevent any dangerous interference with the world's climate system by anthropogenic (human) activity. In support of this goal, the world's developed countries, as Parties to the Convention, committed to adopt policies and measures intended to return their greenhouse gas emissions to 1990 levels by the year 2000. In addition, the Convention contemplates the adoption of protocols to address greenhouse gases in the post-2000 period.

The first Conference of Parties (COP-1) at Berlin in 1995 adopted a mandate to address the post-2000 period. The "Berlin Mandate" committed the Parties to a process to negotiate a protocol or other legal instrument that would be agreed upon by the end of 1997 and would require actions appropriate to addressing greenhouse gases in the post-2000 period.

To accomplish this end, COP-1 set up an Ad Hoc Group on the Berlin Mandate (the AGBM) which has become the most important subsidiary forum for climate change issues. Generally, the AGBM has concerned itself with: (1) the analysis and assessment of likely elements of a protocol or other legal instrument which will address the post-2000 period, (2) the implementation of existing commitments by all Parties to inventory their greenhouse gases, implement national programs to mitigate climate change, and communicate information on their inventories and implementation efforts to the COP; and (3) the strengthening of commitments to adopt policies and measures (P&Ms) which will achieve negotiated quantified emissions limitations and reduction objectives (QELROs) within specified time frames (*e.g.*, 2005, 2010, 2020).

1. *Events in 1996*

The Climate Change agenda for 1996 was ushered in by the IPCC's adoption of its massive Second Assessment Report (SAR) at its meeting in Rome in December of 1995. The SAR

3. The U.N. Framework Convention on Climate Change, 31 I.L.M. 849 (entered into force March 21, 1994). To date, the Convention has been ratified by more than 160 countries, including the United States. A complete copy of the Convention along with a host of other official documents and useful materials may be found at the Framework Convention web site at <www.unfccc.de/index.html>.

4. The IPCC operates under the auspices of the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO).

was the culmination of more than two years of work involving scientists and technical experts from 130 countries and provided assessments of (1) the scientific understanding of climate change, (2) impacts and mitigation options, and (3) the economic and social dimension of climate change. Perhaps most significant, however, was its conclusion for the first time that "the balance of evidence suggests that there is a discernible human influence on global climate."

Following the somewhat uneventful first AGBM session in Geneva from March 5-8, 1996, the Second Conference of Parties (COP-2) met in Geneva from July 8-19, 1996. Over 1,500 observers and delegates attended, including Ministers from 80 countries. A number of important policy issues were presented to both the Conference and its subsidiary bodies and it was the first opportunity for the Conference of Parties to address the IPCC Second Assessment Report, which proved to be the most challenging issue of COP-2. The overall results were mixed, producing some major policy shifts among the Parties and refining key issues, while at the same time failing to achieve consensus on many of those same issues and solidifying significant differences between the Parties.

With respect to the SAR, the Convention's Subsidiary Body for Scientific and Technological Advice was unable to agree on how to use the report and ended up sending an unfinished draft decision to the COP. COP-2 was also unable to achieve consensus. Instead, it produced a Declaration by a majority of the Ministers (the Geneva Declaration) which recognized and endorsed the conclusions of the IPCC as the most comprehensive and authoritative assessment of the science of climate change, its impact, and the response options currently available. The Declaration called for legally binding objectives to achieve significant reductions in greenhouse gas emissions.[5]

Notably, the United States announced a new position, supporting a legally binding instrument to fulfill the Berlin Mandate and embracing the SAR's conclusion "that the world's changing climatic conditions are more than the natural variability of weather." Concluding that "the IPCC has clearly demonstrated that action must be taken to address this challenge and that as agreed to [in the Berlin Mandate] more needs to be done through the Convention," the United States also outlined a proposed framework for negotiating a binding agreement under the Framework Convention, conditioned on three fundamental principles. First, negotiations would have to focus on what was real and achievable, particularly as to time frames. Second, the United States would seek market-based solutions that are flexible and cost-effective. Third, the agreement should lay the foundation for progress by having *all* nations, developed and developing, contribute to a solution by taking steps to limit emissions consistent with the Berlin Mandate.[6]

For its part, AGBM-4 managed to complete its analyses of the likely elements of a protocol or other legal instrument[7] and moved forward on the issue of identifying positions and negotiating text seeking proposals from the Parties. It also continued its consideration of steps to strengthen Convention commitments and implementation, with particular emphasis on approaches to

5. This qualified endorsement was further limited by the Declaration merely "noting" the IPCC findings, rather than adopting them, in deference to the 16 delegations who objected to the Declaration.

6. Timothy E. Wirth, Remarks of Undersecretary of State for Global Affairs Timothy E. Wirth before the Second Conference of Parties, Geneva (July 17, 1996).

7. COP-2 was unable to reach agreement regarding voting procedures for a protocol and in particular, the majority required for adoption.

policies and measures[8] and the quantified emission limitation and reduction objectives they will seek to achieve.[9] In this regard, two general approaches emerged. The first contemplates an agreed upon menu of possible policies and measures from which countries would choose options most suited to their particular national circumstances, while the second would categorize and prioritize the policies and measures in annexes to a protocol.[10]

COP-2 was followed by a year-end meeting of the Ad Hoc Group (AGBM-5) and the Subsidiary Bodies in Geneva from December 9-18, 1996, at which the emphasis had shifted from analysis and assessment to the identification and negotiation of proposals and text. AGBM-5 considered 14 proposals regarding commitments, implementation, and other elements of a protocol, reflecting a wide range of views on policies and measures, quantified emission limitation and reduction objectives, and the nature and scope of a possible protocol. It also requested national proposals with negotiating text by mid-January of 1997 and asked the Secretariat to produce a framework compilation to assist future deliberations.

2. *The Agenda for 1997*

As of this writing, there has not been sufficient time to review all of the individual national plans, although the U.S. Draft Protocol, which was released to the public on January 17, 1997, indicates that the Parties will have a great deal to resolve if the Berlin Mandate is to be fulfilled. The long-range U.S. plan proposes "emissions budgets" for developed countries covering successive periods of up to ten years commencing in 2010, with controversial provisions for banking, borrowing, and emissions trading among more developed countries. The plan also contemplates more rigorous reporting and compliance as well as emissions reduction requirements for all Parties, including developing countries, with joint implementation and emissions trading for qualified projects in those countries, all of which promise to engender serious debate.

The Geneva Declaration and the U.S. endorsement of binding obligations and the conclusions of the SAR may have provided sufficient momentum to move the Berlin Mandate process toward the negotiation of a binding protocol by the time of COP-3, scheduled for December 1-12, 1997, in Kyoto, Japan. Nonetheless, despite this and the fact that the release of proposed plans should provide a more concrete basis for actual negotiations at meetings of the AGBM in March and October, there remain significant differences for the Parties to resolve.

C. The Basel Convention

During 1996, Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)[11] continued work on the implemen-

8. Identifying and agreeing upon actual policies and measures for developed countries to adopt after the year 2000 would appear to be the key issue with respect to the implementation of the Convention and fulfilling the Berlin Mandate.

9. Proposed options have ranged from a twenty percent reduction in CO_2 emissions by 2005 relative to 1990 to a five to ten percent reduction by 2010 relative to 1990. There has also been significant disagreement whether the emission reduction objectives should be uniform or differentiated between greater and lesser developed countries.

10. Many of the policies and measures that have been identified focus on controlling emissions though regulatory mechanisms and technological solutions. However, cross-sectoral economic instruments and the removal of subsidies and market distortions have also taken on new significance in light of the proposed U.S. framework linked to trading credits and market-based approaches.

11. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, *reprinted in* United Nations Environment Programme, The Basel Convention: Final 28 I.L.M. 657 (1992) (entered into force May 5, 1992) [hereinafter Basle Convention].

tation of the pending Article 4(A) ban on the movement of wastes from developed to less developed Parties. Specifically, through the workings of a technical working group (TWG) the Parties made progress on the development of draft lists of wastes presumed to be covered and not covered by the pending ban. The Parties also continued negotiations on a liability protocol to the Convention that could be finalized in 1997 and possibly signed at the Fourth Conference of the Parties (COP-4) scheduled for October 1997.

The Basel Convention establishes a notice and consent system for the transboundary shipment of hazardous and other wastes among Parties. Subject to certain bilateral, regional, or multilateral agreements that meet the requirements of Article 11 of the Convention (such as existing agreements between the United States and Canada and the United States and Mexico), Parties are generally prohibited from trading in wastes covered by the Convention with non-Parties. Presently, 104 countries are party to the Basel Convention. The United States has signed the Convention manifesting its intent to become a Party but has not yet ratified the agreement.

1. *Ban on OECD to Non-OECD Shipments*

In September 1995, the Third Conference of the Parties (COP-3) met in Geneva and adopted an amendment to the Convention that, when ratified by three-fourths of the Parties, will greatly restrict hazardous waste exports from developed to less developed Parties. Specifically, the Parties agreed to a new Article 4A and a related Annex VII. The new Article 4A provides that:

> 1. Each Party listed in Annex VII shall prohibit all transboundary movements of hazardous wastes which are destined for operations according to Annex IV A [disposal operations], to States not listed in Annex VII.
> 2. Each Party listed in Annex VII shall phase out by 31 December 1997, and prohibit as of that date, all transboundary movements of hazardous wastes under Article 1(1)(a) of the Convention which are destined for operations according to Annex IV B [recovery/recycling] in States not listed in Annex VII. Such transboundary movement shall not be prohibited unless the wastes in question are characterized as hazardous under the Convention.[12]

The new Annex VII includes Parties and other States that are members of the OECD, European Community, and Liechtenstein. To date, only Finland has ratified the amendment, suggesting that governments may be awaiting the results of the TWG waste listing work before ratifying the amendment.

COP-3 instructed the TWG (a subsidiary body of the COP) to give full priority to completing its work on hazard characterization and the development of lists of wastes which are hazardous and subject to the Convention and those that are not subject to the Convention. The Parties also agreed that they will make a "decision" on the TWG waste lists (possibly an endorsement or formal adoption) at COP-4.

The TWG met on several occasions in 1996 with environmental and industry non-governmental organizations (NGO's) attending as observers. By December 1996, the TWG had prepared a draft A List of wastes presumed to be hazardous wastes under Article 1(1)(a) (and therefore subject to the pending ban on OECD to non-OECD shipments) and a B List of wastes and materials presumed to be outside the Convention's definition of hazardous waste,

12. Decision III/1 adopted by the third meeting of the Conference of the Parties to the Basel Convention, UN Doc. UNEP/CHW. 3/35 (1995).

and therefore not subject to the pending ban. The TWG is expected to meet again in early 1997 and complete its work on the waste lists in advance of COP-4.

The ultimate legal significance of the lists being developed by the TWG is not yet clear. It is possible, however, that the Parties will formally incorporate the lists into the Convention. Alternatively, the Parties may recognize the lists as guidance to be used by countries in determining whether certain wastes are "hazardous" under Article 1(1)(a) and therefore subject to the Article 4A ban. In any event, developing countries are expected to rely heavily on the lists in determining whether a waste is subject to the Article 4A ban, given the limited resources available in many countries to test imported wastes. The listing work will also influence the positions Parties take with respect to the universe of wastes subject to the Basel control regime for shipments between Parties (including wastes subject to the trade ban between Parties and non-Parties). To some extent, the lists may also influence the development of national hazardous waste laws, particularly in developing countries.

2. *Draft Liability Protocol*

The Basel Convention also directs Parties to prepare a protocol setting forth rules and procedures on liability and compensation for damage resulting from the transboundary movement of hazardous and other wastes.[13] At the first meeting of the Parties in December 1992, the Parties established an Ad Hoc Working Group of Legal and Technical Experts (Legal Working Group) to begin work on a draft protocol on liability and compensation. The Parties at COP-3 in 1995 requested the Legal Working Group to finalize the draft liability protocol for consideration and adoption by the COP-4 in 1997.

The Legal Working Group has met on several occasions since 1992 to develop a draft liability protocol, and convened its fourth session in Geneva from June 24-28, 1996. This meeting produced a bracketed draft liability protocol.[14] However, the draft protocol leaves a number of issues related to the scope and bases of liability unresolved.

The stated objective of the draft protocol is to "provide for a comprehensive regime for liability and for adequate and prompt compensation, including reinstatement of the environment, for damage resulting from the transboundary movement of hazardous wastes and their disposal." The definition of "damage" in the draft protocol currently includes loss of life, personal injury, loss or damage to property, and the loss of profit from impairment of the environment. One option being considered under the protocol would impose strict, joint, and several liability on generators, exporters, disposers, and persons in control of the waste at the time of an incident. Competing proposals would limit liability to those persons who at the time of the incident have "operational control" of the waste.

It is also not yet clear when the provisions of the protocol will first apply to a movement of waste or whether the scope of the protocol will extend to the "after care" of disposal sites. Negotiations on required insurance or other financial guarantees for waste shipments and the creation of (and contributions to) an international fund for emergency response actions and compensation for damages are also ongoing. The fifth meeting of the Legal Working Group is scheduled for April 20-24, 1997, in Geneva. If sufficient progress on the draft liability protocol is made, it is anticipated that the document could be provided to the Parties for review and possible signature at COP-4.

13. Basel Convention, *supra* note 12, art. 12.
14. U.N. Doc. UNEP/CHW.1/WG.1/4/2 (July 3, 1996).

D. Chemical Weapons Convention

The Chemical Weapons Convention (CWC),[15] an international treaty concluded in 1993 that is designed to curb the production and use of chemical warfare agents, was the subject of a prolonged political struggle throughout most of 1996. The Clinton administration lobbied hard for ratification of the treaty, but was opposed by a group of conservative Republicans including Senate Majority Leader Trent Lott of Mississippi and Senator Jesse Helms of North Carolina. In April, the Senate Foreign Relations Committee voted in favor of ratification. In September, however, the White House was forced to accept an indefinite postponement of the ratification vote in the full Senate, due to concerns that a vote at that time would not be favorable.

Although the United States failed to ratify the CWC during 1996, several other nations did ratify the treaty, bringing the total to 67. Under the terms of the CWC, the treaty is to enter into force 180 days after ratification by the 65th nation. Accordingly, the CWC is scheduled to take effect on April 29, 1997.

The Clinton administration is currently renewing its efforts to ratify the CWC before the treaty enters into force. If the administration is successful in these efforts, the CWC could result in new regulatory requirements on a broad range of commercial chemical products. The treaty has the potential to affect such chemicals because it addresses not only chemical warfare agents, but also immediate and distant chemical precursors to such agents. Indeed, virtually all discrete organic chemicals are subject to at least some limited requirements under the CWC.

To ensure that these precursor chemicals are not diverted to the production of chemical weapons, both producers of specified quantities of the chemicals and certain users of the chemicals may be required to submit annual declarations of their activities to national authorities, who in turn will provide much of the information in these declarations to a new international agency, the Organization for the Prohibition of Chemical Weapons (OPCW). Facilities subject to the notification requirements will generally also be subject to both routine and unscheduled "challenge" inspections by OPCW representatives. Some of the chemicals may also be subject to certain production limitations and restrictions on international trade. In addition, certain types of chemical production equipment may need to be dismantled under the treaty.

The likely effect of the treaty on private industry in the United States has been the matter of considerable dispute. The CWC most clearly should be of interest to manufacturers of the chemicals specified under the treaty. However, because of the manner in which the materials and activities covered by the CWC are defined, some observers have claimed that a much broader range of industries are also likely to be affected.

Even if the United States fails to ratify the CWC, the treaty may be of considerable importance to domestic companies. For example, once the treaty enters into force, Parties to the CWC will be subject to certain restrictions on trade in chemical products with non-Parties, which could include the United States. Moreover, many U.S. companies have operations in foreign countries that will be Parties to the CWC. Such operations may soon be subject to the notification and inspection requirements of the treaty. For these reasons, the Chemical Weapons Convention may soon be of considerable interest and relevance to private industry.

15. The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, 32 I.L.M. 800 (not yet in force).

II. Multilateral Negotiations on Future Accords

A. International Watercourses

Negotiations began in October 1996, under the auspices of the Sixth Committee (law) of the United Nations General Assembly, on a multilateral convention regarding the nonnavigational uses of international watercourses. This topic had been the basis of a study by the United Nations International Law Commission (ILC). After decades of work (testifying to the difficulty of this subject), the ILC produced draft articles of what is essentially a framework convention that includes fundamental norms but which also encourages regional agreements tailored to specific water basins. The 1996 negotiations, which were inconclusive, used the ILC's draft articles as a starting point. Negotiations will resume in March-April 1997.

B. Second United Nations Conference on Human Settlements (Habitat II)

Habitat II, which was held in Istanbul, Turkey, in June 1996, was one of a series of mega-conferences sponsored by the United Nations on a set of related global issues. It was thus part of a conference continuum that included the 1992 Conference on Environment and Development and the 1995 Fourth World Conference on Women. Habitat II dealt with virtually every environmental issue involved in human settlements, as well as a vast array of economic and social issues. Two legally nonbinding instruments emerged from the intergovernmental portion of Habitat II—the Istanbul Declaration (15 paragraphs) and the Habitat Agenda (238 paragraphs). These documents reaffirmed the concept of sustainable development as the overarching paradigm for efforts to achieve a higher quality of life for people throughout the world. The Habitat Agenda globalizes the concept of environmental justice within societies by recognizing it as an issue and prescribing specific steps for action in several different contexts. The Habitat Agenda also contains numerous commitments relating to health and the environment, including worldwide commitments to remove lead from gasoline, use appropriate indicators to monitor and assess conditions in human settlements, promote gender equality in specific ways, promote the availability of safe drinking water, and promote environmentally sound energy and transportation policies.

C. Protocols to the LRTAP Convention

Work continued in 1996 under the auspices of the Economic Commission for Europe on the development of three new protocols to the Convention on Long-Range Transboundary Air Pollution (LRTAP Convention).[16] The new protocols are aimed at controlling air emissions of certain persistent organic pollutants (POPs), heavy metals, and further reducing emissions of NO_x. These protocols would be in addition to the five protocols already concluded by the Parties to the LRTAP Convention.

In November 1995, the Convention's Executive Body authorized the Working Group on Strategies to begin negotiations on a POPs protocol. During 1996, the Working Group on Strategies and a subsidiary working group on POPs prepared a draft protocol that included a number of obligations intended to reduce releases of various POPs.[17] Proposed obligations include commitments to eliminate substances, restrict uses and consumption, meet release

16. Convention on Long-Range Transboundary Air Pollution (LRTAP), Nov. 13, 1979, TIAS/No. 10541, 18 I.L.M. 1442 (entered into force March 16, 1983).

17. Report of the Fourth Session of the Ad Hoc Preparatory Working Group on Persistent Organic Pollutants, EB.AIR/WG.7/8 (Nov. 1996).

restrictions for major stationary sources, and manage wastes and stockpiles in a manner that minimizes releases. Parties to the LRTAP Convention have targeted an initial list of fourteen substances for action. These substances include various pesticides, dioxins and furans, and other substances, such as PCBs. It is expected that the protocol would include a mechanism for adding additional substances to the agreement in the future that are persistent, toxic, bioacummulative, and subject to long-range transport. The work on a POPs protocol under LRTAP is also expected to shape discussions within UNEP in 1997 on the possible development of a global agreement addressing POPs.

The Working Group on Strategies and a subsidiary working group on heavy metals also made progress on the development of a protocol addressing heavy metals during 1996. Under provisions of the draft protocol, Parties would be obligated to reduce their emissions of certain heavy metals in accordance with the targets and timetables set forth in the protocol. Emission limit values are also being contemplated for new major sources of emissions. The current metals proposed for inclusion in the draft protocol are cadmium, lead, and mercury.

Both the POPs and heavy metals protocols will be the subject of further negotiations in 1997 and may be finalized by the year's end. Technical work in support of a second LRTAP protocol on NO_x continued in 1996 and will carry into 1997. Drafting work on this protocol is expected to begin in earnest in 1997. Consistent with the approach taken with respect to the previous LRTAP protocols, it is anticipated that the United States will treat these future protocols to the LRTAP Convention as executive agreements.

III. Trade and the Environment

A. The WTO

Trade and environment issues continued to receive significant attention within the World Trade Organization (WTO) in 1996. In April 1996, the Appellate Body of the WTO concluded that reformulated gasoline rules promulgated by the U.S. Environmental Protection Agency (EPA) to minimize emissions of volatile organic compounds, toxic pollutants, and nitrogen oxides were discriminatory and inconsistent with international trade rules.[18] A dispute panel, convened at the request of Venezuela and Brazil, concluded in a report issued in January 1996 that EPA's reformulated gasoline regulations were not consistent with Article III:4 of the General Agreement on Tariffs and Trade (GATT) and could not be justified under the Article XX exceptions. On appeal, the Appellate Body found that the rules did fall within the scope of Article XX(g) of the GATT (measures relating to the conservation of exhaustible resources) but that the rules failed to meet the requirements of the Article XX chapeau barring "unjustifiable discrimination." The decision was the first report of the Appellate Body under the Understanding on Rules and Procedures Governing Settlement of Disputes (DSU). Following the Appellate Body ruling, the United States announced that EPA would revise the reformulated gasoline rules.

The Committee on Trade and Environment (CTE) established by the WTO General Council in January 1995 issued its final report to the WTO Ministerial Conference held in Singapore, from December 9-13, 1996. Consistent with the mandate and terms of reference contained in the 1994 Marrakesh Ministerial Decision on Trade and the Environment, the CTE Report

18. United States—Standards for Reformulated and Conventional Gasoline, WTO Doc. WT/DS2/AB/R (April 29, 1996).

included background, analyses, discussion, and proposals organized around the ten trade- and environment-related items contained in the Marrakesh Decision. Among the issues addressed in the CTE Report are: the relationship between provisions of the multilateral trading system and trade measures included in multilateral environmental agreements; the relationship between provisions in the multilateral trading system and taxes for environmental purposes; and the relationship between provisions of the multilateral trading system and environmental requirements pertaining to product packaging, labeling, and recycling. The CTE produced little by way of consensus among WTO Members on the many trade and environment issues addressed in the Report. Recognizing the complexity of the issues being addressed by the CTE, the WTO Ministerial directed the CTE to continue its work on trade and environment issues under the terms of reference contained in the Marrakesh Decision.

B. NAFTA AND THE NAAEC

The North American Agreement on Environmental Cooperation (NAAEC),[19] the environmental side agreement to NAFTA, was an historical effort on the part of the North American countries to promote sustainable development through mutually supportive environmental and economic policies. The Commission for Environmental Cooperation (CEC), created under the NAAEC, continued or commenced a number of actions in 1996 intended to protect, conserve, and improve the environment in North America through increased cooperation among the Parties and increased public participation.

The CEC has three branches: the Council, comprised of one cabinet-level environment official from each country and the governing body of the CEC; the Secretariat, located in Montreal; and the Joint Public Advisory Committee (JPAC), comprised of five senior-level nongovernmental representatives from each country. Under the NAAEC, the Parties focus on two primary undertakings: the cooperative work program and dispute settlement. Highlights of the CEC's work in 1996 are provided below.

1. *The Cooperative Work Program*

In the first two years of operation, the CEC had begun work on an impressive list of environmental projects under its cooperative work program. The NAFTA Parties are seeking solutions to a number of issues of trilateral significance for the first time, focusing initially on five major themes: Environmental Conservation; Protecting Human Health and Environment; Enforcement Cooperation and Law; Environment Trade and Economy; and Information and Public Outreach. The proposed 1997 Annual Program and Budget continues to look at these five major themes and has focused the cooperative efforts into seventeen key initiatives.

Under the theme of Environmental Conservation, the NAFTA Parties have encouraged the CEC Secretariat to coordinate nongovernmental involvement on the conservation of North American birds by identifying areas important to the long-term viability of naturally occurring bird populations and developing a conservation strategy for each area. The governments will cooperate on a separate initiative to protect the birds of North America by developing a recommended conservation strategy.

With respect to marine ecosystems, the CEC is coordinating efforts among the Parties for the first regional implementation of the Global Programme of Action for the Protection of

19. North American Agreement on Environmental Cooperation, September 14, 1993, U.S.-Can.-Mex., 32 I.L.M. 1480.

the Marine Environment from Land Based Activities signed by 101 countries in Washington, D.C., in November 1995, as well as regional implementation of the International Coral Reef Initiative. A presentation of the North American experience in regional implementation will be made at the UNEP Governing Council meeting in January 1997. Other Environmental Conservation highlights in the CEC include the development of a North American Biodiversity Information Network and cooperation for the conservation of the Monarch butterfly.

Under the theme of Protection of Human Health and Environment, an unprecedented trilateral discussion has taken place among the NAFTA Parties aimed at creating regional action plans for the sound management or phase-out of four toxic substances: PCBs; DDT; mercury; and chlordane. This process has educated all three countries about the mechanisms and technologies their neighbors use to understand and manage these substances. The CEC Council will review the regional action plans in early 1997 for approval. The Parties are also developing a criteria document to assist in developing a new short list of substances to be subject to future action plans.

The CEC also facilitated the creation of the North American Pollutant Release Inventory, the regional equivalent of the U.S. Toxic Release Inventory. This activity involves developing a methodology for making pollutant release and transfer register (PRTR) data comparable, compatible, and accessible to the public. The United States and Canada are providing support to Mexican efforts to establish a domestic PRTR and all three will publish the first reports on North American Pollutant Release Inventory information from 1994 and 1995 data. Other Human Health highlights include the development of a cooperative long-term air quality monitoring, modeling, and assessment program in North America, a greenhouse gas trading study, as well as recommendations on transboundary environmental impact assessment procedures for the countries of North America.

Cooperation on enforcement issues has improved through the creation of the CEC North American Working Group on Environmental Enforcement and Compliance Cooperation, which cooperates on activities such as technical assistance, cataloguing training courses and enforcement officials, exploring alternative approaches to voluntary compliance, and improving the tracking of hazardous waste across borders. In 1997, the Council has agreed to develop principles to guide the development of a new generation of environmental regulatory and other management systems, in recognition of the need for continuous improvement of environmental protection and public health. The CEC will develop such principles as a standard that the public will be able to use to evaluate new laws, rules, and regulations.

The CEC has also undertaken a pathbreaking and complex study of the effects of NAFTA trade on the environment under the Environment, Trade, and Economy theme. The NAAEC calls for a continued consideration of the "environmental effects of NAFTA" in Article 10.6(d). The intention is to understand how greater market access and higher levels of environmental performance can be pursued as complementary and synergistic goals. To this end, the United States has supported independent CEC work to design and implement an analytical framework to identify and assess the effects of NAFTA on the environment. The CEC expects the study to identify both positive and negative environmental effects of the NAFTA agreement, and believes it will provide the basis for further cooperation among the Parties to address ways of countering the negative effects.

2. *Environmental Dispute Settlement*

Despite public concern about the perceived lack of enforcement of domestic environmental laws in the NAFTA countries, so far only six submissions from the public have been received

by the Secretariat under the process established by Article 14 of the NAAEC to address that concern. Currently, there are three submissions, one against each of the NAFTA Parties, still under consideration by the Secretariat. In August 1996, the CEC Council decided to instruct the Secretariat to prepare a factual record regarding the environmental impact assessment done on a public harbor terminal in Cozumel, Mexico.

A separate complaint from members of the public concerning massive migratory bird deaths at the Silva Reservoir in Mexico resulted in the preparation of a report by the Secretariat under Article 13 of the NAAEC. Article 13 enables the Secretariat to prepare a report on any matter within the scope of the Commission's annual work program or any other cooperative, nonenforcement function of the NAAEC so long as the Council does not object to its preparation within a specified period of time. The NAFTA governments have negotiated a resolution to the Silva Reservoir situation which has created unprecedented scientific cooperation on this problem by bringing scientists together in a depoliticized environment. This resolution allowed the CEC to fulfill one of its principal missions—to respond to a national environmental problem that has international consequences while remaining sensitive to local priorities and to the possibility of creating effective regional models.

While NAAEC encourages environmental cooperation to resolve outstanding concerns, and contains a sanctions provision for when domestic environmental laws are not being enforced, it also protects the rights of the NAFTA members to establish and enforce their own environmental laws.

IV. Regional Fora in Asia

Over the past year, significant environmental developments occurred throughout Asia at both the national and international level. Outlined below are key environmental activities over the past year in the Association for South East Asian Nations (ASEAN) and the Asia-Pacific Economic Cooperation forum (APEC). These regional activities focused on the integration of sound trade policies with sound environmental policies, transboundary air pollution, clean production and clean technology, marine environmental protection, population and poverty pressures on natural resources and the environment, international environmental quality standards, and the imposition on developing countries of "external environmental concerns" of developed countries.

A. ASEAN

Much of the work of ASEAN during 1996 focused on the integration of sound trade policies with sound regional environmental policies. More specifically, ASEAN member countries discussed the harmonization of member-country environmental standards, the mitigation of harm to member countries from transboundary air pollution, the conservation of regional biological diversity, the dissemination of clean technology and trade and environment information, and the impact on member countries of international standards such as those contained in the ISO 14000 series.

ASEAN was established on August 8, 1967, in Thailand with the signing of the Bangkok Declaration by representatives of Indonesia, Malaysia, the Philippines, Singapore, and Thailand. The Sultanate of Brunei Darussalam joined ASEAN seventeen years later in 1984 and Viet Nam became the seventh member of ASEAN in 1995. At the first Informal Meeting of the Heads of Government of ASEAN in Jakarta, Indonesia, on November 30, 1996, it was reaffirmed that Cambodia, Laos, and Myanmar will participate in all ASEAN activities but will

be formally admitted to ASEAN simultaneously according to a schedule that will be determined by the current ASEAN Heads of Government.

During 1996, ASEAN's trade and environment work continued to focus on enhancing trade and environment policy research and capacity building with regard to assessing the environmental impacts of trade. The ASEAN 1994-1998 Strategic Plan on the Environment sets far-sighted environmental goals such as the harmonization of member country environmental standards. Currently, all seven countries comprising ASEAN are committed to moving toward an ASEAN Free Trade Area (AFTA). The focus on AFTA will necessarily enhance member-country sensitivity to trade and environment issues. At the Sixth Annual Ministerial Meeting on the Environment held in 1994, member countries agreed to study the implications of an AFTA on the environment and to integrate sound trade policies with sound environmental policies.

Building on work initiated in 1996, an Informal ASEAN Ministerial Meeting on the Environment was held on January 7-8, 1997, in Phuket, Thailand (Phuket Meeting). As a result of this meeting, ASEAN environment ministers endorsed a plan to establish an "early warning system" that would monitor severe transboundary air pollution. Additionally, the ministers discussed the possible formulation of a common air quality index for the ASEAN countries. The ASEAN Specialized Meteorological Center will provide support for these initiatives in the form of research, monitoring, and air quality alerts for all climate-related events, such as haze plumes.

At the Phuket Meeting, the ministers also voiced support for pro-active programs to address regional land- and sea-based pollution problems, create an ASEAN Regional Center for Biodiversity Conservation, increase cooperation on clean technology and waste minimization issues, identify ASEAN experts in fields related to trade and environment, and coordinate efforts in the trade and environment area with the WTO's Committee on Trade and Environment. In addition, ASEAN officials at the Phuket Meeting expressed concern over the possible use of international standards such as those in the ISO 14000 series to block imports of goods that are not certified under the standards.

In May or June of 1997, a Meeting of the ASEAN Working Group on Nature Conservation will be held in Thailand. On September 2-4 of this year, the Eighth Meeting of ASEAN Senior Officials on the Environment will be held in Cebu, the Philippines, and on September 22-23, the Senior Officials Meeting (SOM) in preparation for the upcoming ASEAN Ministers Meeting on the Environment will be held in Bali, Indonesia. The ASEAN Ministers Meeting on the Environment (AMME) is to be held in Jakarta, Indonesia, in late 1997.

B. APEC

During 1996, APEC member countries addressed a wide range of environmental topics, including the creation of sustainable cities, the dissemination of information and promotion of clean technology and clean production techniques, the protection of the marine environment, and the conduct of member countries in response to population and development pressures on agriculture, energy, and the environment.

APEC was organized in 1989 to respond to the needs of increasingly interdependent Asia-Pacific economies. APEC member countries represent roughly forty-seven percent of the world's trade in merchandise.[20] Although APEC was established primarily for the market-oriented goals

20. APEC member countries currently include: Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, South Korea, Chinese Taipei, Thailand, and the United States.

of reducing barriers to trade, strengthening the multilateral trading system in the interest of Asia-Pacific economies, encouraging open flow of goods and services with member countries, and sustaining the economic prosperity of the Asia-Pacific region, environmental issues soon became a fundamental part of the organization's activities directed at sustaining the region's dynamic growth. In contrast to ASEAN, APEC environmental policies have a greater potential for widespread influence and impact, as the APEC members include countries from Asia and North and South America.

On July 11-12, 1996, the APEC ministers convened the APEC Ministerial Meeting on Sustainable Development in Manila, the Philippines (Manila Ministerial). During the meeting, the ministers endorsed action programs targeting major sustainable development themes such as sustainable cities and urban management, clean technology and clean production, the sustainability of the marine environment, and the impact of rapidly expanding populations and vigorous economic growth on food, energy, and the environment. In particular, the APEC ministers at the Manila Ministerial approved the Strategy to Address Sustainability of the Marine Environment within APEC adopted by the Marine Resource Conservation Working Group (MRC). In addition, the ministers asked the APEC Industrial Science and Technology Working Group to develop and implement a Cleaner Production Strategy, in coordination with other appropriate working groups.[21]

The next ministerial meeting on the environment will be convened in Toronto, Canada, in April of 1997. This meeting will reportedly focus on how APEC members plan to implement strategies related to the themes identified at the Manila Ministerial.

V. Fisheries

A. U.N. Treaty on Straddling Stocks and Highly Migratory Fish Stocks

The Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks was opened for signature on December 4, 1995, and moved closer to implementation in 1996.[22] To date, 51 countries have formally indicated their intent to ratify, including Japan, Korea, and the European Union. The United States ratified the Agreement on August 9, 1996.

The U.N. Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks adopted the treaty in August 1995 after nearly three years of negotiations. The Agreement implements an obligation embodied in the U.N. Convention on the Law of the Sea to conserve and sustainably manage high seas fisheries.

Under the agreement, Parties are obligated to pursue cooperative measures to ensure the effective conservation and management of fish stocks either directly or through regional organizations. Parties are also required to ensure that such measures are enforced against vessels which fly their flag. The agreement introduces the precautionary approach to fisheries management, both within and outside areas of national jurisdiction, obligating states to act cautiously when there is doubt about the viability of stocks. Fish stocks covered by the agreement include highly migratory fish stocks such as tuna and swordfish, and straddling fish stocks such as cod and pollock. In transmitting the agreement to the U.S. Senate for advice and consent, President

21. APEC Ministerial Meeting on Sustainable Development, Manila, Philippines, July 11-12, 1996, Action Programme (Clean Production/Clean Technology).

22. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, U.N. Doc. A/CONF. 164/37 (1995), 34 I.L.M. 1542 (1995) (not yet in force).

Clinton observed that the agreement should "significantly improve the prospects for sustainable fisheries worldwide," if widely ratified and properly implemented.

B. ICCAT Meeting on Bluefin Tuna

The International Commission for the Conservation of Atlantic Tunas (ICCAT) met in Spain, November 22-29, 1996,[23] and voted to increase tuna quotas in the western Atlantic by 150 metric tons to over 2,300 tons. The decision was a disappointment for many environmental groups which had called for sharp cuts in bluefin tuna catches. The quota was calculated to yield a catch of 2,500 tons—a level which ICCAT's science advisors determined was enough to allow for a slow rebuilding of the population.

In addition, ICCAT cleared the way for its members to ban imports of bluefin tuna from Belize, Honduras, and Panama. These three nations are not part of ICCAT, and had been warned last year that their fishing operations were undermining the recovery of the fish stock. The three nations have been given six months to prove they have taken steps to reduce bluefin tuna fishing before sanctions are imposed. The Panamanian Government, which has told Panamanian-flagged ships that their registry would be canceled if they were caught fishing bluefin tuna, was given until January 1, 1998, to demonstrate that its measures have worked before a ban would begin. ICCAT also warned that Trinidad and Tobago could be subject to sanctions if it did not curb its catch of swordfish.

C. United States Reauthorization of the Fishery Conservation and Management Act

The Sustainable Fisheries Act of 1996, signed by President Clinton in mid-October, overhauled the Magnuson Fishery Conservation and Management Act of 1976. The revised law signals a new era in United States fisheries conservation by taking action to stop overfishing, rebuild depleted fish stocks, reduce bycatch that is harmful to ocean ecosystems, and protect essential fish habitat. In addition, the law includes a four-year moratorium on issuing new Individual Fishing Quotas (IFQs)—a controversial measure which has been used in some fisheries to allocate fishing rights. Significantly, Section 202(h) of the new law requires the State Department to pursue international agreements to establish standards and measures for catch reduction that are comparable to the standards and measures that are applicable to U.S. fishermen.

VI. ISO 14000

Following years of drafting work, the International Organization for Standardization (ISO) published voluntary international environmental management standards for organizations. Five standards, ISO 14001, 14004, 14010, 14011, and 14012, were finalized in September of 1996. Thirteen more are either in a draft status or under discussion, and are expected to become final from 1997 through 1999.[24]

The ISO is an international nongovernmental organization, based in Geneva, that works to facilitate trade by promoting the development and implementation of voluntary international standards in many different areas. ISO formed ISO Technical Committee 207 (TC 207) in

23. International Convention for the Conservation of Atlantic Tunas, May 14, 1966, 20 U.S.T. 2887, T.I.A.S. No. 6767 at 2888, 673 U.N.T.S. 63.

24. ISO Standards go through the following stages, respectively: Working Draft (WD); Committee Draft (CD); Draft International Standard (DIS); and finally, after approval, International Standard (IS).

1993 to develop international standards in the field of environmental management tools and systems.

Currently, TC 207's work regarding the standards addresses the following areas: Environmental Management Systems (EMS); Environmental Auditing (EA); Environmental Site Assessments (ESA); Environmental Labeling (EL); Environmental Performance Evaluation (EPE); Life Cycle Assessment (LCA); and Environmental Aspects in Product Standards (EAPS). TC 207 includes six subcommittees (SC) and a working group (WG). These entities develop the standards, and TC 207 meets on an annual basis to review the progress of the subcommittees.

The ISO 14000 standards are of two primary types: (1) Organization Evaluation Standards and (2) Product Evaluation Standards. Organization Evaluation Standards focus on evaluating an organization's internal management and operations. Product Evaluation Standards focus on the evaluation of an organization's products and product systems.[25]

The final EMS standards are intended to provide an internationally recognized framework in which organizations may establish, measure, evaluate, and audit environmental management programs. The standards aim to establish "a common worldwide approach to management systems that will lead to the protection of the earth's environment while spurring international trade and commerce."[26] The standards do not prescribe particular environmental performance levels, but rather describe environmental management systems and tools. While the standards are voluntary, they have the potential to become a necessary part of doing business on an international scale as organizations identify competitive advantages associated with adherence to the standards.

The U.S. representative to the ISO is the American National Standards Institute (ANSI), a private sector–sponsored clearinghouse for voluntary standards. ANSI has established and accredited the United States Technical Advisory Group (U.S. TAG) to review, comment, and recommend how the United States will vote on work related to the development of the ISO 14000 standards. The membership of the U.S. TAG includes: industry representatives, consultants, organizations, government agencies, and public interest groups. The U.S. TAG has subtechnical advisory groups (SubTAGs) that parallel the subcommittees and working group of TC 207. The American Society for Quality Control (ASQC), the American Society for Testing and Materials (ASTM), and NSF International administer the SubTAGs on behalf of ANSI.

Organizations may become "certified" or "registered" to ISO 14001, the specification standard for environmental management systems.[27] ISO 14001 specifies the requirements for an organization in establishing and maintaining an environmental management system. The other standards in the ISO 14000 series offer guidelines and tools to support an organization's EMS. The status of the various ISO 14000 guidelines at the close of 1996 is summarized in Table 1.

25. The Organization Evaluation standards are 14001 (EMS); 14010-12 (EA); 14015 (ESA); and 14031 (EPE). The Product Evaluation standards are EL (14020, 14022-25) and LCA (14040-43). ISO Guide 64 (formerly ISO 14060), "Guide for the Inclusion of Environmental Aspects in Product Standards," involves product standards. However, it is no longer considered a "standard" but rather a "guide." ISO 14004 and 14021 are considered general series guidance and definition documents.

26. ISO/TC 207 Overview Statement.

27. Certification is the procedure by which a registrar gives written assurance of implementation of the standard. The term "registration" is often used in the United States to describe this procedure.

Table 1: ISO 14000 STANDARDS—Revised 1/97

	Standard	Comments
EMS	**14001** Envtl. Mgt. Standards (EMS): Specification w/ Guidance for Use	Each of these is now a published, final International Standard.
	14004 EMS: General Guidelines on Principles, Systems, Supporting Techniques	
AUDITS	**14010** Envtl. Auditing (EA): Guidelines for General Principles	
	14011 EA: Procedures; Auditing of EMSs	
	14012 EA: Qualification Criteria for Auditors	
ESA	**14015** Environmental Site Assessment (ESA)	This standard is in the process of being drafted and has not yet achieved Working Draft status.
LABELING	**14020** Envtl. Labeling (EL): General Principles	Draft International Standard.
	14021 EL: Self-Declaration, Envtl. Claims Terms & Definitions	Draft International Standard.
	14022 EL: Self-Declaration Symbols	Committee Draft.
	14023 EL: Testing & Verification Methodologies	Working Draft.
	14024 EL: Guiding Principles, Practices & Certification Procedures of Multiple Criteria Programs	Committee Draft.
	14025 EL: Envtl. Labeling Type III, Guiding Principles & Procedures	Working Draft.
EPE	**14031** Environmental Performance Evaluation (EPE)	Committee Draft.
LCA	**14040** Life Cycle Assessment (LCA): Principles & Framework	Draft International Standard.
	14041 LCA: Goal & Scope Definition & Inventory Analysis	Committee Draft, pending Draft International Standard.
	ISO 14042 LCA: Impact Assessment	Working Draft, pending Committee Draft.
	ISO 14043 LCA: Interpretation	Working Draft.
14050 Terms & Definitions		Committee Draft, pending Draft International Standard. A long-term project, will eventually contain all definitions of the final ISO 14000 standards.
ISO Guide 64 Guide for the Inclusion of Environmental Aspects in Product Standards		Expected approval pending. Formerly ISO 14060. No longer a standard, but rather an ISO guide suggesting issues to be taken into account in developing product standards.