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INTRODUCTION

The year 1999, while not as painful as 1998, was not an easy one for Canada's minerals and metals industry. The first half of the year saw prices for many commodities fall, with negative effects felt by the industry throughout the world, although prices did improve somewhat in the second half. Exploration also suffered, dropping some 23% to US\$2.7 billion; junior companies in particular found it difficult to raise funds. As in past years, South America led the way in attracting exploration.

Among other trends in 1999, a number of countries renewed their efforts, such as revising mining codes and investment policies, to attract foreign investment in their minerals sectors. A number continued to privatize their mining industry, for example, Zambia (copper) and Venezuela (aluminum), although these efforts were hampered by low commodity prices. In the face of low commodity prices, the industry showed increasing interest in restructuring and consolidation in a number of commodity sectors, such as aluminum, copper and coal – something that is expected to continue in 2000.

Both governments and industry increasingly recognized the need to address the three components of sustainable development – economic, environmental and social – as part of their policies and business plans. Some of the significant multilateral events, which are described in more detail later, were:

• A tripartite meeting on Social and Labour Issues in Small-Scale Mines held under the aegis of the International Labour Organization (ILO);

- A Round Table on Mining and the Environment, sponsored by the United Nations Department of Economic and Social Affairs and Germany; and
- A Workshop on Sustainable Development held by the three international nonferrous metals study groups.

The minerals and metals industry continued its efforts to adopt sustainable development approaches, not only for the environment but also with respect to social programs and community involvement:

- The Minerals Council of Australia continued to update its Code for Environmental Management through a substantial review process involving several months of stakeholder consultation. The revised code, which recognizes the need to address the "triple bottom line," is expected to be released in early 2000.
- Five companies (BHP, Pasminco, Placer Dome, Rio Tinto and WMC) formed the World Alliance for Community Health (web site http://www.wacommunityhealth.org), a privatesector initiative to develop and implement community health projects in cooperation with the World Health Organization (WHO). The World Alliance works with private-sector, government and non-government partners to plan and implement long-term community health projects in developing under-serviced areas. It assists member companies identify priority needs, design costeffective projects, develop project standards, and access international expertise. The first projects are expected to be approved in early 2000.
- Companies continued to develop corporate codes of conduct and improve their environmental reporting. Some non-governmental organizations, too, have started to develop and promote their own codes of conduct for the mining industry. Furthermore, there is increasing pressure from a number of these groups for external auditing of corporate performance. In 1999, Placer Dome was the subject of two such audits: a report by the Mineral Policy Centre on Placer's Sustainability

Policy, and the CSIRO's report on Placer Dome Asia Pacific's implementation of the MCA's Code for Environmental Management. The Mineral Policy Centre's report noted that the most difficult aspect of social and environmental reporting for the mining industry is how to measure achievement against explicit goals.

As in previous years, environmental and healthbased government regulations affecting the use of and trade in minerals and metals and their products continued to be of concern to the world's minerals and metals sector. These regulations have the potential to affect market access for these commodities and products, not only in Europe but also in countries that are traditional manufacturers of such products, such as Japan. In international fora, Canada continued to promote its Safe Use Principle, which is a riskbased approach to managing environmental and health concerns associated with minerals and metals production, use, recycling and disposal.

This review covers major international issues of importance to the Canadian minerals and metals sector, including multilateral, regional and bilateral developments during 1999.

MULTILATERAL DEVELOPMENTS

The OECD and Chemicals Issues

In June, the Joint Meeting of the Chemicals Committee and the Working Party on Chemicals reviewed recommendations from the Workshop on Nickel-Cadmium (Ni-Cd) Battery Recycling that was held in Mexico City in December 1998. Countries supported recommendations to have a web site on Ni-Cd batteries and an ad hoc group to improve recycling rate calculations. Countries also recommended that industry representatives meet with the Working Group on Waste Management Policy to explain existing barriers to the transboundary movement of spent Ni-Cd batteries and possible ways to remove or lower the barriers. Canada and most other countries also supported the adoption of a proposed harmonized label for Ni-Cd batteries that includes both the mobius loop and crossed-out trash container symbols. Because some members required additional time for national consultation, final adoption of the label was postponed until the next meeting in 2000.

Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal

The intent of the Basel Convention, which came into force in May 1992 and has been ratified by more than 100 countries, was to restrict the transboundary movement of hazardous wastes in order to protect those countries, particularly developing countries, that might not have the capacity or technology to handle them in an environmentally sound manner. The Convention defines recycling as a "disposal" activity, and recyclable materials as "wastes." Canada and some other governments have expressed concerns that the Convention does not adequately distinguish between recyclable materials destined for recovery operations and hazardous wastes destined for final disposal.

The fourth Conference of the Parties (CoP) was held in February 1998. Delegations agreed to amend the Basel Convention to add two new annexes. The first annex (Annex VIII) comprises a list of hazardous wastes that will become subject to the movement "ban" agreed to at CoP3, if and when it enters into force. The second annex (Annex IX) comprises a list of materials that are generally considered not hazardous and that will be excluded from the scope of the regulatory framework established by the Convention. Most recyclable metals are included on the second, non-hazardous annex list. The delegations further agreed to extend the mandate of the Technical Working Group to formally establish a "review mechanism" to revise and update the new annexes as may be required.

Delegations also reviewed requests submitted by Monaco, Israel and Slovenia to accede to Annex VII. These requests stem from the desire of these countries to be able to continue to receive hazardous recyclable materials from OECD member countries. However, the delegations at CoP4 rejected all accession requests, preferring to defer them until the movement ban has entered into force. The delegations further refused to agree to the development of technical criteria that could assist countries in a selfevaluation of their hazardous waste management capacities. However, it was agreed at CoP4 to provide Parties with an analysis that would highlight issues related to Annex VII. A set of terms of reference for this analysis was agreed to at CoP5. Concerns were expressed at the Technical Working Group (TWG) in April 2000 about delays, lack of funds, and the use of an elaboration paper prepared by the secretariat. After some discussion it was decided to move ahead on the analysis using the terms of reference developed at CoP5.

Law of the Sea Convention: Seabed Mining Code

The International Seabed Authority, an organization affiliated with the United Nations, was established in 1994 under the Convention and the associated Agreement of 1994 relating to the Implementation of Part XI (seabed provisions) of that Convention. A further step towards conclusion of the first mining code for the world's oceans was taken at the fifth session of the International Seabed Authority, which met in Kingston in August 1999. The Council of the Authority completed a first reading of the code and embarked on a second reading as it continued the process of devising regulations to govern exploration for polymetallic nodules in the international seabed area. The text sets out the framework for the exploration regime, while the annexes contain a model contract and standard clauses. Once the Council has adopted the regulations, they will be applied through a series of 15-year contracts between the Authority and the private and public investors whose plans of work it has approved. The first seven of these, known as "pioneer investors," had their plans approved in 1997.

The regulations specify how the Authority will oversee prospecting and exploration by contractors. They spell out financial and technical requirements that contractors must meet, offer guarantees of security of tenure and confidentiality of proprietary information, and require contractors to establish training programs for personnel of the Authority and developing countries. The Authority would inspect operations and have the right to impose penalties for certain violations. Contractors would be obliged to implement measures to ensure the effective protection of the marine environment.

The Council adopted a nearly complete set of rules for its Legal and Technical Commission, the body that assists in the Authority's duty to organize and control activities in the seabed area beyond the limits of national jurisdiction. A decision on two pending rules on conditions under which states may take part in meetings of that expert body was put off to next year.

A common thread emerged in the parallel discussions on the mining code and rules for the Legal and Technical Commission. On the one hand is the wish of coastal and other states, wary of damage caused by environmental disasters on the high seas, to see that the Authority is legally equipped to deal with any adverse environmental effects of future seabed activities. On the other hand, states with a special interest in carrying out mining once it becomes economically viable want to ensure that investors are not hobbled by excessive regulation. They also seek assurance that data of commercial value given to the Authority will be kept confidential. Deep-sea mining is unlikely to become commercially viable in the near future.

In addition, the Assembly scheduled a two-part session for next year to enable the Council to complete its work on the draft mining code during 2000. The meetings are scheduled for two weeks each in March and July.

Persistent Organic Pollutants (POPs)

POPs are predominantly man-made toxic chemicals that, to varying degrees, resist photolytic, biological

and chemical degradation. They are characterized by low water/high lipid solubility, which leads to their accumulation in fatty tissues, and are semi-volatile, being able to travel long distances in air. The 12 POPs under debate are: aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, mirex, polychlorinated biphenyls (PCBs), toxaphene, and dioxins and furans. The "dirty dozen" fall into three categories: pesticides, industrial chemicals, and unintended by-products of combustion and industrial processes. Canada has played, or is playing, an active role in the POPs initiatives.

In 1999, the second and third rounds of talks focussed on a global treaty to reduce and eliminate environmental emissions and discharges of POPs. These talks examined provisions to reduce and/or eliminate emissions, production and uses of the POPs in the initial list identified for action under the UNEP mandate and how to ensure that all countries can successfully implement the provisions.

The third round of talks, formally known as the Third Session of the Intergovernmental Negotiating Committee (INC-3) for an International Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants, was held in September 1999 in Geneva. The talks were attended by 115 countries, 17 intergovernmental organizations and 72 non-governmental organizations.

At the talks, negotiators reached agreement on proposals favouring the elimination of the 10 intentionally produced POPs. At the same time, the negotiators also recognized the public health need for an exemption for DDT, which is used in controlling vector-borne diseases such as malaria. These proposals went to participating countries for consultation and then for consideration at the fourth round of negotiations set for March 2000 in Bonn.

Three of the 12 POPs in the UNEP mandate are slated for elimination with no exemptions. These are the pesticides aldrin, endrin and toxaphene. Another five POPs are set for elimination with limited country-specific exemptions. They are the pesticides chlordane, dieldrin, heptachlor, mirex, and hexachlorobenzene, which is also an industrial compound and a by-product. With the exception of the exemptions, elimination would take place once the treaty enters into force.

While the production and use of DDT would be limited to control of vectors, such as mosquitos transmitting malaria, for public health purposes, all other uses including in agriculture would be prohibited.

New uses and production of polychlorinated biphenyls (PCBs) would be prohibited under policy proposals developed by the negotiators. Discussion focussed on the issue of PCBs already in use, principally in electrical equipment, and the related complexity of identifying existing applications and dealing with replacement costs, particularly in developing countries.

There was agreement on a procedure for adding chemicals to the Convention. With the exception of a few remaining issues, the meeting also agreed on scientific criteria and data requirements for screening and evaluation.

The talks moved towards a consensus on the unintentionally produced by-products dioxins and furans. They also laid the groundwork for further consideration of proposals to advance technical and financial assistance, particularly for developing countries and countries with economies in transition, to enable implementation of the treaty.

International Labour Organization (ILO)

A tripartite meeting on Social and Labour Issues in Small-Scale Mines took place in Geneva May 17-21, 1999, under the auspices of the ILO's Sectoral Activities Program. The meeting examined issues related to occupational safety and health, women's participation, and child labour in relation to small-scale mining. It called for governments to establish appropriate legal and regulatory frameworks, supported the ILO Declaration on Fundamental Principles and *Rights at Work*, and identified the need for improved information and technical assistance for small mines. The meeting also called for increased dialogue on small-scale mining, implementation of relevant ILO conventions, and support for a range of social and economic measures to improve working conditions in small mines.

Over the years, the ILO has examined various labour issues related to the mining industry, including adopting a Convention (176) and Recommendation (183) on Safety and Health in Mines in 1995. In 2001, a group of experts representing government, labour and employers is expected to develop a code of practice on safety and health in the nonferrous metals industries that will provide specific guidelines for use throughout the sector.

United Nations Environment Programme (UNEP)

In November 1999, UNEP, together with the United Nations Department of Economic and Social Affairs and the Government of Germany, sponsored a Round Table on Mining and the Environment in Berlin. This meeting was in follow-up to a 1991 round table that produced the Berlin Guidelines – an overview of environmental guidelines and strategies for mining with an emphasis on developing countries. The Berlin Round Table participants endorsed a new compendium of environmental guidelines intended to assist developing countries in promoting sustainable mineral development. These guidelines are now undergoing further consultation and will eventually be finalized and published by UNEP. Participants also called on the Commission on Sustainable Development to address the sustainable development of minerals and metals at a future session.

United Nations Commission on Sustainable Development (CSD)

The CSD was created to ensure effective follow up to the 1992 United Nations Conference on Environment and Development (UNCED). It meets annually to review the implementation of Agenda 21, the program of action adopted at UNCED. In 1997, a fiveyear work program for the CSD was adopted. Under this program, CSD-7 (1999) addressed the sectoral theme of oceans and seas and the cross-sectoral theme of changing consumption and production patterns. CSD-8 (2000) is expected to have greater relevance for the mining, minerals and metals industry in view of its focus on the integrated planning and management of land resources. CSD-8 will also begin preparations for the 10th anniversary of UNCED.

In preparation for CSD-8, Canada hosted, in June 1999, a visit by Joanne DiSano, Director of the UN Division on Sustainable Development, to meet with key government officials involved with natural resources and sustainable development. Canada is also preparing a series of monographs to table at CSD-8, including an update of a monograph prepared in 1997 on the sustainable development of minerals and metals.

Non-Ferrous Metals Consultative Forum on Sustainable Development

In December 1999, member countries of the three international nonferrous metals study groups - the International Copper Study Group, the International Nickel Study Group and the International Lead and Zinc Study Group - convened a Workshop on Sustainable Development. For the first time, governments, industry and other non-governmental organizations met to debate the key benefits and challenges related to how nonferrous metals contribute to sustainable development. An intergovernmental meeting following the workshop agreed that the process started by the workshop should continue and asked the Study Groups Advisory Committee to consider the outcomes and propose follow-up activities. Based on these discussions, member countries of the Study Groups agreed that a Consultative Forum with representation from all interested stakeholder groups should be held September 28-29, 2000. The purpose of the Forum will be to discuss

and develop components of an action plan based on workshop recommendations and on the way these components could be implemented for consideration by member countries of the Study Groups and others.

BILATERAL/REGIONAL AND OTHER DEVELOPMENTS

Americas

Pan-American Workshop on Occupational Safety and Health in Mining

In July 1999, Canada and Argentina sponsored, with the assistance of Chile and Peru, the Pan-American Workshop on Occupational Safety and Health in Mining. The Workshop was proposed by Colombia as an action plan project under the Buenos Aires Declaration following the 3rd Annual Mines Ministries of the Americas Conference in Buenos Aires in November 1998. The workshop focussed on three themes: Minerals, Metals, Markets and Social Development; The Safe Use Principle and its Elements; and Safe Use in Practice: Case Studies. The topics addressed included the global challenges facing the sustainable development of minerals and metals; the life cycle of minerals and metals; the importance of proper hazard identification, risk assessment and risk management practices; and industry presentations of best practices related to the safe production and processing of minerals and metals, product stewardship, recycling initiatives, sound environmental management practices, and community relations. The conclusions and recommendations of the workshop were incorporated and appended to the 1999 Caracas Declaration. These conclusions and recommendations are also available on the CAMMA web site at http://www.camma.org.

Fourth Annual Mines Ministers of the Americas Conference (IV CAMMA)

The IV CAMMA was held in October 1999 in Caracas, Venezuela. Eighteen countries in the Americas and Caribbean participated in the Conference, including two new member countries, Jamaica and Suriname, and six mining ministers. Other invited participants included representatives from nongovernmental organizations, industry, Aboriginal communities, and international institutions. Both the World Bank and the UN Economic Commission for Latin America and the Caribbean gave presentations. Three themes were discussed and conclusions were prepared for consideration by ministers and delegates on Integrating Systems of Mining Information, Modernizing and Strengthening Mining Public Institutions, and Development of Non-Metallic Mining in the Americas. These conclusions were incorporated and appended to the 1999 Caracas Declaration wherein ministers and signatories recognized the importance and hemispheric benefit of disseminating information about each country's mining sector, the need for improved stakeholder communications and the implementation of transparent systems and procedures in modernizing and strengthening institutions in the mining sector, and the need to develop and increase nonmetallic (industrial) mining at the extraction and industrial level. The Caracas Declaration may be found on the CAMMA web site at http://www.camma.org.

Canada-U.S. Bilateral Consultations on the Tulsequah Chief Mine Project

In 1998, the United States asked Canada to refer the Tulsequah Chief mine project, located in northern British Columbia. to the Canada-U.S. International Joint Commission (IJC) for further review of key cross-border environmental concerns raised by the United States and the State of Alaska. The project, which had gone through a joint federal-provincial environmental assessment, had been approved by both levels of government in Canada. U.S. federal and Alaskan agencies had participated in the EA process although they had not joined in the recommendation for the project to be allowed to go ahead. Throughout the rest of 1998, Canada and the United States met through a bilateral consultation process. While some progress was made, a mutually satisfactory solution had not been achieved by the end of the year and consultations continued in 1999.

In 1999, several more meetings were held between Canada and the United States. Although some progress appeared to have been made, the United States maintained that the mine access road and the issue of cumulative effects on the watershed could not be separated and an IJC review of the Taku watershed should encompass the mine access road. The United States further indicated a desire to include Aboriginal groups that might feel the impacts of the mine development in future bilateral discussions. In the meantime, the B.C. government, in accordance with its permitting process, started several technical studies, some of which might address specific concerns raised by the United States.

Meetings between U.S. state and embassy personnel, B.C. officials and Alaskan governor Graham Knowles produced no significant breakthroughs. Further discussions continued at a number of levels and a bilateral meeting has now been tentatively scheduled for mid-May 2000. This meeting may represent the final opportunity to resolve this issue without a referral to the IJC.

Europe and Russia

Russia

A number of activities took place in 1999 to support mining investment made by Canadian companies in Russia. The Mining Working Group of the Canada-Russia Intergovernmental Economic Commission (IEC) continued to intensify its activities. In February 1999, a Deputy Prime Minister of the Russian Federation, His Excellency Gennady Vasilyevich Kulik, met with the federal ministers of Natural Resources and International Trade in Ottawa to discuss the efforts that were under way on Russian mineral investment climate issues. Natural Resources Canada and the Department of Foreign Affairs and International Trade (with the collaboration of the Canadian Embassy in Moscow) worked on a number of specific cases where their contribution enabled Canadian companies to suggest solutions to Russian authorities on problematic investment climate issues.

A Canadian government/industry mission went to Russia in April 1999. During this mission, Canadian mining companies and government officials were able to discuss the most pressing concerns of Canadian mining companies investing in Russia in meetings with high-ranking officials from Russian ministries, the State Duma and Deputy Prime Minister Kulik. Following that mission, the efforts of the Mining Working Group were directed at organizing a highlevel seminar on investment concerns of Canadian companies who have invested in Russia. Participants invited to this seminar included Canadian and Russian company executives, senior government representatives, and officials from international financial institutions. The seminar will be held in March 2000 during Mining Millennium 2000 in Toronto.

Europe

In 1999, the European Commission continued to move forward on several key regulatory fronts that are likely to threaten Canadian nonferrous metals and asbestos producers. These initiatives fall under two related themes: waste management and risk management.

Directorate General XI (Environment) continued to advance three draft directives on managing waste arising from nonferrous metal-containing products: end-of-life vehicles, end-of-life electrical and electronic equipment, and nickel-cadmium batteries and accumulators. The EU is using these and other directives to ban or substantially restrict the use of key metals and metal compounds, including lead, mercury, cadmium and hexavalent chromium.

There are risk assessments of three metals under way by EU member states: cadmium (by Belgium), zinc (the Netherlands) and nickel (Denmark). Both the Commission and the member states are increasingly of the view that current risk assessment procedures should be replaced by a new precautionary approach. In early 2000 the EU will be releasing a Communication on the use of the Precautionary Principle that will define the circumstances under which regulations will be made in the absence of adequate scientific information. In addition, the EU feels there should be a broader use of the Substitution Principle (i.e., encourage substitution by less hazardous or dangerous substances) and the concept of a "reverse onus" where manufacturers and importers would be responsible for preparing both risk assessments and product safety assessments.

The Commission had also moved forward with a ban on asbestos. Although the Commission had subscribed to a controlled-use approach for many years, most of the member states had instituted bans and the Commission decided to follow suit in order to promote harmonization. On August 6, 1999, following approval by the Technical Progress Committee of a proposal submitted by the European Commission (EC) for the modification of an existing Directive on asbestos (76/769/EEC), the EC announced a ban of asbestos.

In a related move, in late 1998, and following unsuccessful consultations between the parties, Canada formally announced that it would challenge a French ban on the importation and use of asbestos using the WTO's dispute resolution mechanism. A panel was created in March 1999 and hearings began in June. The second phase of the panel process – further briefs and consultations with a committee of experts – was completed in January 2000. The panel is expected to render its decision in mid-2000.

Asia-Pacific

Asia-Pacific Economic Cooperation (APEC)

The Expert Group on Mineral and Energy Exploration and Development (GEMEED), a subgroup of APEC's Energy Working Group, held its fourth annual meeting in Bangkok, Thailand, in April 1999. GEMEED established its own web site at http://www.gemeed.cl.

Significant GEMEED activities and achievements during 1999 included:

 completing the second phase of the APEC Network of Mineral and Energy Data (ANMED), its Internet-based exploration database project comprising a wide variety of member economy information such as relevant mining and environmental legislation, and geoscientific data related to exploration (http://www.anmed.org);

- the Sub-Group on Environmental Cooperation, chaired by Japan, published the results of a study on Trends in International Environmental Law Affecting the Mining Industry, and set up the ECOW Virtual Centre (http://ecow.mmal.go.jp) to exchange information on environmental issues in APEC; and
- the third Environmental Cooperation Workshop for Sustainable Development of Mining Activities (ECOW'99), held in Cairns, Australia, which addressed three themes: Small- and Medium-Scale Mining, Life Cycle Analysis (LCA) Application to Nonferrous Metal Products, and Metals and the Environment.

China

In 1999, NRCan co-chaired the final meeting of the Canada/China Nonferrous Metals and Minerals Working Group in Ottawa. The Nonferrous Working Group, which addresses base metals and aluminum, was co-chaired with the State Non-Ferrous Metals Industry Administration (SNMIA), the successor to the China National Nonferrous Metals Industry Corporation. The meeting provided opportunities to exchange information on each country's minerals industry and to discuss issues related to business climate and possible areas of collaboration in science and technology.

The SNMIA, a policy and management body, also retains decision-making power over the CNNC's former "enterprises" during a three-year transition period. Three commodity groups – China Aluminium Group Corporation, China Copper Lead and Zinc Group, and China Rare Metals and Rare Earth Corporation – were established. Some 135 major stateowned companies will be run by these three new groups.

Formed by the recent restructuring, the Ministry of Land and Resources (MLR), which reports directly to the State Council, is the only organization among government entities responsible for mining and minerals that has a full ministry status. The MLR is working with provincial governments to improve China's regulatory climate for mineral exploration and mining. The Chinese government had designated Yunnan Province as a "Pilot Region" for fasttracked and streamlined approvals for mining exploration and development by foreign companies.

Among its other responsibilities, the MLR will be involved in sustainable development, protection of the environment, international cooperation and exchanges with foreign countries, and broad land-use management. NRCan is negotiating a framework MOU with the MLR that will cover a number of these areas and that will likely be signed in early 2000.

Arctic

Arctic Council

The Arctic Council was established on September 19, 1996, in Ottawa, Canada. A high-level intergovernmental forum, the Council provides a mechanism to address the common concerns and challenges faced by Arctic governments and the people of the Arctic.

The members of the Council are Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. The Association of Indigenous Minorities of the North, Siberia and the Far East of the Russian Federation, the Inuit Circumpolar Conference, and the Saami Council are permanent participants in the Council. There are provisions for non-Arctic states, intergovernmental and inter-parliamentary organizations, and nongovernmental organizations to become involved as observers, e.g., Germany, the Netherlands, Poland, the United Kingdom, the Nordic Council, the Northern Forum, the United Nations Economic Commission for Europe, the United Nations Environment Programme, and the International Arctic Science Committee.

The Council meets biennially at the ministerial level. The Chair and Secretariat of the Council rotate every two years among the eight Arctic states, beginning with Canada in 1996 and moving to the United States in 1998. In October 2000, in Barrow, Alaska, the Arctic Council's second ministerial meeting will take place to elect a new chair. It is anticipated that Finland will be elected to this position.

Since its inception, the Arctic Council's work plan has expanded to five working groups that address a number of issues of relevance to the minerals and metals industry. These working groups are described briefly below.

The Arctic Monitoring and Assessment Program (AMAP) has the responsibility to monitor the levels of, and assess the effects of, anthropogenic pollutants in all compartments of the Arctic environment, including humans, e.g., in 1999 AMAP began an initiative to expedite the phase-out of the use of polychlorinated biphenyls (PCBs) in the Russian Federation and to further develop environmentally sound disposal practices in Russia, especially in the Russian Arctic.

Conservation of Arctic Flora and Fauna (CAFF) addresses the special needs of Arctic species and their habitats in the rapidly developing Arctic region, e.g., the establishment of protected areas in the Arctic region where they contribute to the conservation of ecosystems, habitats and species. Emergency Prevention, Preparedness and Response (EPPR) is an experts forum to evaluate the adequacy of existing arrangements and to recommend the necessary system of cooperation. In addition, they provide an assessment of national activities having the potential for transboundary impacts and of the effectiveness of national, bilateral and multilateral legal instruments and agreements to prevent, prepare for and respond to each.

Protection of the Arctic Marine Environment (PAME) addresses policy and non-emergency response measures related to protection of the marine environment from land and sea-based activities. PAME cooperates with the other working groups under the Arctic Environmental Protection Strategy on the following topics: pollution prevention and control, habitat protection and biodiversity, identification and assessment of problems, and sustainable development and environmental protection.

The Sustainable Development Working Group's (SDWG) objective is to protect and enhance the economies, culture and health of the inhabitants of the Arctic in an environmentally sustainable manner. Currently, the SDWG is working on projects in the areas of Arctic children and youth, health, telemedicine, resource management, technology transfer to improve Arctic sanitation systems, national sustainable development strategies, living conditions in the Arctic, and linking Arctic communities.

Notes: (1) Information in this review was current as of December 31, 1999. (2) This and other reviews, including previous editions, are available on the Internet at http://www.nrcan.gc.ca/mms/cmy/index_e.html.

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