



**Governing Council
of the United Nations
Environment Programme**

Distr.: General
19 November 2008

Original: English



**Twenty-fifth session of the Governing Council/
Global Ministerial Environment Forum**
Nairobi, 16–20 February 2009
Item 4 (a) of the provisional agenda*
Policy issues: state of the environment

Chemicals management, including mercury

Report of the Executive Director¹

Summary

The present report is being submitted to the Council/Forum at its twenty-fifth session pursuant to paragraphs 3 and 4 of decision SS.X/1 of 22 February 2008, with a view to facilitating the consideration by the Council/Forum of the significant programme-related matters raised in the reports by the Executive Director submitted to the Council/Forum at its tenth special session, on chemicals management, on progress of the Ad Hoc Open-ended Working Group on Mercury and on waste management. The present report and its addendum constitute a full report on the implementation of decision 24/3 of 9 February 2007 on chemicals management and 24/5 of 9 February 2007 on waste management, as requested by decision SS.X/1.

The present report is divided into three chapters, corresponding to the three parts of decision 24/3 that require a report back to Governing Council: the Strategic Approach to International Chemicals Management; lead and cadmium; and the mercury programme.

* UNEP/GC/25/1.

¹ The designations employed and the presentation of the material in the present report do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or its authorities or the delimitation of its frontiers or boundaries.

I. Suggested action by the Governing Council

1. The Governing Council may wish to adopt a decision on the following lines:

The Governing Council,

Recalling its decisions 18/12 of 26 May 1995, 19/13 of 7 February 1997, 20/23 of 4 February 1999, SS.VII/3 of 15 February 2002, 22/4 of 7 February 2003, 23/9 of 25 February 2005, SS.IX/1 of 9 February 2006 and 24/3 of 9 February 2007 concerning global policies related to chemicals management and the development of a strategic approach to international chemicals management,

Acknowledging the widespread concerns over the serious adverse effects of mercury on human health and the environment and the urgent need for international action,

Noting that the work will be carried out within the framework of the programmes of work of the United Nations Environment Programme and its subprogrammes,

Having considered the reports of the Executive Director on chemicals management,

I. Strategic Approach to International Chemicals Management

1. *Welcomes* the progress made so far in implementing the Strategic Approach to International Chemicals Management;
2. *Also welcomes* the important contributions of the United Nations Environment Programme to the implementation of the Strategic Approach process and in particular the efforts to integrate sound management of chemicals into development planning processes for developing countries and countries with economies in transition and the assistance to developing countries and countries with economies in transition in preparing proposals for the Quick Start Programme and their subsequent implementation;
3. *Underlines* the importance of the multi-stakeholder, cross-sectoral and voluntary nature of the Strategic Approach;
4. *Also underlines* the importance of the continuing cooperation between the United Nations Environment Programme and other participating organizations and observers of the Inter-Organization Programme for the Sound Management of Chemicals;
5. *Encourages* the United Nations Environment Programme to play a leading role in the implementation of the Strategic Approach, including in identifying emerging issues;
6. *Urges* Governments, intergovernmental organizations, non-governmental organizations and others in a position to do so to contribute financially and in kind to implementation of the Strategic Approach to International Chemicals Management, including through the Quick Start Programme, the secretariat and the programme of work of the United Nations Environment Programme;

II. Lead and cadmium

7. *Acknowledges* the progress made on lead and cadmium, including actions taken to finalize the reviews of scientific information on lead and cadmium, in particular the actions taken to fill the data and information gaps, together with the actions to compile an inventory of risk management measures;
8. *Encourages* efforts by Governments and others to reduce risks to human health and the environment of lead and cadmium throughout the whole life cycle of those substances;
9. *Requests* the Executive Director to facilitate the above-mentioned work in developing countries and countries with economies in transition based on requests and subject to available funding;

10. *Also requests* the Executive Director to continue activities to fill existing gaps in knowledge, in particular on the extent of trade in lead and cadmium;

III. Mercury

11. *Acknowledges* the progress made within the United Nations Environment Programme mercury programme since 2005, including the establishment of and progress made under partnerships and other initiatives;

12. *Recognizes* that current efforts to reduce risks from mercury are not sufficient to tackle the global challenges posed by mercury;

13. *Welcomes* the reports on atmospheric emissions and on contaminated sites;

14. *Recognizes* that a range of activities are required to tackle the challenges posed by mercury, including substitution of products and technologies; technical assistance and capacity-building; development of national policy and regulation; data collection, research and provision of information, bearing in mind the need to provide assistance to developing countries and countries with economies in transition;

15. *Commits* to increased efforts to tackle the global challenges to reduce risks from releases of mercury, recognizing in particular the need for internationally coordinated immediate action to prevent further environmental contamination;

16. *Adopts*, as an overall structure for further activities, the policy framework developed by the Ad Hoc Open-ended Working Group and presented to the Council/Forum;

17. *Recognizes* the UNEP Global Mercury Partnership as a vehicle for immediate actions on mercury;

18. *Requests* the Executive Director, working in consultation with Governments and other stakeholders to continue to strengthen the United Nations Environment Programme Global Mercury Partnership to attain its agreed goal, and to support current activities within this framework, in particular by:

(a) *Inviting* Governments and other stakeholders to join and support the United Nations Environment Programme Global Mercury Partnership;

(b) *Encouraging* the partnership areas that have not done so to set numerical reduction targets, including appropriate time frames, as appropriate;

(c) *Assisting* developing countries and countries with economies in transition by providing capacity-building activities and assisting, as practicable, with the provision of technology transfer, subject to availability of funds;

19. *Urges* Governments, intergovernmental organizations, industry, non-governmental organizations and academic institutions to continue and enhance their support of the United Nations Environment Programme mercury programme partnerships, through the provision of technical and financial resources such as supporting implementation of country-based projects that tackle mercury risk reduction and risk management including addressing mercury supply, storage, and waste management;

20. *Requests* the Executive Director to continue to facilitate work between the mercury programme of the United Nations Environment Programme and Governments, other international organizations, including relevant multilateral environmental agreements such as the secretariats of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, non-governmental organizations, the private sector and the partnerships established under the mercury programme, as appropriate;

21. *Requests* the Executive Director to investigate the potential to achieve major reductions in emissions of mercury, including those from coal-fired installations, through the contribution of measures being taken for traditional pollutant control and other initiatives being taken in the context of climate change, and to report the results of this investigation to the Governing Council/Global Ministerial Environment Forum at its twenty-sixth session;
22. *Also requests* the Executive Director to establish a programme to monitor global emissions, by updating the global emissions report every four years, with the next report to the Governing Council/Global Ministerial Environment Forum at its twenty-seventh regular session;
23. *Acknowledges* the need to manage chemicals of global concern in an efficient, effective and harmonized manner;
24. *Recognizes* that efforts to tackle the global mercury challenge may require support of legally binding measures for long-term successful implementation;
25. *Requests* the Executive Director to prepare for and convene an international negotiating committee to develop additional international controls for the control of mercury via a suitable framework and in line with the policy framework presented at the second meeting of the Ad Hoc Open-ended Working Group on Mercury for the consideration of the Governing Council;
26. *Agrees* that the Governing Council/Global Ministerial Environment Forum, at its twenty-sixth regular session, will decide upon the mandate and scope of the international negotiating committee, taking into account the need for a legal framework for long-term successful implementation, the report of the Executive Director on the potential to achieve major reductions in emissions of mercury through other initiatives, and the desirability for chemicals to be managed in an efficient, effective and harmonized manner;
27. *Also agrees* that the first meeting of the intergovernmental negotiating committee will be held as soon as possible after the twenty-sixth regular session of the Governing Council/Global Ministerial Environment Forum;]
28. *Requests* the Executive Director to provide suitable secretariat support for the above meeting, and to prepare the analytical and summary reports necessary for its work.
29. *Invites* Governments and others in a position to do so to provide extrabudgetary resources for the implementation of the present decision;
30. *Requests* the Executive Director to present a report on progress in the implementation of the present decision to the Governing Council/Global Ministerial Environment Forum at its twenty-sixth session.

II. Introduction

2. The present report has been prepared pursuant to Governing Council decision 24/3 on chemicals management. The document provides background information to support the deliberations of the Governing Council/Global Ministerial Environment Forum and is divided into three chapters, corresponding to the three parts of decision 24/3 which required a report back to Governing Council, relating to: the Strategic Approach to International Chemicals Management; lead and cadmium; and the mercury programme.

3. Attention is drawn to the following associated documents, which provide additional information relevant to the present document:

- (a) UNEP/GC.25/5.Add.1 – report to Governing Council on the outcomes of discussions at the second meeting of the Ad Hoc Open Ended Working Group on Mercury;
- (b) UNEP/GC/25/5.Add.2 – Waste Management;
- (c) UNEP/GC.25/INF/22 – Information on the endeavours of the Inter-Organization Programme for the Sound Management of Chemicals in implementing the Strategic Approach to International Chemicals Management;

- (d) UNEP/GC.25/INF/23 – Draft final reviews of scientific information on lead, along with their appendices on ‘Overview of existing and future national actions, including legislation, relevant to lead and cadmium’, the compilation of existing risk management measures and the study on the health and environment effects from the movement of products containing lead, cadmium and mercury in Africa;
- (e) UNEP/GC.25/INF/24 – Draft final reviews of scientific information on cadmium, along with their appendices on ‘Overview of existing and future national actions, including legislation, relevant to lead and cadmium’, the compilation of existing risk management measures;
- (f) UNEP/GC.25/INF/25 - Full report of the second meeting of the Open Ended Working Group on mercury, including national and regional statements;
- (g) UNEP/GC.25/INF/26 and Add.1 - draft report on atmospheric emissions;
- (h) UNEP/GC.25/INF/27 – Status report on partnerships as one approach to reducing the risks to human health and the environment from the release of mercury and its compounds into the environment;
- (i) UNEP/GC.25/INF/28 draft report on the extent of contaminated sites.

III. UNEP activities to support the implementation of the Strategic Approach to International Chemicals Management

4. In 2005, at its twenty-third session, the Governing Council/Global Ministerial Environment Forum adopted decision 23/9 II, which requested the Executive Director, as a matter of high priority, to make appropriate provision for the implementation of the responsibilities of UNEP under the Strategic Approach and for activities to support developing countries and countries with economies in transition in implementing the Strategic Approach To International Chemicals Management, taking into account the Bali Strategic Plan for Technology Support and Capacity-building.

5. The Governing Council/Global Ministerial Environment Forum endorsed in decision SS.IX/1 of 9 February 2006 the Strategic Approach to International Chemicals Management, as adopted by the International Conference on Chemicals Management in Dubai, United Arab Emirates, on 6 February 2006.

6. In response to the above decisions, a UNEP interdivisional working group was established in 2006 to develop a dual approach to supporting Strategic Approach implementation activities for the biennium 2006–2007, involving:

- (a) A series of initial activities, planned for 2006–2007, to support key objectives of the Strategic Approach, beginning with a symposium on illegal traffic in hazardous chemicals, held in the Czech Republic in November 2006 with financial support from the Government of Germany;
- (b) A comprehensive workplan for supporting implementation of the Strategic Approach during the period 2008–2020, which has been drawn up with reference to the Overarching Policy Strategy and the Global Plan of Action of the Strategic Approach. The workplan was presented to the Governing Council at its twenty-fourth session.

7. In its decision 24/3 II of 9 February 2007, the Governing Council/Global Ministerial Environment Forum took note of the UNEP plan of work in support of the implementation of the Strategic Approach and requested the Executive Director to encourage the full participation of Governments and other stakeholders therein, including in initiatives related to indicators and tools for evaluation, and to report on progress to the Governing Council/Global Ministerial Environment Forum at its twenty-fifth session;

8. In its decision SS.X/3 of 22 February, the Governing Council authorized the Executive Director to use the medium-term strategy 2010–2013 in formulating the work programme for UNEP. The plan of work for the implementation of the Strategic Approach has been integrated under the medium-term strategy’s cross-cutting thematic priority on harmful substances and hazardous waste.

9. In that regard, the medium-term strategy defines three expected accomplishments:

- (a) Increased capacities and financing of States and other stakeholders to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous waste;
- (b) Coherent international policy and technical advice is provided to States and other stakeholders for managing harmful chemicals and hazardous waste in a more environmentally sound manner, including through better technology and best practices;
- (c) Appropriate policy and control systems for harmful substances of global concern are developed and in place in line with State's international obligations and the mandate of each entity.

10. In addition to supporting implementation of the Strategic Approach in the environment sector, UNEP, with the World Health Organization (WHO), also acts as the secretariat for the Strategic Approach, which facilitates implementation in all sectors, and services both the Strategic Approach governing body and the International Conference on Chemicals Management. During the initial phase of Strategic Approach implementation, the secretariat paid particular attention to assisting implementation planning at the regional level and to establishing the Quick Start Programme, the trust fund of which is administered by UNEP as trustee. As of October 2008, the Trust Fund Implementation Committee had approved funding of \$14 million for 74 projects. During 2008 attention has increasingly shifted to preparations for the second session of the Conference, which will be held in Geneva from 11 to 15 May 2009. These preparations have included an assessment of the performance of the initial financial arrangements for the Strategic Approach.

A. Activities related to specific expected accomplishments of the Strategic Approach

11. Current UNEP activities on chemicals are contributing to the policy framework of the Strategic Approach for efforts to attain the goal of the Plan of Implementation of the World Summit on Sustainable Development that, by 2020, chemicals must be used and produced in ways that minimize significant adverse effects on human health and the environment. Various incremental activities related to the implementation of the Strategic Approach have been initiated during 2007–2008 and will continue into 2009 and the following biennium. These incremental activities are described below in accordance with the above-mentioned expected accomplishments.

1. Expected accomplishment (a): Increased capacities and financing of States and other stakeholders to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous waste

(a) Mainstreaming

12. The United Nations Development Programme and UNEP have developed a partnership to facilitate the integration, as part of the poverty-environment linkage, of sound management of chemicals into development planning to support sustainable development in developing countries and countries with economies in transition:

- (a) To identify specific areas of chemicals management likely to result in demonstrated environment, health and economic benefits and put in place a plan to begin addressing the identified gaps;
- (b) To assess their national development strategies relative to protecting the environment and human health from adverse effects through sound management of chemicals;
- (c) To improve, where relevant, the integration of chemicals management priorities into national development plans.

13. With funding support secured through the Quick Start Programme Trust Fund under the Strategic Approach, the partnership initiative has been launched in the former Yugoslav Republic of Macedonia and Uganda, while activities in Belarus, Belize, Ecuador, Honduras, Liberia and Mauritania will begin in the first quarter of 2009. In addition, thanks to support from the Swedish

Government, two more countries have been added: Zambia, where implementation was initiated in 2007, and Cambodia, where activities began in 2008.

14. Regional meetings have been organized, with funding from the Norwegian Government, to bring together line ministries (environment and health ministries) with ministries for finance and planning to discuss barriers to the inclusion of sound chemicals management in national development plans.

15. In support of the above and using funding from the Swedish Government, UNEP has launched activities to develop guidance on legal and institutional infrastructures for sound chemicals management. The guidance is expected to be finalized in 2009 and will subsequently be tested in a number of countries under the partnership.

(b) Support for development of country proposals for Strategic Approach implementation

16. UNEP has supported the development of country proposals for the Strategic Approach Quick Start Programme in Armenia and the Republic of Moldova. The former, to be implemented in 2009, and relates to partnership initiative for sound management of chemicals and the implementation of strategic approach in Armenia. The latter, already under implementation, is part of the partnership on capacity-building for improving the environmentally sound management of chemicals and the implementation of the Strategic Approach.

(c) Flexible framework for major chemicals accident prevention and preparedness

17. UNEP established in 2007 an initiative to promote the development of a flexible framework for prevention and preparedness related to major chemical accidents. This initiative complements UNEP efforts in promoting chemical safety in fast-growing economies that are experiencing extremely rapid industrialization and modernization, and that need support in prevention and preparedness for major chemical accidents. To coordinate the development and discuss the contents, needs and implementation mechanisms of this framework, a UNEP expert working group has been established, involving selected experts and institutions in the fields of chemical safety and prevention of major industrial accidents. This working group comprises representatives from the European Commission, the Working Group on Chemical Accidents under the Organization for Economic Cooperation and Development, the International Labour Organization, the United Nations Industrial Development Organization, the United Nations Economic Commission for Europe, WHO and the Asian Disaster Preparedness Centre, among others. The expert working group, having already met three times, has drafted guidance for a flexible framework relating to chemical accidents, which will be implemented in two countries, Cambodia and Philippines, in 2009. Furthermore, UNEP will pursue its work with the expert working group to develop more supporting material for capacity-building and for promoting the Strategic Approach in several developing countries contributing to the Bali Strategic Plan and the Strategic Approach.

2. Activities related to expected accomplishment (b): Coherent international policy and technical advice is provided to States and other stakeholders for managing harmful chemicals and hazardous waste in a more environmentally sound manner, including through better technology and best practices

(a) First inter-ministerial conference on health and environment in Africa

18. UNEP co-organized with WHO and in partnership with the Government of Gabon the first inter-ministerial conference on health and environment in Africa from 26 to 29 August 2008 in Libreville, intended to tackle challenges related to health and environment. Over 300 experts and 50 health and environment ministers adopted the Libreville Declaration on Health and Environment in Africa to commit their Governments to promote and maximize synergies between the health, environment and social and economic sectors. At the same time, the joint WHO-UNEP Health and Environment Linkages Initiative toolkit and synthesis report were launched, constituting a management method to make better use of available evidence and existing knowledge through linked assessment of health and environment impacts and cost and benefit methodologies that support evidenced-based economic development policies. The ministers agreed to meet again before the end of 2010 to review progress.

(b) Chemicals in products

19. With support from the Japanese and Swedish Governments, an initial step to meet stakeholders' needs for information on chemicals contained in articles and products will be taken through a workshop expected to be held in February 2009. The issue is closely linked to both the Strategic Approach and the Marrakech Process on Sustainable Consumption and Production. The workshop is expected to convey its outcome to the International Conference on Chemicals Management at its second session for consideration in the discussions on emerging issues.

3. Activities related to expected accomplishment (c): Appropriate policy and control systems for harmful substances of global concern are developed and in place in line with State's international obligations and the mandate of each entity

(a) Analytical capacity for persistent organic pollutants

20. UNEP is executing two projects with four Caribbean countries under the Strategic Approach Quick Start Programme. The multi-country project for the Bahamas, Barbados and Haiti focuses on building analytical capacity for persistent organic pollutants in these countries by enabling them to design their monitoring networks for the core matrices of the global monitoring programme for persistent organic pollutants under the Stockholm Convention on Persistent Organic Pollutants. These core matrices, as agreed at the third meeting of the Conference of the Parties of the Stockholm Convention, are ambient air and breast milk. The project includes training of laboratory staff in the analysis of persistent organic pollutants and provision of spares and consumables to enable them to analyse such pollutants in these matrices according to international standards. The second project will assess and improve the analytical capacity of pollutant laboratories in Cuba, a country that only recently ratified the Stockholm Convention and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. During the project, laboratories will be identified that are capable of analysing persistent organic pollutants at the national level with a fair distribution between sectors in need of data thereon. In accordance with the institutional and economic situations of these laboratories, needs for capacity-building, training and equipment will be identified for delivery. The project will assist Cuba in establishing a future national monitoring system as laid down in its national implementation plan.

(b) Open burning of waste

21. The open burning of waste and biomass (in agriculture or forest fires) has been identified as the major dioxin and furan sources in inventories carried out by developing countries. Thus far, however, no measured data are available from waste disposal practices in developing countries. The Government of Sweden and the Chlorine Chemistry Division of the American Chemistry Council, United States of America, are the main donors to a project that will, for the first time, generate emission factors for dioxins and furans from open burning of waste in developing countries. This two-year project began in 2007 and will be concluded in the spring of 2009. It is being implemented by UNEP in China and Mexico with the assistance of dioxin laboratories in Sweden and the United States. The project will build capacity in developing countries to design and implement studies for determining toxic chemicals from waste management practices, identify the main drivers for high emission factors and provide initial recommendations on best practices to reduce the formation and release of these toxic chemicals and, thus, reduce exposures to the environment and the general population. The results will directly feed into the Stockholm Convention methodology for identifying and quantifying dioxin and furan releases.

IV. Endeavours by the Inter-Organization Programme for the Sound Management of Chemicals to implement the Strategic Approach

22. In decision 24/3 II on the Strategic Approach to International Chemicals Management, the Governing Council requested the Executive Director to continue the collaboration between UNEP and other participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals and to prepare a report for consideration by the Governing

Council/Global Ministerial Environment Forum at its tenth special session on endeavours by that Programme in implementing the Strategic Approach.

23. An updated report in that regard is provided in the note by the Executive Director on chemicals management (UNEP/GC.25/INF/22).

V. Second session of the International Conference on Chemicals Management

24. The Strategic Approach on International Chemicals Management was adopted at the first session of the International Conference on Chemicals Management, held in February 2006. Sessions of the Conference will be held in 2009, 2012, 2015 and 2020, unless otherwise decided by the Conference. The second session of the Conference is scheduled to take place in Geneva from 11 to 15 May 2009, immediately prior to the sixty-second World Health Assembly. The Conference would itself be preceded by the fourth meeting of the Conference of the Parties to the Stockholm Convention.

25. The second session of the Conference will provide an initial opportunity to evaluate progress made in the implementation of the Strategic Approach at the global, regional and national levels. The Conference will make recommendations to guide stakeholders in and facilitate the further implementation of the Strategic Approach.

26. The Conference will discuss how to promote the strengthening of national chemicals management capacities, coherence between international instruments and programmes, and the development of modalities for reporting on implementation of the Strategic Approach. The Conference will also evaluate the performance of the financial arrangements, including the UNEP-administered Quick Start Programme Trust Fund, and make recommendations on ensuring the availability of resources for supporting implementation of the Strategic Approach. A number of emerging policy issues, currently being prioritized, will be considered by the Conference along with procedures for the identification of such issues in the future. In addition, there are a number of outstanding institutional matters to be resolved by the Conference, including rules of procedure and the establishment of a bureau and possibly subsidiary bodies.

27. UNEP will underline the importance of the multi-stakeholder, cross-sectoral and voluntary nature of the Strategic Approach and that the UNEP thematic strategy on harmful substances and hazardous waste is contributing to the objectives of the Strategic Approach. It will also emphasize the importance of establishing a rigorous, inclusive and transparent basis for identifying and assessing chemicals related issues of emerging global importance. UNEP will continue to encourage all stakeholders to support the implementation of the Strategic Approach.

VI. Activities by UNEP pursuant to decision 24/3 III on lead and cadmium

28. The Governing Council, in its decision 24/3 III, requested UNEP to provide available information on lead and cadmium to address the data and information gaps identified in the interim reviews and to compile an inventory of existing risk management measures. The information set out below is provided in accordance with that request.

A. Further activities on the reviews of scientific information on lead and cadmium and on the compilation of the inventory of existing risk management measures

29. All Governments were requested to supply any new or additional available information to be submitted to the Chemicals Branch of the UNEP Division of Technology, Industry and Economics. The reviews were circulated for comments and the revised versions of the reviews of both lead and cadmium are presented for the information of the Governing Council as documents UNEP/GC/25.INF/23 and INF/24.

30. In addition, documents UNEP/GC/25.INF/23 and INF/24 contain the inventory of existing risk management measures. The inventory is based on information submitted by Governments, non-governmental organization and inter-governmental organizations.

31. Document UNEP/GC/25.INF/23 also contains the result of a study carried out in cooperation with the Government of Sweden and with the assistance of the African Roundtable on Sustainable Consumption and Production on the possible effects on human health and the environment in Africa of the trade of products containing lead, cadmium and mercury

32. The above-mentioned documents are available at the website listed in the annex to the present note.

B. Other UNEP activities relating to lead

33. The goal of the Partnership for Clean Fuels and Vehicles is the global elimination of leaded gasoline. The Partnership with its secretariat at UNEP has continued to support countries to eliminate the use of leaded gasoline and to reduce sulphur levels in fuels concurrent with the adoption of cleaner vehicle technologies. At the beginning of 2008, 19 countries worldwide were still using leaded gasoline. Within the year, three countries – Jordan, the Lao People’s Democratic Republic, and Mongolia, along with the Occupied Palestinian Territory – have ceased using leaded gasoline and an additional two countries – Afghanistan and Morocco – are expected to phase out its use at the end of 2008. Tunisia, expected to phase out such use at the end of 2008, in the Partnership national awareness-raising activity, committed itself to phasing out leaded gasoline at a date in the near future to be communicated. Phase-out in Jordan and the Occupied Palestinian Territory was achieved successfully through a strong partnership with regard to national awareness-raising activities. In the Lao People’s Democratic Republic and Mongolia, through similar national awareness-raising activities, Partnership support for legislation against leaded gasoline was identified as a need. In addition to these national activities in 2008, the Partnership also coordinated three subregional events of which the phase-out of leaded gasoline was a major component – in the Eastern Europe, Caucasus and Central Asia region in January, the Gulf region in March and North Africa on August. Through these events, countries have been assisted to set timelines and strategies to stop the use of leaded gasoline.

C. Funding for the implementation of the decision

34. During 2007–2008, the Government of Sweden contributed approximately \$180,000 to support the development of the above-mentioned study on the effects of trade in products containing lead, cadmium and mercury in Africa, and the presentation of this study at an intergovernmental workshop in December 2008. No other contributions were received specifically for the work on lead and cadmium.

D. Issues to be considered by the Governing Council at its twenty-fifth session relating to lead and cadmium

35. In the light of its decision 23/9 III, the Governing Council may wish to consider further, on the basis of the present reviews, the need for global action in relation to lead and cadmium and also, as highlighted in decision GC 23/3 III for further efforts by Governments and others to reduce the risks to human health and the environment from lead and cadmium throughout the entire life cycle of these substances. The Governing Council may also wish to consider the needs of developing countries and countries with economies in transition for assistance in undertaking such efforts.

VII. Activities by UNEP pursuant to decision 24/3 IV on mercury

36. In its decision 24/3 IV on a number of areas related to tackling the global challenges posed by mercury, the Governing Council requested the Executive Director to present a report on progress in the implementation of the decision. It established priorities for increased efforts and requested Governments to gather and present information in relation to the key areas of supply and trade (with

an emphasis on the reduction of primary mining). The decision requested UNEP to prepare a report on current atmospheric emissions of mercury and an analysis of the extent of contaminated sites. UNEP was also requested to facilitate cooperation between Governments, other international organizations, non-governmental organizations and the private sector and to strengthen the UNEP Global Mercury Partnership. Lastly, recognizing that further long-term international action was required to reduce risks to human health and the environment, the decision established an ad hoc open ended working group of governments, regional economic integration organization and stakeholder representatives to review and assess options for enhanced voluntary measures and new or existing international legal instruments.

37. With regard to the requirements of that decision, UNEP circulated to Governments and to intergovernmental and non-governmental organizations a call for information and an invitation to support, both financially and technically, implementation of the decision. The sections below report on progress of implementation of the various activities as called for in the decision.

A. Information on means to reduce risk caused by supply of mercury and on options to address trade, including considering environmentally sound storage and curbing primary mining

38. The UNEP secretariat has prepared a report on the supply of and demand for mercury, which analyses the projected demand requirements for mercury until 2020, and potential limitations on supply over this period. The analysis includes the effects of export bans that have been developed by both the European Union and the United States, the potential effects of the closure of a mercury mine in Kyrgyzstan, and possible decreases in productivity of mercury mines in China. The report was prepared for consideration by the Ad Hoc Open-ended Working Group on Mercury at its second meeting in October 2008. Following this meeting, it is being updated, and will be published on the mercury website.

39. The Governments of Switzerland and the United States have provided funding for a project to investigate the possibility of closing the last exporting primary mercury mine, located in Kyrgyzstan. Together with United Nations Institute for Training and Research and UNEP-Global Resource Information Database office, located in Arendal, Norway, the Chemicals Branch has assisted in preparing a technical report on the mercury mine. Following this report, work will continue and will focus on an assessment of the social and economic impact of the closure of the mine.

40. Information on the market and social and economic effects of control of mercury pollution has been collected and analysed by a project undertaken by the Nordic Council of Ministers. The full report of this research project was made available to the second meeting of the Open-ended Working Group on Mercury as document UNEP(DTIE)/Hg/OEWG.2/INF/7. In addition, this information was presented at a seminar held in conjunction with the second meeting of the Ad Hoc Open-ended Working Group on Mercury.

41. The Government of Norway is supporting a pilot project to investigate suitable sites for the sound storage of mercury in Asia and Latin America. The project commenced in late 2008 and will analyse the need for storage of surplus mercury over the next 20 years, in addition to developing a range of criteria that could be applied to determine the suitability of a site for long-term environmentally sound storage.

42. Measures to restrict the trade of mercury have been adopted both by the European Union and by the United States. The export of mercury and mercury compounds (including mercurous chloride and mercuric oxide) from the European Union will be prohibited from 15 March 2011. In the United States, the ban on the federal sale and export of elemental mercury will take place immediately. All exports of elemental mercury will be banned as of 1 January 2013. The act provides for a long-term management and storage option for elemental mercury generated by the private sector as of 2010. These bans will significantly decrease supplies from these major exporters, and, if combined with suitable activities to find alternatives, have the potential to reduce significantly mercury releases to the environment.

B. Atmospheric emissions and contaminated sites

43. The Governing Council, by its decision 24/3 IV, paragraphs 24 (a) and (b), requested the Executive Director to prepare a report on atmospheric emissions of mercury. UNEP cooperated with the Arctic Monitoring and Assessment Programme working group under the Arctic Council to develop a report responding to this request, with the Programme secretariat engaged to coordinate the work process. The report was based on the previous assessment of emissions, produced as part of the Global Mercury Assessment, and contains three components, all of which are available to the Governing Council. A draft executive summary is available to the Governing Council as document UNEP/GC.25/INF/25.

44. Documents UNEP/GC.25/INF/26 and Add.1 include the summary report and the detailed technical background report, respectively. The report, entitled “Global Atmospheric Mercury Assessment: Sources, Emissions and Transport”, is a summary report for policymakers and addresses atmospheric emissions (focusing on the anthropogenic emissions), emissions trends, and results from recent research on atmospheric transport, modelling, and deposition of mercury. It provides improved emissions estimates based on improved emission factors, improved national reports, estimates for sectors not previously quantified, and scenarios that explore future emissions and the prospects for reductions. Annexed to this summary report is the detailed technical background report (the fully referenced scientific report), “Technical Background Report to the Global Atmospheric Mercury Assessment”, which forms the basis for the summary report.

45. The reports were prepared using information submitted by Governments, intergovernmental and non-governmental organizations, and available scientific information. Input from the Mercury Air Transport and Fate Research partnership area within the UNEP Global Mercury Partnership has been used both through the direct involvement of experts as co-authors and through the partnership draft report made available in mid-March 2008. The draft report has been reviewed by Governments, intergovernmental organizations, non-governmental organizations and other stakeholders, and was also presented at the second meeting of the Ad Hoc Open-ended Working Group on Mercury in Nairobi, in October 2008.

46. The major changes noted in this report between the time of its preparation and the preparation of its predecessor included improvements in national reporting for many countries, although it was noted that national inventories were still poor in a number of countries. In some areas, there was improved information on point sources. Improved factors have been developed for estimating emissions where data is scarce, and additional estimates were able to be included for sectors where no estimates had been made previously. In addition, this report was able to look at emission scenarios on a global scale, which had not been able to be undertaken previously. It was recognized within the report that caution was needed in comparing inventories from varying time periods. Inventories represent the best possible information and methods available at the time, however new inventories can include improved data, use better estimation methods, and may include new sectors not previously assessed.

47. Notwithstanding these caveats, the report indicates that, over the period 2000–2005, unintentional emissions of mercury in Europe and North America have decreased following the introduction of control technology, while increases were seen in some countries in Asia over the same period. Improved data and information in Africa and Oceania have led to decrease in the estimated emissions. The largest single source of emissions from human sources is the burning of fossil fuels, with the mining sector being the next largest source. Cement production, waste incineration and product-use sources also contribute to global emissions. There are difficulties in analysing trends in emissions, as there were a number of changes in methods and assumptions, as well as the addition of new sectors, between the earlier estimates and the 2005 figures. Scenarios of future emissions have been developed to explore the possibilities for reducing mercury emissions. These scenarios indicate that while increases in emissions would be expected if current trends in development were to persist, there is good potential to reduce emissions significantly by extending the use of emission controls. The study also investigated the atmospheric transport, concentrations and depositions of mercury, and models were used to explore the regional and global effects of

reducing mercury emissions. Models were particularly useful in investigating the effects of changing mercury emissions in one region on deposition in another region.

48. Paragraph 24 (d) of decision 24/3 IV also requested the Executive Director to provide in his report a report on contaminated sites. An executive summary of the report is available to the Governing Council as document UNEP/GC.25/INF/28.

49. Limited information on contaminated sites was provided by countries in response to the request for information by the Executive Director. Submitted information and other available information have been used to produce a report: "Global Study on Contaminated Sites" which addresses the extent of contaminated sites, the risks to public and environmental health of mercury releases from such sites, environmentally sound mitigation options along with their associated costs and the contribution of contaminated sites to global releases. The full report is available on Chemicals Branch website.

C. Cooperation on activities to tackle mercury challenges

50. In addition to the contribution of the Mercury Fate and Transport Partnership Area to the report on mercury emissions, UNEP has, with the support of the Governments of Sweden and the United States, undertaken a number of projects at the country level to develop inventories of mercury uses and emissions. These inventories, which used the toolkit for estimating emissions developed by UNEP, have provided input into the report on air emissions, and have also enabled countries to develop national action plans to tackle mercury. The inventories have also provided extremely useful feedback on the use of the inventory toolkit, which will be incorporated in the next version.

D. Report on progress in strengthening the UNEP Global Mercury Partnership

51. The Governing Council, in paragraphs 26 and 27 of decision 24/3, urged Governments and other stakeholders to continue and enhance their support for the UNEP mercury programme partnerships. It also requested the Executive Director, working in consultation with Governments and other stakeholders, to strengthen the UNEP mercury programme partnerships by taking a number of steps, including developing an overarching framework, expanding the number and scope of partnerships, enhancing the artisanal and small-scale gold mining partnership and endeavouring to secure adequate funds.

52. A detailed report on activities undertaken under the UNEP Global Mercury Partnership is available to the Governing Council as document UNEP/GC.25/INF/27.

1. Consultations

53. UNEP has undertaken a number of consultations and similar initiatives to strengthen and enhance support for the UNEP mercury programme partnerships. Participants in the partnership areas developed business plans through meetings, teleconferences and e-mail consultations. The plans set out objectives, priorities and activities for the partnership areas. UNEP held consultations with partners and other stakeholders from 1 to 3 April 2008 in Geneva, for the purpose of discussing the Executive Director's development of an overarching framework for the partnership programme, including business plans, partnership goals and operational guidelines. The report of this meeting, including the overarching framework developed, is available to the Governing Council as document UNEP/GC.25/INF/28.

2. Strengthening the UNEP mercury programme partnerships

(a) Overarching framework

54. In line with paragraph 27 (a) of decision 24/3, an overarching framework for the partnerships has been developed under the auspices of the Executive Director and in consultation with Government and other stakeholders. It is provided to inform the Governing Council on the progress made within the UNEP Global Mercury Partnership.

55. The overarching framework establishes an overall goal for the UNEP Global Mercury Partnership: to protect human health and the global environment from the release of mercury and its

compounds by minimizing and, where feasible, ultimately eliminating, global anthropogenic mercury releases to air, water and land.

56. The overarching framework also establishes a partnership advisory group, whose functions are to encourage the work of the partnership areas; to review the partnership area business plans in order to advise the partnership areas on the consistency of their business plans; to report to the Executive Director of UNEP on overall progress; to communicate overarching issues and lessons learned while promoting synergy and collaboration; and to report on activities undertaken within the UNEP Global Mercury Partnership. The first meeting of the partnership advisory group is proposed for April 2009.

57. New partners are invited to join the UNEP Global Mercury Partnership. The process for joining the Partnership is outlined in the overarching framework.

58. Business plans have been drafted for the following partnership areas: artisanal and small-scale gold mining; mercury cell chlor-alkali production; mercury air transport and fate research; mercury in products; mercury releases from coal combustion; and mercury waste management. The business plans are posted on the website of the Chemicals Branch (http://www.chem.unep.ch/mercury/partnerships/new_partnership.htm).

59. Individual partnership areas have undertaken self-evaluations. The partnership area evaluations can be found on the above-mentioned website.

(b) Expanding the number and scope of partnerships

60. Decision 24/3 IV called for the expansion of the partnership programme to include new growing or related sectors such as vinyl chloride monomer production, non-ferrous metals mining and cement production and waste combustion. UNEP sought feedback from Governments and other stakeholders on these new and emerging areas, together with other emerging areas outlined in paragraph 19 of decision 24/3 IV, such as mercury supply and storage.

61. Initial feedback indicates that vinyl chloride monomer production is a regional issue and may be addressed in a regional context within Asia. UNEP is working with the Government of China to facilitate regional discussions on the issue to foster regional action planning, awareness-raising and technical information exchange on best practices and innovative approaches.

62. The European Cement Association is compiling worldwide data on the status of mercury emissions from cement kilns collected from public literature, scientific databases and individual company measurements. Along with the UNEP report on atmospheric emissions requested by the Governing Council in its decision 24/3 IV, this information will provide a basis for informed decision on the best means to address the challenge of mercury releases from cement production.

63. The partnership area on mercury waste management has been established, and will be led and supported by the Government of Japan initially for two years. This will include hosting a meeting of the waste management partnership early in 2009 at which stakeholders can exchange information and further discuss the business plan.

64. No lead has been identified for non-ferrous metals mining or mercury supply and storage. A lead is necessary for coordinated activities to be pursued actively in these areas. Draft business plan for these partnership areas were prepared by UNEP in collaboration with key stakeholders. It may be viewed on the above-mentioned website.

(c) Enhancing the artisanal and small-scale gold mining partnership

65. UNIDO has agreed to act as the lead for the artisanal and small-scale gold mining partnership area. UNEP and UNIDO continue to work collaboratively with partners to enhance the artisanal and small-scale gold mining partnership. The business plan recognizes that the issues raised by artisanal and small-scale gold mining are complex and that there is no single solution that can be applied to all sites.

66. UNIDO has developed a strategy for following up on phase 1 of the Global Mercury Project (funded by the Global Environment Facility) and has secured limited funding for doing so. More

information, including an extensive database of related publications, is available on the project website at <http://www.globalmercuryproject.org>.

67. UNEP has initiated two regional projects under the Quick Start Programme of the Strategic Approach in cooperation with a number of interested partners, focusing on South-East Asia and South America. The project will contribute to existing capacity-building efforts to tackle this challenging issue. Project objectives include securing Government commitment to addressing artisanal and small-scale gold mining; developing multi-stakeholder strategic plans for mercury release reduction in artisanal and small-scale gold mining; building on existing activities to address mercury use in artisanal and small-scale gold mining and building capacity for regional collaboration on the issue; and enhancing regional collaboration and coordination. A similar project in West Africa is being initiated by the United States.

68. In terms of standards for gold production, the Madison Dialogue Metals Working Group is working to develop an information-sharing and harmonization system for responsible artisanal and small-scale metals production. This group is building on existing activities and initiatives and is being facilitated by Earthworks, a non-profit organization to protect communities and the environment from the impacts of mineral development.

(d) Endeavouring to secure adequate funds

69. The Executive Director sent a fund-raising letter dated 26 March 2007 to UNEP official focal points drawing attention to decision 24/3 IV and the need for funding to support the implementation of the decision, including work on partnerships. The United States of America subsequently pledged \$1,000,380 to support the work of partnerships. Additional funding is required to implement activities under the UNEP Global Mercury Partnership in line with priority actions established in the partnership area business plans.

70. Partners in the UNEP Global Mercury Partnership have directly supported a number of projects. Other donors have expressed interest but no further funds have been made available to date. UNEP has also taken other steps to secure funding, such as through raising limited funds through the Strategic Approach's Quick Start Programme, in particular for activities relating to artisanal and small-scale gold mining.

E. Ad Hoc Open-ended Working Group on Mercury

71. The Governing Council, in decision 24/3, decided to establish an ad hoc open-ended working group of Governments, regional economic integration organizations and stakeholder representatives to review and assess options for enhanced voluntary measures and new or existing international legal instruments.

72. The first meeting of the working group was held in Bangkok from 12 to 16 November 2007. A progress report following this meeting was provided at the tenth special session of the Governing Council in February 2008.

73. UNEP prepared a number of reports to support discussions at the second meeting, including reports on financial considerations, technology support, analysis of implementation options and a further analysis of response measures discussed at the first meeting. In addition, the secretariat was requested to develop an analysis of costs and benefits for the strategic objectives, to analyse sources to determine whether projected demand could be met if primary mining were phased out and to prepare an updated paper on major mercury-containing products and available alternatives. The work was supported by a number of Governments. A number of the reports, in particular those on supply and demand, on costs and benefits and on mercury containing products and their alternatives, are being updated, and will remain available via the mercury website as resource documents.

74. The second meeting of the Working Group was held in Nairobi from 6 to 10 October 2008. Participants developed a policy framework for tackling the global challenges posed by mercury. Although the elements were not agreed in detail, they attracted broad support, and are recommended for consideration by the Governing Council/Global Ministerial Environment Forum. Participants also prepared two options for the implementation of the policy framework, and developed statements on the advantages and disadvantages of each of these options. The options remaining under

consideration are that of a free-standing international legal instrument or voluntary control mechanisms. Other options, including that of a protocol for mercury under the Stockholm Convention on Persistent Organic Pollutants were considered not to have the capability to address fully the global challenges of mercury, and participants agreed that they would not be considered further. The report of the Working Group to the Governing Council, detailing the options for implementation and the policy framework, is presented as document UNEP/GC.25/5.Add.1, and the full report of the second meeting of the Ad Hoc Open-ended Working Group on Mercury is presented for information as document UNEP/GC.25/INF/25.

75. While the two options forwarded for consideration reflect distinct mechanisms, there was significant agreement on the need for action, and widespread agreement on the potential structure for such action, as evidenced by the willingness to forward the policy framework to the Governing Council/Global Ministerial Environment Forum for consideration. Governing Council may wish to consider priorities for immediate action to address the global challenge of mercury, and to establish an enhanced programme of activities, over and above what has already been delivered within the UNEP Mercury Programme and the UNEP Global Mercury Partnership. Any enhanced programme of activities would need to take into account the ability of developing countries and countries with economies in transition to undertake actions, and the need for technical assistance and capacity building. The Governing Council/Global Ministerial Environment Forum may also wish to consider which elements of the policy framework, if any, might require a legal framework for their successful delivery, as well as the view, held by some, that an adequate case has not yet been made for such a legal framework. Further work may be needed to reach agreement on areas where additional legal controls are needed to deliver sustainable, long-term effects. A mechanism to develop such controls could be developed.

76. In 2007, pledges and contributions to the trust fund were received from the Governments of Australia, Denmark, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland and the United States, together with the European Commission and the Nordic Council, amounting to approximately \$2,487,000.

77. As of 1 September 2008, pledges had been received from the Governments of Canada, Finland, Germany, Norway, Sweden and the United States amounting to approximately \$1,895,750. Separate funding, amounting to \$1.500 million was made available to the mercury and other metals programme from the Government of Norway through a separate contribution agreement with UNEP. Additional funding is also being made available from the Governments of Canada and France, in addition to the European Commission; however, these contributions were not formalized as of 1 September 2008. Direct support for activities has also been pledged by the government of Japan.

Annex

List of websites pertaining to chemicals activities

A. UNEP activities to support the implementation of the Strategic Approach to International Chemicals Management

SAICM implementation: <http://www.chem.unep.ch/unepsaicm/default.html>

SAICM Secretariat: <http://www.saicm.org/index.php?ql=h&content=home>

B. Activities by UNEP pursuant to decision 24/3 III on lead and cadmium

Draft final reviews of lead and cadmium:

http://www.chem.unep.ch/Pb_and_Cd/SR/Draft_final_reviews_Nov2008.htm

Compilation of risk management measures for lead and cadmium

http://www.chem.unep.ch/Pb_and_Cd/SR/Compilation_Inventory_RMM_Nov_08.doc

C. Activities by UNEP pursuant to decision 24/3 IV on mercury

UNEP report on air emissions:

http://www.chem.unep.ch/mercury/Atmospheric_Emissions/Atmospheric_emissions_mercury.htm

Partnership report: 'Mercury fate and transport in the global atmosphere: Measurements, models and policy implications' report 14 July 2008

[http://www.chem.unep.ch/mercury/Sector-Specific-Information/Fate%20and%20Transport\(1\).htm](http://www.chem.unep.ch/mercury/Sector-Specific-Information/Fate%20and%20Transport(1).htm)

D. Report on progress in strengthening the UNEP Global Mercury Partnership

Overarching framework for partnership activities: <http://www.chem.unep.ch/mercury/Sector-Specific-Information/Docs/Overarching%20Framework.pdf>

Expanding the number and scope of partnerships:

http://www.chem.unep.ch/mercury/partnerships/new_partnership.htm

Ad Hoc Open-ended Working Group on Mercury:

<http://www.chem.unep.ch/mercury/OEWG2/Meeting.htm>
