

## **STRATEGIC APPROACH TO INTERNATIONAL CHEMICALS MANAGEMENT (SAICM)**

### **WHO Contribution to Possible Draft Elements of a SAICM for Consideration by the First Preparatory Meeting**

**June 2003**

#### **Introduction**

1. The process for development of SAICM includes preparatory meetings (PrepComs) followed by an International Conference on Chemicals Management (ICCM). The World Health Organization (WHO) understands that this will provide a number of opportunities for WHO, and individual WHO Member States, to contribute to SAICM as it takes shape. As a first step, therefore, this contributory document focuses on some of the experience gained by WHO in the field of chemical safety, at country, regional and intergovernmental levels. Particularly relevant are discussions over the past year regarding the re-focusing of the International Programme on Chemical Safety (IPCS) (WHO/ILO/UNEP), which is itself an intersectoral and intergovernmental mechanism. WHO is strongly committed to making more detailed inputs at subsequent stages of the SAICM process.

#### **Health and Environment**

2. The first Principle of the 1992 United Nations Conference on Environment and Development's Rio Declaration on Environment and Development points to the central importance of human health in the development of SAICM in stating that 'Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature'.
3. The importance of chemical safety for human health and of the link between health and environment have been recognized for some time and have been the subject of action by WHO Member States. For example, a 1978 World Health Assembly resolution on chemicals was followed by a WHO Executive Board Resolution in 1979 that agreed a plan of action to establish the International Programme on Chemical Safety (IPCS). The Executive Heads of the United Nations Environment Programme (UNEP), the International Labour Organization (ILO) and the World Health Organization (WHO) signed a Memorandum of Understanding in April 1980, whereby IPCS became a cooperative venture of the three organizations to address the effects of chemicals on human health and the environment.
4. The 42<sup>nd</sup> World Health Assembly in 1989 emphasized the paramount importance of health considerations for sustainable development and resolved to contribute to the international efforts towards sustainable development. This was followed by resolutions relating to the importance of the scientific basis of chemical safety in

order to meet current and foreseen challenges, and the importance of comprehensive chemical safety programmes directed towards the needs of all countries. For effective implementation, the need for concerted action at global, regional and national levels was noted.

### **56<sup>th</sup> World Health Assembly Resolution on SAICM**

5. In May 2003, the 192 Member States of the World Health Assembly (WHA) agreed on the participation of global health partners in SAICM through WHA Resolution WHA56.22 (full text at Attachment 1). The Assembly urged Member States to take full account of the health aspects of chemical safety in the further development of SAICM, supported continuation of the roles of WHO and IFCS in overseeing the development of the strategic approach through membership of its Steering Committee, and requested the WHO Secretariat to contribute to SAICM and participate in preparatory meetings and the final conference. The Assembly called for a progress report on SAICM (before the estimated date of its completion) and for the completed SAICM to be submitted to the Health Assembly for consideration.

### **Experience gained from WHO's Contribution to International Chemicals Management**

6. WHO contributes to international chemicals management through a range of programmes, including activities with a primary focus on chemicals and those of an intersectoral nature. This reflects the framework provided in both Agenda 21 and the WSSD Plan of Implementation, which contain both approaches. In addition, WHO acts as the Administering Organization for IFCS and IOMC. These functions, along with the WHO JMPR/JECFA Secretariat (see paragraph 8) are collocated with IPCS at WHO.
7. The relevant intersectoral work of WHO includes contributions to activities under the Millennium Development Goals, the WEHAB (Water, Energy, Health, Agriculture and Biodiversity and ecosystem management) Initiative, and the Healthy Environments for Children (HECA) Alliance. WHO's International Health Regulations (IHR) are being expanded to cover public health events of international importance, including those of chemical origin. The revised IHR will provide the framework for future WHO Global Outbreak Alert and Response activities. The chemical aspects are being undertaken by IPCS.
8. Turning to chemical-focused activities, at the health and environment interface WHO has long-established programmes for assessing health risks posed by exposure to chemicals through air, water and food. These risk assessment activities have informed risk management bodies that, in turn, have provided advice and recommendations to limit human exposure to environmental and other chemicals, such as the WHO Guidelines for Drinking-Water Quality and the Joint FAO/WHO Codex Alimentarius Commission (to which scientific advice is provided by the Joint FAO/WHO Meetings on Pesticide Residues (JMPR) and

Joint FAO/WHO Expert Committee on Food Additives (JECFA). Major WHO contributions to chemical safety are also made through IPCS, WHO's Food Safety Programme, the WHO Pesticide Evaluation Scheme (WHOPES), the International Agency for Research on Cancer (IARC), and WHO's occupational and environmental health programme. A fuller account of these contributions is summarized at Attachment 2. Many of these contributions and the experience gained are substantive and merit consideration in the final SAICM.

9. For the purpose of completeness, and without prejudice to the views of WHO's partners in IPCS, the IPCS current areas of work are listed in full in Attachment 2. WHO contributes to all work areas. Over the past year, and on the basis of multi-sectoral input from stakeholders, IPCS has been undergoing a re-design in response to current and expected future challenges in chemical safety. The re-design identified four focus points for future work, namely: risk assessment, including harmonized methodologies; poisons information, prevention and management; chemical incidents and emergencies; and support for capacity building.
10. The IPCS re-design aims to enable flexibility to meet emerging issues and concerns (as should SAICM), and a number of guiding principles have been promoted as a point of reference for future detailed IPCS work planning. The development of guiding principles of a similar nature may also be useful for SAICM, both to aid the discussions and for inclusion in the final product.

### **Proposed Elements**

11. SAICM should note the significant strategic work to date embedded in the IFCS Bahia Declaration on Chemical Safety and Priorities for Action Beyond 2000. SAICM should be similarly focussed on chemicals, but cognizant of the range of other international efforts that aim to effect chemical safety, for example, other action areas of the WSSD Plan of Implementation and the Millennium Development Goals.
12. SAICM needs to have a multi-sectoral and balanced approach, addressing *inter alia* human health and the environment in its content, and engaging health, environment and other sectors in its application.
13. SAICM must be inclusive, involving all countries, and be directed towards their needs. It must identify measures to build country capacities to address these identified needs, especially in developing countries and countries in transition.
14. SAICM should include elements that address the need for actions at global, regional and national levels. Decisions on what level of action is desirable and efficient are part of strategic decision-making, as are decisions on when action needs to be taken. Information on the health and economic impact of chemical exposures as well as the cost-effectiveness of possible remedial measures are needed to inform such decisions.

15. Hence, the scientific evidence-base needs to be continually improved and updated to inform decision-making and to monitor and evaluate the effectiveness of risk management measures. Rigorous, international expert peer-review processes are necessary for the global acceptance of such information. Information needed includes hazard characterization and exposure assessment of chemicals and risk information, such as estimates of the burden of disease (or illness and dysfunction), that take into account differing susceptibilities of sub-populations. WHO's Global Burden of Disease framework is currently being applied to chemical case studies, with the aim of refining the methodology to inform priority-setting for risk management actions on chemicals. Important input comes from national surveillance systems for chemical exposures and poisoning. The WSSD WEHAB Working Group Paper (A Framework for Action on Health and the Environment, August 2002, at [http://www.johannesburgsummit.org/html/documents/summit\\_docs/wehab\\_papers/wehab\\_health.pdf](http://www.johannesburgsummit.org/html/documents/summit_docs/wehab_papers/wehab_health.pdf)) provides a useful summary of the issues and needs for strengthened information on health and environment linkages.
16. SAICM will need to provide a framework for decision-making, including priority-setting. Building on Rio Declaration Principle 15 on the precautionary approach, WHO is developing a *Precautionary Framework for Public Health Protection*. This framework, which will be contributed by WHO to the SAICM process, will provide guidance on application of precautionary strategies that will improve preventive public health decision making under conditions of complexity and uncertainty. It will assist WHO Member States in the development of their public health policies and application of precautionary measures to address environmental health risks (including, but not limited to, those resulting from chemicals).
17. SAICM needs to take account of the commitment of established intergovernmental organizations and international institutions active in the field of chemical safety. This would include, in the case of WHO, use of regional office and country-level networks which can facilitate chemical management, in particular by working with developing countries.
18. SAICM should avoid duplication of effort and address gaps in chemical assessment work (e.g. in hazard identification, in exposure assessment, and in the assessment of newly-recognized health and environment risks), so that scarce resources can be appropriately devoted to priority risk assessment and management issues. Duplication of effort in publishing such information should also be avoided, while recognizing the need for a range of useable information products in national languages.
19. SAICM should include a process for responding to emerging issues and the changing patterns of chemical production, use and consequent human exposures.
20. Measurements of progress will be needed, both by activity/target, and also in terms of health and environment outcomes.

## **Conclusion**

21. WHO is the directing and coordinating authority on international health work and is committed to making continued efforts to improve chemical safety, both through its own programmes and in provision of expert technical advice to support the work of others. WHO will continue to engage in the SAICM process, and in working with its Members States, it will aim to implement WHA Resolution WHA56.22 on the participation of global health partners in SAICM.

**FIFTY-SIXTH WORLD HEALTH ASSEMBLY**

**WHA56.22**

**Agenda item 14.5**

**28 May 2003**

## **Strategic approach to international chemicals management: participation of global health partners**

### **The Fifty-sixth World Health Assembly,**

Recalling the first principle of the Rio Declaration on Environment and Development, namely, that “Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature”;

Noting that the Bahia Declaration on Chemical Safety and the Priorities for Action Beyond 2000 of the Intergovernmental Forum on Chemical Safety emphasized the essential role of sound management of chemicals in sustainable development and the protection of human health and the environment;

Further noting that the World Summit on Sustainable Development Plan of Implementation, paragraph 23(b) calls for further development of a strategic approach to international chemicals management and urges international organizations dealing with chemical management to cooperate closely in this regard;

Fully supporting the UNEP Governing Council Decision 22/4 to further develop a strategic approach to international chemicals management following an open, transparent and inclusive process and providing all stakeholders opportunities to participate; and the invitation to a range of international organizations, including WHO, to collaborate actively in the further development of the strategic approach;

Noting the involvement of WHO in the Steering Committee of the strategic approach to international chemicals management established to act as a facilitative steering mechanism to deal with practical aspects of the strategic approach;

Noting also the role of WHO as the administering organization for the Intergovernmental Forum on Chemical Safety;

Mindful of WHO's contribution to the international management of chemicals through the International Programme on Chemical Safety, a cooperative venture between ILO, WHO and UNEP;

Recalling resolution WHA45.32 on the International Programme, which emphasized the need to establish or strengthen governmental mechanisms to provide liaison and coordination between authorities and institutions involved in chemical safety activities, and resolution WHA42.26 on WHO's contribution to the international efforts towards sustainable development, which considered that equitable health development is an essential prerequisite for socioeconomic development;

Recognizing the need for health interests at country level to be reflected in, and addressed by, the strategic approach to international chemicals management,

1. URGES Member States to take full account of the health aspects of chemical safety in further development of the strategic approach to international chemicals management;

2. REQUESTS the Director-General:

(1) to support the continuing roles of WHO and the Intergovernmental Forum on Chemical Safety in overseeing development of the strategic approach through membership of its Steering Committee;

(2) to contribute to the content of the strategic approach, in accordance with the invitation of the UNEP Governing Council, through initial submission of possible health-focused elements and participation of WHO in preparatory meetings and the final conference;

(3) to submit a progress report to the Health Assembly before the estimated date of completion of the strategic approach;

(4) when completed, to submit the strategic approach to international chemicals management to the Health Assembly for consideration.

Tenth plenary meeting, 28 May 2003  
A56/VR/10

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## Key Contributions of WHO to International Chemicals Management

1. The following summarizes key contributions of WHO to international chemicals management, including those made through:
  - International Programme on Chemical Safety (IPCS)
  - JMPR and JECFA
  - Food Safety Programme
  - WHO Pesticide Evaluation Scheme
  - WHO Air and Drinking-water Quality Guidelines
  - International Agency for Research on Cancer
  - Occupational and Environmental Health Programme.

### Activities of IPCS

2. The current work of IPCS includes the following products and services:
  - ***Chemical risk assessments for national authorities*** (including Environmental Health Criteria monographs, Concise International Chemical Assessment Documents, International Chemical Safety Cards, WHO Classification of Pesticides by Hazard, and Joint IPCS/OECD in-depth assessments (as needed)).
  - ***Chemical risk assessments for WHO activities*** (including chemicals in drinking water and disinfectants, air pollutants - indoor and ambient, chemical exposures in the workplace, chemical risks due to climate change, Persistent Organic Pollutants, and assessment of pesticides for public health and chemical issues in healthy environments for children).
  - ***Methodologies for chemical risk assessments*** (including harmonization of approaches and methods, emerging chemical health risks, e.g. state-of-the-science review of endocrine disruptors, integrated risk assessment, and biological, physical and scientific principles of risk assessment). A large proportion of this work is undertaken bilaterally with OECD and WHO (including through its Inter-Regional Research Unit office, based at NIEHS).
  - ***Research studies on using human toxicology data*** (including development of methodology, validation of available data, and contribution to burden of disease estimates for death, illness and dysfunction attributable to chemical and pesticide exposures).
  - ***Dissemination of chemical safety information*** (including IPCS INCHEM database, development and maintenance of the IPCS web site, Global Information Network on Chemicals (GINC) and prevention and treatment interventions for pesticides).

- ***Poisons Centre Network Management*** (including establishing and strengthening national poisons centres, and IPCS INTOX Programme implementation).
- ***Emergency response mechanisms for chemical incidents*** (including a preparedness and response network for chemicals integrated with the network for communicable diseases under the WHO Global Outbreak and Alert Response Network, cooperation with drinking water and food safety programmes on deliberate contamination threats, support to national emergency preparedness initiatives, and international coordination mechanisms).
- ***Policy coordination in chemicals management*** (including chemicals issues in environmental health, IPCS programme planning, WHO linkages to Stockholm and Rotterdam Conventions, Intergovernmental Forum on Chemical Safety, and secretariat functions for IOMC/IOCC).

### **JMPR and JECFA**

3. With FAO, WHO conducts chemical risk assessments for Codex Alimentarius and Member States (notably by the *Joint FAO/WHO Expert Committee on Food Additives* (JECFA) which evaluates the safety of food additives and contaminants, naturally-occurring toxicants and residues of veterinary drugs in food, and the *Joint FAO/WHO Meeting on Pesticide Residues* (JMPR), and revision of the *Methodology for Evaluation of Chemicals in Food*). Synergies with IPCS activities exist because of the close links with the preparation of risk assessment documents on specific pesticides and other chemicals (which may also be industrial chemicals) and in the development and refinement of risk assessment methodologies, which are included among IPCS activities. As a result of the recent FAO/WHO evaluation of Codex, the processes for provision of scientific advice to Codex are being reviewed. These arrangements for JMPR/JECFA provide an example of cross-sectoral ways of working.

### **Food Safety Programme**

4. This programme is largely responsible for the exposure assessment of chemicals in food, including development of methodologies for predicting dietary intake of chemicals. Hence its work also contributes to Codex work (refer to paragraph above). Other contributions to international chemicals management include: provision of advice in food safety emergencies; it has initiated an activity to advise on terrorist threats to food (including those caused by chemicals); and it hosts the Global Environment Monitoring System/Food Contamination Monitoring Assessment Programme (GEMS/Food) which promotes the monitoring and collection of information on the levels of chemicals in food and includes the only international database on chemical exposures through food. GEMS/Food is also collaborating with UNEP in monitoring of the implementation of the Stockholm Convention by providing information on POPs in human breast milk.

### **WHO Pesticide Evaluation Scheme**

5. The WHO Pesticide Evaluation Scheme (WHOPES) is the only international programme which promotes and coordinates the testing and evaluation of pesticides proposed for public health use. The main objectives of WHOPES are: to facilitate the search for alternative pesticides and application methodologies that are safe and cost-effective; and to develop and promote strategies and guidelines for the use of pesticides in public health, and to assist and monitor their implementation by Member States. WHOPES is an example of a programme which addresses risk assessment needs of countries with limited risk assessment capacity.

### **WHO Air and Drinking-water Quality Guidelines**

6. WHO establishes guidelines for chemicals found in air and drinking-water sources in the form of its *Guidelines for Air Quality* and *Guidelines for Drinking-water Quality (GDWQ)*. The GDWQ are a significant contribution to chemicals management. Guidelines are maintained for over 100 chemicals/groups of chemicals found in drinking-water and they are recognized as the UN system's position on drinking-water quality. The guidelines, which are based on IPCS, JMPR and JECFA assessments where available, are used by many countries directly or indirectly in setting national standards and are referred to in the Codex food standards. Hence the programme works to reduce duplication of effort in risk assessment functions to support risk management actions. It also provides an international benchmark for evaluation.

### **International Agency for Research on Cancer**

7. The International Agency for Research on Cancer, is a Specialized Agency of WHO devoted to a range of major activities on cancer, including assessment of the carcinogenic potential of chemical substances.

### **Occupational and Environmental Health Programme**

8. This programme operates through its Global Strategy on Occupational Health for All, and includes a range of activities on chemicals, particularly facilitation of country-based actions through a network of WHO Collaborating Centres. Also a number of activities, for example work on silicosis and Control Banding, are conducted in cooperation with ILO. Control Banding enables workplaces to select appropriate control measures for chemicals based on Risk Phrases on product labels. Hence it will use the outcomes of the Globally Harmonized System for Classification and Labelling to improve chemical safety.