



ROTTERDAM CONVENTION

Section E

Cross-cutting Issues



Section E – Cross-cutting Issues

In this section of the resource kit, we have made available selected sources of information which may assist in developing and strengthening the chemicals management infrastructure within a country, including information which may assist in the evaluation of chemicals. This is not intended to be a comprehensive compilation but simply to provide an overview of the information that is available. It will continue to evolve as experience is gained in the implementation of the Convention and new documents or sources of information are identified.

The primary audience for this material is Designated National Authorities (DNAs) and government authorities involved in chemicals management. The information may also be useful to non-governmental organizations and stakeholders involved in the development, production, transportation, use, import or export of chemicals.

To assist users this section of the resource kit is organized around the following three thematic areas:

1. General chemicals management

This sub-section contains information related to general chemicals management, including the development or strengthening of the necessary legal or administrative infrastructure as well as specific topics such as working with customs authorities, harmonized systems customs codes and the globally harmonized system for classification and labelling of chemicals (GHS). In some instances links are provided to specific websites where further information may be obtained. In others, copies of individual documents may be accessed directly.

2. Evaluating the risks of hazardous chemicals

This sub-section lists selected sources of information related to the evaluation of chemicals including methodologies for evaluating the risks of chemicals. In some instances links are provided to specific websites where further information may be obtained. In others, copies of individual documents may be accessed directly.

3. Sources of information on hazardous chemicals

This sub-section lists selected sources of information on individual chemicals or groups of chemicals. Owing to the broad range of sources of information available on chemicals, this section includes links to specific websites where further information on individual chemicals may be obtained.

A CD containing all PDF, documents and URL links is annexed to this booklet.



I. GENERAL CHEMICALS MANAGEMENT

a) Developing or strengthening national legal or administrative infrastructure

i) International Code of Conduct on the Distribution and Use of Pesticides.

The FAO *International Code of Conduct on the Distribution and Use of Pesticides* (the Code) is an internationally recognized guidance document on pesticide management. The Code is designed to provide standards of conduct and to serve as a point of reference in relation to sound pesticide management practices, in particular for government authorities and the pesticide industry. ([Code-Arabic.doc](#); [Code-Arabic.pdf](#); [Code-Chinese.doc](#); [Code-Chinese.pdf](#); [Code-Eng.doc](#); [Code-Eng.pdf](#); [Code-French.doc](#); [Code-French.pdf](#); [Code-Spanish.doc](#); [Code-Spanish.pdf](#))

FAO has developed a series of Guidelines on Pesticide Management in support of the implementation of the Code. These technical guidelines provide specific guidance and information covering various areas of pesticide management and include such topics as: registration and control of pesticides; legislation; personal protection for those working with pesticides; good labelling practices; pesticide storage and stock control; tender procedures for the procurement of pesticides; etc. These documents are frequently the basis for the development of policies and practices in countries looking to initiate or improve a pesticide management scheme. The relevant guidelines may be accessed at (<http://www.fao.org/ag/AGP/AGPP/Pesticid/Default.htm>).

A selection of the guidance documents (listed below) may be downloaded from the CD:

Guidelines on the initial introduction and subsequent development of a simple national pesticide registration and control scheme (FAO, 1991)

These Guidelines are intended to provide assistance to those countries that do not yet have a pesticide registration and control scheme in operation. They discuss the need for controls and the scope of a simple scheme, and make the point that before controls can be put into place appropriate legislative powers are essential.

([Guidelines on Introduction and Development of a National Pesticide Registration and Control Scheme \(FAO 1991\).pdf](#))

Guidelines on compliance and enforcement of a pesticide regulatory programme (FAO, 2006)

These guidelines are designed to provide a reasonably comprehensive source of compliance and enforcement guidance to support of a pesticide regulatory programme. The reference section of the guidelines contains information about a number of other publications that may be useful to countries seeking information on the implementation of pesticide compliance and enforcement programmes.

([Guidelines on Compliance and Enforcement of a Pesticide Regulatory Programme 06.pdf](#))

Guidelines for Legislation on the Control of Pesticides (FAO, 1989)

These Guidelines are intended to provide assistance to Governments wishing to develop a legal framework for the control of pesticides or to review and possibly strengthen existing pesticide control legislation.

Legislation must be designed to be able to deal effectively with specific problems existing in the country. Although a general framework can be suggested, as is done in these Guidelines, in the normal course of events good pesticide legislation must take account of the economic and social situation of the country as well as any specific technical requirements such as the crops grown, pest problems, dietary patterns, toxicity of the required pesticides, level of literacy, and climatic and environmental considerations. ([Guidelines for Legislation on the Control of Pesticides \(FAO\) 1989.pdf](#))

ii) Designing national pesticide legislation (FAO, 2007)

This text aims to provide governments wishing to design, reform or update their national legislation with up-to-date advice on all aspects of pesticide management. Although the recommendations for national legislative change are designed to be useful to all countries, the text highlights the particular problems faced in developing countries and countries in transition, offering practical solutions to common problems.

[\(Designing national pesticide legislation.pdf\)](#)

iii) Guide on the Development of National Laws to Implement the Rotterdam Convention

This Guide reviews possible actions by governments in developing the appropriate legal or administrative infrastructure for the implementation of the Convention in the context of existing national laws, and includes suggestions on ways to link such actions to other international instruments on chemicals in support of an integrated approach to their implementation at the national level.

[\(Guide on the Development of National Laws to Implement the Rotterdam Convention.pdf\)](#)

iv) Guidance for developing National Implementation Plans for the Stockholm Convention.

The Stockholm Convention requires countries to develop National Implementation Plans. The first meeting of the Conference of the Parties adopted guidance for assisting countries in the preparation of these plans. The guidance includes specific text relevant to the requirements of the Rotterdam Convention and has been developed as a means of encouraging integrated implementation of the two Conventions at the national level.

[\(Guidance for developing National Implementation Plans for the Stockholm Convention.pdf\)](#)

v) Developing and sustaining an Integrated National Programme for Sound Chemicals Management – Guidance document (UNITAR, 2004)

This document has been developed to assist countries in developing and implementing an Integrated National Programme for Sound Chemicals Management. The document provides context and background on the importance of chemicals management and introduces the international policy framework for the sound management of chemicals. It also outlines the national framework for an integrated national programme for chemicals management, including the importance of inter-ministerial collaboration and developing a national policy on chemicals, and concludes by outlining a range of activities and practical suggestions for concrete action towards developing and sustaining an integrated national programme for the sound management of chemicals.

[\(Developing and sustaining an Integrated National Programme for Sound Chemicals Management – Guidance document-2004.pdf\)](#)

The document is published with a companion document: Searching for Synergies: Linking Waste Management to an Integrated National Programme for Sound Chemicals Management (13 May 2004) which explores opportunities to link chemicals and waste management nationally.

[\(Searching for Synergies-unitar-doc.pdf\)](#)

vi) Preparing a National Profile to Assess the National Infrastructure for Management of Chemicals: A Guidance Document (UNITAR, 1996)

This document has been developed to assist countries in preparing comprehensive National Profiles to assess their national infrastructure for the sound management of chemicals through a process which involves all interested parties. While the suggested approach is comprehensive, the document has been designed to provide flexibility to countries in order to ensure that National Profiles are prepared in accordance with country priorities and are consistent with available information and resources.

[\(Guidance on National Profile preparation.pdf\)](#)

vii) *Preparing/Updating a National Profile as part of a Stockholm Convention National Implementation Plan (UNITAR, 2003) (working draft)*

This guidance note has been developed to assist countries in preparing Stockholm Convention-related information, as part of a National Profile process that involves all interested and affected parties at the country level. The development of a National Profile, or the updating of an existing National Profile in the manner suggested, can result in a useful tool to support the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs). While the suggested approach is comprehensive, the document has been designed to provide flexibility to countries in order to ensure that efforts are undertaken in accordance with country priorities and are consistent with available information and resources.

The document is intended to serve as companion guidance to (and should be read in conjunction with the primary guidance provided by the 1996 document, *Preparing a National Profile to Assess the National Infrastructure for Management of Chemicals: A Guidance Document*. ([Updating a National Profile as part of a Stockholm Convention NIP.pdf](#))

viii) *Guidance for “Developing a Capacity Assessment for the Sound Management of Chemicals and National SAICM Implementation” (UNITAR)*

This guidance document has been prepared with the intention of assisting interested countries in preparing a national SAICM capacity assessment. The target audience for the document includes government ministries and agencies, working together with stakeholder groups such as industry, labour organizations, environmental and health NGOs, research and academia, etc., that have an interest and stake in chemicals management and SAICM implementation. It assumes that countries have prepared a National Profile and are interested in and committed to taking the next steps in assessing gaps and identifying priorities.

([Developing Capacity Assessment for chemicals and SAICM implementation.pdf](#))

b) Working with Customs Authorities – Import and Export Controls

i) *Case Studies on customs-related implementation of the Rotterdam Convention*

To all practical effects, customs officers are ‘gate keepers’ of the Convention since they are likely to encounter these chemicals during their daily work. The successful identification of chemicals covered by the Convention, as well as a clear understanding on where to seek more information on the provisions of the Convention, applicable national laws and chemicals listed under the Convention are key elements to the success of the work of customs officers.

Recognizing that different countries may apply different approaches to the integration of customs officials in the implementation of the Convention at the national level, the experiences of Jamaica and Switzerland may provide useful working examples of the roles that customs officers can play in the implementation of the Rotterdam Convention at the national level. The case studies are focused on procedures, information resources and key players at the national level.

Jamaica: In Jamaica the control of imports is achieved through a system of import permit or licence in collaboration with Customs Authorities at all ports. To improve the information exchange about the characteristics of chemicals banned for use or subject to severe restrictions, stakeholders have been involved in the implementation of the Convention.

([Jamaica’s experience with the customs-related implementation of the Rotterdam Convention.pdf](#))

Switzerland: Switzerland has implemented the Rotterdam Convention in its “Ordinance on the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Chemicals in International Trade (PIC Ordinance, ChemPICO)”. The key players in

ensuring the implementation of the Convention in Switzerland are the Designated National Authority (DNA, which is the Federal Office for the Environment - FOEN) and the Customs Offices. The Ordinance contains two parts: one part dealing with provisions for and obligations of exporters and importers and the other part with the obligations of the federal agencies.

[\(Switzerland's experience with the customs-related implementation of the Rotterdam Convention.pdf\)](#)

ii) Harmonized System Codes assigned to chemicals in Annex III to the Rotterdam Convention

In line with Article 13 of the Convention, the World Customs Organization (WCO) has assigned specific Harmonized Customs Codes to certain of the individual chemicals or groups of chemicals in Annex III of the Convention. The process for assigning specific Harmonized System (HS) codes to the remaining chemicals listed in Annex III has been initiated. The inclusion of these HS codes in the shipping documentation for Annex III chemicals, as required by the Convention, should facilitate integration of the work on the Rotterdam Convention with that of customs authorities.

To facilitate their implementation a tabular summary of the HS codes has been prepared: [\(Harmonized System codes list.pdf\)](#)

iii) Correlation between the product coverage of selected international conventions and the harmonized system of the World Customs Organization

This publication contains the correlations between the Harmonized System and selected international conventions as drawn by the WCO Secretariat in collaboration with the Secretariats of the organizations administering the conventions or agreements set out, in accordance with instructions received from the Harmonized System Committee.

[\(Correlation between Product coverage of MEAs and the Harmonized System.pdf\)](#)

iv) The Green Customs Initiative (<http://www.greencustoms.org/>)

Green Customs offers information and training materials for customs officials on combating illegal trade in commodities of environmental concern. The Green Customs Initiative is an example of developing synergies between the Montreal Protocol and other multilateral environmental agreements (MEAs) about a specific need expressed by developing countries and countries with economies in transition: building the capacity of customs officers in monitoring the trade of commodities controlled under MEAs.

The Green Customs Guide to Multi-lateral Environmental Agreements (MEAs)

This guide is intended to help customs and border control officers in their work. Chapter 1 explains what MEAs are and the role of customs in the national implementation of such agreements. Chapter 2 provides an overview of the main international trade-related MEAs, explaining what they are, how they regulate trade, the role and responsibilities of Customs and other border authorities, specialized terminology, and where additional information and guidance may be found. Chapter 3 explores practical aspects of implementing MEA controls.

[\(Green Customs Guide.pdf\)](#)

c) Labelling of chemicals

The **Globally Harmonized System of Classification and Labelling of Chemicals (GHS)** is an internationally-agreed tool for chemical hazard communication, incorporating harmonized chemical hazard classification criteria and provisions for standardized labels and safety data sheets. Detailed information on the GHS may be found at

http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html

UNITAR has compiled a broad range of information relevant to the implementation of the GSH which is available via a special section of their website. The information available includes guidance and training materials, summaries and full texts of international, regional and national legislation, policies and guidelines, information on capacity building projects, reports from related meetings and workshops, as well as related websites. (<http://www.unitar.org/cwg/ghs/>)

2. EVALUATING THE RISKS OF HAZARDOUS CHEMICALS

This section lists selected sources of information related to the evaluation of chemicals, including methodologies for evaluating the risks of chemicals. This information may be of use to countries in developing their own capacities to evaluate the risks associated with the use of hazardous chemicals and/or to better understand the processes followed at the international level in preparing evaluations of individual chemicals or groups of chemicals.

a) The WHO Recommended Classification of Pesticides by Hazard (2004)

This document sets out a classification system which distinguishes between the more and the less hazardous forms of selected pesticides based on acute risk to human health (i.e. the risk of single or multiple exposures over a relatively short period of time). It takes into consideration the toxicity of the technical compound and its common formulations.

The main section of the classification consists of five tables which separate technical grade active ingredients into the three classes listed below. A further table lists active ingredients unlikely to present acute hazard in normal use:

- Extremely hazardous (Class Ia)
- Highly hazardous (Class Ib)
- Moderately hazardous (Class II)
- Slightly hazardous (Class III)

(http://www.who.int/ipcs/publications/pesticides_hazard/en/index.html)

b) Listing of WHO/IPCS publications and projects on risk assessment methodology

The World Health Organization's International Programme on Chemical Safety (IPCS) develops information and guidance on risk assessment methodologies. These aim to promote the development, harmonization and use of generally acceptable, scientifically sound methodologies for the evaluation of risks to human health and the environment from exposure to chemicals. The results of such work enhance mutual acceptance of risk assessment products. The publications are available at: (http://www.who.int/ipcs/publications/ehc/methodology_alphabetical/en/index.html) and on the INCHEM database at: (<http://www.inchem.org/>)

A selection of these guidance documents (listed below) may be downloaded here:

Human Exposure Assessment (EHC 214-2000)

This monograph presents in one publication the concepts, rationale, and statistical and procedural methodologies for human exposure assessment. It presents the methodologies for surveying exposures, analyzing data and integrating findings with the ongoing national and global debate defining natural limits to human behaviour. The underpinnings/basis of exposure assessment are the environmental and biological measurements found in the more familiar specialties of air and water pollution and food and soil sciences. Therefore, throughout the document readers are referred to other publications for technical details on instrumental and laboratory methods. This monograph is intended for the community of scientific investigators enquiring about the human health consequences of contaminants in the environment and for those professions involved in devising, evaluating and implementing policy with respect to managing the quality of environmental health.

[\(Environmental Health Criteria 214 \(2000\).pdf\)](#)

Principles for the Assessment of Risks to Human Health from Exposure to Chemicals (EHC 210 - 1999)

This monograph divides the risk assessment process into four distinct steps: hazard identification, dose-response assessment, exposure assessment and risk characterization. It outlines the nature of the data available and their use in the assessment of risk within a risk assessment/risk management framework. It is intended to assist in the interpretation of risk assessments on specific chemicals. The reader is referred to sources of chemical-specific hazard identification. Since exposure will vary considerably under different circumstances, responsible authorities are strongly encouraged to characterize risk on the basis of local measured or predicted exposure scenarios. The general approaches to exposure assessment described in this monograph will assist in characterizing risk in specific situations.

[\(Environmental Health Criteria 210.pdf\)](#)

Assessing human health risks of chemicals: derivation of guidance values for health-based exposure limits (EHC 170 - 1994)

This monograph explains how the guidance values for exposure to chemicals in environmental media in IPCS Environmental Health Criteria (EHC) monographs are developed and how they can be modified by national and local authorities in their development of limits and standards for environmental media.

[\(Environmental Health Criteria 170.pdf\)](#)

Principles for Evaluating Health Risks to Reproduction Associated with Exposure to Chemicals (EHC 225 - 2001)

This monograph summarizes current scientific knowledge on hazard identification and risk assessment for reproductive toxicity. Reproductive toxicity includes adverse effects on sexual function and fertility in males and females as well as developmental toxicity. This monograph is intended as a tool for use by public health officials, research and regulatory scientists and risk managers. It seeks to provide a scientific framework for the use and interpretation of reproductive toxicity data from human and animal studies. It also discusses emerging methodology and testing strategy in reproductive toxicity.

[\(Environmental Health Criteria 225.pdf\)](#)

Principles for Evaluating Health Risks in Children Associated with Exposures to Chemicals (EHC 237 – 2006)

This document provides a systematic analysis of the scientific principles to be considered in assessing health risks to children from environmental chemical exposures during distinct stages of development. The central focus of the document is on the child rather

than on a specific environmental agent, target organ or disease. Thus it addresses the difficult task of integrating all that is known about exposure, toxicity and health outcomes at different life stages. The results of illustrative pollutants are described to demonstrate how exposure patterns, susceptibilities and mechanisms of toxicity change at different life stages and how these changes can impact on risk assessments. References are provided for more detailed information on environmental threats to children.

[\(Environmental Health Criteria 237.pdf\)](#)

Approaches to Integrated Risk Assessments (ILO/UNEP/WHO/IPCS - 2001)

This document provides a common framework for integrated risk assessments. Integrated risk assessments are defined as a science-based approach that combines the processes of risk estimation for humans, biota and natural resources in one assessment. The paper provides a framework for the integration of health and ecological assessments and is complemented by a series of illustrative case studies including, among others, POPs in humans and wildlife and organophosphorus pesticides in the environment.

[\(Integrated Risk Assessment.pdf\)](#)

c) OECD Guidelines for the Testing of Chemicals

The OECD guidelines are a collection of internationally agreed test methods used by government, industry and independent laboratories to determine the safety of chemicals and chemical preparations, including pesticides and industrial chemicals. They cover tests for the physico-chemical properties of chemicals, human health effects, environmental effects, and degradation and accumulation in the environment.

These are the guidelines generally employed in developing scientific data concerning effects on human health and the environment submitted to regulatory authorities in support of the regulation of industrial chemicals or pesticides.

http://titania.sourceoecd.org/vl=4637754/cl=43/nw=1/rpsv/periodical/p15_about.htm?jnlissn=1607310x



3. INFORMATION ON CHEMICALS

There is a very wide range of sources of information on chemicals available in the public domain. This sub-section lists a limited number of sources of information on individual chemicals or groups of chemicals, including peer reviewed evaluations, information on alternatives, etc. The cited sources reflect internationally recognized sources of peer reviewed evaluations as well as those sources where evaluations have been used in support of notifications of final regulatory actions considered by the Chemical Review Committee.

In addition Article 13 of the Convention requires that for certain chemicals, exporting Parties are required to provide safety data sheets to each importer following an internationally recognized format. Subsection e) below provides information on sources of safety data sheets.

a) The International Programme on Chemical Safety (IPCS)

The International Programme on Chemical Safety (IPCS), established in 1980, is a joint programme of three Cooperating Organizations (WHO, ILO, and UNEP) which implements activities related to chemical safety. WHO is the Executing Agency of the IPCS, and its main role is to establish the scientific basis for safe use of chemicals and to strengthen national capabilities and capacities for chemical safety. WHO/IPCS undertakes assessments of chemicals whose objective is to provide a consensus scientific description of the risks of chemical exposures. These descriptions are published in assessment reports and other related documents so that governments and international and national organizations can use them as the basis for taking preventive actions against adverse health and environmental impacts. For example, the documents are often used as the basis for establishing guidelines and standards for the use of chemicals and for drinking water and can assist with the implementation of international agreements such as the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The following provides a very brief description of the sort of documents produced as part of the IPCS activities on the risk assessment of chemicals and the associated links to the IPCS webpages where copies of these documents can be found. In addition, many document are available on INCHEM: (<http://www.inchem.org/>)

Environmental Health Criteria documents

Environmental Health Criteria (EHC) documents provide international critical reviews on the effects of chemicals, or combinations of chemicals, and physical and biological agents on human health and the environment.

Each EHC follows a standard outline or format, including a summary followed by information on identity, sources of exposure, environmental transport, distribution and transformation, environmental levels and human exposure, kinetics and metabolism in laboratory animals and humans, effects on laboratory animals and *in vitro* test systems. In addition, information on effects on humans and on other organisms in the laboratory and in other different fields is included. An overall evaluation and conclusion for the protection of human health and the environment is found at the end of each document, together with needs for further research and details of previous evaluations by international bodies, e.g. IARC, JECFA.

Two different series of Environmental Health Criteria (EHC) documents are available: (1) on specific chemicals or groups of related chemicals; and (2) on risk assessment methodologies. Both are accessible at the following URL:

(http://www.who.int/ipcs/publications/ehc/ehc_numerical/en/index.html)

Health and Safety Guides

Health and Safety Guides (HSG) provide concise information, using non-technical language, for decision-makers on risks from exposure to chemicals, together with practical advice on medical and administrative issues. Copies of HSGs, organized in alphabetical order, are accessible at the following URL:

[\(<http://www.inchem.org/pages/hsg.html>\)](http://www.inchem.org/pages/hsg.html)

Concise International Chemical Assessment Documents (CICADs)

Concise International Chemical Assessment Documents (CICADs) are similar to Environmental Health Criteria (EHC) documents in providing internationally accepted reviews on the effects on human health and the environment of chemicals or combinations of chemicals. They aim to characterize the hazard and dose-response of exposure to chemicals and to provide examples of exposure estimation and risk characterizations for application at the national or local level. They summarize the information considered critical for risk characterization in sufficient detail to allow independent assessment, but are concise and do not repeat all the information available on a particular chemical. For further details, readers of individual CICADs are referred to the original source document for the CICAD (either a national or regional chemical evaluation document or an existing EHC(chemicals series). Copies of CICADs, organized in alphabetical and/or numerical order, are accessible at the following URL:

[\(<http://www.who.int/ipcs/publications/cicad/en/>\)](http://www.who.int/ipcs/publications/cicad/en/)

International Chemical Safety Cards

WHO and ILO work together to produce International Chemical Safety Cards (ICSCs) which provide essential health and safety information on chemicals to promote their safe use. They are used at the “shop floor” level by workers or employees in factories, agriculture, construction and other workplaces and often form part of education and training activities. ICSCs provide information on the intrinsic hazards of specific chemicals together with first aid and fire-fighting measures, and information about precautions for spillage, disposal, storage, packaging, labelling and transport. ICSCs have no legal status and may not reflect in all cases the detailed requirements included in national legislation. They are available in a number of languages. Copies of ICSCs organized in alphabetical order are accessible at the following URL:

[\(<http://www.who.int/ipcs/publications/icsc/en/>\)](http://www.who.int/ipcs/publications/icsc/en/)

b) The Joint FAO/WHO Meeting on Pesticide Residues

The Joint FAO/WHO Meeting on Pesticide Residues (JMPR) is an international expert scientific group that is administered jointly by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). The JMPR is made up of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group. The FAO Panel of Experts is responsible for reviewing residue and analytical aspects of the pesticides under consideration, including data on their metabolism, fate in the environment and use patterns, and for estimating the Maximum Residue Levels (MRLs) that might occur as a result of the use of the pesticides according to good agricultural practices. The WHO Core Assessment Group is responsible for reviewing toxicological and related data and for estimating, where possible, acceptable daily intakes (ADIs) for humans of the pesticides under consideration.

Toxicological monographs are published after the meetings by WHO. These summarize the data used in the Meeting's evaluations and provide full references to the relevant literature. Most of the monographs that have been published are available on:

[\(<http://www.inchem.org/pages/jmpr.html>\)](http://www.inchem.org/pages/jmpr.html)

Residues monographs, which contain information on pesticide use patterns, data on the chemistry and composition of pesticides,

methods of analysis for pesticide residues and information on pesticide MRLs, are available on:
(http://www.fao.org/ag/AGP/AGPP/Pesticid/JMPR/Download/pes_alp.htm)

c) International Agency for Research on Cancer

The International Agency for Research on Cancer (IARC) is part of the World Health Organization. IARC coordinates and conducts research on the causes of human cancer and the mechanisms of carcinogenesis, and develops scientific strategies for cancer control. The IARC Monographs identify environmental factors that can increase the risk of human cancer. These include chemicals, complex mixtures, occupational exposures, physical and biological agents, and lifestyle factors. National health agencies use this information as scientific support for their actions to prevent exposure to potential carcinogens.

Interdisciplinary working groups of expert scientists review the published studies and evaluate the weight of evidence that an agent can increase the risk of cancer. The principles, procedures and scientific criteria which guide the evaluations are described in the “Preamble” to the IARC Monographs.

Since 1971, more than 900 agents have been evaluated, of which approximately 400 have been identified as carcinogenic or potentially carcinogenic to humans. Information on the available monographs may be found at: (<http://monographs.iarc.fr/>)

d) OECD Screening Information Data Sets

The “Screening Information Data Set” (SIDS) programme, operated under the auspices of the Organization for Economic Cooperation and Development (OECD), is a voluntary cooperative international testing programme that began in 1989. The SIDS programme focuses on developing base level test information on approximately 600 poorly characterized international High Production Volume (HPV) chemicals. The SIDS data are used to “screen” the chemicals and set priorities for further testing or risk assessment/management activities.

The OECD/SIDS test data set includes:

- physico-chemical properties
- results of environmental fate testing
- results of environmental effects testing
- results of health effects testing

Copies of the SIDS for individual chemicals, organized in alphabetical order, may be found at the following URL:
(<http://www.inchem.org/pages/sids.html>)

e) Safety Data Sheets (SDS) on individual chemicals

Article 13 of the Rotterdam Convention requires exporting Parties, when exporting chemicals listed in Annex III and chemicals banned or severely restricted in its territory that are to be used for occupational purposes, to provide each importer with a safety data sheet according to an internationally recognized format including all currently available information.

Safety data sheets contain information such as: Chemical and Physical Properties, Health Hazards, First Aid Recommendations, Personal

Protection, Fire and Reactivity Data, Spill and Disposal Procedures, Storage and Handling. They are designed to provide both workers and emergency personnel with the proper procedures for handling or working with a particular substance.

Safety Data Sheets are one of the key tools in hazard communication. A good Safety Data Sheet provides the user with the information needed to carry out a suitable risk assessment for specific applications. A chemical safety data sheet provides the following basic information about the chemical: *Is either this sentence or the following sentence redundant?*

Safety data sheets are published under several names, including:

- International chemical safety card (ICSC)
- Chemical safety card (<http://www.cdc.gov/niosh/ipcsneng/neng0000.html>)
- Chemical info-sheet
- Material safety data sheet (MSDS) (<http://www.ilpi.com/msds/#Internet>) (<http://siri.org/msds/>)
- Product safety data sheet (<http://data.energizer.com/Static.aspx?Name=ProductSafety>)
- (http://www.e1.greatlakes.com/corp/safety_sheet_search)
- Health and safety data (<http://ntp.niehs.nih.gov/index.cfm?objectid=03610FA5-C828-304B-FE31F1182E8F764C>)

f) Other sources of information on individual chemicals

European Commission Chemicals Bureau

The following link brings you to an EXCEL sheet where there is an overview of the status of existing active substances being reviewed and, where available, the outcome of that review;

(http://ec.europa.eu/food/plant/protection/evaluation/stat_active_subs_3010_en.xls)

List of substances that have been evaluated are at the following link:

(http://ec.europa.eu/food/plant/protection/evaluation/exist_subs_rep_en.htm)

Information on restrictions and bans for industrial chemicals is available at the following website:

(http://ec.europa.eu/enterprise/chemicals/legislation/markrestr/index_en.htm)

The most comprehensive list of all existing restrictions up to the year 2004 can be found in the consolidated text of Directive 76/769/EEC at:

(http://ec.europa.eu/enterprise/chemicals/legislation/markrestr/consolid_1976L0769_en.pdf)

More recent restrictions (later than 2004) can be found by clicking on the following links:

(http://ec.europa.eu/enterprise/chemicals/legislation/markrestr/amendments_en.htm)

and

(http://ec.europa.eu/enterprise/chemicals/legislation/markrestr/adaptations_en.htm)

Preparatory studies that contain risk evaluations or socio-economic analyses can be found at:

(http://ec.europa.eu/enterprise/chemicals/studies_en.htm)

Risk assessments on industrial chemicals are available at the website of the European Chemicals Bureau (ECB) at:

(<http://ecb.jrc.it/esis/index.php?PGM=ora>)

