

Searching for Synergies: Linking Waste Management to an Integrated National Programme for Sound Chemicals Management

Guidance Note

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*Prepared through collaboration of UNITAR with UNEP, ILO, FAO, WHO, UNIDO
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OPCW



UNITAR



Secretariat of the Basel Convention
United Nations Environment Programme



INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS
A cooperative agreement among UNEP, ILO, FAO, WHO, UNIDO, UNITAR and OECD

UNITAR/IOMC Programme Principles

- **a multistakeholder approach**, involving representatives from various government ministries as well as concerned parties outside of government, such as industry, research institutions, labour, and public interest groups;
- **a country-driven process** through which partner countries assess and identify their chemicals and waste management needs and link their related activities to national environmental and developmental objectives; and
- **an integrated approach** to chemicals management in order to strengthen co-ordination and therefore the effectiveness of efforts to address chemicals issues across all stages of the life cycle.

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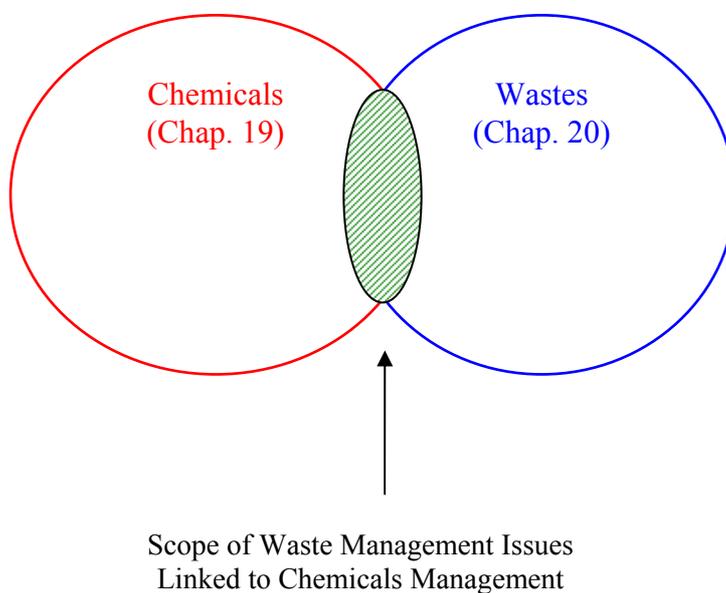
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Searching for Synergies: Introduction

This guidance note has been developed to assist countries in developing and implementing an Integrated National Programme for Sound Chemicals and Waste Management. The document is intended to serve as companion guidance to the document, *Developing and Sustaining an Integrated National Programme for Sound Chemicals Management: A Guidance Document*. Countries interested in linking chemicals and selected waste management issues as part of an integrated national programme should read this document as an integral aspect of their programme preparation. Both documents were developed by UNITAR, in cooperation with its partner organizations in the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), the Secretariat of the Organization for the Prohibition of Chemical Weapons (OPCW) and the Secretariat of the Basel Convention (SBC).

Part A of this document reviews the international framework for waste management. Part B, following the framework developed in the core guidance document, provides suggestions for strengthening coordination between chemicals and waste management issues, and suggests some of the substantive areas of integrated capacity development for sound chemicals and waste management. In this context, the scope of waste management issues being considered are those with an interface to the chemicals management issues of Chapter 19 (see diagram). In other words, not all waste management issues are discussed here but rather a selection – from Chapters 19 and 20 of Agenda 21 – which would benefit from closer coordination and linkages, possibly leading to integration.



Part A: International Framework for Waste Management

The separation of chemicals and wastes within Chapters 19 and 20 in Agenda 21, and the parallel negotiation of separate international agreements for chemicals or wastes, may give the impression that chemicals and waste management issues are clearly distinct and require different management approaches. However, an examination of some of the relevant international policies and frameworks for waste management reveals that there is a much closer linkage between many of the issues in both areas than may at first appear. After all, a life cycle approach to chemicals management includes disposal – and therefore wastes.

1. Agenda 21, Chapter 20

The counterpart chapter to the chemicals chapter of Agenda 21 is Chapter 20, “Environmentally Sound Management of Hazardous Wastes including Prevention of Illegal International Traffic in Hazardous Wastes”. Chapter 20 addresses waste management issues in four programme areas: promoting the prevention and minimization of hazardous waste; promoting and strengthening institutional capacities in hazardous waste management; promoting and strengthening international cooperation in the management of transboundary movements of hazardous wastes; and preventing illegal international traffic in hazardous wastes.

While Chapter 20 focuses somewhat more on the issue of preventing illegal traffic than does Chapter 19, there are also programme areas that focus on the need to strengthen capacities and promote international cooperation.¹ For example, Programme Area B (Promoting and strengthening institutional capacities in hazardous waste management) has as one objective: “To adopt appropriate coordinating, legislative and regulatory measures at the national level for the environmentally sound management of hazardous wastes, including the implementation of international and regional conventions”. Programme Area C is devoted to Promoting and strengthening international cooperation in the management of transboundary movements of hazardous wastes.

Moreover, Chapter 20 itself recognizes the linkages to broader issues. Paragraph 20.3, for examples, states that “the activities outlined in the present chapter are very closely related to, and have implications for, many of the programme areas described in other chapters, so that an overall integrated approach to hazardous waste management is necessary”. And paragraph 20.7 emphasises the objective of “preventing or minimizing the generation of hazardous wastes as part of an overall integrated cleaner production approach”.

2. WSSD

The WSSD Plan of Implementation contains not only recommendations regarding chemicals management issues, but also regarding wastes. Paragraphs 22 and 23 recommend action to:

¹ The IFCS has also focused on the illegal traffic of “toxic and dangerous products”

- Develop waste management systems, with the highest priority placed on waste prevention and minimization, reuse and recycling, and environmentally sound disposal facilities ... with international support for developing countries; and
- Promote efforts to prevent international illegal trafficking of hazardous chemicals and hazardous wastes and to prevent damage resulting from the transboundary movement and disposal of hazardous wastes in a manner consistent with obligations under relevant international instruments, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

3. Global Agreements

The Basel Convention

The most well-known international agreement relevant to hazardous wastes management is the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal. As with the chemicals management agreements, the Basel Convention requires that countries coordinate at the national level and have the capacity to gather information about the types and amounts of wastes in their country. The overall goal of the 1989 Basel Convention is to protect human health and the environment from generation and transboundary movements of hazardous wastes.² The scope of the Convention is broad including hazardous wastes (based on their intrinsic hazard properties), chemical wastes, and other wastes with the aim of keeping transboundary movements to a minimum. Treatment and disposal of such wastes should be kept as close as possible to where they are generated. The active promotion of the transfer and use of cleaner technology to reduce waste generation is also encouraged especially through the activities of the Basel (sub)regional centers. All such actions are seen within the concept of environmentally sound management of hazardous wastes and other wastes. Regionally the Basel Convention has been strengthened by implementation of the Bamako and Waigani Conventions as well as the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution from Land-based Sources (see section 4). More recently the Protocol on Liability and Compensation for Damage resulting from Transboundary Movements of Hazardous Wastes and their Disposal and the Basel Declaration on Environmentally Sound Management have been adopted to further the aims of the Convention.

National activities have usually centred on building capacity for prevention, minimization, recycling, recovery and disposal of hazardous wastes and other wastes, especially through information exchange. Promotion of financial and other economic instruments has also been implemented in some countries leading to more environmentally sound and efficient management of such wastes. Efficient recovery and recycling of wastes has also contributed to a reduction in transboundary movements as is shown by the decreasing amounts of wastes reported by many countries to the COP. The environmentally sound management of POPs

² <www.basel.int>

wastes including PCBs that are under discussion is an initiative where national synergies could lead to maximizing institutional efficiency.

Other Agreements

Other international chemicals agreements, such as the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and the 2001 Stockholm Convention, also take waste issues explicitly into account. The Stockholm Convention, for example, requires the environmentally sound management of POPs wastes (and products and articles upon becoming wastes that contain or are contaminated by POPs). Parties to the Convention must dispose of wastes in an environmentally sound manner, or in a way that destroys the POPs content, and take account of international rules (such as the Basel Convention) when transporting such materials internationally.

Countries should also be aware of the different types of waste management approaches developed in the OECD and EU. In the OECD there are several agreements on wastes, including on their prevention and management and a two-tiered system for transfrontier movements of hazardous wastes which assigns wastes destined for recycling either an amber or green status depending on their overall environment risk.³ In the EU, there is also a waste shipment regulation (Council Regulation (EEC) N° 259/93) and other related legal instruments.⁴

4. Regional Agreements

A number of regional agreements address hazardous waste issues in developing regions. They include:

- the 1991 Bamako Convention, which prohibits the import of hazardous wastes into Africa;
- the 1995 Waigani Convention, which prohibits the import of hazardous wastes into Pacific Island developing countries;
- the 1995 Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Izmir Protocol); and
- the 1992 Central American “Acuerdo Regional sobre Movimiento Transfronterizo de Desechos Peligrosos”.

In addition to the international commitments that a country may have under the Basel Convention, for example, they must consider their commitments and needs regarding any regional wastes agreements that they may be party to.

³ See Council Decision C(2001)107/FINAL at <www.oecd.org>.

⁴ For further information, visit <<http://europa.eu.int/comm/environment/waste/>>.

5. International Calls for Integrating Chemicals and Waste Management Issues

The international community, through existing conventions and other means, has explicitly called for consideration to be given to integrating chemicals and waste management issues.

Basel Convention Conference of Parties

In 2002, the Parties to the Basel Convention recognized the “progress made in the strengthening of cooperation and improved coordination and coherence of activities between the secretariat of the Basel Convention and, in particular, the interim secretariats of the Stockholm Convention ... and Rotterdam Convention” and requested the Secretariat to undertake “joint activities to improve coordination and coherence between chemical and waste programme activities” (Decision VI/29).

UNEP Governing Council

Members of UNEP’s Governing Council (GC) have also addressed this subject. In February 2002, the GC recognized the “essential role of the sound management of chemicals throughout their life cycle, including the management of hazardous wastes, in achieving sustainable development...” and acknowledged the “increasing need for effective capacity-building and technical assistance to assist developing countries and countries with economies in transition in implementing existing international legal instruments for management of chemicals and hazardous wastes”.

SAICM

SAICM PrepCom I comprised, in part, preliminary discussions regarding the scope of the initiative. Most, if not all participants agreed that the scope of the Strategic Approach should encompass chemical wastes issues. Many participants cited the inclusion of the Basel Convention directly during discussions of relevant conventions related to chemicals management. The rationale for the inclusion of wastes issues in SAICM is, in general, similar to other forums, where wastes issues have been included in chemicals management deliberations. The inclusion of wastes-related issues through consideration of the Basel Convention would expand the scope of SAICM by including hazardous wastes, as well as chemicals-related issues. The PrepCom process will continue to discuss this issue and it is expected that PrepCom II (scheduled to be held in October 2004) will likely reach a formal consensus regarding this matter.

Part B: Strengthening Linkages between Chemicals and Waste Management at the National Level

Based on existing international and regional activities and requests to integrate chemicals and waste management issues, some countries face particular challenges to implement such integration at the national level. This section examines some of the practical issues that are faced when linking chemicals and waste management issues in an integrated national programme and explore some topics which might benefit from this approach. These include expanding national chemicals management profiles to include wastes and waste management issues, strengthening coordination between chemicals and waste management, and exploring substantive areas for integrating chemicals and waste management.

6. National Chemicals and Waste Management Profiles

Countries and other entities already compile information relevant to waste management, such as data on waste generation and stockpiles. National Profiles, as an overview of the chemicals management infrastructure, could be adapted/expanded in a straightforward way to include waste management issues. The chapter on legal infrastructure, for example, can be expanded to include domestic laws and regulations that address wastes issues. International agreements on waste that a country is party to (including e.g. the Basel Convention, and/or regional conventions like Bamako) can be added under the appropriate chapter. A helpful exercise would be to systematically review the national profile (if it exists), and analyse where information related to waste management can be added.

7. Strengthening Coordination between Chemicals and Waste Management

Interministerial Coordination

Based on efforts already made within countries to coordinate on chemicals and waste management issues, separately or together, the opportunity exists to link national coordinating activities more closely. Existing interministerial coordination mechanisms could be adapted to include all institutions concerned with chemicals *and* waste management issues. One early activity would be to reach agreement among existing participants to expand the committee's mandate to include waste issues. Terms of Reference, where they exist, could be amended to formalise the expansion of an existing committee. A separate chemicals and waste committee could also have a different mandate, including different decision-making powers, if necessary.

National Information Exchange

Existing structures and processes that exist for chemicals management information exchange and waste management information could be adapted to coordinate more closely, or even be integrated into a single information exchange system. A formal expansion of the network of

ministries, agencies and other interested parties to include all those concerned with chemicals and waste management issues can be an early step; but significant efforts to engage such parties, through, for example, training (including Internet training), and awareness raising, are likely necessary to ensure the sustainability of any information exchange mechanism.

Mobilising Resources

Both chemicals and waste management activities are dependent upon resources for their continuation and expansion. Coordination regarding the use of existing resources, as well as the pursuit of new external resources, may therefore prove valuable. In the chemicals field, developing strategies for financial and human resource mobilisation comprises two major aspects: becoming familiar with and using both internal (national) processes and institutions that can provide resources; and replicating such efforts at the external (international) level. When expanding financial resource mobilisation efforts to include waste issues, a similar approach may be appropriate. At the international level, however, it would likely be necessary to investigate whether there are organisations that provide resources only for waste-related activities, exclusive of strictly chemicals-related activities. The list of donor organisations is therefore likely expand when including wastes issues in financial resource mobilisation strategy development.

Awareness Raising

Efforts to more closely link chemicals and waste management activities as outlined above would likely benefit from certain awareness raising efforts. Awareness-raising through, for example, initial meetings, high-level communications, information sharing, and other “outreach” activities, can facilitate initial contacts, and possibly lead to direct engagement between organisations dealing with chemicals and those dealing with wastes. In some countries, for example, responsibilities for wastes (including chemical) issues lies with ministries and/or agencies that are different from those concerned with other parts of the chemicals management life cycle (e.g. Health Ministries are often responsible for hazardous hospital waste issues). Another example is that in many countries there are NGOs outside of government who are engaged directly in waste management issues, who may, due to limited resources or mandates, restrict their focus to wastes only.

8. Substantive Areas for Linking Chemicals and Waste Management

A number of substantive chemicals and waste management areas are amenable to being linked through greater co-ordination and co-operation. This section provides some examples as a possible starting point for identifying linkages between chemicals and wastes management issues, possibly leading to greater integration. Other areas of linkage may appear through examining a country’s national chemical and waste management systems.

Compatible classification and labelling of chemicals and wastes

Many countries have classification and labelling schemes for chemicals, and there is now an international standard as developed through the GHS. In the past, however, classification and labelling of wastes has often followed a different format. Given the need in many developing countries to develop systems for classification and hazard communication, it may be useful to ensure compatibility of national classification and labelling of chemicals and wastes, based on a harmonized framework (such as the GHS) and examine the role of customs codes for both chemicals and wastes. At the international level, for example, consideration is already being given to how the wastes classifications used in the Basel Convention might be made more compatible with those in the GHS.

Development of a framework to strengthen import and export control of chemicals and waste

Both Chapters 19 and 20 of Agenda 21 place an emphasis on controlling the illegal traffic in chemicals and wastes. Strengthening import and export control for both chemicals and wastes might suggest a harmonised regulatory framework for controlling imports/exports, rather than separate legal instruments. Additionally, as customs officials must monitor trade in regulated chemicals and wastes, and prevent illegal traffic, co-operation and co-ordination across ministries for border control mechanisms, rather than separate training, would be beneficial.

Strengthening a preventive approach to obsolete stockpiles

Some chemicals, if unused or unwanted, may eventually become wastes and a serious threat to human health and the environment. There are programmes (such as the Africa Stockpiles Programme or initiatives of the FAO⁵) to dispose of such stockpiles, and the Stockholm Convention requires that parties develop strategies for identifying stockpiled and waste POPs. However, a preventive approach would propose that countries consider putting in place a mechanism to prevent unwanted imports of substances that in the future may become obsolete (e.g. pesticides that are shipped as 'humanitarian aid'). This may be accomplished through an adequate legal and enforcement framework and/or the development of guidelines (such as on storage and stock control of chemicals) to avoid unwanted imports, illegal practices and the accumulation of unwanted and obsolete stockpiles.

Co-ordinated emergency management and response

Chemical and waste accidents and incidents can take place throughout the chemical life-cycle (e.g. during production, transport, use and disposal) and are usually the responsibility of a range of different ministries and agencies. Planning for and responding to emergencies involving chemicals or chemical waste may, however, be closely coordinated. International recommendations regarding the transport of dangerous goods and other guidance regarding

⁵ On the ASP programme, see <www.africastockpiles.org> and for the FAO, <www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Disposal/index_en.htm>.

emergency preparedness and response already exist.⁶ A national strategy for co-ordinated chemicals and waste emergency response may be strengthened, for example, from joint training on preparation for chemicals and waste spills. Additionally, countries may consider developing (with the participation of all stakeholders) overall safety objectives and procedures related to prevention, preparedness and response to accidents involving chemicals and wastes (for example, enforcement of policies regarding safe use at installations where hazardous substances are handled or stored with a potential for fire, explosion, spills or other accidents).

Strengthening capacities for chemicals and waste analysis and monitoring

The capacities needed for analyzing and monitoring chemicals and wastes are similar, such as testing to measure concentrations in tissues and environmental media, measuring and monitoring the environmentally safe disposal of chemicals, and related to enforcement action (such as the identification of chemicals or wastes subject to bans, restrictions etc). Possible opportunities for coordination may include pooling of resources (*e.g.* by exchange of data and information, including on analytical procedures and protocols, quality assurance systems and reference data and materials) for strengthened capacities for chemicals and waste analysis and monitoring. Such pooling could result in an effective network of functioning laboratories with the capacities to serve various purposes. For example, some simpler tests may be done locally while other more complicated tests might be referred to centralised laboratory facilities. A thematic workshop on *Strengthening National Capacities for Chemical Analysis and Monitoring* held in November 2001 also recommended that it may be useful for countries to examine the different analytical requirements of various conventions with a view to identifying potential synergies, overlaps, as well as gaps.⁷

⁶ See, for example, the UN Recommendations on the Transport of Dangerous Goods <www.unece.org/trans/danger/danger.htm> and some of the suggestions contained in UNEP/OCHA Environment Unit's *Partnership for an Integrated Approach to Prevention, Preparedness for and Response to Environmental Emergencies* and *Guidelines for Environmental Assessment following Chemical Emergencies* available at <www.reliefweb.int/ochaunep> or OECD's *Guiding Principles for Chemical Accident Prevention, Preparedness and Response* at <www.oecd.org>.

⁷ A full report of this workshop is available from UNITAR.



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