



Session 2

**THE BASEL CONVENTION
Environmentally Sound Management
- a global concept with concrete applications**

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I. INTRODUCTION

1. “Within the framework of integrated life-cycle management, prevent to the extent possible and minimize the generation of hazardous wastes, treat and dispose of the wastes in such a way as they do not cause harm to health and the environment, and eliminate or reduce transboundary movements of hazardous wastes”. This is the environmentally sound management conceptual framework as agreed by the Parties to the Convention. At their 5th meeting in December 1999, the Parties adopted the Basel Declaration on environmentally sound management together with its enabling decision V/33 to move from concept to concrete implementation.

2. Two concurrent but mutually supportive courses of action are called for to progress with the understanding of what constitutes environmentally sound management. First, it is important to pursue the ongoing process of further refining the concept based on sound science and experience. This would entail an improved knowledge of the practical use of the hazardous characteristics listed in Annex III of the Convention. This would also lead to the need for a mutual understanding of the relationship between environmental regulations and market forces as well as between development and environmental goals. Second, the design, construction and operation of the critical public/private partnership is essential to move into concrete implementation. Both processes would provide a solid foundation and a platform upon which all stakeholders could join forces and achieve the ambitious goals of environmentally sound management, with emphasis on the minimization of the generation of hazardous wastes.

3. Progress in environmentally sound management needs to be built on the practical work carried out at the national level as well as making use of the technical and scientific expertise developed within intergovernmental bodies in particular in regard to hazard characterization and risk assessment. Each stakeholder should bring its own specificity, expertise and experience in the design of an operational environmentally sound management framework.

II. A SCIENCE-BASED APPROACH

4. Wastes are classified as hazardous in the Basel Convention based upon their intrinsic properties. In addition to the hazardous characteristics of a waste, complementary parameters are being considered in relation to the protection of human health and the environment, in particular to address the notion of risks. These are:

- the dose-response
- route of exposure
- estimation of risks
- reduction of risks

The following table describes these various elements:

| Waste materials | | |
|-----------------|---------------------------|---|
| | Objective | Activities |
| 1 | Hazardous characteristics | Hazard identification |
| 2 | Dose-response | Concentration and effect assessment |
| 3 | Route of exposure | Exposure assessment |
| 4 | Estimation of risks | Risk characterization |
| 5 | Reduction of risks | By substitution Minimization of the generation Product design Cleaner production/processes |

5. It should be noted that while developing scoping and discussion papers on the hazard characteristics H 6.2 (Infectious substances), H11 (Toxic Delayed or chronic), H12 (Ecotoxic), H13 (Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above), experts of the Technical Working Group have been involved in debating about the need to include a risk assessment approach in regard to the use of some hazardous characteristics contained in Annex III to the Basel Convention.

6. It is a fact that good science requires time and such work within the Basel Convention and in other intergovernmental fora will not be concluded in the near future. Consequently, the science-based approach should be complemented to move, in a timely manner, into the concrete application of environmentally sound management criteria. Both approaches would enhance each other.

7. A fundamental prerequisite of environmentally sound management is the way wastes are being classified and, therefore, subjected to control and authorised disposal operations procedures. The key criteria in this regard concern the intrinsic property or properties of the waste. Classification of a waste as hazardous needs to rely as much as possible on predictable and objective parameters so that it could be applied internationally over time.

8. First, the waste contains hazardous properties that, depending on its physical or chemical nature and the process to which it is subjected, will exhibit fully or partially all those hazardous properties (in this regard it should be noted that there are cases where a waste possesses a hazardous constituent but its concentration is below a level that will trigger the waste to exhibit a hazardous characteristic). This sequential approach provides for the pre-eminence of the logic that is embodied in the Basel Convention, that is: the classification of a waste as hazardous because of its intrinsic properties is the baseline, the starting point. Then consideration of conditions will follow, such as in particular release/exposure scenarios in risk assessment. The hazard identification provides the elements for classification whereby the dose-response parameters would provide indication of the level of concentration of the hazardous constituents that trigger adverse environmental and health effects. Exposure assessment would indicate the degree of severity of the effects. Risk characterization would define the degree of tolerance to the effects and exposure.

Another parameter that could be considered would be the overall contribution of a specific waste material, being processed or disposed of, to environmental or health risks.

Concluding remark: the design of a coherent and practical environmentally sound management framework requires, as a prerequisite, the intimate knowledge of the intrinsic properties of wastes that is also a necessity for their classification.

III. THE NEED FOR A COMPREHENSIVE DESIGN

9. The development of standards, the consideration of voluntary and regulatory approaches, the environment goals and economic and trade interest would be useful elements to assess environmentally sound management. They would however, not suffice for designing the framework. Other critical elements should be part of the equation; namely: the progressive harmonization of procedures and control systems for the transboundary movements of wastes, including hazardous wastes, compilation of data on generation of hazardous wastes and monitoring their import and export. Enforcement, prevention and monitoring of illegal traffic, adequate waste management infrastructure and trained personnel, compliance with international obligations, liability and compensation regimes, reduction of pollutants, waste minimization programmes (voluntary or mandatory) and cleaner production/process programmes/prevention and economic/financial instruments.

10. Local, national, regional and international comparable knowledge, know-how and infrastructure are required to achieve environmentally sound management. Environmentally sound management cannot be restricted to the measurement of the level of operation of one waste facility or industry dealing with wastes. Its implication is wider and more comprehensive. One can use a metaphor: it is not enough to drive well a solid and reliable car if the road is in a very poor condition and the other drivers do not know how to drive or have unreliable vehicles.

11. Environmentally sound management is a concept that means different things for different people; factors such as geographical locations, level of economic development or professional activities would influence such perception. It will take time to build a common understanding of what constitutes environmentally sound management among all public and private stakeholders. It is therefore essential to work within a framework that is comprehensive enough to accommodate such diversity of perceptions while providing a practical mechanism for concrete implementation. Inaction should not be the response. It is even more important today to build that common understanding and fine tune the design of the environmentally sound management framework to the progressive accumulation of scientific and technical knowledge. Activities on the ground should help us in uncovering the reality of what environmentally sound management means in practical terms, and to better articulate the responsibilities and contribution of all stakeholders.

Concluding remark: an environmentally sound management framework should be comprehensive enough to encompass the most relevant and critical elements that are required to protect human health and the environment.

IV. THE PUBLIC/PRIVATE PARTNERSHIP

12. The globalization of economy calls for the full and active participation of all stakeholders to reduce policy divergence and tensions between the progressive liberalization of trade in goods and services and the protection of the environment. This dramatic transformation of the world economy does impact on the practical implementation of the Basel Convention. On one hand, the stringent control systems of the Basel Convention is meant to ensure maximum protection to those Parties that for environmental and health reasons have decided not to import hazardous wastes, and to ensure full transparency in

transboundary movements of hazardous wastes. On the other hand, industry is looking for efficient and cost-effective mechanism that it can use for its business while, at the same time, meet its international obligations. As a pragmatic way forward to find solutions, Governments and industry are interacting to move into the practical implementation of environmentally sound management as called for in the Basel Declaration adopted at the fifth meeting of the Conference of the Parties in December 1999. With the adoption of the Basel Declaration, the Parties have designed the framework for nurturing a vital partnership with all stakeholders, in particular with industry. Such partnerships should evolve over time and be based on shared responsibilities, even though their construction is not yet clearly understood.

13. How could such partnership be put into practice? The Basel Convention has created the international legal framework for the environmentally sound management of hazardous wastes it controls. Individual Governments Party to the Convention have developed procedures and plans to manage hazardous wastes in an environmentally sound manner, including their minimization, cleaner production approaches, use of best affordable or available technologies, as well as promulgating legal texts for implementation and compliance. Gradually, Parties are developing or improving their legal framework or policies in regard to hazardous waste management. This is a critical step in building up mechanisms that industry can use to meet its international obligations (eg: promotion of a life-cycle economy to cover products from design to disposal; stricter application of the polluter-pays principle through liability and compensation regimes; product stewardship; or environmental reporting by companies). In short, Governments have a crucial role in creating enabling mechanisms where their institutional and regulatory capacities interact with industry (e.g., providing effective and practical procedures).

14. Corporate performance should lead to improved environmental performance. In the building up of a multistakeholders partnership, industry could converge around a core set of environmental practices that would be illustrative of the way to implement the environmentally sound management concepts. Such practices could operate at the facility level while taking into account the wider needs for environmentally sound management at the national, regional or international level, such as the needs for capacity building.

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| Concluding remark: a multi-stakeholder approach is necessary to embrace the complexity of developing environmentally sound management criteria and effective and practical procedures to implement this concept. Time scale will determine the architecture of the partnership required to progress with the implementation of the environmentally sound management. |
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15. The level of commitment of every stakeholder will be the measure of progress in elaborating and clarifying what constitute environmentally sound management, and in making effective changes through the concrete enhancement of environmental performance and sharing of experience.

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