

Controlling Mercury Emissions from Wastes

Mercury wastes comprise a broad range of wastes, from used products to pollution control residues from power plants and other large industrial facilities. These wastes are managed in a variety of different ways, and can contribute to substantial mercury releases if managed improperly. Accordingly, the environmentally sound management and disposal of mercury wastes is a pivotal issue for the INC to consider. (For a discussion on waste see ZMWG Waste Fact Sheet).

The INC's consideration of mercury treaty waste provisions should address the appropriate relationship between the mercury Convention and the Basel Convention on the Control of the Transboundary Movement of Hazardous Wastes and their Disposal, which presents a parallel regime that covers mercury waste. The challenge for the INC will be to find a relationship to the Basel Convention which accomplishes mercury Convention objectives, but avoids overlaps and duplication whenever possible.

Hazardous Wastes and the Basel Convention

The Basel Convention establishes a global framework for the control of transboundary movements of hazardous wastes. The main principles coming out of the Convention are i) reduction of hazardous waste generation; ii) reduction of transboundary movements of hazardous wastes; iii) hazardous wastes should be treated and disposed of in the country of generation; and iv) prohibition on dumping of toxic wastes, whether for disposal or recycling, particularly from rich to poorer nations.

An important concept underlying the Basel Convention is environmentally sound management ("ESM"). ESM of hazardous waste means 'taking all practicable steps to ensure that waste is managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes'. ESM looks at both end-ofpipe technologies and upstream solutions for reducing or eliminating wastes.

Under the Basel Convention, hazardous wastes are regulated under various provisions,¹ and it has

developed some technical guidelines on fly-ashes from coal-fired power plants and mercury containing wastes from industrial pollution control devices for cleaning of industrial off-gases. In addition to these, the Basel Convention has initiated the development of new technical guidelines on other mercury containing wastes.

The Limits of the Basel Convention

There are several limitations to the Basel Convention, as discussed further below.

a) Areas not covered - mining, trade, etc.

During the first Intergovernmental Negotiating Committee (INC) meeting in 2010 the Basel Secretariat circulated INC.1/INF/3 called "Information supplied by the secretariat of the Basel Convention". In this document the Secretariat enumerates the issues that the Basel Convention is unfit to address, such as:

- * the primary mining of mercury;
- the transboundary movements of chemicals or products;
- the trade of elemental mercury or mercury compounds;
- the remediation of contaminated waste sites affecting public and environmental health.
- b) Non-obligatory guidelines ("Soft Law")

Mandatory treaty provisions, which are generally obligatory upon States, are considered under international law as "hard law" because of the enforceability of its provisions. The Basel technical guidelines and similar instruments, on the other hand, are considered "soft law". These are not obligatory, but this type of international law helps create legal norms, which can become "hard law" over time. Thus, technical guidelines are not mandatory, until such time where enough States follow the guidelines whereby they eventually take on an obligatory nature.

further clarified by the lists contained in Annexes VIII and IX to the Convention. Mercury and mercury compounds are listed under Y29 in Annex I to the Basel Convention. In addition, mercury wastes are also covered in Annex VIII under the following codes:

- A1010 metal and metal-bearing waste;
- A1030 wastes having as constituents or contaminants of mercury and mercury compounds;
- A1180 waste electrical and electronic assemblies or scrap containing components such as mercury switches or contaminated with mercury.

¹ Article 1, paragraph 1(a) of the Basel Convention defines wastes belonging to any category contained in Annex I to the Convention unless they do not possess any of the hazardous characteristics contained in Annex III. The regulated wastes are

c) Questions on Implementation

The Basel Convention has implementation issues as well, most notably its:

- Failure to have the Basel Ban Amendment enter into force – a global ban on toxic waste exports from rich to poorer countries - which has languished for more than 15 years.
- Inability for almost 10 years to set up health and environment protective values for persistent organic pollutants in wastes called "low POPs content levels".
- Inability to control the continued rise in the illegal trade in toxic wastes, especially of electronic wastes.
- Failure to manage end-of-life vessels and allowing the IMO to usurp jurisdiction over the issue.
- d) Absence of Financial Mechanism

The Basel Convention also lacks a financial mechanism to support efforts by countries to manage their toxic wastes. Thus, there is no effective and efficient financial support under the Basel Convention to promote and improve waste management among member States.

e) Need to Address Legal "Grey Areas"

Several important "grey areas" remain within the Basel Convention that need to be addressed by the Mercury Treaty. For instance, how is elemental mercury used as a raw material in a process or product going to be classified by individual governments after a voluntary phase-out of mercury in those products or processes?

Since the Basel Convention does not define when mercury is a commodity, the Mercury Treaty may clarify this issue in order to ensure that commodity mercury is clearly distinguished from waste mercury. This distinction would be important in the issue of transboundary movement for storage as against waste.

Mercury Storage and Waste

Storage of mercury is another challenging issue between the Basel Convention and the Mercury Treaty that requires clarification. There is a legal question on storage because the Basel Convention defines the term "storage" to be a toxic waste disposal operation.

Since it is a toxic waste disposal operation, the Basel Convention claims jurisdiction over the issue. However, not all forms of storage relates to wastes. Storage of commodity elemental mercury, as practiced in countries such as the United States, is an example of this non-waste approach. Moreover, characterizing elemental mercury storage as waste management may make it more difficult for governments to cooperate in regional solutions, because of legal restrictions on accepting wastes from external sources. Thus, a country that has no facility capable of storing mercury permanently and wishing to transport its surplus mercury quickly and less expensively may wish to take the non-waste approach.

The legal and technical guidance over the coverage and manner of storage of both waste and commodity elemental mercury need to be threshed out by the Mercury Treaty and Basel while respecting the two distinct approaches to storage.

Mercury Treaty Provisions

In short, the Mercury Treaty provides an excellent opportunity to leapfrog the shortcomings of the Basel Convention.

The INC is best positioned to approach the issue of mercury waste from a broad and overarching perspective, particularly in defining goals and obligations of Parties. As tempting it is to dive into definitions of what is a waste or product mercury, or levels of concentration or content, it is not necessary to immediately prescribe specific definitions or concentration levels of mercury wastes. It is more crucial for the INC to set the Convention policy objectives by prescribing the following:

- 1. Restricting mercury trade and prohibiting mercury waste dumping from developed to developing countries.
- 2. Providing a clear mandate to the Mercury Treaty COP to determine and address the legal and technical gaps between the Basel Treaty and the Mercury Treaty, and consult with the appropriate Basel body in resolving areas of overlap.
- 3. Providing financial and technical support to help Parties meet the environmentally sound storage and disposal goals of the Mercury Treaty.
- 4. Establishing strict storage requirements and otherwise ensure that sequestered mercury is not reintroduced into global commerce.
- Developing or establishing environmentally sound management techniques specific to the disposal of mercury-containing products and wastes, taking into account emerging information and ongoing research activities on safe disposal options.