

## Legal Framework for Hazardous Waste Management

The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal, usually known as the **Basel Convention**, is an international treaty that was designed to reduce the movements of hazardous waste between nations and specifically to prevent transfer of hazardous waste from developed to less developed countries. The Convention was opened for signature on 22 March 1989 and entered into force on 5 May 1992. As of July 2016, 183 states and the European Union are parties to the Convention.

### Major Incidence of Dumping of Hazardous Waste in the World

Name of Accident	Details
<b>Mapua contaminated site (1932)</b>	Disaster due to pesticide pollution by the Fruit growers' Chemical Company (FCC)
<b>Minamata Bay (1932-68)</b>	Mercury poisoning - cause of Minamata disease. High levels of Hg contamination (5.61 to 35.7 ppm) and 2252 died.
<b>Mayapuri (1986)</b>	Radioactive contamination
<b>Italy-Lebanon (1987)</b>	The first case concerns an Italian firm, Jellywax, which 'allegedly shipped over 2,400 tons of chemical wastes to Lebanon between September 1987 and June 1988 through ports outside Lebanese government control'

Although the issue of hazardous waste first received international attention because of these incidents, the problem is by no means confined to Africa. Numerous incidents of dumping in developing countries have been reported throughout the world. (Some incidents are mentioned in above table for reference)

### Emergence of Laws in Developed Countries

In the 1980s, environmental awareness was growing in developed countries and many governments began to enact more rigorous regulations in response to mounting political pressure. However, as developed country governments attempted to regulate domestic waste while developed country firms found a profitable loophole that is international dumping in developing countries. Routes developed from the global North to the global South for the international dumping of hazardous waste and soon media scandals broke out.

The internationalization of hazardous waste management has led to the emergence of salient issues and actions. One important issue is the modus operandi for *trans-boundary* movement of hazardous wastes, if the movement is allowed to occur. The major *trans-boundary* issues include the legality of the movement of hazardous wastes across national boundaries the extent to which expertise on the management of these wastes is available in destination countries, which are often developing nations, the health and safety implications of the *trans-boundary* movements, equity issues and legal issues, especially as they relate to liability and compensation.



Fig 1.2 Oil spills at the shore of Goa

These trans-boundary issues have also led to the emergence of various global, regional and sub-regional treaties, accords and agreements aimed at reducing the negative impacts of the generation and trans-boundary movement of hazardous wastes. Some of these accords contributed immensely towards shaping the manner in which many of the issues listed above are currently handled among nations. Such accords include the London Dumping Convention (1973), the Code of Practice of the International Trans-boundary Movement of Radioactive Wastes (1990), the Cairo Guidelines (1987), the Dakar Declaration (1989), Article 39 of the Lome IV Convention (1989), the Bamako Convention (1991), the Barcelona Convention (1976/1995), the Waigani Convention (1995) and the Basel Convention (1992).



Fig 1.3 Illegal Dumping of Hazardous Waste

## INDIAN SCENARIO – LEGAL FRAMEWORK OF HAZARDOUS WASTE MANAGEMENT IN INDIA

India is a party to the Basel Convention on trans-boundary movement of Hazardous Waste. Import of 29 items is prohibited under Schedule-8 of the Hazardous Waste Management Rules (1989) amended in 2003 while the Basel Convention has banned 76 items. The Ministry of Environment Forest & Climate Change (MOEF & CC) is in the process of examining whether more wastes needed to be banned. Unscrupulous traders in the garb of importing used oil or furnace oil, in fact, imported waste oil, which is a banned item. They also illegally imported zinc wastes despite its being not permissible except, if more than 65% of zinc can be recovered from the wastes. In May, 1997, the Supreme Court directed that no import of any HW, which is already banned or to be banned hereafter, would be permitted by any authority or any person under the Basel Convention.

Prior to introduction of the Hazardous Waste Management Rules (1989), most of the industries used the opportunity to dispose their HW in illegal dumpsites outside industrial estates, along roadsides, in low-lying areas, along with municipal wastes or even in rivers and canal pits at the expense of the environment and public health. So far a total of 115 illegal HW dumpsites have been identified by 10 States.

As per CPCB Bulletin Vol-I, July 2016 the present status of generation and management of hazardous waste in the country is as below:

- *No of HW generating industries:*43938
- *Total generation of HW:*7.467 Million Tons Per Annum
- *Land fillable waste:*3.416 Million Tons Per Annum
- *Incinerable waste:*0.695 Million Tons Per Annum
- *Recyclable waste:*3.356 Million Tons per Annum

There was no proper secured landfill facility available in India to dispose of Hazardous Waste (HW) till 1997. To regulate management of Hazardous Waste generated within the country as well as export/import of such waste, the Hazardous Wastes (Management and Handling) Rules, 1989 were notified under the Environment (Protection) Act, 1986. Any waste, which by virtue of any of its physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristics causes danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances has been defined as hazardous.

The Hazardous Waste Management Rules (1989) amended in the years 2000 & 2003 enable to identify hazardous wastes by means of industrial processes and waste streams in

Schedule-1 and also by way of concentration of specified constituents of the hazardous waste in Schedule-2. List of wastes applicable for trans-boundary movements are provided in Schedule-3 (Part A). Hazard characteristics of waste have been defined in Part B of Schedule-3. Categories of wastes banned for export and import of HW have also been defined (Schedule-8). The procedure for registration of the recyclers/re-processors with environment sound technologies for processing waste categories such as used lead acid batteries, non-ferrous metal and used oil is contained in schedule-4 and schedule-5 respectively.

The Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 (the “Hazardous Wastes Rules”) are the primary regulations addressing the management of hazardous waste in India. These rules were established under the Environment (Protection) Act, 1989 which gives the Central Government the power to “take all such measures as it deems necessary or expedient for the purpose of protection and improving the quality of the environment and preventing, controlling and abating environmental pollution. This includes making rules related to hazardous wastes. The first set of hazardous wastes rules was released in 1989. These rules were amended extensively over the years and, in 2008, were replaced by the Hazardous Wastes (Management, Handling & Trans-boundary Movement) Rules, 2008. In order to make hazardous wastes management in India more effective, the MOEF & CC, GOI has made more stringent provisions in the initial HW Rules by various amendments from time to time till date. These rules were recently amended in **2016** and are called “the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016”.

The Government of India has empowered the individual state governments to identify the Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF) suitable for the local area development. The state government can further entrust the development of the common facility to technically and financially capable developers and maintain the facility over a period of 20 +years on environmentally suitable and legally acceptable manner. In addition to the above direction, The Honorable Supreme Court of India also has constituted a monitoring committee (SCMC) to ensure strict compliance of the above guidelines. This has led to various states through their Industrial Development Corporations to promote developers for Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF) and ensure compliance of the regulations.

**Source**

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