

AN OVERVIEW OF SCIENTIFIC MANAGEMENT OF HAZARDOUS WASTE THROUGH REGULATIONS

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ABSTRACT

This article contains in brief a detailed discussion on the constituents of the Basel Convention and how has it helped to evade and control transboundary movement of hazardous waste from one region of the world which is powerful in might and power to the other region of the world who are still in their developing phase. This article thus will unfold how Basel Convention has helped to remove the hurdles of transboundary movement of hazardous waste and also stand of India as it is a member country of this Convention and has taken effective steps for scientific disposal of hazardous wastes in the country.

THE BASEL CONVENTION ON THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF HAZARDOUS WASTES AND THEIR DISPOSAL

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989 by the Conference of Plenipotentiaries in Basel, Switzerland, in response to a public outcry following the discovery of toxic wastes imported from the developing world hence the negotiations for the convention were started in the late 1980s under the auspices of the United Nations Environment Programme and then the convention came into being.ⁱ There are in total 188 members in the Basel Convention in total the Basel Convention aims to protect the environment by bringing measures to control and regulate hazardous and other waste disposals India signed the Convention on 15th March 1990 and ratified it on 24th June 1992 and in consonance to this convention India's Ministry of Consumer Affairs Food and Public Distribution has announced a blanket ban on all types of single-use plastic products in all its Public Sector Units including Food Corporation in India in September 2019.ⁱⁱ

With the industrialized nations becoming aware of environmental regulations in the 1970s and 1980s led to a strong public resistance to disposal of hazardous wastes and led to an increase in disposal costs of biomedical wastes. Hence in reaction to the cheap disposal of hazardous wastes in Eastern Europe and other developing nations the Basel Convention was negotiated in the 1980s and then the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was enacted.⁶ⁱⁱⁱ The aim of this convention is to protect human health against the adverse effects of hazardous wastes based on origin, composition and characteristics of hazardous wastes. The aim of this convention is the reduction of hazardous waste generation and promotion of environmentally sound management of hazardous wastes.^{iv}

The secretariat of the Convention is situated in Geneva, Switzerland. The important features of this convention is it applies Prior Consent Approval procedure to regulate the transboundary movement of the hazardous and other wastes as the non-parties cannot transport hazardous waste to and from each other unless specially agreed, if not then this transportation is illegal. Further the member nations should have domestic legislation for both prevention and the punishment of the illegal trafficking of such hazardous wastes. The Convention contains the entire mechanism to control the generation, storage, transportation, treatment, reuse, recycling, recovery and final disposal of hazardous wastes and member states cannot be a party to it. The Conference of Parties is a primary organ of the Basel Convention and is responsible to make decisions about the operations of the convention.^v

The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as “hazardous wastes” based on their origin and/or composition and their characteristics. There are two types of wastes household waste and incinerator ash. The main provisions of the Convention focus on reduction of hazardous waste, sound management of hazardous waste disposal, restriction on transboundary movement of hazardous waste or movement only according to regulatory system.

Then definition of waste as given under Basel Convention means “something that needs to be disposed of by the provisions of the national law.” The list of categories of waste under the Basel Convention are used oils, lead acid batteries, persistent organic pollutants, pesticides and chemicals, certain other category of wastes are also included like electrical waste, ships destined to be dismantled, mercury and asbestos wastes.

The Convention also contains important articles which are as follows-

- a) Under Article 4 states are required to observe fundamental principles of environmentally sound waste management.
- b) Under Article 4 only states cannot export hazardous waste to Antarctica or to a State which is not party a to the Basel Convention, or to a party having banned the import of hazardous wastes but under Article 11 states can through enter into either bilateral or multilateral agreements with non-parties but they still have to be in consonance to the provisions of the Basel Convention's regulatory system.
- c) Article 6 and Article 7 talks about the concept of prior informed consent, which requires the exporting country to inform the country to which it is transporting the hazardous waste giving them full detailed of the intended movement of wastes and the movement will only begin when all States concerned have given their written consent.
- d) Article 10 and Article 13 talks about cooperation between parties relating to exchange on information between parties regarding implementation of the convention to providing technical assistance to the developing countries on the issue.
- e) Under Article 16 the Secretariat is required to facilitate and support this cooperation as it performs the role of a clearing house.
- f) Article 6 and Article 7 also highlight the liability of the states who indulge in transboundary movement of hazardous waste in contravention to the provisions of the Convention, Further Article 8 and Article 9 talk about fixing responsibility on such guilty states for safe disposal of such wastes either re importing in the State of its generation or otherwise.
- g) Article 14 of the Convention talks about establishment of regional and sub-regional centers mitigation of hazardous waste generation and evolving sound policies for management of hazardous wastes through training and capacity building activities in the countries who are parties to the convention.

STAND OF INDIA AFTER RATIFYING THE BASEL CONVENTION

India ratified the Basel Convention in June 1992 and brought it into force on 22nd September 1992. After ratification India introduced, further amended in the year 2019 by the the Ministry of Environment, Forest and Climate Change. The gist of the rules include prohibition of the

import of the solid plastic waste including in the special economic zone and export-oriented units. The silk waste exporters are completely exempted, and no longer need permission for their export from the Ministry of Environment, Forest and Climate Change. The defective electronic waste can be imported back within one year of export and permission from the ministry is not to be taken with respect to it.

Defective electrical and electronic assemblies and components can be imported back within one year of export without obtaining permission from the ministry. The new rules introduced by India in consonance to the Basel Convention are Exemption of Industries from Hazardous and Other Wastes (Management and Transboundary Movement) Rules of 2016, Bio-Medical Waste Management Rules 2016 and Electronic Waste Management Rules 2016.^{vi}

Hazardous Waste Management Rules 2016 is a comprehensive piece of legislation that firstly provides the definition of hazardous waste which includes any waste which by reason of characteristics, such as “physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger to health, or environment.” It comprises the waste generated during the manufacturing processes in industries. Hence not only disposal but scientific management of hazardous waste can be done if it is disposed at captive treatment facility installed by the individual waste generators or at Common Hazardous Waste Treatment, Storage and Disposal Facilities after the waste is collected, stored, packaged, transported and treated in an environmentally sound manner. These hazardous wastes are also used by industries as raw materials as a supplementary source for material and energy, these include lead acid battery scraps, used oil, waste oil, spent catalyst, waste tyres, paper waste, metal scrap. Thus by utilizing such waste through recycling is more environment friendly rather disposing off in landfills which adds additional burden on mother earth. Hence not only is scientific disposal of wastes is important but also to innovate ways to reuse and recycle the waste. If this does not happen then unscientific disposal of hazardous waste through ways like burning and incineration can lead to emission of toxic fumes back into the environment causing various forms of pollution like air pollution, water pollution and causing skin related, genetic related diseases and neurological disorders in humans.^{vii}

The new Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016 has expanded the ambit of wastes by including ‘Other Waste’ including hazardous waste in its category like waste tyres, paper waste, metal scrap. These rules are reformed to make process simple yet stringent as rules for permission, import/export, filing of annual returns,

transportation, etc. have been revised significantly. For scientific management of waste a sound infrastructure is needed so that waste is scientifically processed and disposed off including the necessity to safeguard the health and environment, for a Standard Operating Procedure, specific to waste type has been provided in the rules to be complied by stakeholders and the Central and State Pollution Control Board have to grant authorization for the same, granting of approvals is now being done through a single window clearance for setting up of hazardous waste disposal facility and import of other wastes.

The State government has also been put to responsibility for environmentally sound management of hazardous waste by setting up an industrial space to recycle and process wastes and this is done by registering workers, forming their groups and teaching him as to how to process, recycle and reuse the wastes.

State Government is authorized to prepare integrated plan for effective implementation of these provisions and have to submit annual report to Ministry of Environment, Forest and Climate Change. On the other hand the State Pollution Control Board is mandated to prepare an annual inventory of the waste generated and waste disposed and submit to the Central Pollution Control Board by the 30th day of September every year.

CONCLUSION

The Basel Convention has been quite a remarkable convention when it relates to disposal of hazardous wastes as only its member nations can transport hazardous wastes for its scientific disposal to other signatory countries but the rules that they need to follow while disposal of hazardous wastes cannot be altered or changed by them, all of it will be controlled by the Convention. Hence the exporting countries of hazardous wastes cannot exploit the regulations and the environmental conditions of the importing countries of hazardous wastes. Non-member countries can also not serve as a dumping ground of hazardous wastes and this has helped regions like Antarctica to be free from hazardous waste and not be exploited by the developed countries dominating and dumping their hazardous wastes in this region. Further India has also played a very proactive role in being a signatory to the Convention and enacted for safe and sound disposal of hazardous wastes in the country.

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