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Select Legal Controls of Hazardous Waste Management: A Little Done; Vast Undone

by
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Introduction

"O Wicked man! if you roasted a bird then your bathing in sacred rivers, pilgrimage, worship and yajnas are useless."

(Narsimhapurana, 13.44)

It is an un-denying fact that every population must manage the disposal of its waste or suffer the health consequences. We must remind ourselves the dictum of ancient environmental ethics that guides us to live in harmony with nature. Observation of the Apex Court in this direction highlights the same, wherein, the Apex Court in *Sachidanand Pandey v. State of W.B.* observed that, "You must teach your children that the ground beneath their feet is the ashes of our grandfathers so that they will respect the land. Tell your children that the earth is rich with the lives of our kin. Teach your children what we have taught our children that earth is our mother... Contaminate your bed and you will one night suffocate in your own waste."¹

Waste is broadly generated by two modes i.e. through human activities, and industries. Handling of both types of waste has become a real challenge in the governance of the country. The growth and development has brought in several new challenges before the country and such challenges are before the management and handling of waste. This waste include: agro-industry waste containing pesticides, domestic waste, industrial waste containing hazardous and dangerous chemical substances, municipal waste, bio-medical waste, etc. Its management, handling, storage, transportation, disposal, recycling, reuse, etc. pose a new challenge which the law must respond. It is interesting to note that more than 100,000 synthetic chemicals are on the market and thousands of new chemicals are introduced into the global economy each year. Generation of waste grows in volume, persistence and toxicity. World wide generation of hazardous waste had increased from approximately 5



million metric tons in 1945 to 400 million metric tons in early 1990s, which makes it about 80 fold since 1945. Further, the disposal of hazardous waste may cost as much as \$2000 per ton in a developed nation, versus \$40 per ton in Africa².

Coming to the domestic front, for example, in Madhya Pradesh alone, the study of the Madhya Pradesh State Pollution Control Board on the status of hazardous waste shows that the total solid hazardous waste generated is about 2 lac metric ton per year and total liquid hazardous waste generated is about 20,000 kl per year. High waste generation is recorded in Dhar district first, followed by Indore, Ujjain, Bhopal, Gwalior, Rewa, Jabalpur, Guna, Sagar and Satna due to the number of hazardous waste industries. According to the data on disposal of hazardous waste in Madhya Pradesh, about 11% waste is disposed of in landfill; about 34% is disposed of through sale to recycles/reprocessors; about 49% is reused by the generator themselves and

about 24 industries have obtained membership of the disposal facilities operating outside the State³. The other industrially developed States have no different story to tell; rather the picture is more glommy.

International Environmental Law Scenario

It is often said that the year 1972 has marked a new era in protection of human environment, environment protection and sustainable development. The Stockholm Conference in its Principle 6 expressly provided that: (T)he discharge of toxic substances or other substances and release of heat, in such quantity or concentration as to exceed the capacity of the environment must be stopped⁴.

Such concern indicates that the international community, had visualised the consequences of hazardous waste and, therefore, came to the conclusion of a hard decision of stoppage of the discharge of toxic substances. After two decades, in the Rio Conference one finds the international community shifted its attention to the management of



hazardous waste and introduced "prior consent/notification" in transportation of hazardous waste.

At the third phase at the Johannesburg Summit, 2002, provided for the key commitments, targets and drew a time table and a Plan of implementation. The key outcome of the Summit was: (i) "to use and produce chemicals in ways that do not lead to significant adverse effects on human health and environment by 2020"; (ii) to renew the commitment to the sound management of chemicals and of hazardous wastes throughout their life cycle'; and (iii) to encourage countries to implement the new globally harmonised system for classification and labelling of chemicals as soon as possible, with a view to have the system fully operational by 2008⁵.

Besides above general international environmental law developments, the efforts have been made by specific organisations, namely, the Organisation for Economic Cooperation and Development (OECD) under whose aegis the momentum to control the hazards associated with the management of wastes through international shipments commenced during 1980s. The OECD promulgated first international agreement relating international trade in hazardous waste in 1984 and imposed ban on export and import of hazardous waste to non-OECD countries in 1986. Further, the United Nation Environment Program's (UNEP) Governing Council adopted the "Cairo Guidelines" in 1987, a non-binding agreement on environmentally sound management of hazardous waste.

Two years thereafter came the Convention on the Control of Transboundary Movement of Hazardous Wastes, 1989 with the key objectives, firstly to minimise the generation of hazardous wastes in terms of quantity and hazardousness; secondly, to dispose of them as close to the source of generation as possible; and thirdly, to reduce the transboundary movement of hazardous wastes. The Convention has twenty-nine Articles and aims to: regulate transboundary movement of hazardous wastes through notification and consent system among the Parties; and to provide impetus for many nations to revise or enact their laws governing the import and export of hazardous wastes.

The Basel Convention clearly laid down in Article 4 a long list of do's and don'ts in the form of "General Obligations". Parties are generally prohibited from exporting covered wastes to, or importing

covered wastes from, non - Parties to the Convention⁶. Each Party is under an obligation to ensure minimising the level of generation of hazardous wastes from their sources, prohibit export of hazardous or other wastes to parties that have prohibited its import or not given written consent, availability of adequate disposal facilities within their border and prevention of pollution from hazardous waste and its shipment⁷.

Articles 6 (Transboundary Movement between Parties), 7 (Transboundary Movement from a Party through States which are not Parties), 8 (Duty to Re-import) and 9 (Illegal Traffic) of the Convention aim to regulate the transboundary movements of hazardous wastes⁸. The mechanism, given in the Convention to control transboundary movements of hazardous wastes, is through consent, notice and tracking requirements. Parties may not initiate the export of such wastes without written confirmation that the notifier has received from importing country; written consent of any transit countries; and confirmation of a written contract between the exporter and the disposer specifying the environmentally sound management of the waste. The notification must include information about the exporter, generator(s), and disposer of the material, competent authorities, means of transportation of waste,

relevant insurance, and content of the material. Parties are also obligated to reimport wastes where it cannot be managed in an environmentally sound manner in a receiving country⁹ or in instances of illegal traffic¹⁰.

Further Article 4(5) of the Basel Convention imposes a ban on Parties for exporting covered wastes to, or importing covered waste from the non-Parties to the Convention. Such bans provide good incentive for the countries to participate in global environmental agreements but they impose a very heavy economic and environmental burden. However, to this general provision, Article 11 creates an important exception and allows imports and exports of covered wastes between Parties and non-Parties where the transboundary movements are subject to bilateral, multilateral or regional agreement¹¹. Thus the exception gives a green signal to Party nations to enter into other arrangements or agreements. However the important conditions are that, firstly "such arrangements/agreements do not derogate from the environmentally sound management of hazardous waste and other wastes"; and secondly, such arrangements/agreements do not "stipulate provisions which are not less environmentally sound than those provided for by this Convention".

A Comparative Treatment:

While the international agencies viz. UNEP and OECD were taking steps to address international trade in hazardous waste, the United States and the European Community were expanding their legal controls on the transboundary movement of hazardous wastes. Until 1976, the United States domestic law did not comprehensively regulate hazardous wastes when the Resource Conservation and Recovery Act, 1976 was passed to deal with hazardous waste. The RCRA established standards for the treatment, storage and disposal of hazardous wastes. The provisions relating export under the RCRA were further strengthened in 1984 which provided strong controls on exports, requiring prior informed consent of the importing country and a manifest system tracking the waste's shipment. The strengthening of the law was expected to

provide



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a strong assurance that the international trade in hazardous wastes would be properly controlled and monitored but unfortunately the same did not happen. Rather the export of hazardous wastes has been described to be in "Shambles" by Agency's own Inspector General¹². Further, even though RCRA contains an expansive definition of hazardous wastes, there are significant exceptions for municipal wastes and other wastes such as scrap metal that may in some instances contain hazardous constituents¹³.

In UK there are two set of laws and regulations controlling wastes, the Environmental Protection Act, 1990; and the Health and Safety at Work, etc. Act, 1974. The waste management under Part II of the Environmental Protection Act, 1990 provides for two distinct legal requirements: Firstly, it prohibits anyone from handling or dealing with controlled waste unless they have a licence to do so. And secondly, it places a duty of care on any person that is entitled to handle the waste. Both requirements are underpinned by criminal sanctions. Environment Agency, under Sections 37 to 40 of the Environmental Protection Act, 1990, has the power to vary, suspend, revoke and surrender of licences. Under Section 62, the Secretary of State is empowered to issue regulations for any controlled waste that may be dangerous or difficult to treat, keep or dispose of. The Special Waste Regulations, 1996 have been issued which provide detailed procedure for handling and disposal of special waste¹⁴.

Under the Health and Safety at Work Act, 1974, several Regulations were made namely, the Control of Substances Hazardous to Health (COSHH) Regulations, 2002; the Chemical (Hazard Information and Packaging for Supply) (CHIP) Regulations, 2002; the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations, 1996. The Regulations define hazardous substances (COSHH Regs. 2002), provide detailed rules on advertising, packaging, labelling and where appropriate, secure fastening etc. (CHIP, Regs. 8, 2002); impose requirement and prohibition in relation to the classification and packaging and labelling of dangerous goods for carriage by road or on railway (Regs. 1996).

Indian Perspective:

Legislative Response

In India the two major industrial disasters: the Oleum Gas Leak and Bhopal Gas Disaster, required the Union Parliament to enact the




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Environment (Protection) Act, 1986. Further, Parliament realised the problem of inadequate linkages in handling matters of industrial and environmental safety and also control mechanisms to guard against insidious build up of hazardous substances. Section 8 of the Act bans handling of hazardous substances except in accordance with prescribed procedure and after complying with the safeguards. The Act empowers the Central Government under Sections 6, 8 and 25 to make rules and prescribe procedure generally and Section 6, sub-section (2) clauses (c), (d), (e) and (f) provide particularly for handling of hazardous substances¹⁵. The Government of India, Ministry of Environment & Forests in response to these provisions framed the Hazardous

Wastes (Management and Handling) Rules, 1989, as amended in 2000 and 2003 (hereinafter referred as HW rules)¹⁶. The salient features of the HW Rules are as follow:


The Rules provide duties, responsibilities and liabilities of the occupiers, operators of the facility¹⁷ and of the transporters. Under sub-rule (1) of Rule 4, the occupier and the operator of facility are responsible for proper collection, reception, treatment, storage and disposal of the hazardous wastes. The occupier and operator of facility are responsible for proper handling and disposal of hazardous wastes,

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ensuring that such activity do not cause any adverse effects to the environment, with an express duty to inform the operator of the facility of his intention to dispose of the hazardous waste¹⁸. They are also under a duty to take adequate steps while handling hazardous waste to: (i) contain contaminants and prevent accidents and limit their consequences on human and the environment; and (ii) provide persons working on the site with information, training and equipment necessary to ensure their safety. Thus, the occupier and the operator of facility have dual duty under the HW Rules.

Any improper handling and disposal of hazardous waste causing damage to the environment entails liability on the occupier, transporter and operator of a facility under sub-rule (1), Rule 16. The liability is to: (i) reinstate or restore damaged or destroyed elements of environment at their cost, failing which they would be liable to bear entire cost of remediation or restoration; and (ii) to pay a fine as may be imposed by the State Pollution Control Board with the approval of the Central Pollution Control Board for violation of the Rules¹⁹.

According to sub-rule (1) of Rule 5, the hazardous wastes are to be collected, stored and disposed of only in such facilities as may be authorised for the purpose. Every occupier or recycler of hazardous wastes or a person intending to be an operator of facility is to make an application to the State Pollution Control Board or Committee²⁰. It may be granted authorisation to operate the facility subject to conditions mentioned in the letter of grant of authorisation²¹. Proviso to sub-rule (2) allows an occupier or a recycler, not having hazardous waste disposal

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facility of his own and using a common Treatment, Storage and Disposal Facility (TSDF), shall become member of this common facility and send the waste for proper disposal and treatment. The authorisation may be cancelled by the State Pollution Control Board or Committee in case of failure to comply any of the conditions of the authorisation or provisions of the Act or the rules under sub-rule (1) of the Rule 6. The State Pollution Control Board or Committee is empowered to issue directions to the persons whose authorisation has been suspended or cancelled and during pendency of appeal under Rule 12²².

Further, the HW Rules lay down the procedure for packaging, labelling and transporting of hazardous wastes under Rule 7. The waste is to be packaged for handling, storage and transportation and handling in a manner which is easily visible and can withstand physical and climatic conditions. The packaging, labelling and transportation of wastes is also to conform to the rules made under the Motor Vehicle

Act, 1988. For transporting waste out of State, a “non-objection certificate” is to be obtained from the State Pollution Control Board or Committee of the concerned State receiving such waste for disposal²³. Identification of site for establishing the “facility” is the joint and several responsibility of the occupier or the operator of the facility or association of occupiers. However, in case of “common facility” in addition to the above, the State Government's involvement is provided under the Rules and thus making them responsible for the whole exercise.

The HW Rules impose an absolute ban on import and export of hazardous wastes or substances containing or contaminated with hazardous wastes for dumping or disposal. There are twenty-nine such materials listed in Schedule VIII; whereas, the Basel Convention has total seventy-nine such items. In this connection the stand of the Ministry of Environment and Forests is that it is under consideration to add more to the exciting list. But how long will such consideration take is not clear²⁴.

As the Ministry of Environment and Forests is the nodal agency it may permit, import and export of hazardous wastes to and from the country and its transit through any part of the country for the purpose of recycling and reuse. The occupiers, engaged in export or import of wastes with the permission of the Ministry, are under a duty to comply with the provisions of the Basel Convention under Rule 12(6). The procedure for obtaining permission from the Ministry has been



specifically enumerated under the Rules. In cases of import of hazardous wastes, the occupiers are to make an application to the State Pollution Control Board 120 days in advance. The Board is to process such application within 30 days from the date of receipt and to forward it to the Ministry of Environment and Forests for grant of permission (authorisation). In cases of export, the exporting country or the exporter need to apply 90 days in advance to the Ministry of Environment and Forests, Government of India, seeking permission for the proposed export or transboundary movement of hazardous waste. The sub-rule (4) of the Rule 15 provides that in case of illegal trafficking, the exporting country shall bear the costs incurred for the disposal of such waste.

The HW Rules also provide procedure for making an appeal against any order of grant or refusal of an authorisation and its disposal under Rule 18. The procedure for registration and renewal of registration of recyclers and re-refiners is given under Rule 19. Sub-rule (1) requires every person desirous of recycling or re-refining non-ferrous metal wastes, as specified in Schedule 4 or used oil or waste oil, to register himself with the Central Pollution Control Board. There are two provisos to sub-rule (1). The said provisions provide the cases where registration is not required. Further Rule 21 emphasises on the necessity of use of environmentally sound technology by recyclers and re-refiners. Schedule 1 list out the hazardous wastes which are thirty-six in number. Schedule 2 provides a list of wastes constituents' concentration limits and classifies items in five categories. Schedule 3 of the Rules provides a list of wastes applicable for imports and exports and hazardous characteristics. Schedule 4 gives a list of non-ferrous metal wastes applicable for registration recyclers. Schedules 5 and 6 provide the lists of specification for used oil suitable for re-refining and waste oil suitable for recycling respectively. Schedule 7, as mentioned earlier, gives a list of authorities and stipulation of their duties vis-à-vis control of hazardous substances and their transboundary movements. Schedule 8 is of seminal importance as it provides the list of wastes whose import and export is prohibited.

It may be mentioned that the Ministry of Environment and Forests has established

a separate division, called, Hazardous Substances Management Division (HSMD) headed by an IAS officer at Joint Secretary Level. This Division deals with the management of hazardous wastes (both indigenous and imported), hazardous chemicals, major chemical accidents, municipal solid waste, biomedical waste and liability and compensation connected with chemical accidents. This Division is also the focal point for international environment agreements, namely, the Basel Convention on Transboundary Movement of Hazardous Waste and its Disposal; Convention on Persistent Organic Pollutants (under



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negotiation), etc. and for the overall implementation of HW Rules alongwith various other Regulations enacted on the subject lies with this division.

What Emerges? The Findings:

Having undertaken a brief journey of international environmental law development, the comparative position and the critical study of the domestic legal framework relating hazardous wastes, it is noted that in this era of strong environment protective legal regime, the instances of illegal hazardous waste disposal, their ill effects on human health and environment are on increase. Laws are full of exceptions and inclusions and thus turning inefficient to deal with the problem. Growing trade in hazardous wastes is turning a lucrative business and an industry of millions. All this reflect a sad scenario.

Looking at the international front, though efforts started since 1972 caring for the hazards of hazardous substances, a good sign, but the international communities are moving with a tortoise speed, injustice to their international commitments. Thus the result is that the hazardous substances to be banned move freely in transboundaries.

Coming to the comparative scenario, though in the USA there is a legislative change from liberal to semi rigid handling of hazardous substance but the substances have not been controlled with a more environment friendly approach, may be the development process has slowed down the speed. England also saw legislations and Regulations, but they need spirit and vigour in their implementation to save environment from the hazardous wastes

And finally at the national front, the Basel seventy-nine items have yet to find a place in the Hazardous Rules, a half hearted treatment. The Rules had good intention in providing different treatments to different wastes but many widow dealing weakens the control. But one thing clearly emerges that India has tried to fulfil its international commitments at Basel and stands in the row of those leading countries who have moved towards ecofriendly path.

In order to make the Rules caring for the successful control of the hazardous wastes, an humble attempt is made to provide the following suggestions:

- Any exception to the ban has to be scientifically studies and, if the out put is not raising much concern then only the exception must be given a green single.
- There are authorities to deal with hazardous substance where there not is much coordination and cooperation. Is not time ripe to have one umbrella treatment so as to make the legal control effective?



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- Adequate provisions in the Five Year Plans and Annual Budget of the country must be made to meet the challenges as without finances nothing moves forward.
- Responsibilities of the Ministry of Environment and Forests must be clearly articulated in the Rules for the implementation of laws, and its accountability in cases of breach. The Government of India must encourage to make use of the existing technical capabilities and explore newer technology which is cost effective to handle, control, regulate and manage the hazardous waste through proper research and training.
- The Hazardous Substances Management Division (HSMD) needs to be strengthened and it be provided with adequate human and financial resources to support the management of hazardous waste.
- Particular care must be taken to prevent industries and penalise those who use our soil for processing of products and commodities of which production has been banned in other industrial countries.

It is time that the Indian citizens who run industries must remember that they are under Fundamental Duties to protect and improve the environment rather than make the Bharat a dumping place of their hazardous wastes. We must keep in mind the *mantras* of Vedas:²⁵

A person, who is engaged in killing creatures, polluting wells, grounds and tanks, ponds, certainly goes to hell.

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1. (1987) 2 SCC 295.

2. *David Hunter, International Environmental Law and Policy*, Foundation Press, New York, 2002, p. 846. (The African nation of Guinea-Bissau was offered \$600 million to accept large shipment for five years. This figure was double the country's foreign debt and over 35 times greater than its total annual exports. The US businessman who unsuccessfully tried to arrange this deal would have earned up to \$400 million in one year.) (*Emphasis Supplied*).

3. *Fifth State of the Environment Report, Madhya Pradesh, 2006*; prepared by the Environment Planning and Coordination Organisation (EPCO), Bhopal, p. 279

4. *Emphasis added*.

5. For further details, visit the official website: www.Johannesburgsummit.org.

6. Paragraph 5 of Article 4 reads, "A Party shall not permit hazardous wastes or other wastes to be exported to a non-Party or to be imported from a non-party."

7. Articles 4(2)(a) to (d) of the Convention states as under: "Article 4(2). Each party shall take the appropriate measures to:

- (a) Ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum, taking into account social, technological and economic aspects;
- (b) ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal;
- (c) ensure that persons involved in the management of hazardous wastes or other wastes within it take such steps as are necessary to prevent pollution due to hazardous wastes and other wastes arising from such management and, if such pollution occurs, to minimise the consequences thereof for human health and the environment;
- (d) ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects

which may result from such movement;

(e) to (h) * * * (For other provisions of the Article 4, see the document).

8. Refer Articles 6, 7 and 8 of the Convention.

9. See, Article 8 of the Convention.

10. Article 9 of the Convention.

11. Article 11(1) Notwithstanding the provisions of Article 4 Paragraph 5, parties may enter into bilateral, multilateral, or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention. These agreements or arrangements shall stipulate provisions which are not less environmentally sound than those provided for by this Convention in particular taking into account the interests of the developing countries.

12. Reported in Hunter, David *et al.*, *International Environmental Law and Policy*, 2nd Edn., 2002, 836.

13. See Hunter, David *et al.*, *International Environmental Law and Policy*, 2nd Edn., 2002

14. For details, see, Hunter, David *et al.*, *International Environmental Law and Policy*, 2nd Edn., 2002, pp. 356-372.

15. "6. Rules to regulate environmental pollution— (1) * * *

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely—

(a) * * *

(b) * * *

(c) the procedures and safeguards for the handling of hazardous substances in different areas;

(d) the prohibition and restrictions on the handling of hazardous substances in different areas;

(e) the prohibition and restrictions on the location of industries and the carrying on of processes and operations in different areas; and

(f) the procedures and safeguards for the prevention of accidents which may cause environmental pollution and for providing for remedial measures for such accidents."

16. Besides the HW Rules, the Central Government also issued other Rules relevant for handling, storage, disposal of toxic substances, namely, (i) the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989; (ii) Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/Genetically Engineered Organisms of Cells Rules, 1989 under Sections 6, 8, and 25 of the Act.

17. "Operator of facility" means a person who owns or operates a facility for collection, reception, treatment, storage and disposal of hazardous wastes. See, Rule 3, sub-rule 21.

18. Sub-rule (3), (Inserted by S.O. 24 (E) dated 6-2-2000) of Rule 4 states: "It shall be the responsibility of the occupier and the operator of a facility, to take all steps to ensure that the wastes listed in Schedules 1, 2 and 3 are properly handled, and disposed of without any adverse effects to the environment". (*Emphasis Added*).

19. See, Rule 16 sub-rules (2) and (3) (Inserted by S.O. 593 (E) dated 20-5-2003).

20. See sub-rules (2) and (3) of Rule 5.

21. See sub-rules (5) and (6) of Rule 5.

The authorisation to operate a facility shall be issued in Form 2 and shall be subject to conditions laid down therein:

(i) An authorisation granted under this rule shall, unless suspended or cancelled, be in force during the period of its validity as specified by the State Pollution Control Board or Committee from the date of issue or from the date of renewal, as the case may be.

(ii) An application for the renewal of an authorisation shall be made in Form 1, before the expiry.

(iii) The authorisation shall continue to be in force until it is renewed or revoked.

22. See, sub-rule (2) of Rule 6.

23. See, sub-rule (6) of Rule 7.

24. *Research Foundation for Science Technology Nation Resource Policy v. Union of India*, (2005) 10 SCC 510, 523.

25. *Padmapurana, Bhumikhunad*, 967.8.

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