LEGAL ASPECTS OF E- WASTE MANAGEMENT IN INDIA: A STUDY

Apeksha Chaudhary, Dr. Vaibhav Goel Bhartiya
Research Scholar, Principal
SPSIL, SPSIL
Swami Vivekanand Subharti University, Meerut, Swami Vivekanand Subharti University, Meerut.

ABSTRACT

Electronic waste (E-waste) is the most rising production industry in Bharat and worldwide as well. The E-waste i.e. to lead, mercury, cadmium, metal and range of other substance are the dangerous for the health of human beings and environment. In this era of the technology advancement, we cannot imagine our life without the mobile phones, refrigerator, computers, laptops, mixer, washing machine, oven etc. without analyzing the ill effects of all these products on the human life. Problem of E-waste management is facing by the developing nations continuously, it’s a self created problem and some time imported from the developed nations. Lack of awareness among the Indian public about the ill effects of e-waste on environment and human health is also a reason of e-waste problem in India. Maximum e-waste handling is done by the informal sector. Moreover, other reason for this problem is that improper implementation of the e-waste management rules in India.

Therefore, this is the high alarming time that Government has taken some stringent steps for the proper management of the e-waste. This is also the responsibility of the society to stop the India to becoming a dustbin for E-waste, which disturb the human life of the individuals. Through our collective efforts we have to sustain the environment for our upcoming generations.

Key words: E-waste, E-waste management, environment, health, human rights.

INTRODUCTION

Technology advancement become a boon for the society, however same time this advancement also become a threat for the society. Faster devolution and later up-gradation of electrical and electronic products, are forcing consumers to discard old products, which in turn accumulate huge e-waste to the solid waste stream. Thousands of old computers, phones, TV sets and radios are become useless every year, most of which either end up in landfills or send to the unauthorized scrap dealers. Electronic waste, a new form of pollution which causes serious danger to the atmosphere and human life too. As we are on the path of development
and electronics become the essential part of our day to day life survival. Here the attention is required for the proper dispose of the electronic items after the end of their useful life.

E-WASTE:

Simply E-waste means the old, broken and obsolete electronic items and material. E-waste also refer the electronic products which become unwanted or non-working and reach to their end of useful life. Technology advancement is so fast that many electronics become scrap after the few years of use. E-waste can be generated from anything such as computers, laptops, TV, washing machines, mixers, CD players, mobile phones, printers, monitors, VCRs etc. Used electronics which are destined for reuse, resale, salvage, recycling or disposal are also considered e-waste. Some definitions of E-waste is as follows:

According to Schedule of The Hazardous Wastes (Management and Handling) Rules, 2003 as “Waste Electrical and Electronic Equipment including all components, sub-assemblies and their fractions except batteries falling under these rules."

E- Wastes (Management and Handling) Rules, 2016- “E-waste means electrical and electronic equipment (EEE), whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment and repair processes”.

To provide a foundation to support the definition of e-waste, it is necessary to understand the meaning of the word electrical and electronic equipment (EEE) that is “any household or business item with circuitry or electrical components with power or battery supply. E-waste consists of all waste from electronic and electrical appliances which have reached their end-of-life period or are no longer fit for their original intended use and are destined for recovery, recycling or disposal.

SOURCES OF E-WASTE:

1. Information and communications technology
2. Electronics used in Offices.
3. Large Household Appliances
4. Small Household Appliances:
5. Toys, leisure and sports equipment etc.
6. Medical equipment:
7. Automatic dispensers: Monitoring and control instruments
8. Batteries

PROPERTIES OF E-WASTE

E-waste is partially dangerous: E-waste consist different substances, few substance are toxic in nature and can create serious health risks and pose severe pollution the environment due to the improper handling and disposal.

E-waste is partially precious: E-waste also contains some valuable substance, for example end of life motherboards may be sold for more than 1000US$ per ton to recyclers who recover metals. This is the one of the reason because of it preciousness no one is ready to easily dispose of it.

Due to evolution of technology advancements volume of e-waste is increasing daily and causes damages to environment and causes damages to fundamental rights.

Thus, after the complete process raw material convert into the WEEE and goes to landfills.

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1 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3908467/ Access on 11/2/2020, Day – Tuesday, Time - 2:00 pm
2 https://www.sciencedirect.com/science/article/pii/S0956053X15000033 access on 10/2/2020, day - Monday, time - 11:00 am.
EFFECTS OF E- WASTE:

E-waste, due to its toxic nature has a poor effect on the atmosphere and human rights of the individuals. E-waste in itself consists of a large variety of materials, some of which contain a range of toxic substances that can spoil the atmosphere and become threat to human health if not properly managed such as: Lead and cadmium causes damages to central and peripheral nervous systems, blood systems and kidney damage and also affects brain development of children, and Berillium causes to lung cancers etc.

E-waste collection, transportation, processing, and recycling are subjugated by the informal sector, informal sector is unregulated in India. Often, all the materials and value that could be potentially recovered is not recovered due to the lack of knowledge. Due to leakage of toxins, everyday thousands of workers involve in e-waste management work face the occupational disease, safety issues, health complications.

Seelampur in Delhi, largest e- waste dismantling centre is the biggest example of e-waste dismantling process, where so many adults and children engaged in extracting reusable components and precious metals like cooper, gold, aluminum and various functional parts from the devices.

LEGAL ASPECTS OF E-WASTE MANGMENT IN INDIA

There are certain laws in India which deal with the e-waste directly and indirectly. Which is as follows-

1. Indian Penal Code, 1860: IPC impose the criminal liability of those persons who make hazardous to the health and life under the various provisions. Such as negligent and malignant act likely to spread infection of disease dangerous to life. Under Section 278 make provision for the making atmosphere noxious to health, which one of the fundamental right under Article 21 of the Indian Constitution.


   Fundamental duties (Part IV- A ) of the Constitution of India talks about the ecological protection.

Fundamental Rights: Part III is the back bone of Indian Constitution. It guarantees fundamental rights to the Indian citizens, so that they can live their life peacefully. Clean environment is very necessary for the right to life, without the pollution free environment we cannot lead a healthy life. This rights is already

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3 Section 269 Indian Penal Code, 1860
4 Section 270, Indian Penal Code, 1860
5 Whoever voluntarily vitiates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying on business in the neighbourhood or passing along a public way, shall be punished with fine which may extend to five hundred rupees.
6 No person shall be deprived of his life or personal liberty except according to procedure established by law.
decided by apex court of India in the case of Shanti Star Builders v. Narayan Totame\textsuperscript{7}, Subhash Kumar v. State. of Bihar\textsuperscript{8}, Noise Pollution v.In Re\textsuperscript{9} etc.

"No person shall be deprived of his life or personal liberty except according to procedure established by law\textsuperscript{10}.

**Directive principle of state policy:** DPSP are the guiding principles for the Union and state government to be kept in mind while framing the legislation and any policy. Although these principles are not enforceable by the court of law in India, but these principles are the very fundamental in the governance of the Government. Relevant provision under the DPSP are as follows:

**Article 47**

“The State shall regard the raising of the level of nutrition and standard of living of its people and improvement of public health as among its primary duties”. Article 47 simply says that primary duty of the state is improvement of public health.

The Supreme Court, in *Paschim Banga Khet mazdoor Samity & others v.State of West Bengal & others*\textsuperscript{11}, while widening the scope of art 21 and the government's responsibility to provide medical aid to every person in the country, held that in a welfare state, the primary duty of the government is to secure the welfare of the people.

**Article 48**

The State shall endeavor to organize agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter, of cows and calves and other milch and draught cattle.

**Article 48-A**

The State shall endeavor to protect and improve the environment and to safeguard the forest and wildlife of the country\textsuperscript{12}.

**Fundamental Duties**

**Article 51A (g)**

It shall be the duty of every citizen of India to protect and improve the natural environment including forest, lakes, rivers and wildlife and have compassion for living creatures.

\textsuperscript{7}1990(1) SCC 520
\textsuperscript{8}(1991) 1 SCC 598
\textsuperscript{9}(2005) 5 SCC 733
\textsuperscript{10}Article 21, Constitution of India,1950.
\textsuperscript{11}AIR 1996 SC 2426
\textsuperscript{12}Inserted By the Constitution (42nd Amendment) Act, 1976, sec. 10 (w.e.f 3-1-1977)
3. **Criminal Procedure Code, 1973**: Cr.PC provides for a rough and ready procedure to be used in urgent cases for removal of public nuisances. Environment gets protection under the Cr. P. C. through section 133.

4. **Environment Protection Act, 1986**: EP Act is umbrella legislation. It was constituted on 19 Nov, 1986, to provide for the protection and improvement of environment and for matters connected with environment. It specifically provides for the creation of Pollution Control Boards to exercise powers and perform functions relevant to the regulation of environmental pollution. In *Vellore Citizen’s welfare forum v. Union of India*¹³ the apex court described the importance of the Environment Protection Act, 1986 and said that the main purpose of the Act is to establish the authorities with adequate powers to control and protect the environment.

5. **The Hazardous Waste (management and handling) Rules, 2003**: This rule categorized e-waste or its constituents under “hazardous” and “non hazardous” waste. As per the rules, “hazardous waste” is defined as any waste which by reason 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.

6. **The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008**: These rules provide the registration process of hazardous waste recycler. According to these rules, every person desirous of recycling or reprocessing hazardous waste including electronic and electrical waste is required to register with the central pollution control board (CPCB). The e-waste handler is required to register with the CPCB. The authorized recycler or re-processor or re-user should have environmentally sound facilities for recovery of metal and plastic and the waste should be sent to them. Under these rule the ministry of environment and forest is the nodal ministry to deal with the transboundary movement of the hazardous wastes and to grant permission for transit of the hazardous wastes through any part of India.

7. **Guidelines for Environmentally sound management of E-waste, 2008**: The objective of these guidelines is to provide guidance for identification of various sources of e-waste and the approach and methodology for handling and disposal of e-waste in an environment friendly manner. These Guidelines shall apply to all those who handle e-waste which includes the generators, collectors, transporters, dismantlers, recyclers and stakeholders of e-wastes irrespective of their scale of operation. The guideline also covers the concept of Extended Producer Responsibility

8. **E-waste (Management) Rules, 2016**

Under the direction of E-waste (Management & Handling) Rules, 2011, the ministry of environment ,forest and climate change has notified the E- waste (Management) Rules, 2016. Some of the Key features of the rules are as under:

¹³ (1966) 5 SCC 670
1. CFL and other mercury containing lamp come under the purview of rules.

2. Collection mechanism based approach has been adopted to include collection centre, collection point, take back system etc for collection of e-waste by Producers under Extended Producer Responsibility (EPR).

3. Option has been given for setting up of PRO, e-waste exchange, e-retailer, Deposit Refund Scheme as additional channel for implementation of EPR by Producers to ensure efficient channelization of e-waste.

4. Authorization shall be in line with the targets prescribed in Schedule III of the Rules. The phase wise collection target for e-waste, which can be either in number or Weight shall be 30% of the quantity of waste generation as indicated in EPR Plan during first two year of implementation of rules followed by 40% during third and fourth years, 50% during fifth and sixth years and 70% during seventh year onwards.

5. Deposit Refund Scheme is also introduced

6. The manufacturer is also now responsible to collect e-waste generated during the manufacture of any electrical and electronic equipment and channelise it for recycling or disposal and seek authorization from SPCB.

7. Dealer or retailer or e-retailer shall refund the amount as per take back system or Deposit Refund Scheme of the producer to the depositor of e-waste.

8. State government is also responsible for the safety, health of the workers involving in the dismantling and recycling operation.

9. It is duty of State Government to implement these rules and submit a report to the Ministry of Environment, Forest and climate change.

10. The transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details.

11. Financial liability also imposed for the violation of the provisions of e-waste rules.

12. Urban Local Bodies (Municipal Committee/Council/Corporation) has been assign the duty to collect and channelized the orphan products to authorized dismantler or recycler

**NEED FOR THE PROPER DISPOSE OF E-WASTE:**

1. India is moving towards digital age, the rising electronic waste management is necessary for ensuring sustainable growth.

2. "Digital India" campaign for digital connectivity involves handling a lot of electronics for transmission and dissemination of information. Thus India must focus on this waste because conventional waste management was belated and improper. India must not delay on this e-waste management.
3. India has almost 2.4% of global e-waste almost more than its contribution to global GDP. The rise in waste upto 1.7 million tonnes is testimony of the fact that this waste was improperly managed. Moreover, according to a study 70% of the landfills are composed of e-waste. This is concern because e-waste like Mercury in CFL can leach and create land pollution, skin diseases, cancer, etc.

4. The laborers who work on disposed electronic waste like circuit boards resort to corrosion with acids, burning, manual pricking for extracting metals like Copper, tungsten, etc. They are vulnerable to diseases. Often the disposed waste is thrown in canals and water bodies leading to water pollution and skin diseases. Other thing is that India prohibit child labour but in dismantling of e-waste children are also engaged which is hazardous for their health and life too.

5. Through the Swachh Bharat Mission or Clean India movement, Govt. aware the public about the waste such as “Geela Kachra, Suka Kachra, Bio-medical waste”. But e-waste is not the part of this Mission which is dangers for the human life.

Nokia, mobile phone company is one of the very few companies that seem to have made serious effort in this direction since 2008 towards the safe disposal of electronic items. So, it makes mandatory for all the companies to create channels for the proper collection and disposal of e-waste in India as per the direction of Central Pollution Control.

CONCLUSION: Most of the developing countries, like India faces a problem of continuous growth of e-waste because of life style changing which now more depends on EE equipments in which continuous improvement has been made and the products are becoming obsolete speedily especially in case of computer and mobile phones, laptops etc. So this becomes a big challenge for India to control the E-waste.

Other point is that the maximum e-waste is control through the informal sector which have a very bad impact on atmosphere and human health. It should be done through the environment friendly manner. Unfortunately there is no large scale organised sector to do the recycling work and it is performed only by unorganised sector.

Because of it the risk of damage to human health and natural environment increases as no precaution is taken while performing the recycling work and also the involvement of women and children has worsen the condition. The import of e-waste from other countries has ill-effect on environment. Lack of awareness among the society regarding e-waste, the measures like ERP and Take back policy is very difficult. The legislation work regarding e-waste had been done lately in time and it is not performing well.

For controlling this serious problem government must provide some benefits, which could be in form of concessions in form of tax to the electronic industries. Moreover, the e-waste collection targets need to be regularly reviewed and renewed to ensure compliance across India on collection of e-waste.