



RESPONSIBILITIES OF INDIVIDUAL PRODUCERS, RECYCLING UNITS AND CONSUMERS TOWARDS E-WASTE MANAGEMENT

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ABSTRACT

Managing the toxic e-waste is not just the government or a particular individual's responsibility. Rather it is an integrated community work, where in everybody is aware of potential harm possessed by the e-waste they might just toss away. The electronic waste which is simply tossed into the garbage may be just simply dumped into the land, incinerated or simply burnt with the other waste releasing the toxic effluents which seep into the ground into the land, the water and in the air. With an estimate of 50 million tons of waste disposed of every year [1] the management of this sort of waste may become unmanageable in the coming years if the correct measures are not taken due into considerations. More so the harsh protocols of disposing waste taken up by the locales working in management of this waste like breaking, removal of the yolk and thereby dumping the rest of the cathode ray tubes followed by dumping, incinerating, open burning, de-soldering, acid baths and many such treatment on the e-waste manages to leach poisonous mercury, lead, beryllium, hydrocarbons, brominated dioxins and many such pollutants [2] into the natural resources we all have to consume. This paper briefly submits the main responsibilities of individual producers, the government, a consumer and public in general and how we can all together bring a significant change in the waste management.

KEYWORDS

E- waste, MOEF, Take back, Extended producer responsibility

INTRODUCTION:

Electronic or e-waste is disposed of electrical and electronic items which maybe recyclable, reusable or disposable. These are CRTs, electronic gadgets like, television sets, computers, radios, mixer grinders, refrigerators, mobile phones and many more. The rage of the technology, recent developments and uproar of the IT sector has seen a tremendous shower of inventions and electronic gadgets. But as the technology has evolved a lot of technology has also gone obsolete, because of which it turns up in the dump yards. Also, the average life of the e-waste has gone down from several years to 2-3 years or even lesser. The repairing costs often tend to be as much or slightly lesser if at all. Therefore, the customers tend to buy a new product and the older one eventually goes to waste.

What is more, is the illegal export of the e-waste. A MAIT GTZ study says 50,000 metric tons of e-waste is illegally imported to India. [3] And so is the e-waste being transported to the countries like India, China and the African countries. In spite of the Global Norms being strict about no export of toxic material is allowed export of the e-waste occurs. The cheap labors they get in developing countries is what lures the well developed countries to dispose off their wastes too.

With the endless amounts of issues with the management of e-waste the only solution is to work together with a sense of responsibility towards the management. In this paper are mentioned the responsibilities we have to carry on to fight the menace of e-waste.

RESPONSIBILITIES OF RECYCLING UNITS:

The Recycling unit comprises of: The Collection center, Dismantler and the recyclers. The responsibilities of these should be:

1. Get an authorization from the Pollution control boards and form authorized collection centers registered dismantler and Recyclers.
2. To ensure the e-waste that is collected is safe with them during storage and the transport and no harm to the environment is done during these procedures.
3. Keep a record for the Pollution control committee to scrutinize the waste that has been collected and how has it been treated in the further steps.

4. A dismantler similarly must keep in mind that the processes must not affect the health or the environment negatively.
5. The dismantling process should be in accordance with the set up standards or guidelines.
6. Ensuring sending the dismantled waste to registered recyclers for further processing and divided as recyclable and reusable.
7. Not to give away the dismantled waste to anyone but the registered recyclers.
8. The recyclers are enforced to enact on their protocols strictly on the basis of the set guidelines given by the government or the pollution control committee.
9. Ensuring the disposal of hazardous waste in an environmental friendly manner.
10. Ensuring the non-recyclable/non-recoverable is sent to authorized treatment storage and facility.

RESPONSIBILITIES OF AN INDIVIDUAL PRODUCER:

1. Ensuring the collection of e-waste that is produced during preparation of the electronic and electrical goods.
2. Collection of the e-waste generated from "end of life" of the products in line with the principle of 'Extended Producer Responsibility' and to ensure that such a e-waste are channelized to registered dismantler or recycler.
3. Setting up a take back systems so that customers can submit their e-wastes.
4. Ensuring the ease to the consumers so they can easily access the collection system.
5. Ensuring the producers do not add contaminants more than what is allowed as per the environmental norms.
6. Creating awareness within the public to ensure sensitivity within the public.

RESPONSIBILITIES OF A CONSUMER:

According to the MOEF norms set up by the Indian Government the responsibility of the consumer/bulk consumer is:

1. Consumers should ensure that the e-waste generated is channelized to authorized collection centers or recyclers or dismantlers
2. The bulk consumers are encouraged to keep a list of generated e-waste for pollution control board scrutinizes. We as individuals should be sensitive to prepare a separate stock for the e-waste and dispose it off in safe hands. It is

our duty to spread awareness among people towards the sensitivity of this issue. Many in developing countries like India, and China do not as much as understand the issues and potential threats of dealing with e-waste.

CONCLUSION:

The e-waste can be easily carried off if we realize our responsibilities. The government has set up norms. Implementing stringent laws to enforce the norms set up. Creating awareness among people is also very important. Being sensitive to what harm this waste can do to our environment is something we all really need. The people who're working in dealing with e-waste without protection can be employed taught and made to do the same work under much better conditions. The take back policy would not only ensure taking care of the used product but also ensure a better quality of the product therefore, making the equipment in the working conditions for long.

The e-waste is not just any waste. It is after all made up of many precious metals and other elements. There is a need of paradigm shift to our perspective. This being said, it should rather be seen as a source of revenue generation rather than merely a waste. But for that responsibilities are needed to be taken and worked upon. Not just one individual, but as a community.

REFERENCES

1. Sthiannopkao S, Wong MH. (2012) Handling e-waste in developed and developing countries: Initiatives, practices, and consequences. *Sci Total Environment* | 2. Wath, S. B., Dutt, P. S., & Chakrabarti, T. (2011). E-Waste scenario in India, its management and implications. *Environmental Monitoring and Assessment*, 172, 249-262. | 3. <http://www.efytimes.com/e1/creativenews.asp?edid=42978> | 4. http://www.moef.nic.in/downloads/rules-and-regulations/1035e_eng.pdf |