

Industrial Waste Leads to Violation of Labour, Industrial, Environmental and Administrative Laws

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Abstract - Dumping of Industrial waste in public places and water resources are creating serious health hazards and unless and until it is controlled the reaction out of this world cause infection which would create a lot of disadvantage to the society .So, there should be a rule to prevent the people from damaging the ecosystem of our country to save nature to save people. The implementation of strict law for the prohibition of dumping Industrial waste should be sanctioned by the legal system and it should be activated by the Indian Penal Code. There are about 94 types of electronic products as reselling illegally by recycling methods. An economic solution and implementation of law (Implementations of Labour Law, Industrial Law, Environment Law, Administrative Law & IPC-Sections) are designed to achieve an optimal source to reuse and reduce the Industrial waste.

Keywords: E-pollution, Backyard recycling, Energy re-usage, Innovation, Implement- Labour Law, Industrial Law, Environment Law, IPC

I. INTRODUCTION

Environment means different things to different peoples. To some it means home; to others it may refer to a village, a city, a country or the whole world. It is formed by combining two words. viz., 'environ' and 'ment' meaning 'encircle' or 'all round'. Environment is a complex of many variables, which surrounds man as well as the living organisms. So, we should take care to protect our environment at any cost. The current problem is the accumulation of e-waste which would cause series problem to man and nature^[1]. Environment includes water, air and land and the inter-relationships which exist among and between water, air and land and human beings and other living creatures of plants, animals, micro-organisms. The Encyclopedia of Science and Technology describes 'environment as a collective term describing the conditions surrounding an organisms^[2]. It includes air, light, soil, temperature, water and the presence of other organisms. i.e., the conditions for development or 'growth'. It is also defined as a whole set of natural and social systems in which man and the other organisms live and from which they draw their sustenance^[3]. Environment is, thus, described as the assemblage of material factors and conditions surrounding the living organisms and its components. The Electronic products comprise of Industrial wastes which have reached their end-of-life stages, like televisions, PCs, mobile phones, electrical appliances, etc.

The Industrial waste is one of the fastest growing types of waste in the developed world in view of the growing menace of Industrial waste generation and large scale involvement of the unorganized sector in processing Industrial wastes in an environmentally unsound and occupationally hazardous.^[4] In the current situation urgent technological innovation and market intervention in tackling the problem is a must. To reduce this issue we should involve interdisciplinary activities like engineering, medicine, law, economics, mathematics otherwise the pollution caused by the Industrial waste would engross the whole world with severe impacts on ecological system.

II. IRRESPECTIVE ACTIVITIES CARRIED OUT BY INDUSTRIAL AND OTHER ORGANIZATION

The industries and other organization are quiet unmindable of dumping the Industrial waste in public places such as on riverbanks, ponds, other places where many peoples inhabits. The rotten smell coming out of this is unbearable and obnoxious. The people living in such areas are on the edge of being affected by contagious diseases. According to hospital reports a large host of people frequents doctors to have a cure on cancer, asthma, dialysis, liver problems etc... It is reported that one lakh and 80 thousands peoples died out of liver cancer in our country. So, immediate steps are to be taken to say a colossal perdition of lives.

III. PROBLEMS WITH INDUSTRIAL WASTE

There are no harmless substances. There are only harmless ways of using substances. Dumping of Industrial wastes is putting children at risk and 50 percent of all used e-waste is "dumped" into India, China and African countries, where it is a common practice for children (and some adults) to make money by "backyard recycling" scrap electronic products are fired in open places to remove reusable components. Industrial waste is the major issue in India. It affects many peoples either directly or indirectly. Industrial waste creates a lot of economic and environmental losses to our country.

The term Industrial waste is applied to all waste from or caused by electronics, which is often toxic waste. It is a

major concern with respect to wireless technology and computers, which are readily discarded due to rapid technological change, low initial cost and planned obsolescence. The various solutions including recycling, re-use, standardization of technologies and implementation of law for less rapid obsolescence are applied.

The development of semiconductor products has been accompanied by an increased release of potential toxic wastes, which are harmful to health and environment.

In India, 133 crore inhabitants generate 3.3 lakh metric tonnes of Industrial waste per year that is 0.29 kg of Industrial waste per person per annum—an astounding figure. A recent survey shows that Industrial waste amounting to 21.8 kg per annum is already being produced in India. The Industrial waste imbroglio in India stood at 3,000 tonnes per day in 2007 and is projected to reach 10,000 tonnes per day by 2012. In 2020 the Industrial waste is produced above 40,000 tonnes per day, as we expect. So steps are to be taken to tackle this problem.

IV. INDUSTRIAL WASTE METALS

Fishes, plants and animals take up cadmium from the environment. Cadmium stays in the body a very long time and can build up from many years of exposure to low levels. Eating foods containing it, low levels in all foods (highest in shell fish, liver and kidney meats). Lead is a naturally occurring element is used almost since the beginning of the civilization. Mercury is the naturally occurring metal. It is the only metal on the Earth which is liquid at room temperature, types of mercury are Elemental or metallic mercury, Organic mercury compounds and Inorganic mercury compounds. Short-term, high-level exposure to Chromium (VI) produces irritation at the site of contact including ulcers of the skin, irritation of the nasal mucosa, perforation of the nasal septum, irritation of the gastrointestinal tract, impairment of olfactory sense, and discoloration (Yellowing) of teeth and tongue.

Industrial waste contributes approximately 40 percent of the lead, 70 percent of the heavy metals, and a significant portion of the organic pollutants to the US dumps. Varying susceptibility—High risk groups are children, young, pregnant women, elderly and old, preexisting illness, smokers and Alcohol consumption, poor nutritional status.

Cadmium, Lead, mercury, chromium, etc.. These metals cause various side effects to the human body, soil contamination and atmospheric pollution. These things cause economic downfall either directly or indirectly.

Hazardous waste:

Hazardous waste is any discarded solid or liquid material that is toxic, ignitable, corrosive, or reactive enough to explode or release toxic fumes.

According to the UN Environment Programme, developed countries produce 80-90% of these wastes. The US centers for Disease control and prevention (CDC) estimates that at least 400,000 US children still have unsafe blood levels of lead caused by exposure from the number of sources.

National academy of science and numerous other studies indicate “there is no safe level of lead in children’s blood”. Lead is especially harmful to children and is still used in leaded gasoline and household paint in about 100 countries.

V. INDUSTRIAL WASTE LAW IN INDIA

Recently, Greenpeace examined the policy-and-practice on Industrial waste take-back offered by 20 e-brands in India and found that only one global brand (Acer) and two Indian brands (HCL and Wipro) have functioning take back services in India. Moving a step further, Wipro walks into the path e-waste law in India^[5].

According to Greenpeace, the demand by IT and consumer electronic brands for a comprehensive law embracing IPR in India to tackle impending e-waste crisis is getting louder as brands have started openly pitching for this. Acer is the only global brand that openly speaks about the necessity of such a law in India. “We welcome and appreciate Wipro’s pro-law move with this the brand has joined the league that includes HCL and Acer,” commented Abhishek Pratap, toxics Campaigner, Greenpeace.

“Now the brand needs to lobby with in the electronics sector and with the government to make the law a reality”. On chemical management of products, Wipro has moved further with a stronger ‘Precautionary Principle’ and chemical management policy.

This is reflected in its aggressive time line of 2012 for complete phase out of phthalates, beryllium and antimony, along with phase –out time line set for BFR and PVC as 2009. These three brands have ensured effective take-back service for their respective branded, end-of-life products in India. Greenpeace demands that other electronic brands should follow the path taken by Wipro and publicly announce support for Industrial waste law in India.

Legislation embracing producer Responsibility for Industrial waste is already in force in the EU, Japan, Korea, Taiwan, and in a few of the states in the US.

VI. THE INDIAN PENAL CODE (IPC)

The Indian penal code (IPC) strongly says in IPC-486. Selling goods marked with a counter property mark—Whoever sells, or exposes, or has in possession for sale, any goods or things with a counterfeit property mark) affixed to or impressed upon the same or to or upon any case, package or other receptacle in which such goods are contained, shall, under he proves.

1. That having taken all reasonable precaution against committing an offence against this section, he had at the time of the commission of the alleged offence on reason to suspect the genuineness of the mark, and.
2. That on demand made by or on behalf of the prosecutor, he gave all the information in his power with respect to the person from whom he obtained such goods or things, or
3. That otherwise he had acted innocently.



Fig.1 Map of dumping places in the world Source: http://www.toxic_e-waste.com/places.jpg

IPC270 strongly says—Malignant act likely to spread infection of disease dangerous to life:- Whoever Malignant does any act which is, and which he knows or has reason to believe to be, likely to spread the infection of any disease dangerous to life, shall be punished with imprisonment of either description for a term which may extend to two year, or with fine, or with both.

VII. TYPES AND ELEMENTS OF ENVIRONMENT

Environment may be divided into two types, namely *Natural environment*, and *Man-made environment*.^[6]

The natural environment consists of four interlocking systems namely, the atmosphere, the hydrosphere, the lithosphere and the biosphere.^[7] These four systems are in constant change and such changes are affected by human activities and *vice versa*. Biosphere, Atmosphere, Hydrosphere, Lithosphere and Biosphere is the major layers in the atmosphere

VIII. FUTURES OF ENVIRONMENTAL STUDIES

Environmental studies discipline has multiple and multilevel scopes. This study is important and necessary not only for children but also for everyone: literate or illiterate: employee or non-employee etc... These futures are summarized below:

- i. The study awareness among the people to know about various renewable and non renewable resources of a region. The endowment or potential, patterns of utilization and the balance of various resources available for future use in the state or a country are analysed in the study^[8].
- ii. It provides knowledge about the ecological systems and the cause and effect relationships.

- iii. It provides necessary information about biodiversity richness and the potential dangers to the species of plants, animals and microorganisms in the environment.
- iv. The study enables one to understand the causes and consequences natural and man induced disasters (flood, earthquake, landslide, cyclone etc.) and pollutions and measures to minimize the effects.
- v. It enables one to evaluate alternative responses to environmental issues before deciding an alternative course of action.
- vi. The study enables environmentally literate citizens (by knowing the environmental acts, rights, rules, legislations etc.) to make appropriate judgment and decisions for the protection and improvement of the earth.
- vii. The study exposes the problems of over population, health, hygiene etc., and the role of arts, science and technology in eliminating / minimizing the evils from the society.
- viii. The study tries to identify and develop appropriate and indigenous eco-friendly skills and technologies to various environmental issues.
- ix. It teaches the citizens the need for sustainable utilization of resources as these resources are inherited from our fore fathers to the younger generation without deteriorating their quality.
- x. The study enables theoretical knowledge into practice and the multiple uses of environment.

IX. HOW TO RECYCLE INDUSTRIAL WASTE?

- i. Gather all of your electronic equipment and separate them into two categories: those that are still working

- and can be sold or donated and those that are no longer functioning and needed to be recycled.
- ii. Contact your local public works department in your town/city to determine if they collect electronic recyclable items such as the ones you may have in your home. If not, proceed to next Step.
- iii. Peruse your local phone book or the internet to find a convenient facility that collects specific types of electronic equipment for reuse or recycling^[9]. If there is not a local facility in your area visit the Industrial waste Database online.

- iv. Visit the Industrial waste Database online at www.ecycle.org and enter your search criteria.
- v. Identify the material that you would like to recycle.^[10]
- vi. Currently, there are 11 facilities listed in the database Contact the facility located closest to your hometown to make an appointment to have your Industrial waste collected.
- vii. Following the appointment, collect the recyclable Industrial waste materials and place them on the curb or front porch for pick-up.

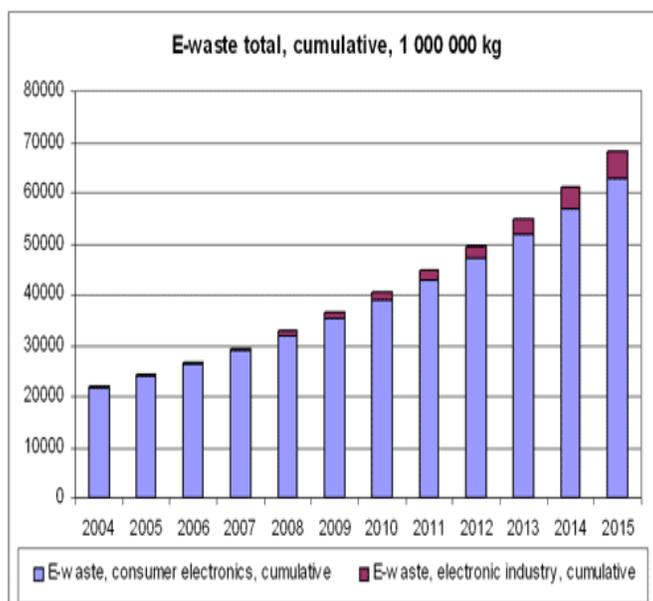


Fig.2. Total Industrial waste cumulative(Source :http: www.eleb2b.com)

Fig.2 shows that the graph of cumulative of e-waste in the various years.

At present there are no recycle units in our country. So if more recycle units is being developed, then it will ensure a lot of job opportunity to lakhs and lakhs of peoples in rural areas despite of its pollution?^[12] It supports control of pollution and also increases economic status.

So it is much important that the government must take necessary steps to make the use of these recycling plants as early as possible, because private sectors are concerned with self beneficial activity and not taking care of our people.

If the government of India shows interest in establishing a recycling plant, more than four lacs people from rural area will be benefited

X. INTERDISCIPLINARY APPROACH

Overlapping Sciences:

- Engineering(Electrical,Electronics,Computer,or Mech.,etc...)+Economics=Engineering Economics*
- Environmental Science & Engineering + Economics = Environmental Economics*
- Physics + Chemistry = Physical Chemistry*
- Biology + Chemistry = Biochemistry*

Geology + Physics = Geophysics

Environmental Science+ Engineering= Environmental Engineering

Interdisciplinary approach is a new method of research in which the tools of different disciplines of knowledge like Arts, Science, Engineering, Technology, Law, and Medicine etc converge and used to find a newer and sustainable explanations or solutions to the problems under study. It is thus a co-operative and co-ordinated approach in which the experts of different disciplines pool their knowledge together for the purpose of finding the proper explanation to any of the problems.

Every branch of knowledge has its own way of thinking and a specific method of study. For example, Economics is concerned with those activities of man which are related to earning and spending wealth. Political science is about the relationship of man with the State. Botany is a science concerned with plants while zoology about animals. It is observed that in all disciplines man is kept as a pivot around which all other activities revolve and connected. However, there are differences in their way of thinking and study of different aspects of human activities.

Industrial waste is the major environmental and economical problem in India to solve this problem we have involve the multidisciplinary like Environmental Engineering + Law + Chemistry+ Medicine + Electronics Engg. + Computer Engineering + Bio-medical Engg. + Remote Sensing + Economics + Mathematics

Different sciences have not only differing in their points of view but also in methods of study. They have their own concepts and technical terms. The researcher in a particular branch of knowledge has to follow them; and that is one of the reasons why it is called a discipline. Each branch of knowledge has, thus, its own discipline and conceptual tools to carry out research.

XI.INTERDISCIPLINARY INVOLVEMENT IN ENVIRONMENTAL STUDIES

Science examines an area of knowledge, typically about something in the physical world that can be explained in terms of scientific observation or the scientific method.

The sciences that describe the physical universe are categorized in different ways. The largest distinction in science is whether a science is pure, or theoretical, or whether it is applied, or practical. Pure science explains a phenomenon, while applied science determines how a particular phenomenon may be put to use. In general, pure science is divided into the following categories:

Life sciences, which describe living organism, their internal processes, and their relationship to each other and the environment. Earth sciences, which explain the phenomena of the earth, segments of the environment, and the solar system to which it belongs. Physical sciences, which deal with matter and energy and allow us to describe the material universe in terms of weigh, mass, volume, and other standard, objective measures.

There are a number of areas in which these three categories of pure sciences overlap, where one type of phenomenon may be associated with another. For instance, light (a part of physics) is the energy source behind the process of photosynthesis (chemistry), or food production in plants (biology). For this reason, distinctions between pure sciences and between pure and applied sciences blur, and as a consequence a new compound science develops. An example of this is biochemistry, in which the chemical processes of living things (such as photosynthesis) are analyzed, observed and explained. In the same way, environmental study is associated with almost all branches of knowledge in one way or the other, however with varied degrees of composition.

Environmental study, relatively a new field, is a multi-disciplinary branch of knowledge. This systematic study integrates information from biology, chemistry, geography, agriculture, and many other fields. In other words,

environmental study is an inclusive, holistic and mission oriented branch of knowledge.

Environmental study is, by definition, a multi-disciplinary endeavor, incorporating both natural and social sciences, in the study of man's relationship with air, water, as well as with the fellow humans and other forms of life and concerned with environmental disturbances and minimization of the impact by means of societal changes' .

A few decades before, if the Government wanted to construct a dam, then for that project only engineers were involve, starting from planning, execution to evaluation. This kind of single discipline involvement to the project is called mono or intra disciplinary approach in research. There were many defects in the implementation of these projects, as the activities are carried out by experts from only a single discipline. Later, besides a discipline another related discipline came to support for proper execution or evaluation of the projects. For instance, economic discipline supported for cost-benefit evaluation of the dams or road construction, city planning etc. This method of studying a problem by two related disciplines is called inter-disciplinary approach. When time passed, one or two disciplines could not plan or execute or evaluate the schemes properly and satisfactorily. As a consequence, several related disciplines were involved in this process. For example, construction a new harbour or an Express Highway or a new multipurpose dam or a new nuclear power plant requires the expertise of not only the civil engineers and economists but also the involvement of a number of disciplines like sociology, law, biology, geology etc. Involvement of such expertise for the study of such complicated environmental issues is referred as multidisciplinary approach. Now almost all researchers believe and practice multidisciplinary approach in their research projects, especially in environmental impact studies.

The study is a process aimed at improving the quality of life by empowering the students to investigate and understand environmental problems. Environmental studies can help students gain the knowledge, skills, motivation and values needed to manage the earth's resources optimally and to take responsibility for maintaining environmental quality Environmental study is a key instrument for bringing about the changes in the knowledge, values, behaviors and lifestyles required to achieve sustainability and stability within and among countries.

XII. BIOMEDICAL WASTES

Types of waste:

The U.S Medical waste Tracking Act (Mwta), which was enacted by congress in response to public concerns after syringes, needles, and other medical wastes washed ashore on the U.S. east coast in 1988, defines "regulated medical wastes" as :

1. Cultures and stocks of infectious agents

2. Human pathological wastes
3. Human blood and blood products
4. Sharp implements: used and unused
5. Contaminated animal wastes
6. Isolation waste from patients with highly communicable diseases

Generators of biomedical wastes include hospitals and, to a lesser extent, clinics, research laboratories, and drug companies. Solid waste generation by hospitals is estimated to be between 4.5 and 9.1 kg/day per bed, of which roughly 10% is thought to be infectious or disease causing. In addition to infectious wastes and noninfectious solid wastes, most hospitals also generate chemical and chemotherapy wastes, organic wastes (solvents), and radioactive wastes which may be regulated as “hazardous wastes” under RCRA (Except radioactive wastes which fall under the Atomic Energy Act, as noted earlier). Generation of RCRA hazardous waste was estimated in one study to be 21 mL/bed per day which, for a 200" bed hospital, translates into 152 Kg per month. This quantity is significant because it would qualify a hospital as a “small-quantity generator” under RCRA, forcing those wastes to be sent off-site to an authorized facility.

XIII. INDUSTRIAL WASTE CONTROL BY LAW

IPC-485: Making or possessing of any instrument for counterfeiting a trade-mark or property mark.^[13] Whoever makes or has in his possession any die, plate or other instrument for the purpose of counterfeiting a property mark, or has in his possession a property mark for the purpose of denoting that any goods belong to a person to whom they do not belong, shall be punished with imprisonment of either description for a term which may extend to three year, or with fine, or with both

IPC-487: Making a false mark upon any receptacle containing goods.^[14] Whoever makes any false mark upon any case. Package or other receptacle containing goods, in a manner reasonably calculated to cause any public servant or any other person to believe that such receptacle contains goods which it does not contain or that it does not contain goods which it does contain, or that the goods contained in such receptacle are of a nature or quality different from the real nature or quality thereof shall, unless he proves that he acted without intent to defraud, be punished with imprisonment of either description for a term which may extend to three years, or with fine, or with both.



Fig.3. E-waste dumping in the worldSource:http://www.toxic_e-waste/e-waste-world.jpg

IPC-488: Punishment for marking use of any such false mark.^[15] Whoever makes use of any such false mark in any manner prohibited by the last foregoing section shall, unless he proves that he acted without intent to defraud, be punished as if he had committed an offence against that section.

IPC-489: Tampering with property-mark with intent to cause injury.^[16] Whoever removes, destroys, defaces or adds to any property-mark, intending or knowing it to be likely that he may thereby cause injury to any person, shall be punished with imprisonment of either description for a term which, may extend to one year, or with fine, or with both.

IPC-472: Making or possessing counterfeit seal, etc. with intent to commit forgery punishable under Sec.467 of the Indian penal code^[17]. Whoever makes or counterfeits any seal, plate or other instrument for making an impression, intending that the same shall be used for the purpose of

committing any forgery which would be punishable under Sec.467 of this code, or with such intent, has in his possession any such seal, plate or other instrument, knowing the same to be counterfeit, shall be punished with³ [imprisonment for life], or with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

IPC-473: Making or possessing counterfeit seal, etc. with intent to commit forgery punishable otherwise.^[18] Whoever makes or counterfeits any seal, plate or other instrument for making an impression, intending that the same shall be used for the purpose of committing any forgery which would be punishable under any section of this chapter other than Sec.467, or with such intent, has in his possession any such seal, plate or other instrument, knowing the same to be counterfeit, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

IPC-475:Counterfeiting device or mark used for authenticating documents prescribed in Sec.467 or possessing counterfeit marked material^[19].-Whoever counterfeits upon, or in the substance of any material any device or mark used for the purpose of authenticating any document described in Sec.467 of this code, intending that such device or mark shall be used for the purpose of giving the appearance of authenticity to any document then forged or thereafter to be forged on such material, or who, with such intent, has in his possession any material upon or in the substance of which any such device or mark has been counterfeited, shall be punished with [imprisonment for life], or with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

IPC-476:Counterfeiting device or mark used for authenticating documents other than those described in Sec.467, or possessing counterfeit marked material.^[20] Whoever counterfeits upon, or in the substance of, any material, any device or mark used for the purpose of authenticating [any document or electronic record] other than the documents described in Sec.467 of this code, intending that such device or mark shall be used for the purpose of giving the appearance of authenticity to ¹ [any document or electronic record] then forged or thereafter to be forged on such material, or who, with such intent, has in his possession any material upon or in the substance of which any such device or mark has been counterfeited, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

IPC-477:Fraudulent cancellation, destruction ^[22] of will, authority to adopt, or valuable security^[21] Whoever fraudulently or dishonestly, or with intent to cause damage or injury to the public or to any person, conceals, destroys or defaces, or attempts to conceal, destroy or deface, or secrets or attempts to secrete any document which is or purports to be a will, or an authority to adopt a son, or any valuable security, or commits mischief in respect to such document, shall be punished with. [imprisonment for life], or with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

IPC-263:Erasure of mark denoting that stamp has been used.^[23]-Whoever, fraudulently or with intent to cause loss to Government, erases or removes from a stamp issued by Government for the purpose of revenue, any mark put or impressed upon such stamp for the purpose of denoting that the same has been used, or knowingly has in his possession or sells or disposes of any such stamp from which such mark has been erased or removed, or sells or disposes of any such stamp which he knows to have been used, shall be punished with imprisonment of either description for a term which may extend to three years, or with fine, or with both.^[24]

IPC-265: Fraudulent use of false instrument for weighing.^[25] - Whoever fraudulently uses any instrument for weighing which he knows to be false, shall be punished with imprisonment of either description for a term which may extend to one year, or with fine, or with both.

IPC-269: Negligent act likely to spread infection of disease dangerous to life^[26]. - Whoever unlawfully or negligently does any act which is, and which he knows or has reason to believe to be, likely to spread the infection of any disease dangerous to life, shall be punished with imprisonment of either description for a term which may extend to six months, or with fine, or with both^[27].

IPC-257:Making or selling instrument for counterfeiting government stamp.^[28] Whoever makes or performs any part of the process of making, or buys or sells, or disposes of, any instrument for the purpose of being used, or knowing or having reason to believe that it is intended to be used, for the purpose of counterfeiting any stamp issued by government for the purpose of revenue, shall be punished with imprisonment of either description for a term which may extend to seven years and shall also be liable to fine^[29].

XIV. MERITS OF INTERDISCIPLINARY APPROACH

Overlapping of the sphere of operation makes different disciplines inter-dependent and thereby creates need for multi-disciplinary approach.

No discipline is complete in itself. Each discipline specializes in its own way. Hence, interdisciplinary approach is required to solve the emerging multifaceted environmental problems arising around the world. Interdisciplinary approach to environmental studies restricts the over specialization of a particular discipline because such studies are related to the dynamic man – environment relationships^[30]. The symbiotic or inter-dependent man-environment research is necessary for achieving objectivity. The inter-disciplinary approach brings a person out of a particular discipline and takes a more comprehensive view of things through which a person observes what others say and view the problem in hand, and it would help him to modify / refine his own views. There is a possibility of listening to and understanding the concepts and methods in other disciplines if interdisciplinary approach is adopted for solving complicated environmental issues. Hybridization of disciplines, through interdisciplinary approach, would lead to newer directions for research and methods of analysis to solve multifaceted environmental problems^[30].

There is still a considerable lack of awareness about the interrelated nature of all human activities and the environment. It is mainly due to inaccurate and insufficient availability of information, especially in developing countries. Sensor based in situ data collection, remotely sensed data products, Geographical Information System based analysis etc., would enhance the precision and quality

of environmental analysis. Besides, there is an urgent need to increase the public sensitivity to environment issues and involvement of various disciplines in solving environmental problems. It would lead to the development of a sense of personal environmental responsibility, greater motivation and commitment towards sustainable development.

XV. CONCLUSION

Industrial waste recycling is the process of converting Industrial wastes into usable things which is good for the economy due to five main reasons.

They are as follow:

1. Safe disposal of Industrial waste & electrical and electronic wastes can be done.
2. Materials like precious metals, plastics etc., can be recovered and also can be reused.
3. More employment opportunities can be made separately for this process.
4. Environmental and commonly all other pollutions can be controlled to a considerable amount by this process (Implementations of Labour Law, Industrial Law, Environment Law, Administrative Law & IPC).
5. Economical down flow can also be controlled by using this recycling process (Administrative Law, Financial Law).
6. The various solutions including recycling, re-use, standardization of technologies and implementation of law for less rapid obsolesce are applied.
7. In 2020 the formation of Industrial waste will be above 40000 tonnes per day
8. Following the four R's resource use to control the Industrial waste : Refuse, Reduce, Reuse, and Recycle.

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- [24] Added by Act No.XII of 1899, Sec.2.
- [25] Subs.by Act 26 of 1955,Sec. 117 and Schedule for "transportation for life" (W.e.f. 1st January, 1956
- [26] Ahilandammal V.S. Balasubramania Aiyer, A.I.R. 1965 Mad. 539 at p. 541 : Mal Singh v. State of Rajasthan (1984) 35 R.L.W. 418 at p. 420; Jethsur Surangai v. State of Gujarat, 1984 S.C.C. (Cr.) 474 at pp. 477, 478
- [27] Kartik Sethy v. Banamati Mohanti, 1967 Cut L.T. 7 at p. 8 ; Babu Lal v. State of Uttar Pradesh. 1964 S.C.D. 262
- [28] Subs. by Act No. 26 of 1955, Sec. 117 and Schedule for "transportation for life" (w.e.f. 1st January, 1956).
- [29] Dickens v. Gill (1896) 2 Q.B. 310