

Vol - III DECEMBER 2016 ISSN 2349-638x **Issue-XII Impact Factor 2.147**

Environment Protection Act's : A Systematic Review

M. G.Landge

P.G. Department of Chemistry, Vaidyanath College, Parli Vaijnath, MS, India.

Abstract:

"Jal Hai To Kal Hai"

" Environment is the sum of total of abiotic and biotic conditions influencing the response of a particular organism". An environment is a system of interaction between the natural and social system for meeting. The human needs are dependent on the biophysical environment, which is accounted by a set of sovereign immutable laws. This will enable us to make a rational and appropriate use of environmental resources for suitable development. Thus, environment is surrounding in which living live. The environment for any living organism con not be constant. It is dynamic and changes according to time and place. The effect of change in environment may be beneficial or harmful organism living in it.

Therefore, in the man-environment meeting of the united nation's held in Stockholm in June, 1972, decisions were taken to conserve the environment to improve it and to study with the losses occurring to man, living beings, plants, animals and environmental wealth. The main objective or this acts main the moto is to bring into action such important decision of this present review is to discuss the important acts, which have been passed and enacted by the parliament of India.

Key words : Environment, Resource, Living, Conserve, Act, Protection. Pollution, Prevention, etc.

Explanations: The important Acts, which have been passed and enacted by the parliament of India, are us follows.

- 1) The Environment (Protection) Act, 1986.
- 2) The Water (Prevention and Control of Pollution) Act, 1974.
- 3) The Air (Prevention) Act, 1981.
- 4) The Wildlife (Protection) Act, 1972.
- 5) The Forest (Conservation) Act, 1980. 349-6381

1) The Environment (Protection) Act, 1986.

The EPA, 1986 (29 of 1986) has been established chiefly for important and conserving the environment. The act consists of 26 sections distributed among four chapters and extends to whole of India. In this act and for the first time in the history of Indian Act's terms like Environment, Pollutants of the Environment, Pollution and Hazardous products have been defined. "Environment" includes water, air, land and the inter relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro organisms and property. The term "environmental pollutant" means any solid, liquid or gaseous matter, which can lead to damages to our environment. The term "environmental pollution" means the existence of the environmental pollutants in the environment. The term "hazardous substances" means any substance or creation whose chemical or physical chemical properties may cause hazards to human beings, other living beings, microorganisms, plants, wealth and above all the environment.

This act was enacted to provide for the protection and improvement of environment and matters related to it. It provides general powers to the Central government to take all necessary measures for the purpose of;

- I. Protecting and improving the quality of environment, and
- II. Preventing, controlling and reducing environmental pollution. Besides other powers, the Central Government shall have power for,
- i. Planning and execution of a nation-wide program for the prevention, control and reduction of environmental pollution.
- ii. Laying down standards for the quality of environment in its various aspect,
- iii. Lying down standards for emission or discharge of environmental pollutants from various sources what so ever,
 - Restriction of areas in which industry, operations or processes shall not be carried out or shall be carried out subject to certain safeguard,
 - Laying down procedures and safeguards for prevention of accidents which may cause pollution,
- vi. Laying down procedures for handling hazardous substances,
- vii. Examination of materials that are likely to cause pollution,
- viii. Carrying out and sponsoring investigations and research relating to problems of environmental pollution,
 - Collection and dissemination of information on environmental pollution, and
 - Preparation of manuals, codes or guides relating to pollution.

2) The Water (Prevention and Control of Pollution) Act, 1974.

iv.

٧.

ix.

х.

The WPCPA, 1974 has been constituted to preserve the water and controlling the pollution of water thereby maintaining the quality and retaining the healthy factor in the water. Under this Act the Central Administration has been provided with elementary central boards in the State, Boards of State Union Territories which deals with water pollution in the nation wide area and implements its objectives.

The various terms used in the Act have been defined. Water pollution means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water as may or is likely to, create a nuisance or render such water harmful or injurious to public health or safety or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animal or plants or of aquatic organisms. Sewage effluent means effluent from any sewage system or sewage disposal works and includes sullage from open drains. Sewer means any conduit pipe or channel, open or closed carrying sewage or trade effluent. Stream includes river, water course, in land water, sub-terronean water and sea or tidal waters to such extent or as the case may be.

This Act was enacted as measure to prevent and control water pollution. It was amended in 1988. An important amendment was renames the Central / State Pollution Control Boards (CPCBs). Some more powers were given to CPCBs like power to close or stop supply of water and electricity to offending establishments.

Page No.16

Aayushi International Interdisciplinary Research Journal (Refereed & Indexed Journal)						
Vol - III	Issue-XII	DECEMBER	2016	ISSN 2349-638x	Impact Factor 2.147	

Functions of Central Boards-

- i. To advise central government and state government issues related to water pollution.
- ii. To provide guidance and training to persons in the field of water pollution.
- iii. To educate people through mass media.
- iv. To provide technical assistance and guidance to state boards and industries.
- iv. To set up laboratories to analyse samples.

Functions of State Boards-

v.

- i. To seek guidance and training of persons connected with preventation and control of water pollution.
- ii. To collect information regarding causes, preventation and control of water pollution.
- iii. To organize programs to control water pollution.
- iv. To find out recent methods for disposal of treated sewage and effluents.
- WPCPA has provided different powers to both Central/ State pollution Boards.
- i. It is the duty of each industrial establishment to take consent from State Board on a specific application about the methods of treatment and disposal of sewage and other industrial effluent to be discharged in the water body.
- ii. Board has got power to take sample of any sewage, industrial effluent from any water body.
- iii. Board has power to enter any industrial premises for inspection.
- iv. Board has got power to any application to court after an offence is detected.
 - Board can ask closure of any unit any time. It can stop water supply, electricity to the units of defaulters.

Table 1. Guideline in drinking water by the World Health Organization (WHO) and National Agency for Food and Drugs Administration and Control (NAFDAC).

Heavy metal	Max. acceptable conc.	Max. acceptable conc.	
-	(WHO)	(NAFDAC)	
Zinc	5.0 mg/l	5.0 mg/l	
Arsenic	0.01 mg/l	0.0 mg/l,	
Magnesium	50.00 mg/l	30.00 mg/l	
Calcium	50 .00 mg/l	50.00 mg/l	
Cadmium	0.003 mg/l	0.0 mg/l	
Lead	0.01 mg/l	0.0 mg/l	
Silver	0.0 mg/l	0.0 mg/l	
Mercury	0.001 mg/l	0.0 mg/l	

Compulsory acquisition of land for the state board:

Any land required by a State Board for the efficient performance of its function under this Act shall be deemed to be needed for a public purpose and such land shall be acquired for the State Board under the provisions of the Land Acquisition Act, 1894 (1 of 1984), or under any other corresponding law for the time being in force.

3) The Air (Prevention and Control of Pollution) Act, 1981.

The APCPA, 1981 have been defined as, Air pollution means any solid, liquid or gaseous substances, including noise present in the atmosphere in such conc. As may be or tend to be

injurious to human beings or other living creatures or plants or property or environment:, Air pollution means the presence in the atmosphere of any air pollutant.

This Act was promulgated for prevention, control and abatement of air pollution by creating Central/ State boards. Central board exercises powers perform the functions of State Board for Union territories either directly or by delegating powers.

The various functions of Central Board are-

- i. To provide guidance and technical assistance to state boards and the industries.
- ii. To advise both Central and State Govt. regarding improvement in methods related to check air pollution.
- iii. To provide training to the persons involved in the field of air pollution.
- iv. To set up laboratories to check all kinds of samples.
- v. To educate people with the assistance of mass media.

The various functions of State board are-

- To advise State Govt. to combat with the problem of air pollution.
- To collect information regarding causes, prevention and control of air pollution.
- iii. To lay down standards for air quality.
- iv. To inspect air quality periodically to check air pollution.

As per this act both central and state boards have been given certain powers to meet the consequences due to air pollution. These are

- I To declare any area within the state as air polluting area.
- ii Before setting up any unit every industrial establishment has to take clearance from the board.
- iii The board has got power to stop industrial operations in air pollution control areas.
- iv The board collects the samples of air or emission for analysis.
- v The board has got power to cancel the consent given to industry at any time.
- vi The board officials have got the power to go to any industry at any time to check compliance with requirement of act.
- vii The board has got power to prosecute any defaulter

Analysis:

i.

ii.

- (1) The State Government may, by notification in the Official Gazette, appoint such persons as it thinks fit and having the prescribed qualifications to be government analysts for the purpose of analysis of samples of air or emission sent for analysis to any laboratory established or specified under sub-section (1) of section 28.
- (2) Without prejudice to the provisions of section 14, the State Board may, by notification in the Official Gazette, and with the approval of the State Government, appoint such persons as it thinks fit and having the prescribed qualifications to be Board analysts for the purpose of analysis of samples of air or emission sent for analysis to any laboratory established or recognised under section 17.
- (3) Any document purporting to be a report signed by a Government analyst or, as the case may be, a State Board analyst may be used as evidence of the facts stated therein in any proceeding under this Act.

4) The wildlife (Protection) Act, 1972.

The parliament has constituted the wildlife prevention Act for the conservation of wild animals and birds, which has its implications in almost all states and union territories. Wildlife conservation has been very much in forefront of Govt. policy and India is a signatory to the Conservation on International Trade in Endangered Species (CITES). Enforcement of wildlife protection is done under the wildlife protection act, 1972. The Indian Board for Wildlife (IBWL) is the apex advisory body in the field of wildlife conservation in the country and is headed by the Prime Minister. Indian wildlife is protected in 107 zoos, 49 deer parks , 16 safari parks, 06 snake parks, 24 breeding centre and 06 aquariums, besides of course 95 national parks and 500 sanctuaries.

The wildlife (protection) Act, 1972 comprises of various definations of the terms which have been used in this act. In the Act, Animal includes amphibian, birds, mammals and reptiles and their eggs. Wild animals has been defined as any animal found wild in nature and includes any animals specifies in schedules I, II, III, IV or V wherever found. Wildlife includes any animal, bee, butterflies, crustacean fish and moths, and aquatic or land vegetation, which form part of any habitat. National park means an area declared as a National park. Sanctuary means an area declared as a wildlife sanctuary, Trophy means the whole or any part of captive animal or wild animal, other than vermin, which has been kept or preserved by any means, whether artificial or natural and includes, rugs and antlers. Vermin means any animal specified in schedule V. Zoo means an establishment, whether stationary or mobile where captive animals are kept for exhibition to the public but does not include a circus and or establishment of a licensed dealer in captive animals.

Under this Act, declaration and administration of sanctuaries, National parks, Forest Hunting Reserves and Forest Areas by the various states, giving licenses and permits in this policy, to form wildlife Advisory Boards to provide advices relating to conservation of wildlife to the state government. Prohibition of hunting of different varieties of mammals, migratory birds, endangered species of birds and animals has been directed under this Act. Under this Act, Sanctuaries, National parks, forest Hunting Reserves and forest areas are declared and administered by the State Government. The selling of items made-up of wildlife for business and commercial benefits has brought under this Act. It also provides powers of providing stringent punishments to the offenders of this law. Under this Act, several conservation projects have been started for specific endangered animals e.g. Lion Project started in 1972, Tiger Project started in 1973, Crocodiles Breeding Project started in 1974, Rhino Conservation Project started in 1987 and Elephant Project stated in 1992.

Penalties:

Any person who [contravenes any provision of this Act [(except Chapter VA and section 38J)]] any rule or order made there under or who commits a breach of any of the conditions of any license or permit granted under this Act, shall be guilty of an offence against this Act, and shall, on conviction, be punishable with imprisonment for a term which may extend to [three years] or with fine which may extend to [twenty-five thousand rupees] or with both:

5) The Forest (Conservation) Act, 1980.

The colonial forest policy starting in the 19th century ignored traditional systems of conservation and sustainable use. Also, the crucial ecological and social roles of forest were overlooked. Until 1980, the Indian Forest Act of 1972 prevailed, which concentrated power and so called scientific management with the Central Government. **Forest Conservation Act** is an act to provide for the conservation of forests and for matters connected with protection of trees from illegal felling and destruction. This act covers all aspects of forests including reserve forests,

protected forests or any forest land irrespective of its ownership. There are five main clauses in Forest Conservation Act which guides through the use of forest resources and limit the harm to forest reserves. This act is extended to all the states of India except Jammu and Kashmir and it came into existence on 25th October, 1980. The FCA of 1980 had provision for first time for preventing diversion of forest land for any other purpose. No part of a reserved forest land can be used for non forest purpose by the state government without prior approval from the central government. State Government can not lease forest land or its portions to any private person or to any authority, corporation, agency or organization which are not managed or controlled by government. A forest land can be cleared of trees (Which have grown naturally) only when this land is to be used for reforestation. The 1988 Amendment subscribed to the policy of ensuring ecological balance through conservation of biological diversity soil and water management increase of tree cover, meeting the need of rural and tribal population increase in the productivity, efficient utilization of forest produce, and substitution of wood and peoples involvement for achieving these objectives. The central government may constitute an advisory committee that can guide the central government for the matters concerned with conservation of forests. If a person, authority or department is found guilty of committed an offence under Forest Conservation Act, he shall be liable to be proceeded against and punished accordingly as per the rules and act. The head of department or an authority or any other person can be render to any punishment if he proves that the offence was committed without his knowledge or he exercised his full power to stop the offence to be committed. The six regional offices have been set up to monitor the conditions of forests and to find out steps for their conservation. These are located at Chandigrah, Lucknow, Bhubneshwar, Bhopal, Shillong and Bangalore.

Legislation is an officially enacted law. Environmental legislation means laws for the protection of environment. The important environmental laws are mentioned below.

1972: UN Conference on Human Environment held in Stockholm recommended that,

- i.Every person has the right to live in an environment of quality. Everybody has the responsibility to protect and improve the environment.
- Ii .Environment is being degraded through pollution and depletion of natural resources.
- lii. Seas should not be used as dumping areas for pollutants to save marine life.
- Iv. Peoplie should be educated about the cause of environmental deterioration and modes of checking it.
- V. Every State should ensure that its pollutants do not spoil the environment of other states.

1976: Indian constitution was amended to incorporate that,

- i "The State shall endeavour to protect and improve the natural environment and safeguard the forests and wildlife in the country".
- Ii "It should be the duty of every citizen of India to protect and improve the natural environment including forests lakes, rivers and wildlife and to have compassion for living creatures."

1987: Amendment of Factories Act- It states that the owner of a factory shall make effective arrangement for treating the waste and effluents so as to render them harmless and for their disposal.

1988: Amendment of Motor Vehicle Act- It requires the manufactures to ensure that the vehicle does not cause pollution.

1988: Amendment of water (Prevention and Control of pollution) Act- It has made the treatment of sewage and trade effluents compulsory so that water pollution is prevented.

1991: Amendment of wildlife (Protection) Act- It prohibits hunting and trapping of wildlife, and trade in wildlife products (skins and ivory etc).

2008: The EPA 2002 has been amended so as to meet certain policy objectives and make it more responsive and adaptable to the emerging challenges of the new economic order and also to address a number of issues and shortcomings in the Act. The Environment Protection (Amendment) Act, Act No. 6 of 2008, was adopted in the National Assembly in 01 April 2008 and was proclaimed on 15 July 2008. The following are the major issues covered under the Environment Protection (Amendment) Act 2008. The processing of application for Preliminary Environmental Report (PER) Approval for common undertakings which are generally of a less polluting nature , was not provided for previously. The Act provides for the setting up of an EIA/PER Monitoring Committee so as to monitor compliance with conditions imposed following the grant of an EIA licence or PER approval. With a view to reinforcing the existing enforcement mechanism, the Act provides for the service of a fixed penalty notice for common contravention of an environmental law. The Act makes provisions for a mechanism to abate environmental eyesores such as stockpiling of scrap materials, overgrowth on bare lands and illegal affixing of posters through the service of an Eyesore Abatement Notice and cost recovery in case of removal of an eyesore by an Authority.

The Act further provides for the empowerment of local authorities to enforce environmental laws covering, among others, common environmental nuisances and eyesores falling within their respective administrative area. Noise nuisance is one of the major environmental problems facing the country which is giving rise to lots of complaints. The Noise Prevention Act dates as far back as 1938 and most of the regulations made there under do not cater for the present context. Besides being obsolete, noise legislations are scattered among various authorities leading to poor compliance and enforcement. The Act now makes provisions for the following:

(i) An environmental standard for noise emitted from a place of worship, which is set at 55 decibels [dB(A) Leq] recorded at the boundary of the site;

(ii) Empowerment of the Minister to make regulations for the control of noise;

(iii) Empowerment of the Minister to make regulations to provide exemption from standards for noise in relation to events or celebrations organised, sponsored or approved by the State;, and (iv) Repeal of the Noise Prevention Act and all regulations made there under.

Conclusion:

In order to protect environment, there is a need to acquire awareness of and sensitivity to the total environment and its allied problems. Environment awareness and ethics are the handy tools to fight and face the environmental criss. Inspite of many laws to check pollution and conserve bio-diversity, quality of environment is deteriorating and wildlife is effective and law enforcement authorities should be more vigilant and strict. Above all educating the masses about the ill effects of pollution can go a long way to protect the environment. Private efforts by environmental organization can also help.

Acknowledgement:

The authors are thankful to Dr. R.K. Ippar Principal, Vaidyanath Arts, Science and Commerce college, Parli-vaijnath, Dist-Beed for encouragement.

References:

- 1. Mahajan K., Enforcing Environmental laws some issues, Yojana, vol.41, No.8, pp 119-121, (1997).
- 2. Amoser, S. et al, Diversity in noise-induced temporary hearing loss in otophysine fishes. J. Acoust. Soc. Am. 113, 2170–2179, (2003).
- 3.Mazlan, A.G. et al., "On the current status of coastal marine biodiversity in Malaysia," Indian Journal of Marine Sciences, vol. 34(1), pp. 76-87, (2005).
- 4. Johnson, J.S., SURTASS LFA environmental compliance experience. Presentation at ECOUS (Environmental Consequences of Underwater Sound), May 12-16, San Antonio, Texas, (2003).
- 5.Agele , S.O. Int. J. Forest, Soil and Erosion, Biotic and abiotic constraints to revegetation and establishment of functional ecosystem in degraded lands in a tropical environment . 1 (1):5-1, ISSN 2251-6387, ,(2011).
- 6. Chu C. M., Bradshaw A. D, The value of pulverized refuse fines (PRF) as a substitute for topsoil in land reclamation.1. Field studies. Journal of Applied Ecology, 33, 851-857, (1996).
- 7.Kanamori T., Yasuda T., Immobilisation, mineralisation and the availability of the fertilizer nitrogen during the decomposition of organic matter applied to soil. Plant and Soil 52: 215-229, (1979).
- 8. Salem S. Abu Amr1, Hamidi Abdul Aziz and Mohammed J.K. Bashir ., Performance of Ozone Reactor in Treating Stabilized Landfill Leachate: Efficiencies International Journal of Scientific Research in Knowledge, 2(8), pp. 362-369. (2014).
- 9. Hoigne J., Characterization of water quality criteria for ozonation processes. Part I: minimal set of analytical data. Ozone Sci. Engng., 16:113–120, (1994).
- 10 Khanl.N., and Firuza B.M., Internat. Rev. Hydrobiol., Biological Assessment of Water Pollution Using Periphyton Productivity and Standing Crop in the Linggi River, Malaysia, ., 97, 2, 124– 156, (2012).
- 11. Apha, Standard Methods for the Examination of Water and Wastewater. 14th edition. American Public Health Association, Washington, D.C. Washington, (1975).
- 12.Nellivat P., Ground Water Pollution and Emerging Environmental Challenges of Industrial Effluent Irrigation., A Case Study of Mettupalayam Taluk, Tamilnadu (2006).
- 13. Chris Milner and Fangya Xu., Research paper series., On The Pollution Content of China's Trade: Clearing the Air., International., University of Nottingham, ., (2009).
- 14.Md. Abdur Rakib and Md. Atiur Rahman ., An Emerging City: Solid Waste Generation and Recycling Approach ., International Journal of Scientific Research in Environmental Sciences, 2(3), pp. 74-84, ISSN: 2322-4983, (2014).
- 15.Mwangi S.W., Partnerships in urban environmental management: an approach to solving environmental problems in Nakuru, Kenya., Environment and Urbanization, 12(2): 77-92, (2000).
- 16.Ray A, Waste management in developing Asia: can trade and cooperation help?., J. of Environment & Development, 17(1): 3-25,(20080).
- 17.Duruibe, J. O. et. al., Heavy metal pollution and human biotoxic effects., International Journal of Physical Sciences Vol. 2 (5), pp. 112-118, ISSN 1992 – 1950,(2007).